In some countries, for example in southern India, four -leafed flashicles are also collected. The flash drives immediately tear off as soon as they appeared, not allowing them to outgrown, coarse. In general, they make up a relatively small percentage of tea bush leaves. So, in the fourth year of the bush of life, when the first fee is made from it, they usually take off about 200 g of flash drives. However, the number of flashes in a kilogram of fresh sheet for agricultural agricultural tea is not the same: there can be 1500 and twice as much.

Previously, in China, with the traditional method of cultivating tea, the collection from the bush, which took the standard form, did not quantitatively change from year to year. Currently, as a result of a variety of agricultural measures used on tea plantations in all

Tea -reproducing countries, tea yield increased and varies depending on the areas of growth and agrotypes from 2 to 12 thousand kg of green leaf per hectare.

In Georgia before the revolution, the yield of tea was only 400 kg per hectare per year, now the average yield is 4 thousand kg. And it can be brought to 10 thousand kg, but the quality of tea, its fortress is reduced.

In India, in Assam, the average grave of tea is 5.5, and the maximum is 12.5 thousand kg per hectare. But in other tea areas of India, the yield is much lower: in Western Bengal, it is 2.5-3 thousand kg, and in southern India (Maras) does not exceed 2.7 thousand, and in the dry, unfavorable years it falls even lower, And in the most favorable and on the best plantations, it never exceeds 5-6 thousand kg (the average is 3.5 thousand kg).

On the contrary, in Sri Lanka, fluctuations in the yield of tea are extremely insignificant-from 7 to 7.5 thousand or in rare cases 7.75 thousand kg, which is explained by the comparative uniformity of soil and climatic conditions.

It is interesting that the processing of the Earth around the tea bush and the introduction of mineral fertilizers are not favorable for it. Of course, the introduction of mineral fertilizers in combination with other agrotechnical measures raises the yield of tea, i.e. It promotes an increase in the mass of tea sheet, but at the same time causes a decrease in its aroma, density and other quality indicators. In India, for example, the soil on tea plantations does not even loosen. A tea bush with gratitude responds to a type of care in which intervention in its natural life is not allowed and at the same time external conditions for its growth are significantly improved. An example of such a care is the shading of plantations with the help of plantings next to the tea of special-prisoners-albration and Dalbergia.

These bean trees simultaneously saturate the soil with nitrogen and fertilize it. In addition, their root system, located in a completely different soil layer, deep under the root system of tea bushes, not only does not interfere with them, but also supports them, nourishes and even delays water for them, which can use a tea bush in arid periods As a reserve. Trees-attenuers perform other functions: they protect tea from the wind, from the scorching sun, under their crown, a special microclimate of the greenhouse is created, during the period of pouring tropical rains, they carefully spray water over tea bushes and, finally, protect the tea bush from dust, envelop it A pleasant smell of their flowers, foliage and even wood. It is not surprising that the-planters are able to increase the yield of tea bushes by 2-3 times.

Even more than the quantity, the quality of the tea sheet changes as external conditions change (weather, humidity, illumination, etc.). That is why even with unchanged crops in quantitative indicators, the quality of tea every year and even several times a season can change and change. Therefore, the quality of tea can be adjusted by improving it.

To make it more convenient to collect flash drives, a tea bush is cut, preventing it from growing above certain sizes (not higher than 80 cm) [4], and form, i.e. They give a certain form-horizontal, or table-shaped (in India, Sri Lanka and other countries), and semi-oval, spherical,. Business in Georgia and Azerbaijan. Ordinary, or light, trim

Tea bush is produced annually, but, in addition, every 20-25 years they make the so-called heavy trim, as if rejuvenating the bushes.

## Chapter 3. Geographical distribution of tea plants

At first, the tea plant spread to the countries of Asia neighboring with China. But this process went extremely slowly and unevenly. If in China tea was introduced into culture for about 350 years, then in Japan it penetrated (as a plant) later almost half of the millennium-in the 805th or 810; At about the same time, in 828, to Korea.

The pause lasted a whole millennium, and then a violent penetration was followed not only into Asian, but also into European countries [5]. In 1824-1826, experiments began to breed tea in Java and Sumatra-in the then Dutch India; In 1824-1825-in Vietnam (Anname), in 1833-in Russia (Georgia) [6], in 1834-in India [7], in 1842-on Ceylon (now Sri Lanka), in 1846 - in Hungary. All these countries, with the exception of Hungary, where it did not go further than minor experiments, moved to the industrial

Tea production by the 70-80s of the XIX century [8]. By this time, tea appeared on two more continents- in Africa (South

African Republic, South Rodesia, East Africa) and South America (Brazil). And when these areas began to give industrial tea in the early 20s of the XX century, the tea plant advanced in several countries: in 1900 in Iran, in 1920 in Bulgaria (first experiments), in 1920-1930 in Rwanda, in 1920-1930, Burundi, Congo. Moreover, the Assamic hybrid has everywhere, excluding Russia and the old tea -producing countries - China, Japan, Korea, as well as Indonesia and Vietnam.

After the Second World War, the spread of the tea plant continued not only in the southern regions, but also in the northern, maximum for tea zone of subtropics, including in Northern Italy, Southern Switzerland, in Ukrainian Transcarpathia and in Russian

Black Sea region.

The boundaries of the growth of tea can be considered 48 ° N. and 32 ° Yu.Sh. Between these latitudes, i.e. At a distance, along the length of an almost equal distance from the equator to one of the poles, a tea plant can grow, give offspring and products on almost all continents of the world. But it should be borne in mind that in every country, even the most favorable in climatic conditions for tea culture, a tea bush grows only in completely definite, limited and relatively small "tea spots". Some exceptions are China where tea grows on a rather large one. territories, but here it is localized mainly in two places: in the western group of districts (23 ° -31 ° C.Sh), adjacent to the border with Tibet, and in the eastern group of districts (27 ° -32 ° N) adjacent to the sea.

Currently, tea is cultivated on an industrial scale in more than 30 countries. In addition, it grows in small quantities as an experimental plant in at least ten countries. In the literature there are indications that a tea bush is growing in Yugoslavia, South England, Portugal, in the south of Switzerland and in southwestern France, i.e. In "not tea", in our opinion, countries. But the main tea-derivative countries of the world are still the countries of Asia- India, China, Sri Lanka, Indonesia, Pakistan, Japan, Malaysia, Burma, Thailand, Vietnam, Iran. In Europe, the only tea manufacturer is Russia, which has small plantations in the south of the Krasnodar Territory, in the Black Sea region.

As for Channel production in Georgia and Azerbaijan, its fate is unknown after the collapse of the USSR, because it is extremely doubtful that it withstand competition in the world market.

In Africa, they are engaged in the cultivation and production of tea in Kenya, Sudan, Uganda, Tanzania, Zimbabwe, Zambia, Mozambique, Cameroon, Rwande, Burundi, Mali, Madagascar, South Africa, as well as on the islands of Mavriki and Azores.

In South America, tea is grown in Brazil, Argentina, Peru and in small quantities - in Chile, Colombia and Bolivia, and in Central America - in Mexico and Guatemala. The gravity in Argentina has unfolded best from these countries, which now even exports tea to Russia (1992-1993).

Finally, tea plantations can now be found in North Australia (Queensland), in Papua New Guinea and on the islands of Fiji. This suggests that all the tea countries not only really strive to provide themselves with tea, but even try to earn it on sale in the world market.

However, only very few of the listed tea areas (no more than five) are in world famous as areas that give selected teas of the highest class. The highest, best teas give only the extremely small "dot" inside the tea - producing "spots". As a rule, they are alpine plantations located above 1500-1800 m above sea level. In China, these are Yunnan and Fujian, in Japan-Udzhi (Kyoto Prefecture), in India-Darjing (West Bengal), Nilgiris (Madras) and partly casurans (Upper Assam), in Sri Lanka-alpine plantations in the southern part of the island Ceylon.

## 1. History of the development of tea leadership in Russia and in the USSR before its

## decay

Despite the fact that in the Russian Empire there were practically no territories suitable for cultivating tea, the desire to grow "Russian tea" appeared already in the XVIII century, and in the middle of the 19th century it was realized, and then throughout the 20th century the tea breeding was developed in the USSR With constant state support, which ultimately took a prominent place in the world - along with the largest tea -producing countries of the globe. It was truly a fantasy, turned into past, and it is impossible to forget this page of Russian history and perseverance.

Back in 1792, an article by G.F. Sivers on "how to grow tea in Russia", where it was planned to receive tea bushes from Japan and create tea plantations in the area of Kizlyar, at the very southern point of the then Russian Empire. However, at that time, things did not go beyond this idea.

The first Attempts really acclimatize tea V Russia, on territory

The Black Sea coast of Georgia, were undertaken in the early 30s of the XIX century, i.e. Simultaneously with the attempts of the British to create their own tea breeding in India. And the Orthodox Church originally took up this, who believed that tea is raising abstinence.

In 1834, the monk Sallusti convincingly proved the possibility of breeding tea in Russia. However, the tsarist government did not pay due attention to this issue, and at first only individual enthusiasts and rich landowners like the Georgian princes Eristavi, who could not be afraid that such an undertaking, was engaged in experiments on tea breeding, were engaged in the first time.

The impetus for the serious and more persistent development of tea breeding in Georgia was an accident, the initiative did not come from local residents. During the Crimean War in 1854, near the city of Poti, the English military ship suffered an accident, and its crew was captured. One of the officers of this vessel Jacob McNamarra married a Georgian noblewoman and remained in Georgia. But as a keen Scotch, he could not live without tea. He came to the idea of breeding tea in Georgia, and he undertook the first experiments in this direction in the estate of the princes Eristavi (in the Ozurgety area). This Scot was the father of the future academician N.Ya. Marra (1864-1934). Under his observation in the Ozurgeti and Chakvi area, small tea plantations were created, and already in 1864 at one of the trade and industrial exhibitions of Russia they demonstrated the first samples of the Caucasian tea. It was the prototype of the current

Georgian tea. But his quality was such that he could not compete with the imported Chinese tea then, he was used in the future exclusively for imported tea.

At the end of the 19th century, timid attempts were made to expand the plantation of tea in Georgia through the use of the vast lands of the royal family. But further preliminary sets and expeditions for seeds and seedlings to other countries did not actually move [9]. The Georgian, which was produced in other farms, did not have tea before the 1917 revolution of serious commodity significance, although it was sold at provincial fairs called "Russian" or "Ozurgeta".

By the end of the XIX- beginning of the 20th century, there are also attempts by individual breeders-enthusiasts to advance the culture of tea north, beyond Georgia and other subtropical points of Russia. So, in 1896 M.O. Novoselov first planted a tea bush in Azerbaijan, in the Lenkoransky district, where by 1900 small experimental sites were already laid. Almost at the same time, another enthusiast-a peasant Koshman-acclimatized a tea bush in Solokh-Aul, 60 km north of Sochi, in the territory of the current Krasnodar Territory. It was already in the full sense of the word Russian tea, i.e. Formally growing in Russia.

Thus, the works of enthusiasts practitioners already in the 19th century experimentally proved that the subtropics of Russia are suitable for growing tea. But inertness and

The slowness of the economic and administrative bodies of tsarist Russia was an obstacle to the development of domestic tea breeding. By 1917, the total area of all tea plantations in Russia barely reached 900 hectares.

The fracture has occurred since the mid-1920s, when the state program for the development of tea affairs in our country was adopted. First of all, attention was paid to Georgia. Tea plantations were created not only in the Black Sea regions of Adjara and Guria, but also in almost all other parts of Georgia: in Abkhazia, Imeres, Mengrelia and even in the farm of the Black Sea coast of Kakheti. In addition, already in the late 1920s and early 30s, work began on the creation of the second tea-producing region of Transcaucasia-in the territory of Azerbaijan, in the Lenkoranskaya, as well as in the Zakatali zone. Here, in 1928-1929, seedlings were again planted, since pre-revolutionary tea plantations died in 1920, and in 1932-1934 the first industrial laying of plantations began, and in 1937 the first pack of Azerbaijani tea was released.

In 1936, the third tea -derivative region - the Krasnodar Territory of the RSFSR began to be mastered, where the laying of tea plantations were originally made in the Azlerovsky and Lazarevsky districts. The war interrupted these works. Only since 1949 they were continued, and the Maykop district began to be mastered again, where three years later they first gathered a tea leaf. Plantations also appeared in the Tula and Goryazhe-Klyuchevsky districts of the Krasnodar Territory.

Finally, in 1948, tea plantations were laid in Zelenchuksky district of the Stavropol Territory. They suffered the winter well and were expanded next year, but the quality of tea was low, and its production turned out to be economically unprofitable. Almost at the same time, in 1949, tea seeds were sown in the Transcarpathian region of the Ukrainian SSR, and in 1952 the first Transcarpathian Ukrainian tea was collected in the area of the Latoritsa River. But here, in the future, the cultivation of tea was discontinued due to unprofitability. In 1953, the first Kazakhstani tea was received, bred by the breeder A.V. Parabian. The many years of work of the scientist, begun in 1944, was crowned with success. Thus, it was proved that in the North Caucasus, in Transcarpathia and Kazakhstan - at the very northern border of dry subtropics - a tea bush can grow, and not only grow and survive at a five -month winter, but also give a tea leaf suitable for the manufacture of tea.

However, for the development of tea culture on an industrial scale, all these areas were recognized as unprofitable, and in the end it was decided to pay special attention to

A sharp increase in tea products in the traditional areas of domestic tea breeding - Georgia, Azerbaijan, Krasnodar Territory, in order to completely specialize them in tea production, having seized new plants of the Earth, intended there for other, ordinary cultures.

This plan, which was appropriate from the point of view of the interests of the whole country, however, came across a stubborn, initially secret, and then clear reluctance of Georgian business executives to develop tea leadership as a specialized industry with an indispensable increase in product quality. Since the end of the 70s, this unwillingness grew into the resistance and sabotage of all tea business. Since the 80s, the manual collections of tea sheet, which give the highest varieties, have already begun to directly reduce. The quality of the raw materials during machine collection was catastrophically worsened.

The official motive for such a policy among the Georgian administration and the then Georgian party circles, primarily the secretary of the Central Committee of the Communist Party of Georgia E.A. Shevardnadze, there was what, they, they say, have to end manual labor, although, as world experience testifies, all the tea breeding in India, China, and in Japan is only impossible and without it. But to preach manual labor in the USSR was considered heresy, and the dexterous Georgian demagogues skillfully used this circumstance to actually undermine the Soviet economy. Their true motive against tea breeding in Georgia was that the Georgians themselves did not need tea, but to contribute to the common economy, and even more so to help Russia, they considered it unprofitable for themselves. They wanted Georgia to occupy the position of the "spoiled daughter" of Russia and the entire Soviet Union, which would provide it with a comfortable existence due to the intense work and resources of other republics, and primarily the RSFSR.

Susing and pulling out all sorts of concessions for Georgia from the central government, such figures as Mzhavadze and Shevardnadze, sought themselves personally among Georgians and, at the expense of the interests of the Russian people, wanted to be known as "Georgia's radiocrats", "defenders from Russia". In this dishonest nationalist game, the question of tea breeding in Georgia, which resulted in direct sabotage with tea supply and aimed at a deterioration in the quality of Georgian tea, was used, which was supposed to sow dissatisfaction between Russian and Georgian peoples.

Under these conditions, Georgian tea was in less demand in Russia, where, in fact, he was rejected by both the Russian and numerous Tatar, Bashkir and Buryat population. And this, in turn, led to the strengthening of the orientation of the USSR to the purchase of imported teas, to a general reduction in attention to domestic tea, although it seemed to have to act on the contrary - to demand from Georgia an improvement in the quality of tea.

The development of political events in the late 80s and early 90s in Georgia and its exit from the Union, and then from the CIS, it was clearly shown that the calculation for the specialization of Georgia as a tea-producing country could be real only if its presence is indispensable in the USSR, When it had a permanent market for its tea, and that the collapse of the USSR actually led to the elimination of tea production and to change the situation in the global tea market in favor of foreign tea exporters, to a sharp deterioration in Russia due to the growth of world tea prices.

In conclusion, we give some information that gives an idea of the growth of tea breeding and tea affairs in the USSR over the past 60 years.

The area under tea grew by more than 100 times - from 0.9 thousand to 97 thousand hectares. Instead of three small semi -custody factories, 80 new mechanized enterprises were created. And finally, instead of 130-140 kg of tea, produced in tsarist times, by the beginning of the 60s, 60 thousand tons of tea were produced in the whole country annually, and by the end of 1970, only one Georgia of finished tea was produced 95 thousand tons

However, in a decade, from 1981 to 1991, the production of tea in Georgia again dropped again-to 57 thousand tons, and the quality, gravity of tea fell so sharply that

Less than half of the statistical amount fell on the table, and the rest upon arrival at the Chara -designer factories of the RSFSR was married and wrote off.

So by the beginning of the 90s, an artificial, unprecedented in the history of tea affairs was a shortage of tea in Russia, and under this pretext the wrecking extremely low-grade Turkish tea was purchased, which further worsened the situation.

During the years of Soviet power, about a quarter to a third of the tea consumed in Russia was imported from India, Sri Lanka, Vietnam, Kenya, Tanzania, while until 1917, Russia satisfied its population's needs one hundred percent due to imported teas.

In the 50s-70 years, the USSR turned into a tea-exporting country. Until 1989, Soviet tea - Georgian, Azerbaijani and Krasnodar, or "Russian", as it is called abroad - entered foreign markets: to Poland, GDR, Hungary, Romania, Finland, Czechoslovakia, Bulgaria, Yugoslavia, as well as in Many Asian countries - Afghanistan, Iran, Syria, South Yemen, Mongolia. In Asia, there was also an indispensable one that was valuable there not only for the Mongols, but also for Buryats, Khakasses, Tuvans brick and tile tea.

Today, not only all these markets are lost for our country, but completely lost and domestic, our own, purely Russian market, which has turned into the field of free competition of tea -producing countries. As a result of political and economic changes that occurred in 1989-1992 in the USSR and Eastern Europe, Russia turned out to be deleted from the world-producing countries of the world and turned into a country completely dependent on the import of tea, forced to spend a considerable part of its budget and foreign exchange reserves, which inevitably leads to a reduction in consumption of tea by the population of the country.

### Notes

- [1] Bred K.E. Bakhtadze agrosort of tea "Georgian breeding no 8" withstands frosts to minus 25 ° C. <
- [2] A tea bush can also be cultivated in indoor conditions. Unfortunately, in our country, it is poorly common as an indoor plant, although it has undoubted advantages for this (long life, slow growth, undemanding to direct solar radiation and light, pleasant appearance juicy, evergreen flowering, delicate aroma). They propagate a tea bush with cuttings, layering (in India, for example, from one bush they receive from 600 to 1,500 cuttings per year), we have mainly seeds. <
- [3] But in Darjiling (the center of tea plantations and the production of tea in India), the plantations are reluctant to rejuvenate, allowing them to reach 90-100 years of age, and the quality of the Darjeling variety tea remains excellent. <
- [4] In Georgia, a freely growing bush reaches a height of 3 m. <
- [5] An attempt to bring tea to North America in 1800 and acclimatize it in South Carolin and California did not receive further development. <
- [6] The first tea bush was brought to Russia, to the Nikitsky Botanical Garden in Crimea, back in 1817 <
- [7] The first attempts to establish the cultivation of tea in India (Calcutta district) were undertaken in 1780, but the new tea could not withstand competition with Chinese tea. Only in 1823 in

The provinces of Manipur discovered an Assamic wild tea, on the basis of which in the 30s and 40s of the XIX century. The British began industrial production of Indian tea on all expanding scale. <<

[8] Ceylon was especially rapidly developed after the mass death of coffee trees there in 1882. It is amazing that 100 years later, in the late 70s-early 80s of our century, all tea plantations that were aged and not renewed regularly for 60-70 years were also killed on Ceylon (Sri Lanka). Ceylon tea almost disappeared in the late 70s of the XX century. But then efforts were made to revive him, and at present (90s) he reappeared on the world market. <

[9] One of the reasons for the failure of tea breeding was the poor quality of the seeds brought from Japan and China: they turned out to be either rotten or unacceptable. As it turned out later, the owners of tea plantations - the Chinese and the Japanese, as well as the British, who were driving the seeds, doused them with boiling water, hoping to prevent tea in Russia in this way. It should not be forgotten that Russia imported millions of gold rubles until 1917, and to make it "free" from tea dependence, of course, was not in the interests of foreign tea fires.

### Chapter 4. Dry, or ready -made tea

## 1. Revolution in the technology that has existed for centuries

Until now, we talked about tea as a plant. But in order to turn from the flesh gathered at the flash plantation into the ready -made dry tea, the green tea leaf must go a considerable path of factory processing.

Tea production technologies are dedicated to extremely a lot of work. We will not therefore dwell on it in detail. Let's say only about the main thing, about the most significant tea in the modern production.

First of all, it should be emphasized that the modern process of tea production is very different from the previous, traditional Chinese method that requires many manual operations.

The previous technology that has existed for centuries is outdated. And the point is not, the only thing that today the process of production of tea in all the tea -producing countries has become mechanized, although this circumstance has already made changes to the technology. The main thing is that the modern technology for the production of tea is based on a deep understanding of the creatures of the chemical transformations that a tea leaf experiences before becoming dry tea. This makes it possible to move away from the traditional method of production, completely exclude some operations from the processing process or reduce their time, introduce some innovations in processing modes and generally make the entire production process in general. If traditional technology required a large skill and qualification workers, considerable tension of strength and absolute accuracy in the performance of individual operations, as well as individual art, then the modern technology that uses perfect machines is based primarily on knowledge of the biochemistry of tea and tea production. In other words, creating

Industrial brands of tea, we are more and more relied on science. That is why the role of biochemists in the modern production of tea is increasingly increasing. From this it is clear why the research work on the biochemistry of tea and tea production in recent years has reached a high level and led to updating the ideas about tea and thereby to update the methods of its production.

To imagine how important the technology and its changes in the creation of a variety of teas, one should mean one important circumstance: from the same source material, from the same freshly glued green tea leaf at the tea factory, you can get various types of finished tea - black, green, red and yellow; scattered, pressed or rapidly discrimination. Everything will depend only on what operations, what technological process will be subjected to the same tea sheet at the factory.

But besides the fact that each type of finished tea corresponds to its own technology, even for the production of the same type you can offer different technological schemes.

Since in every country researchers go in their works in different ways, use new and traditional in tea production in different ways, the technology for obtaining finished tea in different countries and even in different areas of the same country is different. It depends, of course, not only on scientific recommendations and traditions, but also on some differences in the nature of tea raw materials (i.e. fresh tea leaf), as well as from production secrets of tea -producing firms.

The main thing that modern technology is striving for is extremely accurately and strictly scientifically determine what and how affects the quality of the finished dry tea, the formation of its aroma and taste, on the preservation of substances useful for humans, on the storage of tea during storage. In each country and for every type of tea, these problems are again solved in different ways. And that's it

This ultimately reflects on the nature and quality of teas entering the trade. That is why to have an idea of the technology of tea production, in fact, is completely useful to every cultural, conscious consumer - this will allow him to better navigate in the teas.

Technological processes affect not only the assortment, but also on the quality, and therefore on the gravity of tea, although in general the variety depends on a number of factors, among which one of the main ones is the quality of the original product, i.e. fresh green tea leaf. The slightest violations in the adopted technology can lead to damage to high -quality initial raw materials, to underestimation of grade, and vice versa, improving the factory processing of the source material, you can get a higher variety of tea. For example, the production of tea using a new technology proposed in the 50s as a biochemist Professor M.A. Bokuchava, allows you to improve the quality of ready-made dry black tea by one or two varieties compared to tea prepared from the same raw materials using the old technology.

IN common features technological process production tea on modern mechanized enterprise It comes down To next operations: Washing, Twisting, fermentation, drying and sorting. In factories in Russia - Adlera and Maykop - stagnation is produced

artificially, and abroad (for example, in India and Sri Lanka)-natural. While in India, the staging lasts from 18 to 22 hours, we have the same process last 6-8 hours (and only 3-4 in the new stagnation unit). It is clear that such a rush does not help improve the quality of tea. At first he does not not work, and then he is poorly twisted.

Twisting occurs in special machines - rollers compressing the tissue of the tea leaf. The meaning of this operation is to destroy the structure of the leaf tissue at the molecule level (!), Without crushing the seagots outwardly. It is as a result of this that the aroma is "released". That is why, when buying tea, you should give preference to tightly twisted teas, and not flat, seeded tea.

Then follows the process of fermentation - one of the main in the production of black tea. It is during fermentation that the specific taste and aroma characteristic of black teas are formed. Typically, fermentation occurs without the intervention of machines and a person who should only monitor the process in order to determine when the climax occurs, i.e. When the tea leaf reaches the highest stage of the development of taste and aroma, after which the fermentation process is cut off, not allowing tea to "over -over". We still have an accelerated process of fermentation with subsequent heat treatment in a number of factories.

unfinished semi-finished product. They did this for the notorious "fulfillment of the plan." Moreover, according to the new technological scheme introduced in Georgia in the 70-80s, fermentation as a completely independent process is generally actually excluded, which was a clear wrecking. It was assumed that it allegedly occurs already during twisting. This gave "saving in time" for about 6-8 hours and, most importantly, allowed to do in the factory without a special enzyme room where tea was to be "crawled out". And this opened the way to create fully mechanized enterprises, where tea would prepare cars without touching the hands of a person. So, under the guise of technological progress, there was a methodical, organized damage to tea raw materials, which had no analogies in Asian countries of classic tea production, where they did not resort to cars.

The next process, drying, occurs in special chasusyl machines at a temperature of 92-95 ° C, and the temperature of the half-semi-dodger reaches 70-75 ° C. The main goal of drying is to bring the moisture content of tea to normal. In our humidity, 6-7.5 %were considered to be a standard, usually 3-5 %abroad, and some companies even have 2 %(Lipton, England). It is clear that the ability of Soviet tea to withstand long -term storage from this decreased. Drying is produced in India once, and this is quite enough in conditions

hot climate, when the air temperature in the workshop itself reaches 40 ° C. In most countries, drying is two - time - for guarantee and reinsurance. In Georgia, in the 70s, they began to produce a single drying, supposedly "Indian", but this led only to the fact that large batches of tea after a couple of months were chased and rotten. Therefore, after drying, it was decided to produce still accelerated heat treatment of a semi-finished tea in a special thermal chamber at an air temperature of 40-45 ° C and a moisture content of 50-65 %, which did not save the position, as it still reduced the quality of tea, since each new operation on a tea leaflet After fermentation, he "selects" him some kind of fraction of the fragrance.

Thus, the process of tea production, established in the USSR, and, above all in Georgia, was largely vicious by the end of the 70s, and this was, of course, not a random phenomenon, because hesitatedly led to a deterioration in the quality of Soviet tea, to an increase in discontent This tea from consumers.

Final process production tea is sorting dry teasemi -finished product, i.e. Selection using various sieves (sorting machines) homogeneous in size and shape of the teas. In this way, the industrial brands of a half-finished tea are sent to Chara-designer enterprises, where trading varieties of tea are prepared from them by compiling mixtures of various brands of semi-finished product, as well as facilitating these varieties.

In a number of countries (China, Japan, England), after final drying, tea is sometimes flavored, i.e. The aromatic substances are added to it, which either give tea a completely new aroma, or enhance, restore the aroma lost by tea in the process of factory processing.

# 2. Types, varieties and varieties of teas

Majority consumers got used to it distinguish Tea V Mainly By district Growth: Indian, Ceylon, Georgian, Krasnodar And T.D. Considering

The geographical sign is the main thing for a particular variety of tea. Many people think that in each of these geographical areas a botanically different, special type of tea bush grows. This opinion is erroneous. The only botanical type of tea plant in three varieties is capable of giving all the enormous variety of finished teas that humanity now - thousands of trade varieties, with various factory processing.

The whole variety of teas is divided, as mentioned above, into four main types: black, green, red and yellow. Such a division is by no means due to a purely appearance, different colors of teas both in a dry form and especially in the infusion. Color is only an external reflection of the differences in the biochemical processes of the processing of the tea sheet, which ultimately affects the chemical composition and the main taste and aromatic features of each type of tea.

If, in the production of black teas, the tea leaf undergoes such stages of processing as stagnation, twisting, fermentation and drying (or shortened fermentation plus thermal treatment), then in the production of green tea two stages - wilting and fermentation - are excluded. At the same time, they specially strive to avoid some kind of random or passing fermentation during other stages of processing. Thus, black (fermented) and green (non - enzymatic) teas are, as it were, pole types, because their production is based on diametrically opposite biochemical principles.

Red and yellow teas are intermediate types between black and green. Both of them experience fermentation, but in an incomplete, not finished form, therefore they are called unhapped or semi-fee-fertile teas - and this

A characteristic feature. Moreover, the degree of fermentation is more pronounced in red teas than in yellow ones, where the processes of fermentation are sluggish and sideways, along with other processes.

That is why red teas are closer to black, and yellow teas - to green teas. This is the essence of the division of ready -made dry tea into four main types. Each of the main types is divided by the nature of the mechanical processing of the sheet

on varieties. For example, black and green teas can be loose, pressed or extracted.

Spread teas, or, as they are called in trade practice, baychovs [1], the most common. This is a mass of individual teas, not interconnected in closed (metal or paper) packaging in the most diverse amount, depending on the standards adopted in a country: 25, 40, 50, 75, 100, 110, 113.5 (quarter pound), 125, 200, 220, 226.5 (half a pound), 250, 440, 453 (pound), 500 and 1000 g.

Pressed teas, which are briquettes prepared from compressed under heavy pressure of teaspoon of various qualities - from tea chips to rough leaves and even branches of the tea plant, are less known to a wide range of consumers. Pressed teas have a rather narrow, local spread among some peoples of Central and Central Asia, the Far East and the inhabitants of the Far North. These briquettes can have the form of tiles, brick, cylinder, ball, disk, or some more bizarre shape (for example, "Lastochkino Nest") and reach a mass of 100 and 250 g to 2.5 or more kilograms (there are known briquettes weighing up to two pounds).

Extracted (or fast -soluble) teas began to be used only in recent years. They are extracts or tea concentrates that make it possible, firstly, to accelerate and simplify the process of brewing tea, and secondly, to place quite significant doses of tea in concentrated form in relatively small volumes. Actually, these teas do not contain tea, natural sheet - this is either powder or granules. And real teashers do not use them. They are common only in America, and even then in public catering.

Baykhovy and pressed teas have their own varieties depending on the form of processing, the appearance and size of the sheet.

Black loaf teas are divided into sizes of teas into leaf (large), broken, or broken (medium) and small (sarying and crumbs). In our trade, division is accepted only into large and small tea, and by small loyal tea we actually mean medium teas, since sowing and baby practically did not enter the retail trade. The Russian consumer was used to considering them "torture" and always rejected them, although in other countries these types of tea are used as a cheap, third variety.

In addition, large and medium teas are divided by a sheet, i.e. According to its quality indicators, depending on raw materials and factory processing, into several categories or degrees. So, black leaf teas are divided into four degrees: Flauri Peko (FP), Orange Peko (OR), Figs (P), Pecon Sushong (PS). The average cut (or broken) teas also have four degrees: Broken Orange Peko (thief), Broken Peko (Br), Broken Peko Sushong (BPS), Peko gives (PD). And finally, small teas are divided into fannings (FNGS) - sowing and give (D) - baby.

All these designations, albeit in small print, should be present on the labels for packing imported teas of decent firms (and not fake and smuggled), and the consumer, guided by them, can receive relevant information about the tea purchased.

This tradition actually gives a complete picture of the assortment of factory varieties of black-bay tea-half-finished, since the unified international

Classification of factory stamps of tea. It gradually developed during the second half of the 19th century and only by the beginning of the 20th century took its modern look. At the heart of its terminology (names of degrees or childbirths) are inhibited Chinese names and some English terms.

Green buttonhole teas are divided into only two categories in the size of the sheet - sheet and broken (cut, broken). But they are more difficult to differ in the form of a leaf twisting

(not to be confused with the quality of twisting). For example, the sheet can be twisted along its axis into a tube so that the finished teas is resembled a small, slightly bent dry blade. This is the most common type of twist, characteristic both for black, red and yellow, and for the known part of the green teas. But along with this, green teas can have other types of twisting: across the axis of the sheet in the form of a pea, capers or a small ball of irregular shape (pellets), and then such tea in trade is respectively called "pearl", "capers", "gunpowder". The sheet may not be twisted, but simply crushed, flattened, and then the tea is called "flat"; Several varieties are known in China and Japan. All these seemingly small differences in the form and in the appearance of the finished seagull are reflected nevertheless on the taste and aroma of tea, and give both new shades from other varieties.

The differences in the form of pressed teas are even more visible. Among them, brick, tile and tablet teas are distinguished. The main here, of course, is not an external form - brick, tiles or pills, but the character of a leaf subjected to a press. The most rough material goes to the pressing of brick tea, the material is less rough for pressing the tile, and even thinner (tea powder) to the manufacture of tablets.

As for extracted teas, they are produced either in the form of a liquid extract, or in a dry, crystalline form, they are given a general name for rapidly soluble teas (according to the method of use), and released in a special hermetic package resembling tin cans.

All the indicated types of finished tea (black, green, red and yellow) and their varieties (baidu, pressed, extracted) are also distinguished by production countries (Chinese, Indian, Japanese, Ceylon, etc.) or more narrowly - according to areas of growth (Assam, Darjeling, Udzhi, Georgian, Azerbaijani,

Krasnodar). It should be borne in mind that in some areas only a certain type or variety of tea is produced, and in such cases, an indication of the growth area already gives an idea of the type or variety of finished tea. For example, Japanese tea from Udzhi - always green, Krasnodar and Ceylon - always black, baykhovaya Taiwanian teas - mainly red, etc.

It is known What inside each varieties exists subdivision on Numerous trade varieties. Varieties reflect the characteristic individual features of aroma and taste, and most importantly - the degree of quality of one or another finished tea compared to other tea of the same variety.

The quality of the finished tea, and therefore its variety depends on many factors that are formed gradually, starting from the moment of the growth of a tea bush on the plantation and ending with the final stage of industrial processing - flavoring. These factors include: firstly, the conditions for the growth of a tea plant (soil properties, the amount of precipitation, the appeal to the sun, the neighborhood of other plants, the age of the tea bush, care of care); Secondly, the conditions for collecting a tea sheet (thoroughness of the collection, type of collection-manual or machine, type of leaves-the younger, more tender collected flash drives, the higher the variety of finished tea); Thirdly, the time of collecting a tea sheet (this indicator for each geographical area is individual: for Chinese teas, an earlier collection gives a higher variety, because the weather at this time is still cold and dry, the sheet grows slowly and turns out to be small and dense, concentrated; The best teas are obtained from the fees on the edges of the season - early in the spring or late autumn, i.e. before or after the period of summer Mussona; The most valuable substances are accumulated in the sunny, late summer months; fourthly, the nature of the processing, the technological scheme (more careful, more thorough processing without the slightest disorders of the technology gives higher grades; in particular, the thoroughness of the factory processing The tighter, the sheet is twisted, the higher the variety, and quality

raw material, the accuracy of the press is reflected in the quality of pressed teas); fifth, the nature of additional processing (artificial flavoring and blending).

Trading varieties of tea are obtained by mixing and combining various industrial varieties, or, as experts say, by bathing, usually produced at Chara -based factories away from the place of production of tea.

Each blend created at the factory usually includes from 10 to 25 varieties of industrial tea, and very often not only from different plantations, but also from different parts of the world.

For example, the same African (Ugandyan, Kenyan) can be added to Indian tea, but below the Andigi, Keniye tea - Indian, etc. These blending then receive their trade name - either the main tea included in the composition, but with the presentation of the number, or completely special. There can be several thousand such names.

Abroad, tea is usually called by the name of a particular tea firm with the addition of sometimes the name of the type of tea, the degree of quality (higher, selected, good) and the area of growth.

In China, Japan and other countries of Southeast Asia, many varieties of tea have original names (for example, "black dragon", "silver needles", "cilia"

Beauties ", etc.), accepted only in this country. We have trade varieties of black -bay tea are distinguished mainly in place

growing (Indian, Ceylon, Georgian); To name usually Add ordinal number varieties (higher, first, second, third), A Sometimes Andany An additional epithet (selected, extra) or additional number (for example, Georgian tea of the first grade No. 300, Azerbaijani No. 400), if you need to indicate thinner differences within the same variety (while taking in

An additional epithet (selected, extra) of additional number (for example, Georgian tea of the first grade No. 300, Azerbaijani No 400), if you need to indicate thinner differences within the same variety (while taking into account the composition of the mixture forming this variety). Usually the higher the number, the higher the quality of the tea. Thus, when packing in our country, in the name of trade varieties of black kayach tea, placed on the labels of packs, the name of the type (black) and varieties (kemethovy), which implies for those who are understanding in view of the predominant

the spread in Russia of this particular type of tea. Our type is indicated only for green tea, as well as for non-bait varieties of black tea (for example, green Georgian tea, the highest variety, No125; Gruzinsky green brick tea; tea green Georgian, III variety; tea black tile Georgian, I variety).

Black and green teas have the largest number of varieties and varieties. Significantly less assortment of red and yellow teas.

The only country in the world that produces all the known types and varieties of tea was and remains China. Red and yellow teas are released almost exclusively in China (as well as in Taiwan), although China has not published data on the quantity and share of them in the total tea products of the country over the past 10 years.

As for the tea industry of other countries, they are specialized mainly in the release of any one type of tea-black or green.

In recent years, the Russian tea industry has produced only one type of tea - black.

India industry is also mainly oriented towards the production of black buttonholes and only in extremely small quantities (less than one hundredth part of the total products) gives green, moreover, one button accordion. Approximately the same ratio between the production of black and green teas in Vietnam.

On the contrary, Japan produces mainly green kythah teas, and produces blacks about one fifth of the total number, and exclusively for export.

Sri Lanka, Malaysia, Indonesia and all the tea-producing African countries (Kenya, Uganda, Tanzania, Malawi, Congo) are specialized exclusively in the production of black teas.

The Indochina - Thailand, Laos, Cambodia, where tea is produced mainly for local needs, is a very diverse assortment, but in small quantities and very different from world standards. So, in Thailand various varieties of "orange", or "brown" tea, close to black, but less enzymatic, having intense, but differing in tint from the black infusion, are produced. The so -called "blue" tea is known in Cambodia and Laos - a kind of green variety, however, distinguishing, however, its own tart taste, a heartbreaking, but pleasant aroma and dark, intense tint. For the production of these teas, as a rule, an old manual technology is used, which gives the opportunity to endlessly vary the processes of staging and enzyme, thereby achieving, creation

Intermediate between the main four types of tea.

Now that we are in general terms with the classification of teas, we will dwell in more detail on the characteristics and description of the properties of each type and a variety of tea separately. Let's start with the baych teas, better known to a wide circle of consumers of our country.

## 3. Baykhovy teas

Black teas. Almost 98 % in global tea trade is black teas. They, as we already know, have the greatest variety of trade varieties, and therefore have the rich gamut of shades of taste and aroma within their type.

Black loaf teas are mainly manufactured. Inside each group of varieties, black teas differ both in quality indicators and in some of the external characteristics concomitant quality. Such signs are the color, the shade of the teas and then the degree or quality of the twist's twist, i.e., as the teapodes say, the "cleaning" of the sheet. By color, ready -made black baykhovy tea should be black with a particular tint (reddish, bluish, brilliant, orange), depending on the national characteristics of growth and processing. If the seagulls have, say, gray, dull color, then this means that tea is of poor quality, because the eating occurred as a result of the fact that the juice was somehow removed from the surface of the seas during manufacture and the tea lost part of the soluble substances, and Therefore, not only its appearance faded, but also "faded", its taste and aroma were partially lost [2].

If the tea instead of black became light brown, it means that the technological process was also broken or coarse leaflets were used as raw materials. Thus, a change in the color of dry teas compared to the standard indicates a decrease in the quality of tea.

An even closer relationship exists between the degree of twisting of the leaf and the quality of tea. The tighter the leaf is twisted into the tube, the more it is elastic when pressing and light compressing with fingers, the stronger it is, the better and higher the variety of tea. If the sheet is curved, poorly twisted or easily crumble, it means that low -quality tea.

Some varieties of black kemetal tea have such a beautiful "cleaning" that it often serves as a decisive feature in the name of the variety (for example, "royal eyebrows", "cilia of the beauty", "claws").

As for the magnitude of the teaspes, in the vast majority of cases, it plays a prominent role in assessing the quality (variety) of black buttonholes.

By tradition, the best is considered to be the leaf, whole, intact, unstable tea. And this is quite understandable. A whole sheet preserves the aroma of tea better, is less exhausted, and absorbs moisture less. This is why leafy teas are recognized as the best compared to

small teas of the same variety in the presence of other equal indicators. However, in India and Sri Lanka, where in recent decades it has become customary to artificially cut high varieties in a special machine, medium and small teas also have high quality. Moreover, among some specialists, the CHAVOVODS and especially among consumers, the opinion was strengthened that small teas are even better than leaflets, since they give an intensive infusion faster and easier [3]. True, cut, small and medium tea should be distinguished from small and medium crushed, which is always incomparably lower than quality. At the same time, small tea, formed from fragments of very high varieties, has, of course, all the properties of these varieties and in quality better than sheet tea of the lower grades. Therefore, the difference between large and small tea in modern trade is to a certain extent relative and conditional. For example, we have a high -grade Ceylon tea on sale both medium and small, and the price of both is the same. The difference is that the small tea of the same highest grade, firstly, is less stable with prolonged storage (which is practically no matter for a consumer buying one pack of tea), and secondly, it is quickly insisted and gives to the solution. Most of the substances contained in it (this consumer must take into account to use tea correctly, i.e., take a slightly smaller dose for brewing small tea compared to ordinary, and also avoid brewing such tea with tough water, since at the same time infusion, although at the same time an infusion, although at the same time an infusion. and retains the intensity of the color, is made by bitter, with a metallic flavor). One of the best varieties of tea of past years is also small - "Bouquet of Azerbaijan" and in recent years - Georgian "Extra", while "Bouquet of Georgia" is released only by leafy.

Another of the outwardly noticeable and more important indicators of the quality of black teas is the presence in the dry finished tea of the so -called tips (we have already talked about them above), which in a freshly spaced state are adhesive twisted, sharp, golden and silver tips, crowning flashes and covered with slightly noticeable fluff. This delicate fluff is preserved in tips even after all stages of industrial treatment of tea, showing amazing resistance contrary to twisting, heat treatment and other operations. It is on the white gun that you can easily notice the tips in the dark mass of finished tea. Tips are the main source of aroma, and their presence is characteristic of high -grade tea. At the same time, the more tips, the better the tea, the higher its variety, the taste is more exquisite.

We should not forget that small teas lose their condition faster with improper storage.

These are some common features characteristic of black kayaks in general. At the same time, black teas generated in different countries have their own

Features that distinguish one national group of varieties from another. Indian and Ceylon teas are distinguished by a fortress, they are characterized by a sharp "tea"

Taste, they give an intense infusion. At the same time, Ceylon teas have a brighter infusion with a reddish tint compared to Indian ones.

Chinese teas are more diverse in shades of taste and aroma, less cutting to taste, differ in softness, velvety, they are accompanied by various flavors, even if they are not artificially aromatized. These flavors - "stiffness", "smoke", "leatability" - arise in the production process as a result of certain features of the technology that is adopted for this variety or group of varieties.

Georgian, Azerbaijani and Krasnodar teas in their fortress and timbre are somewhat closer to Chinese than the Indian ones and are distinguished by the evenness of taste and aroma, if they did not accidentally take any extraneous impurities and smells during transportation and careless storage. This feature of the teas familiar to us - their increased susceptibility - makes it necessary to carefully store them and qualify them.

Black teas of other areas of the world-African, South American, Middle Eastern (Turkey, Iran)-in quality, as a rule, significantly lower than Indian, Ceylon and even former Soviet teas and until the 60s were little known in the world market. However, c

The last decade African countries-Kenya, Malawi, Ugzania, Uganda, Madagascar-began to supply their relatively cheap teas to the world market: partly due to the fact that China greatly reduced their exports, partly because the tea industry of large industrial countries began to make demand For these medium -sized, ordinary teas, using them as additives to higher and expensive Indian varieties to create mass -moderate cost -cubs of mass tea. African teas are usually very small, such as fannings. They stain the infusion in a dark, deaf, not bright, inexpressive color; They have no aroma and have a rough or mild taste. All this makes them convenient for adding to teas that have a "own face".

Of course, the indicated features of the national groups of black tea are the most common and to a certain extent conditional, since they cannot characterize the entire variety of varieties produced in each tea -producing country. After all, the differences between the varieties of teas even within the same country, and sometimes one area can be very significant. That is why, along with the general characteristic, it is necessary to at least briefly indicate some of the most significant features of the most famous varieties of Indian, Ceylon and Chinese teas, as well as the best varieties of old

#### "Domestic" tea.

Krasnodar, Georgian, Azerbaijani black teas. The best of these teas was attributed until the very recent time (until 1991), first of all, "Bouquets": "Bouquet of Georgia", "Bouquet of Azerbaijan", "Krasnodar Bouquet". They corresponded to high

International standards, having a soft, slightly velvety, quite complete, with pleasant tart taste and very delicate, but not particularly strong aroma. Unfortunately, these highest varieties were little known to a wide circle of consumers, because they were made not every year, and even in small batches. But they clearly proved that in Russia the existence of its own high -quality tea breeding and tea industry is quite real, because the Krasnodar teas gave the best bouquets, which sometimes surpassed the Indian and even Chinese higher grades of tea.

The Extra variety, the same price with the "bouquets", usually still differed from them with the lack of a subtle aroma, although it, as a rule, had a full taste.

If we talk not about the characteristic features of the highest varieties, but about the most typical features of the main groups of Russian teas, then Krasnodar teas (their best varieties) are more velvetists, soft and "sweet", more fragrant compared to other teas, especially if they are bearing not far from From the gathering place (for example, at the Adler Chara -designer factory) and stored under the right conditions. At the same time, the Krasnodar teas are most sensitive to climatic fluctuations and storage disadvantages and quickly lose not only the aroma, but also the taste if their collection coincides with the rainy season. In addition, they extremely poorly tolerate transportation and re -phasing. That is why Krasnodar tea, bearing in

Half-kilogram packs at the site of the collection are of excellent quality, and the same tea, poured into small packs in the factories of Odessa, Ryazan, is low.

Tender, but weak -wing Krasnodar teas are pleasant to drink with small additives of Indian or Ceylon tea.

Georgian teas are more cutting and tanks compared to Krasnodar. In the case of good condition, they have a complete, velvety, tart and only inherent in their characteristic taste that they inherited from their ancestor - "kimyn". This taste is not like the taste of Indian teas, and it is this circumstance that sometimes knocks down consumers who are accustomed to connect the concept of "tea taste" with the sharp taste of Indian or Ceylon tea. However, the taste of Georgian teas is more pleasant if it can be clearly identified by proper brewing. You can read about how to achieve this in the section on the brewing of tea. As for the aroma of Georgian tea, it is closely connected with taste and is weak in ordinary varieties.

Georgian tea can be successfully bathed with Indian and Ceylon, but it is better not to do this, since the specific features of Georgian teas are lubricated. It is better to increase the hitch of leaf Georgian tea (its norm) for each welding. The fact is that the consumer is not satisfied with the extractiveness of Georgian teas, or rather, the weak coloring of the infusion in comparison with the infusion of Indian tea. You can increase the concentration of infusion only by increasing the dose of the brewed tea. With a high concentration of infusion and proper brewing, Georgian tea of the highest varieties discovers its

Positive qualities: subtle aroma, pleasant, peculiar, not sharp, velvety taste. It is extremely important for the development of the aroma and taste of Georgian teas when brewing to observe a special thermal regime - the high initial temperature of the kettle and the temperature of the room above 20 ° C. Only if these conditions can be appreciated by Georgian teas. (The chapter on brewing is given a way to handle Georgian tea.)

In recent years, when there was a steady decrease in the quality of Georgian tea, especially its second and first varieties, this was manifested primarily in the complete disappearance of the aroma and in the appearance of a sharp, hard or empty taste. Such indicators of a decrease in the quality of the dry tea leaf can no longer be corrected with proper brewing, they are usually the result of not so much errors during industrial processing as a violation or deviation from the ideal when collecting a tea sheet. So, the empty taste of the infusion may be the result of collecting tea in raw or cloudy weather or gathering after a rainy week. A sharp, tough taste more often arises from violation of industrial technology; But it may be the result of the fact that in the collected tea turned out to be a high percentage of rude leaves or there were completely absent tips. Such cases became almost a rule with a modern machine collection of a tea sheet, when the cutting mechanisms of the tea porthile machine, which, in negligence, installed with some inaccuracy, begin to capture, along with the first and second sheet of flash, the more rude, below the fourth, fifth and even sixth leaflets. Sometimes the "knives" of the tea porthole, although adjusted, are still capturing a more rough sheet. The same happens because of other technical problems or even because of the irregularities of the soil on the plantation, when the car "jumps", collecting tea.

All this usually does not happen with manual collection of a tea sheet, because the collector of tea itself in each case determines which sheet it should disrupt, and often bypasses the bushes where there are no (did not grow) young leaves. The machine cuts off the entire leaf material of the whole row (thread) of the bushes at the level at which its "knives" are installed, regardless of the quality, age and other indicators of this sheet material.

Of course, the quality of the "green material" itself, the most tea plant can be even very good. Indeed, in general, Georgian tea as a tea plant in its indicators stood at a high level. His selection paid great attention, so that a full -fledged product was to be biochemically. But a mixture of the material of various condition had a destructive effect on the overall quality of tea, as it caused a change in the standard of taste to which people were accustomed and the absence of which was signaling, that the tea was spoiled.

Meanwhile, back in the 90s of the XIX century, and especially at the beginning of the 20th century, it was proved that high-grade tea with a thorough manual processing can be obtained from the Georgian tea sheet. Separate varieties of Georgian tea were not cheap before the revolution. These were the varieties "Bogatyr", "Kara-Dere", "Zedoban", "Ozurget". One of the best was considered "Russian Tea Dyadyushkin." Its quality was higher than the average Chinese teas. He even received a gold medal at the Paris exhibition of 1899, because he contained from 4.5 to 5.5 % of the tips, which was higher than that of the then average Chinese teas sold in the Russian market. All this suggests that a tea bush in Georgia can be a source of high -quality black canal teas, if only tea is engaged in qualified and

Responsibly, they will refuse machine cleaning and move to manually, and also move away from the accelerated tea production technology [4].

Azerbaijani teas are close to Georgian, and the highest varieties are not inferior to Georgian in velvety of taste and tenderness of the aroma. In terms of extractive, the highest varieties

Azerbaijani tea above Georgian. However, since Azerbaijani tea is always very small, it differs in particularly increased sensitivity to temperature and humidity fluctuations. Therefore, the quality of ordinary varieties of Azerbaijani tea is generally sharply reduced during long -term storage, far from their place of production. This

The circumstance explains the existing paradox: in Azerbaijan itself, local tea has excellent qualities and is highly appreciated by the population, and outside it is in relatively slight demand, as it is usually inferior to Georgian.

Indian Black Tea Divide on Two Big groups - North Indian And South Indian. The bulk of the teas of Northern India is Assamian teas. However, they are heterogeneous in quality. The best Assam teas are produced in the Upper Assam, while the average Assam gives medium -quality teas, and the lower asses - low. Another large area of Northern India - Bengal - also grows the Assamic variety of tea in the areas of Duars and Terai, and in the first of them they produce very low quality tea, which is associated with extremely simplified technology. On the contrary, in the third area of Western Bengal-Darjiling, where at an altitude of more than 2000 m above sea level, a Chinese variety of tea is growing, they produce the best in India, and, perhaps, one of the best black tea varieties in the world-Darjiling, which is distinguished by honey-bone A shade of taste and aroma, giving intensive, bright, beautiful, velvety infusion.

More precisely, it is precisely this Indian tea, which is often judged by all Indian teas, the least Indian. This is a kind of Chinese tea growing in the foothills of the Himalayas in India. Yes, and according to the method of cultivation and the method of production, Darjinging is much closer to Chinese teas. It is always leaf, large tea with good, beautiful cleaning, with a pleasant dark-beard tint of teas.

The best Darjiling is obtained from the collection in March. Good tea is given to fees in April, May, September and October, the second varieties are the result of the collection in June and August. July Darjing is usually empty, devoid of fullness of taste, because this month in India there are rains, which is reflected on the quality of the sheet, but not on its appearance.

In Southern India, from two areas, Kerala and Madras, the latter gives the best teas, where the Assamic variety is also bred. However, South Indian teas are so harsh to taste that this gives them a well-known stiffness, and therefore they are most often consumed with milk. In general, their quality is average. The exception is the Nilgiris area (in Madras), where tea plantations are located above 1800 m above sea level, in the area of the Blue Mountains. The best varieties of Nilgiris are produced only from a sheet of December, January and February fees, although they collect a sheet all year round, and maximum fees fall by March - May. With the exception of Darjiling (leaf tea), all Indian teas are cut, small (30% BP, 50% FNGS and 20% D). To achieve greater standardization of tea, Indian firms bathe industrial varieties so that sometimes from 15 to 20 components, of which over half, and sometimes two -thirds, are included in low or medium grades. Despite this, Indian black teas have won the world market over the past three to four decades. They attract the mass consumer mainly by the simplicity of use, because their dark color of the infusion and the sharp, "intelligible" tea taste are almost always guaranteed, even with not particularly careful brewing. However, an increase in demand for private Indian tea and its relatively high

Popularity with not always high quality indicators are associated with some other factors that often have nothing to do with the taste and other properties of this tea. Firstly, a sharp reduction in the global market of Chinese teas has already opened the way to Indian tea. Secondly, since the dynamics of demand for Indian

Tea in the global market still largely depends on England, then the large purchases of Indian tea are determined by the conjuncture on it and even its quality, since English companies always buy the best parties of tea [5], the rest of the countries get the remnants, of course, lower quality (although these remains can be high at grade and price). Thirdly, in view of the fact that the Indian tea industry is focused on the demand of the "English tea area" (Great Britain, Ireland, Australia, New Zealand, Canada, the eastern coast of the United States-New England), it tries to adapt its teas to Anglo-Saxon tastes. This means that the main task in the production of tea is to achieve its high extractiveness and expressiveness, even some sharpness of taste, in the calculation of the fact that this tea will drink with milk or cream. This pushes into the background to achieve such important quality indicators as the aroma, brightness of the infusion, transparency, soft taste, velvety of the consistency. That is why Indian teas belong to the so -called heavy, morning teas by the nature of their use, and not to light or evening, in which the aroma is appreciated, the "ESPRA", or "inspiration" that they report.

Ceylon black teas are less different than Indian ones, they are more homogeneous due to the uniformity of natural conditions in Sri Lanka. But here, even here, the best teas are obtained from high -mountain plantations located in the center of the mountain range in the southern part of the island, and only from fees from June to September, while maximum fees occur in March - April and give tea not so high quality. All plantations located at an altitude below 600 m above sea level, as well as most other, medium -sized ones, give rather ordinal, medium -sized teas. That is why it is wrong to believe that any tea, if he is "Ceylon", is always good.

Thus, despite the fairly high gross production indicators, the percentage of high -grade teas both in India and Ceylon is relatively small, and these teas go mainly for export. The best Ceylon tea among the masses of Ceylon teas, who rushed in the early 90s on the purchase of commercial firms in Russia, is Annabel of the Ceylon package. This is really beautiful tea.

Chinese black teas are distinguished by an exceptional variety of varieties. There are several hundred of them. At the same time, their common feature is the wealth of aromatic gamut and the beautiful tart taste of the soft velvety timbre without unpleasant sharpness, characteristic of some varieties of South Indian and Ceylon teas.

However, over the past decades, China has sharply reduced the export of tea to the world market both by quantity and in assortment. Basically in European countries, the so-called jasmine Chinese tea is most famous, i.e. Black or green baychian tea flavored with jasmine, average in quality, usually Fujian, which should not be consumed independently, but as an additive to Indian, Georgian or any other tea.

From high -quality Chinese Chayov, exported V Extremely insignificant The quantities in the external market should be mentioned by Unanian tea, as well as the highest varieties of Fujian black. They are produced exclusively as leafy, with large teas, beautiful in cleaning, characterized by brilliance and deep black color inherent only in Chinese black teas of high quality. Even in dry form, these teas have a strong, persistent and memorable aroma, which is characterized by extraordinary freshness. These qualities are determined by a large percentage of tips in these varieties of tea, strong cleaning, which allows not to lose the aroma to the final stages of production, which is technically impossible to make in the production of broken teas of the South Asian type.

A characteristic feature of Chinese teas trading in the world market is that in every historical period they appear under different names, although some of the teas in China itself retain their traditional "names" not only for centuries, but even for millennia. The reason for this is that Chinese tea always penetrated into Europe through someone's mediation, and it was the intermediary that gave one or another one or another of his or another

distorted from the Chinese name. So, the Turkic peoples, Arabs, Russians, Portuguese, French, British, and all of them, of course, called and determined the names of Chinese teas, performed intermediaries in the trade in Chinese teas in Europe at different times. Only from the middle of the 20th century, Chinese tea entered the world market under purely Chinese names, but they turned out to be so difficult and unusual that until the 80s they also changed, adapted, adapted in each country in their own way. That is why now, when Chinese tea exports only China itself, we again meet with the new "names" of Chinese tea. In the 80-90s of our century, the central organization for the export of tea from China, the so-called National Chinese Corporation of natural products, allowed about three to four tens of varieties of tea specified in modern and equipped with modern Chinese items to export to the world market. These are mainly the teas of the Fujian province, which traditionally delivered tea to Western Europe, starting from the 40s of the last century; In addition, as an exception, for certain occasions, two or three varieties of Yunnan tea, considered the richest of the content of the tips and the most refined in its bouquet, are occasionally received to the world market. But the parties of such revenues are extremely limited.

Fujian teas are divided into the following categories:

- 1. The highest category of black teas: Rogua, Bukhinhun, Shien-Lee-Hiyan, Shipin-Ti-Huang. For the convenience of foreign buyers who cannot extract information about the composition of these teas from their Chinese names, they are all endowed with the following external distinctive features: only 125 g are packaged in metal cylindrical boxes with a double hermetic lid.
- 2. A fairly high quality of teas such as "Shuisinsky", also faced with 125 gram containers-this is Shen-Shun and Yu-Fen.
- 3. A guaranteed high, but not "amazing", but always even, moderate standard have teas produced by Dunhuan. On the labels of such teas, it is precisely the name of the company that many take for the name of the variety of tea. But this is not so: the Dunhuan company is only a kind of Chinese analogue of the English company Lipton or Twining, which strives to ensure that its teas become noticeable and maintain guaranteed the same quality regardless of the fluctuations of the conjuncture. It produces several varieties of tea: ordinary, medium (but also standard quality!) Sushong, Chinese traditional private, everyday tea of a common man; Oolong-medium-quality red tea, as well as three varieties of good black teas: southerners-shun, ti-huan-yin, Way-Kan. It is their names that should be paid attention in the first place, and not to the same branded overprint for all of them: "Dunhuan".
- 4. Among the Fujian teas not connected by the branded standards of export, there are usually two forms: the packaging of 125 g in metal or cardboard containers of scatter teas (usually necessarily leafy, because Chinese teas, unlike Indian ones, are all non-navigated) and packing crumbs) and packing crumbs) and fannings in paper bags of 5 and 10 g, laid in boxes of 50, 100 and 200 pieces.

The latter are usually purchased in European countries of catering and various transport organizations, for which this form of tea hanging is rational and convenient. But for individual use, these varieties and weighting cannot be recommended. Firstly, Chinese teas are not adapted to grinding and, unlike the Indian, quickly lose their quality in this form (exhale, lose their taste). Secondly, the paper membrane of the welding bags greatly distorts the taste of any tea, especially the delicate Chinese. Only sheet tea of the highest quality, preserved in glass, porcelain or puddled metal containers, can convey the originality of Chinese teas. That is why such popular teas as Min-Tsan and Ti-Huang-IN should not be purchased in finely packaged form.

In the packing of 125 g (a quarter of a pound), such Fujian teas as: Tan-Chizun, Ta-Ta-Ta-Tai (with a large sheet, pressed), Town-Juan-In, Juan-Juan, are in a package of foil. Shin-kay, Shui-si, zen-shi-cha and, finally, San In, faculty only 100 g.

If you add two or three varieties of red teas (oolongs) to this list and one or two varieties of tea flavored with jasmine, which has the same standard for decades, then this is exhausted by the assortment of teas that modern China to the world market, leaving for the internal consumption is a huge number of local, still not quite known in the rest of the world of varieties of black, red, green, yellow and pressed tea.

African black teas, as a rule, are relatively low quality: extremely cutting, almost bitter, adapted for brewing only in very soft water. The best of them are Ugandan ("Pride of Africa" and teas from the plantations of the Toro province). The most rude are Congolese. In appearance, they are small -cut.

In conclusion, one should dwell on another category of black kayak teas, which is known under the conditional name of flower teas and sometimes even in the special literature is highlighted in a completely independent type of tea. People of the older generation undoubtedly remember this name. It remains both in dictionaries and in literature. Most consumers are mistaken, believing that flower teas also include flowers of tea along with leaves. In fact, in the production of tea, a tea flower is in no way use a very weak, barely noticeable smell. In floral tea, characterized by special fragrant, special strength and originality of aroma, includes mainly or exclusively tips, and unfounded tips, which gives these varieties of tea a special aroma. Thus, flower teas are super -high varieties of black teas with a particularly high percentage of tips content.

Sometimes floral ones are called by mistake and teas puffed up by the smell of various colors. However, in this case, we should not talk about floral, but about flavored teas.

Between those flavored Tea Not represent yourself Someone Special categories [6]. All types of kythah teas can be flavored. At the same time, aromatization does not change anything in the essence of biochemical processes that determine the type of tea, it is produced after the end of the process of making tea, as a kind of "guiding gloss" on a completely finished, finished product. Thus, as a result of flavoring, teas do not lose their characteristic features of their type, but only acquire a single additional sign: a new, strong, often pronounced aroma. And this sign is obtained in a purely mechanically, physical way, and not as a result of biochemical changes in the tea sheet itself. That is why flavored teas should be considered exclusively as

Additional varieties of the corresponding types of teas, and not as representatives of some special type of tea.

Usually flavor Tea average qualities, which V process Factory Processing lose a significant part of their natural aroma and therefore need additional flavoring. But flavoring can also be subjected to high grades;

The aromatic bouquet at the same time not only enhance them, but also diversify. In addition, along with aromatization of high varieties, they try to detain various latches, fix their natural aroma for a long time.

Two methods of flavoring are possible. The ancient way, so far used, is the aromatization of ready -made dry tea using various fragrant colors and other parts of plants (for example, roots, seeds), which in various proportions are evenly mixed with dry ready and usually warm after drying tea. For a certain time (from several hours to a day), tea passively absorbs the smells of these aromatic plants, after which they are removed from tea, and the tea is dried.

The tea prepared in this way has a strong, well-distinguished smell of that

flavor, which was To him Feminated. Most common flowers-Fragrances are jasmine sambac, fragrant olives, Florida Garden, Aglaya Odorata, Exotic Murray and Cland, or Zelenokvet (growing in our Far East, in the Ussuri taiga). Tea is also aromatized by a battery (seeds), iris's roots and turmeric. The artificial aroma of tea with proper storage is preserved extremely long: from the olive about a year, and from other colors - from three to six years.

Another method for flavoring tea, introduced in some countries from the 20-30s of our century and gained less distribution (mainly in England and the USA), is a way of aromatization using various aromatic essences, mainly synthetic.

Such aromatization is cheaper and can be mechanized, while the first method is very expensive (flowers are grown on special plantations) and is not amenable to mechanization (flowers are mixed with tea and selected only manually from it). But the quality of teas during aromatization with essences is significantly worsened, especially in the case of synthetic essences.

Along with giving tea, they often try to delay the new aroma in high varieties of tea, to fix the existing aroma, which is also done by spraying in the mass of dry tea of artificial fixers (for example, pectins, resins) inherent in tea itself.

It should be emphasized that all these artificial methods of strengthening the tea aroma (flavoring and fixation), carried out at the most final stage of tea production, are applied not only to black tea. But in black teas they make it possible to even more expand their already wide range, because the main difference between one variety of tea from another is ultimately the individual features of the aroma and taste of each variety. Each additional "layering" of a new aromatic principle, each new nuance of the aroma already leads to the creation of a new trade variety of tea. That is why, along with the established standard, generally accepted varieties of tea, various companies abroad, and sometimes individuals create their own mixtures (or bathing) of tea. These mixtures can have a different nature. Various types of tea can participate in the bathing in various proportions. But the most frequent blending inside the same type, especially between different varieties of black teas.

It is black kayak teas due to their typical similarity and aromatic distinctions that are especially convenient and directly created for various blending.

The same type creates the ability to carry out without any violations the uniform welding rules for all black teas, and aromatic-skim differences make it possible to achieve a wide variety in the selection of the bouquet.

Over the past decades, the assortment of black teas in the world is gradually declining. Only individual ancient and economically strong tea companies continue to produce a dozen and a half names of trade varieties, which are various blending of trade black teas. One of these companies is, for example, the English Twining, founded in 1706. Now she releases up to 12 "her" teas, mostly flavored. As a rule, such branded teas are deprived of ordinary indications of the area of origin. They are given specific English names that mask their composition.

Since Twaining teas are quite widespread in European countries, it will be useful to explain what is part of the bathing of these teas. Thus, Twining is produced by the "English morning" and "Irish morning" teas, the first of which consists of the best varieties of Ceylon and Indian teas with a predominance of the first, and the second is a mixture of medium, but highly expeditional varieties of Indian and Ceylon teas and more rude . Both varieties are designed for drinking milk. Tea "Lord Gray" - English bathing of Chinese teas, moderately flavored with bergamot oil (by spraying). Tea "Prince of Wales" - a mixture of the best Indian (Darjiling, Nilgiris) and

Chinese teas without any aromatization, but with excellent honey-cytrose natural aroma. This tea is intended for the evening, it is not mixed with nothing. Finally, under the name "Chinese black twining" is released by the Amo-South-Chinese tea of the highest quality, easily flavored with ylang-ylang or bergamot. Certainly,

Trading bowls firms. which are result long selection components. based Andhaving strictly certain recipes, Difficult on Reproduce tea lovers themselves. But the reduction in the assortment of teas all over the world in large industrial countries gradually begins to contribute to home

bathing. Such an amateur blending differs from industrial in that the mixture is created immediately before brewing and at the same time do not use neither

flavors, nor even more flavor fixers. That is why even with the most skillful amateur blending, it is impossible to achieve the same level of standard and aroma standard, which has a ready -made trade blend. At the same time, home blend allows you to flexibly take into account the individual, specific taste and desire of the consumer.

Green teas. They, as it appears from the name, preserve in dry form (and partly in the infusion) green, which can have various shades-from silver-green (or golden green) with dull gloss to dark green or olive-depending on From a variety of tea. It is important to emphasize that color is almost the main visual indicator of the quality of green tea. The fact is that overheating when drying green tea sharply worsens the quality, and this immediately affects the color of the sheet: it darkens to the extent that the quality has worsened. Thus, the lighter the green shade of the sheet, the higher the variety of green tea. The highest varieties have a light green, pistachio color with a golden or silver tint. On the contrary, in low varieties, as well as in the lying, poorly blockage, spoiled green tea-dark or rather, dirty, earthy and green color.

This feature of green tea in the past often (and abroad sometimes even now) used falsifiers, tinting poor varieties in order to give them in appearance for the highest.

The main difference between green tea and black, if we talk about taste and aroma, is that green tea does not have a specific "tea" smell and taste. People who are accustomed to black tea are always surprised that green tea "does not smell of tea", as it seems to them. Green tea has a tart, in a strong concentration, even a sharply visible taste, slightly reminiscent of the taste of crushed grape seed, but more pleasant and more characteristic. This peculiar taste accompanies no less peculiar, exceptionally thin, but strong aroma, slightly giving a mixture of the smell of freshly bred hay or a worshiped strawberry leaf and citrus. Green teas of poor quality, however, are deprived of all these attractive shades of thin aroma and are given simply by hay. That is why our green teas have not been widely distributed: the ordinary consumer is not able to familiarize themselves with truly good green teas.

Green teas are less diverse in varieties than black, but each variety of green tea is sharply different from another appearance, quality, and character. In other words, the gradations of aroma and smells in green teas are not as numerous as in black, but nevertheless are quite rich and, most importantly, more unexpected.

Green teas of various countries vary significantly in varieties, which is associated with various national traditions in the technology of their manufacture.

Chinese green teas are most diverse in the form of cleaning. Beautiful in appearance, it looks like cleaning the best black teas golden-green Chinese tea "Tun-chi" (eyebrows). Known cylindrically twisted green teas, a large assortment so

called pearl teas ("Tyuch", or "cannon gunpowder"), twisted into the ball, as well as flat, flattened teas ("Lunzzin") and very weakly excreted, as if expanded ("hunchi"). Each of them has a unique and incomparable aroma, tangible

Partly in a dry form, but the most expressed when brewing. Green kemetha teas in China, in addition, aromatize artificially, and this further increases the number of their varieties. A flavored green teas have a sharp and very (even too) fragrant smell. They taste less tierce than non -armed teas. They should not be consumed separately, but necessarily in combination (blend) with ordinary teas, both green and black. At the same time, the proportion of green flavored tea should be 1/4-1/5 and no more than 1/3. Chinese green teas consume mainly in China itself, partially taken to Arab countries, Iran; Low -grade teas - to Pakistan, Malaysia, Bangladesh. Now this export is insignificant.

Japanese green teas are better known in the world market. In significant quantities, they are exported in the United States, where they are consumed mainly in California and other states of the west coast, in the Hawaiian Islands. Japanese green teas differ from Chinese in a darker color and, for the most part, are deprived of the aroma characteristic of Chinese teas. In Japanese tea, there are a somewhat unpleasant flavor of fish due to the abundant use of cherry fertilizers on tea plantations by the Japanese.

In addition, Japanese teas of medium and low varieties are much less storage in storage than Chinese.

But Japanese teas of the highest varieties are extremely highly characterized and exclusively appreciated in the world market.

The best variety of Japanese green tea-"Guier-Curo" (pearl dew)-is manufactured in the Kyoto district, where the high-mountain plantations of the Uji area are located. Therefore, in the global market, Gye-Curo is most often called Udzhi, although this is not entirely accurate. The fact is that Uji can be called any tea from this area, and "Gye-Curo"-only tea of a certain collection and special processing. To receive "Guier-Coer", the teas of tea are shaded three weeks before the collection, which are removed only after the first collection is made. Only a sheet of this fee goes to the manufacture of "Guier Curo", and it is processed with exceptional thoroughness.

Another high variety of Japanese tea - "tencha", or "flat tea", is also made from the raw materials of the Udi area, and from carefully selected, the most fresh, intact and equal leaves of leaves. "Tench" goes mainly to the preparation of the so -called ceremonial tea, it is not exported from Japan.

Most of Japanese teas (almost half) are produced in the prefecture of the Sizuook. Here, from the leaves of the first and second fees (May and July), the Sen-C variety is prepared, which is called "Spider legs" export. The peculiarity of this tea is that just before sending it is fried on the baking sheets and mixed for an hour, as a result of which the sheet from increased friction acquires a shine, whitish coloring and crossed edges. The consumer "Saint-cha" is the population of San Francisco in the United States.

From the leaves of the third gathering (August) in Japan they receive a Banch variety rather rough, low quality. This variety is not exported, but consumed exclusively within the country. The mass export variety of Japanese green tea is the "Enkoncha".

Indian green tea in relatively small quantities is produced in Northern India in the areas of Ranchi, Kangra, Dehra-Dun, Kumaon, Garhval. All this tea is not used in India itself. Tea of the Drahra-Dun, Kumaon, Garhval and Almore districts have a small and hard leaf and gives a weak, light low-quality infusion. It is sent mainly for export to Tibet, Nepal, Butan and Sikkim, as well as to the idol, that is, countries or areas with a poor population, where tea is sold at a very low price. Green teas Kangra Valley are closer to Chinese. They have an insignificant, slightly spicy aroma, find sales in

Afghanistan, Pakistan, Belujistan, where they are used to drinking with liquid tea rice. Tea of the Ranchi district exclusively Chinese varieties. They give a thick, strong, tart drink with a pronounced taste, but in quality these teas are below Chinese. They are taken to the Arab countries of North Africa and Pakistan.

In general, Indian green teas are not comparing with Chinese, Japanese and Georgian and in the world market they are quoted very low.

Soviet green tea was produced only in Georgia. The range of Georgian green teas is quite diverse: it has more than two dozen trade varieties - from No. 10 to NO 125.

Georgian green tea No 95 and having a completely different delicate taste and delicate aroma of a green "bouquet of Georgia" differ in particularly high quality and excellent taste. These are, of course, the best varieties of green tea, which are not inferior in fullness and subtleties of aroma to the upper world samples of their class. The highest varieties of Georgian green tea are also belonging to the green "Extra", the Greek Georgian Higher Variety No 125, but they are simpler than the famous No 95, so appreciated and beloved by the Uzbeks, Tajiks and Tajiks and

## Karakalpaks.

The development of the production of green teas in Georgia found its expression in the fact that green teas received a more detailed nomenclature there, more varieties than black. So, for example, green teas are divided not only into the first, second, but also the third variety (by the way, pretty good quality). They have a "bouquet", "extra", "the highest", and in the first grade, the "selected first" is also highlighted. Each variety, in turn, is divided into several numbers, the counting of which is carried out from No. 10 (the lowest analysis of the third grade, fannings) to No. 125 (green higher), and the third variety includes No. 10, 15, 20, 25, 35, 40; in the second - no 45, 55, 60, 65, 75; in the first - no 85, 95, 100, 110; In the highest - No. 115, 125. Finally, above this scale are also "Extra" and "Bouquet". Thus, the gamut of Georgian teas was very diverse in quality and taste in the 30s and 70s. However, since the end of 1979, the assortment of green Georgian teas was reduced, which was with displeasure was perceived by the population of the Central Asian republics, but was completely not seen either in Russia or other regions of the Soviet Union, where very vague ideas have always existed about green tea. Meanwhile, green tea, not to mention its purely healing properties, is a very pleasant and peculiar drink. In the world market it is appreciated above many varieties of black tea. One of the reasons for the weak spread of green tea among the population of Russia is perhaps its high cost in the past. It is enough to say that a hundred years ago in Moscow a pound (453 g) of green tea cost 12 rubles, and the same amount of black tea - from 2 rubles. 30 kopecks. up to 2 rubles. 80 kopecks. This could not but affect the displacement of green tea from the markets of the European part of the country, since no one bought it here. The habit of drinking only black tea, in turn, subsequently prevented the spread of green. After a hundred years, no one knew him anymore. Only recently, green tea began to gradually conquer the sympathies of some consumers in Russia, but the culture of its consumption has not yet been included in our life. In addition, trading organizations by tradition almost do not import him, fearing that he will not find sales.

Red teas. This is a small, but completely special group of teas, characterized by specific taste and aromatic properties, by virtue of which red teas consider almost the most aromatic teas in the world.

Oologgs (as these teas are called in international trade) combine, on the one hand, some properties of black, on the other, green teas. But these properties are so bizarrely intertwined in red teas and give such a new quality that red teas can least of all can be considered as a mechanical mixture or combination of black and green teas. It is very easy to distinguish the collapse of oolongs from the teas of other types of loaf tea in its peculiar coloring: the edges of the leaf subjected to fermentation resemble black tea, while the rest of the leaf, not captured by the process of fermentation, has all the signs of green tea. This difference in the color of various parts of the sheet is the most characteristic external sign of oolongs, and this feature is quite sufficient to determine the autolo's autonomy, because to fake such an uneven, striped

The painting of the sheet is absolutely impossible without reproduction of partial fermentation characteristic of red teas.

The oolongs were called red or red, because the process of fermentation is interrupted just at the moment when the edges and ends of the leaves acquire a reddish tint. After that, they are dried (fried), and then twisted, and these operations are carried out alternately twice, or even three times. The technology of obtaining red teas is complex and laborious.

Red teas have a very special, difficult to recover, for a long time memorable, strong, deep, somewhat spicy aroma, which most teeners determine only the epithet "amazing". Another characteristic and extremely important feature of oolongs is their high extractiveness and tannin. According to the content of catechins, they almost twice as much as black tea. Red teas are less prone to oxidative processes, and therefore are much more stable in storage than black teas.

The total number of trading oologists is small (especially compared to teas of other types) - about two dozen.

As a rule, oolongs have eight degrees: the most selected, selected, thin, subtle, higher, beautiful, good and ordinary.

Ogolons are good for eating in pure form, and are also perfectly combined with black teas, the aroma of which they enhance and complement with new nuances, giving a rare originality of the taste and smell of the mixture.

Ogolongs, like other baychu teas, in addition, aromatize artificially. Fragrant oolongs are called Pushong. Pushongs have all the qualities of oolongs plus an additional aroma borrowed from a particular flavor. Ogolons and furons are produced exclusively in China.

Yellow teas. They are prepared from the youngest shoots, mainly from the kidneys of the tea leaf, so all varieties of yellow teas (and even less than red) are attributed only to high ones. These kidneys are wilted or even dried in the shade or in the weak sun (which is why yellow teas are divided into "sunny" and "shadow"), while not allowing enzyme, which is excluded as an independent process, but partially occurs during twisting, when part the sheet substances manage to oxidize. Therefore, the seagulls of the finished yellow tea have a dark color with a greenish or yellowish tint, especially distinguishable in the inside of the sheet, if it is slightly twisted. In appearance, yellow tea can sometimes be mistaken for green tea of low quality. Yellow tea is only sheet, with a regular (along the leaf axis) form of twist, and the degree of twist is quite weak. Thus, in appearance, yellow tea is not particularly noteworthy.

But in terms of smell and taste, it is completely different from any other type of tea, and here it is already impossible to confuse it with green or red, and even more so with black it is simply impossible.

Yellow tea has an extremely pleasant, one might say, caressing taste, unusually soft, barely tough and surprisingly sophisticated, delicate aroma. By softness, velvety, tenderness and fragrance, yellow tea does not know equal. If red teas have a strong and clearly memorable aroma to such an extent that it can be remembered and, as it were, even on the next day, then in yellow teas the aroma has a different property - elusiveness. You feel and enjoy it, only while you drink tea, but as soon as you stop drinking, it disappears without a trace, so it is difficult to understand whether you really felt it or you only dreamed of it. This peculiar "taste mirage" is one of the most amazing features of yellow teas.

Another important feature is that the yellow teas are very strong, have a large exciting charge, although the color of the infusion is more like a weak, yellowish-amber infusion of green tea, but with one significant difference. While the infusion of green tea is reflected on the wall of the porcelain cup or on a saucer with greenish or

Greenish-yellow, infusion of yellow teas is reflected in the form of a pale pink rim. On this basis, it is easy to distinguish real yellow tea.

Yellow teas are made in China. Like other Chinese teas, they are partially artificial aromatization, which they perceive excellently. This somewhat diversify the limited number of varieties of yellow teas.

In other countries, due to weak acquaintance with yellow teas, they are often confused with green flavored and with furs, mechanically including in the general category

#### flavored teas.

In Europe, yellow teas are almost unknown, since for many centuries it was forbidden to take them out of China under the fear of death. (It is known that violations associated with the trade in tea, and even more so with his smuggling, punished in China always very severely, despite the faces. So, for example, in the 16th century to the transfer of tea, foreigners were sentenced to the death penalty of the imperial son -in law -Lun.) In China itself, yellow teas were originally used only at the court of the emperor, and later the highest dignitaries of the empire and during religious ceremonies. Only in the 30-60s of the XIX century was the export of yellow tea to Russia in exchange for sable fur (but not for money) was allowed. And at the very end of the XIX century, after the Japanese-Chinese War and the Basal Simosoreki World of 1895, yellow teas for one and a half to two decades in small quantities began to penetrate into Western Europe. The same "window" insignificant in time for the exit of the yellow teas outside the Chinese represented the period from 1927 to 1937, and then from 1949 to 1959, when their export was allowed in limited sizes. Since the beginning of the 60s, China has again embarked on the path of the previous policy of a sharp restriction of the quantity and assortment of teas exported to the foreign market. And the first in the list of "closed" goods for Europe, like a hundred years ago, was yellow tea. Its production was reduced in the domestic market. Undoubtedly, such a policy pursued by China throughout his history regarding yellow tea could not help but give rise to and really gave rise to numerous legends around this product and drink, he had already warmed up the already great interest in it among tea lovers around the world. However, attempts to imitate yellow Chinese tea, for example, in Japan, failed. One of the reasons for this is the absence in other countries of the starting raw materials: there is a tea leaf on yellow tea with the best Fujiani plantations, which has many features and, above all, is distinguished by fleshy and density with small sizes. Only this kind of sheet is suitable for the technology of yellow teas. Another reason is the great labor capacity and low profitability of the production of yellow teas. They require exclusively manual labor. In a modern capitalist country, no entrepreneur will take up the creation of a product that requires large costs and promises losses. Finally, the production of yellow tea on an industrial scale is also prevented by the fact that it can be prepared only in very small batches. Otherwise, it will no longer be yellow tea, but something else.

However, a group of Soviet cups under the leadership of Professor M.A. Bokuchava, twenty -five years ago, developed a new technology for the production of yellow teas, which allows you to get tea, which is very, very close to real yellow teas and, in any case, giving them a well -known idea, although it does not match them in taste and aroma completely. As for the biochemical indicators and dietary properties, the yellow tea of domestic technology was quite consistent with the traditional one. There is no doubt that if it were possible to establish and make a profitable production of yellow tea, he would have won a vast circle of consumers not only in our country, but also abroad.

But the development of such a unique type of tea as yellow is a difficult matter. It requires training, plantations, selection of raw materials, etc. In the summer of 1977, Georgian tea industry began to produce a new type of product - Kviteli tea, which means "yellow" in Georgian. This tea, however, cannot be considered a repetition of Chinese yellow tea. In terms of its taste and aromatic properties, the Georgian yellow tea "Kviteli" is very

Pinocuis, soft and extremely useful in biochemical indicators. But this is not yellow tea at all. In dry form, in placers, it looks like black buttonholes of Georgian tea, only his tide is slightly olive. With a smell into powder, this olive shade intensifies, while in black tea the powder acquires a dark brown color.

Infusion tea «Quets» Dark yellow Colors, pleasant cholera, Withhigh transparency, which indicates the quality of quality. There is no characteristic coloring of the edges of the infusion in the pink color, which is found in real yellow teas, "quiters" have no "quiters". The Kaima of the infusion is painted in olive tones, indicating that the Georgian yellow tea is one of the varieties of green tea.

At the same time, according to the "quitel" technology, it is close to Georgian black tea: it is dried and easily, quickly fried in hotels. Thus, the Georgian "yellow" tea "quitel" can be considered a biochemical hybrid. It could be called brown tea due to great proximity to black, but unlike black it is completely devoid of sharpness of taste. Even with an increase in the dose of brewing, in half and thresholding it does not become tough and bitter. It is made more intense, richer extractive substances, but the deterioration of taste, its sharpness does not cause such an intense infusion. This should be recognized

A positive property of Georgian tea "Kviteli".

The aroma of "quitel" is expressed weaker than its taste. However, when intensifying the concentration of welding, it becomes more noticeable, especially if you smell not the infusion of tea, but an empty cup after rinsing it with a strong infusion. This aroma resembles a copper smell of summer multi -grass.

However, despite all these positive indicators, the production of Kviteli, even with state subsidies, seemed to the Georgian tea finals so

The troublesome and unprofitable occupation, which was already completely discontinued four years later. This tea never became massive.

### 4. Pressed teas

When collecting a tea sheet on plantations, as well as in the process of factory production of tea, many all kinds of processing products are always formed. These are branches, trimmed during the regular drop of a tea bush, old leaves, stems, detained by sits during sifting of different numbers of tea, fragments of leaves formed during drying, baby and, finally, a significant amount of tea dust accumulating in the workshops of tea finals.

The abundance and diversity of these by-products has long caused a person's natural desire to somehow dispose of them, use them as tea, because in their composition they, in essence, were little different from tea, but they were either rude or had an unattractive appearance. Meanwhile, it was noticed that, for example, tea baby can give a rather aromatic and stronger infusion than even entire leaves of tea, especially if this crumb of good varieties. It was necessary to make it only more convenient for use, give it a compact form, "weight" it.

As for the rough leaves, their low quality required increasing the concentration of tea material during brewing, and this caused the need to squeeze a larger amount of raw materials into the usual volumes. So people approached the idea of pressing a baby and a rough leaf to make them convenient for use. Pressed teas appeared.

Pressed teas are of two main types - black and green. In addition, there is a very special type of half -pressed tea -sauer or softened tea.

By the nature of the raw materials and the form of pressing, all pressed teas are divided into brick (tinted), tile and tablet

Brick teas. Brick teas - black and green - have all the main properties inherent in other teas of these types, since the production of black

Brick tea is enzyme material, and non -enzymatic tea for the production of green brick tea. But at the same time, brick teas due to the features of the raw materials and technologies that go on them have their differences in the chemical composition, which is manifested in their special taste and aroma.

In brick teas, the taste is primarily expressed. The aroma is slightly distinguishable. Brick teas are characterized by high tart and sharp, astringent, rude taste, in which a specific aftertaste similar to "tobacco" is completely clearly felt. In green brick teas, it is much more expressed than in black ones.

Brick teas arose later than the baykhovs. In China, they became known in the X-XI centuries, i.e. 600-700 years later than the Baykhovs. Since the 17th century, brick teas (black and green) began to spread in Siberia, and at the end of the 19th century 90 % of Chinese brick teas have been exported to Russia. In the 30s and 40s, the production of brick teas was mastered in the USSR, and by the 50-60s the USSR not only fully provided the needs of the peoples of our country-the Buryats, Kalmyks, Tuvans-in brick tea (green), but also began to export Its in Mongolia, Laos, Vietnam, who did not receive traditional "lifted" teas from China at that time, who are used to using mountain tribes in Indochina.

Due to the features of the climate, as well as historically established traditions, brick teas are consumed mainly in countries with dry, continental climate (sharply hot summer and sharply cold in winter), i.e. In Central and North-East Asia. In such conditions, brick tea has not spoiled for years and retains high condition. This was the reason that in the past brick tea served for a long time among the peoples of Mongolia, Tibet and Xinjiang a measure to evaluate other things and even a kind of monetary unit.

Green brick tea is prepared from a rough (old) tea leaf, cut material and even whole branches of a tea bush. The total amount of sheet material should be at least 75 %, while 25 %, and sometimes 30 %may fall on lignified and green stems.

Green brick tea is produced only in China and in Georgia. Its production consists of two main processes-the preparation of Lao-cha (i.e. a semi-finished product) and the pressing process of Lao-cha in green brick finished tea. In the production of Lao-cha, in turn, the manufacture of two types of raw materials is distinguished-a thinner, called "facing material", and a more rough, "internal material". The main mass of brick is made of the latter, and the facing material goes on the lining of the outer surface of the brick and accounts for 20-24 % of the total Lao-cha sheet material. Previously, according to traditional Chinese technology, the production of brick green tea was a protracted process, which sometimes lasted for a month. The only preparation of Lao-cha only took up to 20 days! According to the new technology, the production of Lao-C is reduced to 10-20 hours, and the entire production process ends within one day.

The quality of green brick tea is determined by the following indicators: firstly, the percentage of the facing material (the higher it is, the better brick tea) and, secondly, the quality of the press (the stronger the tea is compressed, the dry, the ironing the surface of the brick, the more iron Better a variety of brick tea).

Outwardly, green brick tea is a tile or brick light or dark olive color (dark olive is considered the best) with a rather smooth,

The non-sleeping surface, on which not only images and letters squeezed out by a press traffic, but also whole, intact leaves and individual shoots and branches of the tea plant are clearly distinguishable. The edges and corners of the brick should be so strong that they cannot be broken with your hands. Its dimensions are 35x15x2.5 cm with a weight of 2.5 kg or 12.5x12.5x2.5 cm with a weight of 0.5 kg.

In China, a special category of green brick tea, the so-called fired teas, are also pressed from Lao-cha, but not in the form of brick, but in the form of logs (an elongated cylinder), and not as tightly as brick tea. Fold teas contain A smaller percentage of facing material. Outwardly, they are a rather impressive log with a length of about 1 m or slightly more and a mass of 1 to 2 pounds (but there are more portable varieties of the full tea).

There are other categories of green brick tea in China, for example, Nelunench - tea compressed in circles weighing 5 kg; "Lugan" is a loose, crushed brick tea and many others.

Black brick tea is made only in China. In composition of raw materials, it is much more tender than green. Sometimes for its production there is a solid young sheet (second, third, fourth). This is, for example, the brick leaf tea "Hichuang-cha".

Black brick tea in appearance resembles a brilliant anthracite, in which individual leaves are almost indistinguishable - so they are tightly compressed. The quality of Chinese black brick teas is very high, but their production is now almost reduced, limited by narrow needs. The Chinese urban population practically does not know them. Black brick tea is pressed usually with tiles of the same size - 8x12x1 inch (20x30x2.5 cm), weighing 2 kg. Non-standard varieties of these teas are also produced in a smaller number-cakes resembling throwing discs ("chi-cybia"), miniature briquetics from delicate leaves ("Yasi").

Tile tea differs from brick primarily the character of the material. For the manufacture of tile teas there are crumbs, sowing, in a word, secondary tea products, while the production of brick tea is based on

secondary raw materials of tea economy.

In other words, the material for tile tea is not made on purpose, they are not subjected to special biochemical processes that are different from production processes

Baykhovy tea. This is a fundamental difference between tile tea and brick. In addition, there are less significant differences - in the pressing method and in the size of the form. Tile tea consists of a homogeneous mass, and the external cladding and the inside of the brick differ in brick tea. Tile tea is pressed with small rectangular tiles weighing 100, 150 and 250 g. The outer surface of these tiles is smooth, the tiles themselves are solid, durable, not amenable to breakdown with hands (in good quality of teas).

Tile tea compared to other varieties of tea is quite young. In China, he was known for a long time, but there he was pressed loosely. Only in the 80s of the XIX century, in Russia, a tea traitor Ponomarev made one of the first attempts to press from scattered Chinese tea-Huasyan-dense tiles weighing 100-150 g. This tea has gained popularity among military, tourists, hunters as a compact, convenient In the field, a product that possessed all the properties of black tea. Subsequently, Russian tea work firms began to specialize in the manufacture of tile tea, and sowing and baby were increasingly introduced into its composition.

Thus, our country can be considered a pioneer in the manufacture of modern tile tea, which is not accidentally known in Western Europe under the name of the Russian, and in the European part of our country - under the name of Siberian. Tile tea is consumed mainly in Bashkiria, Tatarstan, North-West Kazakhstan, Asaralya, Siberia, and especially in the Far North.

To taste and aroma, the tile tea resembles the varieties of those kemetal teas from which it is made, but is more strong and extractive. This is due to the fact that during the pressing of tile teas, which occurs in dry form under high pressure, some of the pectins and tarry substances are squeezed out of the crumb and therefore faster passes into the infusion. The adhesive abilities of resins and tea pectins allow the press to conduct a press without any extraneous adhesive additives.

Tablet and packaged tea. The tablet tea does not fundamentally differ from the tile, but has its own characteristics. In tablets weighing 3-5 g, the most high-quality baby is pressed, sometimes previously specially broken into the finest

Power, in some cases, for the production of the best varieties of tablet teas in the powder, leaf tea is erased, then pressed into tablets.

Tabbled teas are produced in China, India, Indonesia, Georgia, i.e. In countries with the most developed tea industry, where it is necessary to dispose of a large amount of high -quality tea chips, dust and other waste obtained in the production of tea.

For the most part, tablet teas are black, because they crumble more in the production process, and raw materials for tablet, therefore, there are more in factories. But in the 60-70s, green tablet teas were also produced in our country. There were also attempts to produce tablet teas with fillers - sugar, dry milk, citric acid and other products. But since usually such mixed tea-products are prone to rapid damage, their use has not become widespread. In this regard, such a production was in the late 70s

### suspended.

Tabbled teas are not concentrates, although they look like them. The tablet contains one or two norms of brewing, designed in a dosed, compact shape, convenient for consumption in unhoken, road conditions, especially for welding directly in the cup. The negative property of tablet teas is only what they give, as a rule, a muddy, ugly infusion. That is why in recent years, tablet tea began to be replaced by packaged, i.e. Such, in which the tea powder is not pressed, but is placed in small paper bags of the calculation for one, two-two brewing.

Packed tea is produced by such large industrial countries as the USA, England, France, Germany, using imported cheap low -quality raw materials for this, beautifully and conveniently designed in bags and boxes.

IN USSR This production Just It was getting better Moreover For receipt Packed teas used crumbs of high varieties of tea, such as the Georgian Extra, Azerbaijani Higher or a mixture of crumbs of different varieties. But the quality of the paper, the technique of design and packaging were unsatisfactory. Abroad, where packaged tea is always prepared from the lowest and cheapest varieties, especially in India, England and the USA, it is made beautifully, in solid paper, but this tea is designed for unskilled, random or insolvent people. In England, for example,

The native Englishman in the packing does not take less than half a pound, so the packaged tea is designed for foreigners, tourists, visitors, etc.

Of course, packaged tea gives advantages such as the simplicity of brewing and protecting tea chips from pollution, which is why it has gained much more popular than tablet. But at the same time, the overall level of quality of these teas in all countries and regardless of the fame of the firms producing it is low and designed for an undemanding buyer. The taste of packaged tea is worse because of the paper shell and especially because of the adhesive composition with which this shell is saturated, although flavorings that mask the loss of quality are added to it. This applies to all foreign teas where the impregnation of the paper shell is very strong, so the genuine taste and quality of tea are sacrificed to temporary comfort.

# 5. Extraged - fast -discharge - teas

It would be incorrect to think that fast -and -soluble teas are a product exclusively of our time. Even more than one hundred eighty years ago, our compatriot Iakinf Bichurin, who traveled a lot and lived in China, noted that the Chinese are preparing extracts from tea.

And in earlier times, even in the X-XII centuries, extracted tea was not a new drink. Of the fresh, just collected tea leaves, a juice was squeezed out at the plantation in special small silver presses, which almost immediately dried up with small droplets with a pins or match head, and thus, a concentrate was obtained, which in the water, heated only to 60 ° C, dissolved without a trace, without requiring either endurance or special brewing, and at the same time it was more aromatic and tastier than all other types of brewed tea. Such tea juice was fed only to the imperial table.

However, the extreme labor intensity associated with the receipt of this type of tea, and, most importantly, the barbaric attitude to tea raw materials (from 1 kg of tea leaves, it was hardly possible to get juice for one or two tea parties, and from the centner of the tea leaf came about a pound of dry tea extract!) then forced to abandon this type of tea. Emperor Taizzu admitted that the preparation of such tea is burdensome for the people, and ordered this extremely tasty, healthy, but monstrously non -ethereal product.

Modern rapidly soluble teas, of course, have nothing to do with ancient tea extracts according to preparation methods. They are extremely economical, profitable, cheap, convenient, but, unfortunately, tasteless and, in essence, are not like tea. The so-called rapid-soluble tea is a dry (crystalline) or liquid extract obtained either directly from a natural green tea leaf, or from a finished tea infusion, brewed in a large concentration, and then spilled in special reservoirs. If in ancient times very few extracts could be extracted from tea and therefore only the lightest fractions of juice were received, then modern technology makes it possible to extract everything that is contained in it in soluble form from tea. The modern extract differs in the fullness of the composition, but in the production process it loses the most delicate, vulnerable, thin parts of this composition, showing itself in aroma and taste, which cannot withstand overheating, contacts with metal - in a word, which is contraindicated in tea as a product to a sensitive, delicate delicate.

The rapidly discriminate tea can be green and black. Liquid extract is produced in glass bottles, crystalline rapidly discriminate tea in the form of powder - either in hermetically closing jars (glass or metal, similar to jars of rapidly detailed coffee), or in bags of laminated paper, or, finally, in pure tablets, so And with fillers - sugar, lemon juice. The tablets of rapidly discriminate tea differ from the tablet teas in that they are a powder of rapidly soluble tea in jars, a strong concentrate of tea, in four or five times strengthening. Such a concentrate does not require, unlike tablet teas, pre -welding and ordinary five -minute exposure, and is dissolved instantly and without a residue in hot, warm and even in cold water.

The rapidly soluble tea is extremely portable and perfectly preserved. It is very convenient on expeditions, with sea and air travel, and especially in space conditions, where saving in the mass and volume of each thing and in time spent on any process is so important.

The rapidly soluble teas from the end of the 60s of our century began to be manufactured in many countries of the world: in Japan, Sri Lanka, England, the USA, China, Switzerland, Denmark, Sweden, India, Canada, Germany, Brazil and others. This was due to the demand for

Instant tea from the urban population of industrial countries, i.e. People for whom the time factor is extremely important, who are always in a hurry and, in addition, need a strong stimulating drink. The ability to quickly and easily create high concentrations of the infusion with a simple addition of large doses of powder (you can put 2-3 g in a glass instead of the usual 0.5 g) to instantly get five to six times the concentration of the infusion, made this type of tea especially attractive and convenient.

Technology receipt rapidly discriminated tea diverse. Each side

Carries out production on the basis of its own patented method. But all these methods are limited by the fact that tea is able to give to the solution only 35-45 % of its composition. An attempt to artificially increase the extractiveness of tea invariably leads to loss

specific qualities and properties of tea infusion. That is why, in any technical ways, one can "squeeze" it from tea, moreover, that he is able to give in a natural way.

In the tea-derivative countries (Sri Lanka, India, Japan, China), rapidly soluble tea receives, as a rule, directly processing a fresh green tea leaf, and in the industrial countries of Europe and in the USA-from an imported, cheap crook of low-quality hut. Most of the European countries, after ten, fifteen-year practice, the release of rapidly soluble teas has currently actually abandoned their

Production: Now they are produced mainly only in the USA. However, American rapid -and -soluble tea with unpleasant taste cannot compete with natural tea. That is why this type of tea has not been distributed in any country with strong historical traditions of tea drinking. Anyone who really loves tea will never drink fast-soluble. At the same time, in countries where the population is used to drinking coffee, rapidly soluble tea is found without much hostility, because there is no taste criterion for comparison there.

In our country, several years ago, an effective method of obtaining black and green fast -soluble teas, significantly superior to all foreign in their qualities, was developed. Thus, when comparing Georgian black, rapidly disconnection tea with samples of American black crystalline tea, it turned out that Georgian is much richer than the American caffeine content (5.3 % versus 3.8 %), and in taste, aroma and color is generally immeasurably higher, since the American Tea is completely tasteless, has a harsh, unpleasant tart, brown-gray, unattractive color of the infusion, while ours has a normal taste, color and type of ordinary black Georgian tea.

As experimental work showed, Georgian black rapid tea lends itself well to tablets without additional adhesive substances, and in

A pressed form is very well preserved, without losing condition even in conditions of ordinary home storage. Thus, the Georgian black rapidly discriminate tea in limited

the quantities and especially in special conditions - for polar explorers, astronauts, geologists, tourists, climbers - has every right to exist, but most of the population, accustomed to traditional tea, he cannot replace real kayak tea.

Another thing is green, rapidly discriminate tea, which, firstly, is much better in quality, and secondly, can be widely used as a therapeutic one. Georgian tenderodes M.A. Bokuchava and G.N. Pruidze was offered at one time, in the 60s, a completely new and original way of its production-from non-standard tea raw materials. This means that tea can be used from 150 thousand tons to 200 thousand tons of a tea leaf, which usually remains on plantations as a ferry -cut corrugation material, cut off annually from the bushes and partially going only on compost fertilizers. In addition, a non -approval sheet of machine fee, which is 10 % of the total mass of the collected sheet annually, should also add here. It is understandable that such a source of raw materials greatly increases tea resources: firstly, at the expense of it you can receive annually 4 thousand tons of finished green crystalline tea and, secondly, from the released varietal raw materials designed to obtain green buttonholes, to develop 16 thousand tons of black loaf tea. However, the economic effect is not limited by this.

Green rapid -soluble tea according to the Bokuchav -Prouidze method has such an important advantage in comparison with foreign teas of this category as an extremely low cost - about four, or even six times lower than the cost

Production of green can of tea, which is explained primarily by the low cost of the starting raw materials. This circumstance already indicates a significant economic effect of the production of green fast -soluble tea. As for its quality, it has all the properties of a good freshly brewed kayak tea, and in the chemical composition, in terms of the fullness of the components in the solution, it even exceeds its button accordion. However, Georgia alone cannot create new technological lines to establish such mass production. Either she will cooperate with one of the foreign manufacturers, or she will refuse it at all.

### 6. Covenced tea

After the characteristics of various types, varieties and varieties of tea, I would like to dwell on sauer tea, which forms a very special type of tea or at least can be considered as an independent subtype of green teas, which has only one, also a special variety - half-pressed tea.

Strictly speaking, sauer, or softened (according to English terminology), tea is not even tea in the generally accepted understanding of the word, for it serves not for the preparation of the drink, but for direct consumption in dry (and in fact, in a half-hearted) form. However, since it represents one of the categories of finished tea and is produced in some countries of Asia on a fairly significant scale by an industrial way, you should give at least a brief idea of it, especially since even in the special literature, information about this type of tea is either absent or extremely meager And contradictory. Sved tea is produced in China, Myanmar (Shan State) and Thailand (in the last two countries this is the main type of tea consumed). In Myanmar (Burma), it is called Leppet-Co, and in Thailand-Miang. In the world market, the Burmese or English name is often used-Picld-Ti.

Leppeta is prepared from dry, coarse fleshy leaves of a tea bush or from the fourth, sometimes even a third sheet of tea flash, if they want to get a higher variety. Fresh leaves are stuffed into wooden boxes, the bottom of which has holes made by bamboo grilles, and place these boxes for 5-10 minutes in boiling water. Then the leaves are removed and laid out with an even layer on bamboo mats, where they lie no more than 10 minutes, after which a cement reservoir (pit, trench), lined with bamboo, or core of large bamboo trunks, is tightly stuffed with this mass of leaves, compacts or compress this mass with oppression (usually heavy stones are placed on top) and hermetically closed. In this state, Leppet-SSO is from 10 days to 6 months, depending on the amount of mass and ripening conditions. The finished leppet -so is a weak, slightly wet mass of natural green color, rapidly darkening from contact with air, since the processes of oxidation occur.

Immediately before eating, Leppet-sow is boiled for 1-2 minutes in boiling salted water, and then eaten like a salad, flavoring it with vegetable oil, garlic, shrimp, etc.

Transport Leppet-SO V Bamboo boxes mass 100 pounds (45 kg), lined with leaves and coated with special silt in order to maintain tightness and humidity.

Notes

- [1] The name of the tea "Baykhovi" appeared for us for a long time. It comes from the Chinese "Bai Hoa", which means "white cilia". The Chinese called one of the components of the scattered tea tips, that is, barely blossoming buds, giving tea sophisticated aroma and taste. The higher the percentage of tips in tea, the higher its variety, the more fragrant, tastier and more valuable. Therefore, Chinese merchants have always emphasized that in one or another loose tea there are tips "Bai Hoa". The Russian tea traitorialists who did not know the Chinese language transferred the often audible "Bai Hoa" to us to refer all the scattered teas and began to call them baykhovs.^
- [2] The gray color of the finished tea may also be a consequence of a violation of the rules of sorting a semi-finished product, when it is more often than provided with technological instructions, passed through the sorting machines and thus the color was "selected", it faded.^
- [3] Many, for this reason, prefer, for example, Indian shallow tea of the second -grade or Ceylon small. However, an intensive infusion is not always an indicator of high quality tea. In small -cut teas, such an infusion can mask poor quality, empty taste, lack of aroma.^
- [4] It is interesting to note in this regard that the Party of Georgian Tea of the Summer Gathering and Production by its qualitative indicators received in the autumn of 1993 (November December) is incomparably better than what was in 1991 1992. True, this applies only to the tea of the Ozurget company Bakhmaro, which works on improving the quality of products in the homeland of Georgian tea, in the city of Ozurgeti, where the best shots of the tea industry are concentrated. Modern Ozurgetian tea is free from crumbs and jerks, gives an even, sufficiently clean and beautiful tint infusion, provided that the dose is doubled by the cup, but still contains a lot of gross inclusions (scraps of the cherries, a rough leaf), although they now interfere simply as a neutral ballast, But due to the purity of processing, they do not affect the taste. In general, this is normal, average durable quality tea with well -expressed natural features. However, at a price it is 2.5 times cheaper than imported, for the distrust of Georgian tea remains and, apparently, is not yet eradicated.^
- [5] British tea companies have good titesters, some of which are constantly in India and has the opportunity to constantly monitor the tea market or even make purchases in the stage of raw materials on plantations and in the production process.^
- [6] Some foreign Teapons, For example And R. Harler, Related All flavored teas to one category. Such a classification of finished tea reflects the empirical-trade, and not the scientific principle of assessment.

## Chapter 5. Composition and properties of tea

## 1. Chemical composition

Although tea has been studying for centuries, and scientists have been working on the disclosure of its chemical composition for at least one and a half years, only over the past decades it became possible to get a relatively complete idea of which chemicals are part of the tea. But even today, some chemicals remain in tea unsolved or recognized only in the most general form.

If at the end of the 19th century it was believed that tea consists of four or five of the main substances, now in tea there are dozens of large groups of substances, each of which includes many complex and simple elements. The total number of chemicals and compounds included in tea is still impossible to calculate, ten to fifteen years ago there were about 130 of them, and at present about 300 have already been discovered, and 260 of them have already been identified, i.e. open their formula. Consequently, tea is the most difficult and diverse plant in its chemical composition.

It should be borne in mind that the chemical composition of the freshly pushed green tea leaf and dry tea, obtained from this sheet, is not the same. In dry tea, it is more diverse and more complicated. At the same time, not all chemicals present in fresh leaves remain in dry teas after factory processing: some disappear without a trace, others experience oxidation and partially change, others enter into complex chemical reactions and give rise to completely new substances with new properties and signs.

It is natural that we, as consumers of tea, are primarily interested in the question of those chemicals that are contained in the tea drink in the infusion.

After all, it is the soluble part of tea that enters the human body. That's why we will dwell on it in more detail.

As the studies have shown, tea consists of 30-50 % of extractive, i.e. Soluble parts in water. In practice, solubility is never completely carried out. Green teas contain more soluble substances (40-50 %), and black ones are less (30-45 %). In addition, the younger, the leaves of tea are higher than the quality, the richer the dry tea obtained from them is richer with extractive substances. And vice versa, the older, the leaves are rougher, the less soluble substances go into the infusion, the less tasty tea is.

Of the soluble substances, first of all, attention should be paid to six most important groups or components of tea: these are tannins, essential oils, alkaloids, amino acids, pigments and vitamins. Most of them have been known for a long time, but the old ideas about all these groups of substances expanded largely.

Tannins are one of the essential components of tea and tea infusion. They make up 15-30 % of tea and are a complex mixture of more than three dozen polyphenol compounds consisting of tannin and various (at least seven) catechins, polyphenols and their derivatives. The previous ideas about the tea tannin as a simple tanning substance, which was attributed to a bitter taste, were significantly changed thanks to the works of academician A.L. Kursanova and seem at least naive now. It should be borne in mind that tea tannin, or Theotanine, is not unequalful to the pharmaceutical Tanin or Gallotanin. Theotanine is a complex chemical complex, the composition of which is now completely deciphered. The idea that the tannin gives tea is not true. If in a fresh tea sheet the tannin really has a bitter taste, then after factory processing this bitterness disappears and the tannin in tea acquires a pleasant tart, giving the main taste the infusion of tea.

It should be emphasized that tannin and cakes of tea have the properties of vitamin P and precisely because of the presence of tannin, tea is the main source of obtaining this important vitamin, the value of which will be discussed below.

As a rule, the content of tannin in green teas is much higher than in black (almost doubled), because in green teas tannin is almost in a non-oxidized state, while in black buttonholes up to 40-50 % of the tanin is oxidized. Of the black teas in the teas of South Asia - Indian, Ceylon and Yavsky - it contains more tannia than in the Chinese, Georgian, Azerbaijani and Krasnodar. The tannin gives southern teas a sharper, one might say, more intelligible tea taste, appreciated by some categories of consumers. IN

There are more Georgian teenas in the leaves of the June, July and August fees, and in May and September - much less. In addition, usually in all teas of the highest varieties, tannin contains more than in the lower ones.

The tannins of tea do not remain unchanged. The products of their oxidation - quinons that occur during the factory production of tea, in turn, oxidize other substances of the tea leaf and form many aromatic products involved in the creation of the aroma of tea. Thus, the value of the tannins in tea is huge, and they do not have a tanning effect on the mucous membrane of the human stomach, as they thought in ancient times.

Essential oils are available both in a green sheet and in finished tea. Despite their extremely small amounts, they attracted the attention of a person more than other substances: it was they who rightly attributed a unique tea aroma. The quality of teas also depends on them. Now it is established that the essential oils in the green sheet of tea are contained only about 0.02 %. This means that in order to obtain 100 g of these oils in its pure form, you need to process over half a ton of tea leaves. Although when processing a tea sheet, the loss of essential oils reaches 70-80 %, and another process occurs-the occurrence of new essential oils. The number of chemical components in the composition of essential oils reaches finished tea, according to some sources, to 20 and above, and according to other, more new information - up to 32. And nevertheless, it is among the essential oils that the known number is still not clarified and a number of chemically not disclosed, albeit discovered compounds. Many essential oils have the smells of roses, honey, vanilla, citrus fruits, lilacs, cinnamon.

No wonder, What mixture Such assortment for the Pa substances capable create A bouquet unique in its aroma. Chemically pure essential oils are aliphatic and aromatic

hydrocarbons, aldehydes, ketones, phenols, complex acids (like salicylic) and other exceptionally volatile, easily evaporating compounds. Most of them are able to disappear not only with a significant increase in temperature, but also with improper storage or incorrect brewing. That is why the presence of these substances in tea infusion largely depends on ourselves. In addition, the content and composition of essential oils and their solubility in various types of tea are different. The largest number of essential oils in the form of soluble aromatic aldehydes is contained in red teas (oolons), the most aromatic of all types of tea, which is why they are often used to impurities for some varieties of black tea. On the contrary, in green and yellow teas, aromatic aldehydes, which are part of essential oils are in a bound state and therefore are less entered into the infusion, do not take active participation in the formation of the aroma of finished tea. There, the aroma is created mainly due to other chemicals, primarily a tanin.

Alkaloids are also a significant component of tea. Among the alkaloids, caffeine has always been and remains the most famous or, as it is also called in the composition of tea, Tein. Caffeine is one of the main culprits of people's craving for tea as a tonic drink. In its pure form, it is a colorless smell, but a bitter substance, which is bitter, is contained, however, not only in tea, but also in coffee, cocoa, walnuts of stake, mat and some other tropical plants.

Contrary to common opinion, caffeine is much more contained in tea (from 1 to 4 %) than in coffee, but tea caffeine, or teen, acts softer than pure coffee caffeine, for a number of reasons: firstly, because For brewing, they usually take less tea than coffee, and, therefore, create a lower concentration of caffeine, and secondly, caffeine performs in tea not in isolation, but in combination with tannin, forming the combination of caffeine tannate, which acts more indirectly, more softened On the cardiovascular and central nervous system. Tea caffeine has another wonderful property: it does not delay, does not accumulate in the human body, which excludes the danger of caffeine poisoning with the most frequent use of tea.

English tea -breeder Ch.R. Harler calculated that even the British who have the highest consumption rate in the world (5 kg per year and above), "eat" annually on average 132 g of caffeine, each that is not so much in the calculation per day. But this figure is only theoretical, because almost the whole caffeine never goes into the tea infusion,

contained in dry tea, and a maximum of 35-80 % of it, i.e. About 95-100 g per year, or less than 0.3 g per day. And with our consumption of tea, which makes up only 1/10 of what is in the Englishman, the dangers of abusing with caffeine absolutely do not exist: we get a truly microscopic dose of caffeine - 0.01 g through tea, while stimulating the daily dose allowed pharmacologists, at least 30 times more!

Caffeine belongs to those few tea substances, the composition and quantity of which are extremely slightly changed during processing. Meanwhile, various varieties of tea contain different percentage of caffeine. For a long time it remained a mystery. Then it turned out that caffeine was distributed unevenly in a tea plant. The first fleshic leaf contains 4-5 %caffeine, the second- 3-4 %, the third- 2.5 %, the rest- from 0.5 to 1.5 %. In the seeds of tea, caffeine is completely absent. This suggests that caffeine is not laid in tea from birth, but is acquired in the process of growing a tea bush. From this it is clear that high -quality teas made of the first leaflets contain more caffeine than teas made of rough raw materials. That is why pressed teas, where caffeine is practically absent, the peoples of Buryatia, Kalmykia, Mongolia can drink in very large quantities. And that is why Kazakhs, Turkmens that use black tea are also in large quantities, prefer its second and even third grades, where caffeine is found in extremely small doses, but there are a lot of tannin, pectins, so important to prevent gastrointestinal diseases in Central Asian conditions.

Some consumers are mistaken, thinking that caffeine determines the fortress of tea. This is completely wrong. For example, in Ceylon tea, which is considered strong, caffeine contains noticeably less than in Chinese teas, which are considered weak among the mass consumer.

In addition to caffeine, tea includes in a small amount and other alkaloids. These are a soluble rest in water and theophylline (they are good

vasodilating and diuretic means), which is difficult to soluble in the water, and the guanine completely insoluble in water is a purine base with negative properties. It can be removed from the tea leaf into the infusion only as a result of sharp boiling or prolonged heating of brewed tea. That is why you can't make tea "tight" on fire.

Protein substances, along with free amino acids, make up from 16 to 25 % of tea. Squirrels are the most important component of the tea sheet. All enzymes are proteins. In addition, proteins serve as a source of those amino acids that occur in the process of processing a tea sheet into finished tea. In terms of protein content and their quality, and therefore, the tea leaf is not inferior to bob cultures in nutrition. Green teas are especially rich in proteins (among them the most Japanese).

The increased protein content does not harm the quality of green tea, but reduces the quality of the black in the sense that it worsens its taste and color, since a large number of proteins in

The finished infusion of tea is accompanied by a decrease in the content of tannin in it, which is confirmed by a faded tint of such tea

In the teaspoon, mainly proteins that are soluble in alkalis are present - gliteline, and to a lesser extent - proteins soluble in water - albumins. In the process of processing the sheet, the number of albumins in tea increases by 10 %. The finished green tea has more albumins, while black teas mainly contain gluelithens.

As for amino acids, there are 17 of them in tea, and the nature of one of them has not yet been clarified. Among the amino acids of tea there is glutamic acid, which is extremely important for the life of the human body, actively contributing

restoration of an exhausted nervous system.

Amino acids when interacting with sugars, as well as tannin and catechins in conditions of increased temperatures during the production of tea form aldehydes and thus take part in the formation of the aroma of tea.

The pigments that make up tea also play an important role. People have long noticed the ability of a tea infusion to take various colors, all kinds of shades from light green to dark olive and yellowish and pinkish to red-brown and dark brown, and associated with the presence of various dyes in tea. However, for a long time it was believed that the main dye are tannins. Meanwhile, such pigments as well -known chlorophyll, mainly contained mainly in green tea, as well as xanthill and carotene, contained in carrots and present mainly in black teas, take part in the pigmentation (coloring) of the tea infusion.

More thorough studies of recent years have shown that the color of the infusion is mainly associated with two groups of coloring substances - theaterubigins and theatlavins. The first, giving reddish-brown tones, make up 10 % dry tea; The second, having a golden -yellow gamut, is only 2 %. At the same time, theatlavins consist of theatlavin and theatlavin-Gallata itself and are very unstable substances: at the slightest oxidation, they go to theaterbigs. This property of tea pigments explains many properties of the infusion. For example, his contraction. You probably noticed how a spite and low-grade tea is rapidly drilling, it becomes opaque-so-so, if you leave it to stand for a while. This means that the oxidation of theatlavins occurs, giving not only and not so much color as tone, the brightness of the infusion.

The absence or presence of theatlavins in tea, thus, serves as a rather accurate and visual indicator of the quality of tea. So, the constant ratio of theatlavins and theaterbigs in good tea is 1:10, and in the bad - 1:20. This made it possible to develop a simple and accurate scale of the quality of tea expressed in accurate digital indicators, and monitor its change on this scale. According to the international rules, any bathing of tea should have the ratio of theatlavins and theaterbigs not lower than 1:16, that is, to be at least average tea in quality, and with a ratio above 1:25 tea should be declared not suitable and removed from sales. The establishment of these indicators is very simple and can be produced by any biochemical and medical

#### laboratory.

Thus, the modern level of knowledge about the composition of tea helps to find objective criteria to determine its quality and move from the categories of subjective organoleptic and aesthetic assessments to the short and impassive language of numbers.

Except listed six of the most important groups of substances, considerable meaning For consumer tea have Mineral, inorganic, Small substances, A Also Organic acids contained in tea in smaller quantities. Mineral and other inorganic substances in tea contains from 4 to 7 %. They are not

Limited by iron salts open in tea relatively long ago. In addition to glandular compounds, there are also metals such as magnesium, manganese, sodium in tea. Together with silicon, potassium, calcium, they are extremely important for nutrition of various human tissues and

Especially for the formation of centers of electrostatic and radioactive phenomena in our body. Tea contains other metals and inorganic substances in the form

Microelements, including fluorine, iodine, copper, gold, etc. All are part of complex compounds, but, being in a colloidal state, are dissolved in water and go into a tea infusion (especially fluorine and iodine, which serves as an anti -sclerotic agent).

Particularly indicated by phosphorus and its compounds. In Georgian tea, fittin, hexosomonophosphate, hexozosodifosphate, orthophosphoric acid, which serve to nutrition of nervous tissue were found. The higher the variety of tea, the more phosphorus and potassium in it. The latter is very important for maintaining the normal activity of the cardiovascular system.

The composition of tea includes small in the specific gravity, but a diverse group of tarry substances. These are complexes complex in chemical composition: alcohols (cuts), resin acids, resin phenols and other organic compounds. They are still extremely little studied. But their role in tea in general terms is clear: they act mainly as carriers, and even more like a tea aroma clamp. Therefore, high -quality teas are distinguished by a large content of tarry substances that delay the exhalation of the aroma. In addition, resins also report the known adhesiveness of tea, create the possibility of its pressing (in the production of tile and brick varieties).

Another group of soluble organic compounds in tea forms organic acids (about 1 %), which include sorrel, lemon, apple, amber, pyrovinoser, fumaur and two or three more acids. As part of tea, they are still poorly investigated, but it is clear that in general they increase the food and dietary value of tea.

In tea, there are finally four groups of substances, the components of which are only partially soluble in water or completely insoluble. These groups of substances therefore are of greater importance for tea production than for the consumer. These include enzymes, pectin substances, glucosides and carbohydrates.

Enzymes, or enzymes, are contained in tea mainly in an insoluble, related state. These are biological catalysts. With their help, all chemical transformations occur both in a living tea plant, with its growth, and in the process of factory preparation of tea. It is remarkable that each enzyme has the ability to act only on a certain substance without affecting others. It was using differently enzymatic oxidative processes, a person was able to receive teas of different types, varieties and quality from the same raw materials.

Basic enzymes tea three, A all over Ten. The main ones from them - polyphenoloxidase, peroxidase and catalase. The first two are available both in soluble and in a related state. They cause tea fermentation. Catalase contributes to the general process of fermentation, frees oxygen in tea. Extremely active tea enzyme is also invertase.

Pectin substances are colloidal substances with a complex composition. Their content in tea ranges from 2 to 3 %. In the presence of sugars and acids, they can form gelatinous masses - jelly. Pectins are of no small importance for maintaining the quality of tea: they are associated with such a physical property of tea as its hygroscopicity. With a lack of pectinic acid, its hygroscopicity increases sharply, and therefore the tea spoils faster. The fact is that pectinic acid covers each spoon of thin, weakly permeable for moisture with a gelatin film and thus plays the role of a "rain cloak" for tea. Recently, the positive role of pectins for the human body, especially in the treatment of gastrointestinal diseases, has been increasingly determining. Good quality tea contains, as a rule, more water -soluble pectins than bad varieties of tea.

Carbohydrates in tea contains various - from simple sugars to complex polysaccharides. The higher the percentage of carbohydrates in tea, the lower its variety. Therefore, carbohydrates are a kind of ballast for tea. Fortunately, most of them are insoluble.

Moreover, the polysaccharides unnecessary to a person - starch, cellulose, hemicellulose, which are from 10 to 12 % of tea are insoluble. But useful carbohydrates - sucrose, glucose, fructose, maltose (in tea from 1 to 4 %) are soluble. The presence of a small amount of soluble sugars is one of the remarkable advantages of tea, it not only makes tea an ideal anti -sclerotic drink, especially in combination with iodine and vitamin P, but also ensures the preservation of vitamin B in tea, usually absorbed in sugar.

So, even a fluent and incomplete familiarization with the chemical composition of tea convinces us that nature has created a kind of chemical warehouse in a tea sheet or, rather, a whole chemical laboratory. Moreover, the most amazing and wonderful is that this is a permanent laboratory. Complex chemical changes, interactions, oxidation processes and turning some substances into another occur in a tea sheet continuously, not only while it is alive while it grows, not only when, getting into the factory, it is subjected to all kinds of wilting, twisting and fermentation, but Even when he turned into a small dry seagull and, it would seem, lifelessly lies with billions of himself like somewhere on the shelves of the store or in your kitchen cabinet.

The ancient Chinese considered it necessary to withstand tea for at least one year so that it acquires the desired condition, that is, so that in it there are such chemical processes during long -term storage that would lead to an improvement in its aromatic and taste properties, to an increase in its quality. True, at the same time, special storage conditions were required, because with improper storage in tea, chemical processes will also occur, but they will not lead to improvement, but, on the contrary, to a sharp deterioration in its quality. But this is another question, on which we will dwell in more detail below. It is also important here to understand that the chemical composition of tea is not a certain constant and unchanged value, it changes constantly until the very moment when we take a sip of tea. In addition, the chemical composition of tea is associated with the conditions of its growth and with the method of processing, which is why teas from different areas of growth, different types and even different varieties have different chemical compositions. That is why different types and varieties of tea unequally affect the human body.

But in general, tea is a treasury of substances useful for humans. Not without reason, since ancient times, tea was considered a wonderful, magical drink. However, the ancients could not even guess about those two magnificent properties of tea that we now know about.

One of the remarkable abilities of the tea plant is that it pulls out of the soil and synthesizes the most diverse and rare substances useful for humans. Nature did not stop there and generously endowed the finished tea with another, no less amazing ability - to give in the solution its best, most valuable, most useful part for humans.

That is why now, knowing the chemical composition of tea, we can admire this drink even more with the ancients and just like the ancients, we have every reason to look at tea as a miracle.

#### 2. Vitamins of tea

In tea there is almost the entire alphabet of vitamins. It contains provitamin A - Carotin, important for our vision (especially for the elderly people prone to the disease of the eyes with keratitis) and providing the normal state of the most delicate mucous membranes - the nose, throat, larynx, lungs, bronchi, genitourinary organs.

The tea group is also represented by vitamin V. Vitamin B1 (thiamine) contributes to the normal functioning of our entire nervous system, and also takes part in the regulation of the activities of most of the galls of internal secretion (adrenal glands,

thyroid gland and sex glands). This vitamin also acts well on patients with diabetes, stomach ulcer and gout. Vitamin B2 (riboflavin) makes our skin beautiful,

Elastic, prevents or reduces its peeling, dryness, and also facilitates the healing of eczema. But, in addition, riboflavin is used to treat serious liver diseases: bronze disease, cirrhosis, hepatitis, diabetes, as well as with myocardial dystrophy. Pantotenic acid also belongs to the vitamin B group - vitamin B15 prevents the development of skin diseases (dermatitis) and extremely important for our body as a catalyst for all processes of assimilation of incoming substances. Finally, nicotinic acid (vitamin PP) is also close to this group - an anti-allergic vitamin that is very resistant to high temperatures and well -soluble in water. In this vitamin, people who systematically eat corn or purified rice are especially needed in which vitamin PP is almost completely absent. The content of nicotinic acid in tea is extremely large, hundreds of times more than vitamin B1.

There is 4 times more in tea and vitamin C. in a fresh tea sheet than in lemon and orange juice, but with factory processing, part of vitamin C is naturally lost. Nevertheless, it is not so few, especially in green and yellow teas, where ascorbic acid is 10 times more than in black.

But the main vitamin of tea is vitamin R. Vitamin P (or C2) in combination with vitamin C sharply enhances the effectiveness of ascorbic acid, contributes to it

The accumulation and detention in the body, and also helps the absorption of vitamin C. to almost all tea products containing catechins, including tea dyes, is characterized by the so-called P-vitamin activity, i.e. The ability to act like vitamin R. Vitamin R strengthens the walls of blood vessels, prevents internal hemorrhages. By

The content of vitamin P has no equal in the plant world, in this respect it is much richer than buckwheat (85 units in tea, 61 - in buckwheat). Green tea has the greatest P-vitamin activity. However, not only green, but also black tea, especially high-tanned varieties, contain vitamin R. drinking 3-4 glasses of tea of a good fortress, we provide our body with a daily preventive dose of vitamin R. is no less important for us and the vitamin K contained in tea, which contributes to the formation of protrombin in the liver, necessary to maintain normal blood coagulation.

## Chapter 6 Tea and Human Health

Many centuries before the chemical composition of tea became known, people have discovered many therapeutic and nutritious properties of tea by observations and life experience. Tea has long been glorified as a healing drink and was first consumed as a drug. First of all, people noticed that tea stimulates the life of the body, enhances working capacity, eliminates fatigue. For a long time they thought that tea has a tonic effect on a person in the first place when he serves him to quench thirst and for warming; Then they noticed that tea increases energy, because it also acts as a remedy that quenches hunger. Indeed, in no way replacing food, tea at the same time helps a person withstand its lack for a rather long time, and when drinking tea during meager nutrition, not only the loss of mass is slowed down, but, most importantly, performance is largely maintained. This property of tea - to slow down or reduce the wear of the human body - has long been glory to the ideal drink for travelers, sailors, geologists, hunters and people of other professions who are forced to work in the field, often change the situation, experience physical and nervous loads, and overvoltage. It is no accident that the tea was adopted "into service" as a compulsory food product at the beginning in English, and then in all other armies of the world [1]. Only later it became known that the caloric content of tea (more precisely, fresh sheet) is almost 24 times higher than the caloric content of wheat bread, which is explained by the high content of protein substances [2].

A cup of tea with one tablespoon of milk and a piece of sugar gives 40 calories (according to some reports, 50 calories). When replacing milk with cream and the use of stronger tea with two pieces of sugar per cup, the calorie content of a portion of strong tea rises to 95-100 calories.

Modern ideas about the physiological effect of tea and its healing properties reveal the prospects for the active use of tea as a mass wellness

Means

Meanwhile, the consumer has a very vague representation about the preventive and healing properties of tea, and is often captured by rather ignorant

prejudice. That is why we will dwell in more detail on the question of what action the tea has on our internal organs and the central nervous system.

Let's start with the digestive organs. It has long been noticed that strong tea acts as a good remedy for stomach disorders, and in cases of acute disorder, tea actually remains the only food product that the patient may eat.

At the same time, the old pharmacology indicated that 2.5-3 g of tannin extract, accepted during the day, can cause constipation in a healthy person for 3 days. However, the experiment undertaken by English scientists did not give the expected result. There was not even

Not a single case of stool delayed was registered, although the dose of tannin extract was increased. The fears of old medicine were unreasonable. On the contrary, tea helps in many cases to adjust the digestion process.

Moreover, the bactericidal and bacteriostatic properties of Theotanin were experimentally established by the works of our scientists relatively recently, i.e. The ability to kill or suppress not only bacteria of decay, but also more specific microbes such as a dysentery stick of fllexner, typhoparastic sticks "a", hemolytic yellow staphylococcus and golden streptococcus.

In this regard, the work of the Turkmen doctor S.I. Berdyeva [3], which examined 14 varieties of tea and found that green tea has the most powerful

bactericidal properties. Moreover, the higher the variety of green tea, the sharper its antimicrobial activity is more sharply expressed. In addition, the infusion of green tea on the second day (and even more so on the third) after cooking kills a larger number of microbes than

Freshly prepared, although it loses its taste and aromatic properties [4]. Dr. Berdyeva experienced green tea on dysenteria and abdomen. In the most severe cases, dysenteria sticks disappeared from green tea already on the 2-3rd day of treatment, and a complete recovery occurred on the 5-10th day, while with ordinary treatment it takes several weeks. And when six months later the same patients were again examined, none of them turned out to be a hidden bacilluser, no one repeated the disease. Treatment of dysentery with green tea is several times more effective than treatment with other expensive and scarce drugs, and in addition, it is more useful for the health of patients, since it does not give side complications.

Tea favorably acts on the human digestive tract, due to its ability to adsorize substances harmful to the body, so tea not only "cleanses" the digestive organs from microbes, but also performs a kind of dry cleaning of the entire contents of our stomach, kidneys and partly liver [5].

Finally, other properties of tea tannin make tea with an excellent preventive and therapeutic agent from atony (tone) of the digestive tract. In general, tea contributes to the absorption of food, extremely facilitates the digestion process, creates the conditions for its correct course, thereby preventing digestive organs. That is why it is so useful to drink tea after eating, especially after fatty, meat and heavy foods.

No less beneficial effect is influenced by tea on the kidneys and urinary tract. Due to the presence of a generator, tea has a moderate diuretic property. Apparently, the essential oils contained in tea, as well as caffeine, which stimulates the activity of the kidneys, acting as a diuretic, play great importance for the organs of the genitourinary tract.

There is evidence that tea is effective as a warning tool against the formation of liver stones, kidneys and bladder. The Chinese, for example, are almost unknown in gall and urolithiasis. But it is the Chinese, like no one in the world, not only regularly drinking tea, but also know how to brew it, preserving the maximum of essential oils in the infusion.

Tea contributes to the accumulation of vitamin C in the liver, kidneys, spleen, adrenal glands, which facilitates the work of these organs in a healthy person and helps to cure them faster in case of illness.

The cleansing properties of tea positively affect our lymph system. People prone to diseases of the lymph glands can be advised by tea as an excellent prophylactic.

As for the respiratory system, it was noted that when tea consumption, the amount of air inhaled by the air and the carbon dioxide exhaled by them increases, i.e. Respiratory metabolism during tea drinking is more intense not only compared to the state of rest, but also in comparison with which respiratory metabolism causes coffee. That is why, with all the colds and inflammatory diseases of the respiratory system (bronchi, light), tea is extremely useful both as a diaphoretic and as a means stimulating the respiratory process.

A similar stimulating effect has tea on the breath of our skin, as well as its general condition. If the activity of the skin decreases from coffee, then tea, on the contrary, enhances this activity, causes the expansion of skin pores, promotes intensive sweating and not only mechanically, but also biochemically cleanses and cleans pores. In addition, vitamin B2 contained in tea, helps to increase the elasticity of the skin, eliminates dry skin, makes it elastic, full -blooded, and vitamins p and k give the skin a beautiful appearance and pleasant bodily color, strengthening the walls of the smallest vessels and thereby eliminating the possibility of various subcutaneous hemorrhages,

manifested in the form of a blue or redness of individual areas of the skin.

It is understandable that if tea has a comprehensive improving effect on all internal organs engaged in processing and metabolism, then it should

It is beneficial to influence the overall metabolism in our body, to play the role of a kind of metabolic regulator, and therefore, to prevent diseases associated with

violation of this exchange. Indeed, even in ancient times it was noticed that tea frees from dim, warns gout, accumulation of salts and other toxins, and cures from golden. Tea is used to treat various vitamin deficiency, in particular scurvy. The preventive dose is 3-5 g, and the therapeutic 10-15 g per welding (i.e. for every 175-200 cm3 water).

Finally, tea acts excellently on hematopoiesis and cardiovascular system. The salts of iron, which are in tea, play a positive role in bleeding, improve the composition of the blood, increase the amount of red blood cells, and the catechins of tea activate the activity of the liver and spleen, and help through these organs to enrich blood with vitamins.

As for the vascular system, tea acts on it soothingly, eliminates vascular cramps, expands them and thereby facilitates the process of blood circulation, creates normal blood pressure. Therefore, the prejudices of hypertension against tea are absolutely unfounded. On the contrary, with hypertension, tea catechins used in a more concentrated form, as a drug, reduce blood pressure and in all cases relieve headaches and ears in all cases. To people predisposed to apoplexy or blockage of blood vessels, green tea is especially useful, because it supports the normal elasticity of the walls of the smallest blood vessels - capillaries, strengthens these walls in case of weakness, prevents their permeability and thereby significantly reduces the possibility of internal hemorrhages. Tea is able to prevent, and sometimes eliminated small hemorrhages,

bleeding of the mucous membranes, gums and even swelling. Strong green tea, and especially catechin preparations from it, were successfully used in the treatment of heavy

hemorrhages of the gastrointestinal tract and brain and with senile fragility of capillaries. In the most serious cases - for hemorrhages in the fundus, various capillarotoxicosis, rheumatic endocarditis and in the disease of Verlgof - a concentrated drug of vitamin P is used, isolated from tea.

The use of tea (again primarily green) against various kinds of radiation influences is based on the p-vitamin effect of tea catechins: in sunlight, quartz burns, x-ray irradiations.

In China, where for centuries it was empirically known that tea is one of the radical means of preventing sclerosis and contributes to longevity, they did not even consider it necessary to somehow prove it. Only recently, Chinese scientists have set themselves the task not only to investigate how tea acts, due to which it prevents sclerosis, but also to find out what varieties of Chinese tea are more capable of this to a greater extent. The results of this study in the 80s turned out to be sensational: carefully verified biochemical experiments set on three animal groups showed that the Fujian red teas literally washed and washed off, cleaned the fat layer and thrombi in the blood vessels, and contributed to maintain a high concentration in the body of vitamins P, C and E and successfully eliminated blood cholesterol. It is interesting that of the two groups of animals, one of which was introduced by cholesterol, but they were watered with a liquid three percent solution of Fujian tea, and the other only with clean water, the latter died after 14 days, and the first survived safely. If we take into account that a person uses a 10-15 percent, and sometimes 20-25 percent concentration of a tea drink (brewing), then we can understand why the Chinese scientists managed to treat people with diseases such as cerebral arteriosclerosis, with the help of a chateratrapy, Hyperlipidemia, arterial thrombophlebitis and myocardial infarction, and even withdraw people from a severe stroke.

Toning impact tea experiences Andour muscle system, our

The muscles, the result of which is an increase in performance. However, tea does not affect it directly, but indirectly - through the vascular, respiratory and nervous systems. The influence of tea on the nervous system, especially on the central nervous system, has been recognized by scientists from ancient times.

Everyone who is familiar with a tea drink had to experience its impact on the activity of the brain. In the literature on tea, not only the well -known fact is noted that the tea, thanks to caffeine, relieves headache and gives mental vigor, drives away the dream and makes it possible to work at night, but also that tea helps to reveal the creative forces of the brain, increases the ability of the brain to process the impressions, Passes to more in -depth and concentrated thinking. Many scientists noted that it was under the influence of tea that the creative process is sharply facilitated and that, although at the same time the flight of fantasy, the emergence of ideas and associations is significantly intensified, but at the same time, the attention of a person is not dissipated, as under the action of other stimulants, such as alcohol, and, and, On the contrary, with even greater ease, it focuses on a certain issue.

All these observations of the action of tea on our central nervous system find their scientific explanation. First of all, caffeine, or Tein, being part of tea in combination with other alkaloids, such as a uniform and theophylline, generally soothingly act on our nervous system, only slightly exciting it, and there is no oppression of tea, as this It happens often with the use of coffee and cocoa. Activation of brain activity, i.e. strengthening the process of thinking and its

The deepening occurs under the influence of tea because tea enhances the process of nutrition with oxygen of the vessels of the brain, expands them, facilitates and deepens breathing, cleanses the body and, above all, the circulatory system of toxins.

But, in addition to such indirect exposure, tea also acts directly on our peripheral and central nervous system, in particular on the cerebral cortex, due to the content of xanthins in it - it is they that give the main stimulating effect, cause lightness and speed of thinking.

It is remarkable that tea even in a normal, and not just in an increased dose causes an immediate and at the same time a long rise. It is thanks to the instantaneous effect of tea on the nervous system that fatigue is removed, since the feeling of fatigue in a person is originally caused by the fatigue of nerve cells, and not the fatigue of muscles, which occurs much later. Therefore, removal of fatigue of nerve cells is in

Most cases are enough for the feeling of fatigue in general. As a result of the complex positive effect of tea on the nervous, respiratory,

The cardiovascular system and other internal organs create a well-known "moral" effect of tea: after its adoption, the overall mood of the spirit is improved, people are made more benevolent and peaceful. This effect was also known since ancient times, and he gave rise to the custom of leading business, and especially diplomatic negotiations for tea.

It is impossible not to say that recently, in connection with the study of the chemical composition of tea, pharmacologists pay more and more attention to him. Not far away when various extracts and other tea preparations will find more and more use in medical practice. Thus, tea, which began his life as a medicinal plant in the 4th century, can be said to be worried on the threshold of his one and a half thousandth anniversary of the second youth.

Here are some examples that tea as a medicine is not only not outdated, but is completely in the leg with our atomic age.

According to the experiences of Dr. D.F. McCquoton (USA), tea contains such a high percentage of fluorine that it can be successfully used as a convenient and effective tool that prevents teeth damage, and mainly prevents

The occurrence of caries is a disease that destroys the enamel of the teeth. Only in view of the fact that

Most people drink tea with sugar, which just promotes teeth damage, the preventive value of tea is sharply reduced. Therefore, Dr. McCoveleon recommends drinking tea without sugar, and adults subject to caries, in a higher concentration than usual. Children can be given tea even from one -year -old age, but always with milk and not too much, and mainly in the morning, so as not to worsen the child's sleep.

The opening of the Japanese scientists Taji Ugai and Enzi Hayashi, who proved that tea is an excellent antidote in poisoning the body with strontzium-90. This harmful isotope, usually contained in radioactive precipitation, penetrates the human body not only directly from radioactive air, but And with milk and vegetables and causes cancer such as leukemia. Observations of the patients who suffered from the atomic explosion in Hiroshima showed that those of the patients who went to their relatives in the tea -producing Uji region and drank a lot of high -quality green tea, not only survived, but also definitely stated that they had better from tea.

Checking the action of tea and its extract on animals, which was introduced by Strontius-90 in a deadly dose, showed that tea absorbs up to 90 % of the dangerous isotope, in other words, almost completely eliminates its harmful effect on the body. It turned out that with the simultaneous introduction of tea and strontium, the tannin of tea adsorb and destroys strontium-90 before it manages to reach the bone marrow. Japanese scientists believe that the dosage of Strontia-90 can always be kept in the body much lower than the permissible level, if you regularly drink enough strong green tea.

In conclusion, it will be useful to recall some old, folk, but, unfortunately, not all known ways of using tea with various kinds of widespread ailments.

- 1. Very strong and sweet (with sugar) hot tea with milk antidote with alcohol poisoning, drugs, medications (for example, luminal).
- 2. Warm tea in medium brewing with lemon, black pepper and honey is a diuretic and diaphoretic agent for colds of the respiratory tract and lungs.
- 3. A strong chilled infusion of a mixture of green and black tea with the addition of a small amount of grape dry wine (1 teaspoon per 1 cup) is a means for washing the eyes with inflammatory processes of the eyelids, clogging the mucous membrane, as well as with conjunctivitis.
- 4. The juice of fresh tea leaf, tea extract or dry tea chopped into powder can serve as a means of burns.
- 5. Chewing of dry green tea helps well from nausea and with severe calls to vomiting in pregnant women, when rimming in a car and for seas diseases.
- 6. A strong infusion of green tea can be used in the treatment of external ulcerative diseases, as well as stomach ulcers and duodenum, provided that the systematic use is used. It is not by chance that we dwell on therapeutic, physiological and

dietary properties of tea. The fact is that among a fairly significant number of people, prejudices of the relatively harmful effect of tea on our body are common and rooted. These prejudices have been preserved since those times when tea was not affordable for the overwhelming majority of the working population. The purchase of a number of city, and even more colonial goods, ordinary people could only afford to occasionally, on holidays, and in a more prosperous, philistine environment were forced to limit themselves to some very modest limit of consumption. That is why, among the philistine class, the custom went to drink rather liquid tea, about five times weaker than what they drank, for example, in England. Tea in English could afford only nobles and merchants. The latter, however,, due to their inconsistency, sought to emphasize their wealth mainly

quantitative indicators; That is why the people's concept of "drinking tea" became among the people to mean a long, protracted tea party, accompanied by the absorption of all kinds of

jams, cookies and other sweets. The bourgeois as an intermediate class due to philistine psychology (not by chance that became a household) was ashamed of the true reason why they were forced to limit themselves in tea, and therefore came up with the most incredible fables about the harmfulness of tea. That is how rumors gradually arose that tea causes insomnia, fainting, urinary incontinence, bad complexion, staggering and "blackness of teeth", lethargy, powerlessness, fear, timidity, study, dizziness, weakening of vision and "nervous seizures".

The vitality of these rumors is explained by the fact that they were intensively supported by influential circles at one time, and it was not only a Russian, but also an international phenomenon. It should not be forgotten that these prejudices have become widespread mainly from the last quarter of the 19th century, i.e. During the period of rapid development of capitalism and the rapid spread of tea among the wide masses, which he was not previously known.

The "tea boom" in the field of tastes was, of course, by the reflection of "tea boom" in trade due to the appearance of new tea-producing countries on the world market-India and Ceylon (now Sri Lanka) with their cheapest and more at that time low -grade teas. All these circumstances caused acute competition in world tea trade, complicated by such political moments as the Anglo-Russian

The contradictions in Central and Central Asia and the Russian-German contradictions in Eastern Europe. Therefore, a significant part of the anti-agile campaign, carried out then in Russia and other European countries, was associated with the political and economic interests of certain states that, discrediting tea as a product, inflicted a political and economic blow to the competitor. In the semi-literate, and even completely illiterate people who lived rumors and supple to prejudice, this backstage struggle of the then "tea and coffee octuations" and born monopolies received, of course, distorted and impressive reflection. An excellent example of this is an anti-nuclear campaign, begun more than a hundred years ago in Russia and against Russia. The book of A. Vladimirov "tea and harm to bodily health, mental, moral and economic", published in Vilna in 1874, gave it to her.

This small brochure of 36 pages was filled with unfounded curses at the tea-"a damned foreign drink that can ruin people because of their high cost." To turn the reader from drinking tea, the author attributed to this product an incredibly harmful effect on the body, called it a source of all diseases, starting with insomnia and ending with epilepsy. The author aimed to make, so to speak, an anti-nuclear psychological attack on the reader and not so much to convince him (no

He had no confirmation), how much to intimidate. And this goal was achieved to a certain extent. All arguments against tea, which then appeared in print or in the form of rumors, were, as it turned out during the test, were borrowed from the brochure of Vladimirov. Only recently it was possible to find out that behind the pseudonym Vladimirov was hiding the Lithuanian gentry Vladislaus Mingishale-Dyallo, who was a member of the Lithuanian-German

Nationalist group, a member of the Jesuits Order and speaking at the direction of the Prussian political circles against "Russian influence in Lithuania." Considering that tea as a Russian national drink can attract the sympathies of Lithuanians and Poles to Russia, V. Dovghaallo set his goal to prevent his spread in Lithuania and throughout the Vilnius Territory, which then included all of Belarus, part of Latvia and some Western provinces of Russia (Smolensk region, Bryansk). Fearing that following the spread of tea in Lithuania will intensify the influx of Russian immigrants and Russian trading tea companies will supplant Prussian coffee trade from the Lithuanian market, Dovgayallo did not spare black colors to describe the harm of tea.

Thus, the brochure about the dangers of tea pursued certain trade and political goals and was conceived as a local Lithuanian-Polish action. However, having got into the internal regions of Russia, where they did not know about the true background of its appearance, it was even accepted

The intelligentsia as an enlightened "Western" opinion about tea and, as in such cases is found, gave food to numerous rumors, which, having got into the philistine environment, gained an even more awkward form. I must say that Russian scientists at the same time sought to promote the true meaning of tea for health. A year before the appearance of Vladimirov's book, "The Permanent Commission of Folk Readings" published in St. Petersburg

The twelve -page brochure "Tea. Where does he come to us and what is useful." In 1875, the second edition of this brochure was published under the new name - "Tea and its benefit", where a rebuke of tea was given. The author of this book was G. R. Reinbot, Russified German from the Volga region. Before the revolution, she managed to withstand ten publications, but her circulations were small - only 2 thousand copies. And there were few competent in tsarist Russia. That is why the rumors were indestructible and migrated to the post - revolutionary era.

Rumors about the "dangers of tea" continue to arise today. They appear, as a rule, in the West and most often have the same goal - to annoy competitors. Often they are put on a science form and, as a result, sometimes uncritically spread in our press.

Αt this Modern Anti -nuclear Rumors reinforce links supposedly on Examination conducted among a large mass of aspirations. But what is the price of this, so to say, examination? If the degree of action of alcoholic beverages is easily measured by the amount of consumption in liters, then the action of tea cannot be measured by the number of glasses drunk, especially since this indicator is very difficult to take into account. In addition, alcohol does not change in composition, regardless of how it is consumed. The situation with tea is completely different: it is difficult to find two people brewing tea of exactly the same fortress. Therefore, tea consumption has long been measured not by the amount of drink consumed, but by the amount of dry tea used during the year. That is why all the conclusions of leisure "surveys" who use the same criteria for tea as for alcoholic beverages are absolutely unscientific.

At the same time, statistics indicate that, for example, in London, a city, extremely unhealthy in climate, foggy, overpopulated, filled

Industrial and transport gases (in the city of 1.8 million cars and 460 thousand trucks and buses), 665 people under the age of 100 years live. When surveying these long-livers, it turned out that they consume 4-4.5 kg of tea per year, and the tea is almost the main (at least constant) component of the diet. These data speak for themselves.

Thus, it must be remembered that most of the walking ideas about the dangers of tea arose historically and always had a political, economic, national, but not a medical background.

Unfortunately, even in the medical environment, some are still in the power of walking prejudices. Since the true biochemical and pharmacological study of tea began relatively recently, only a quarter of a century ago, and its results became known only 10-15 years ago, it is not surprising that they still know little about them. The fact that under the words "tea", "action of tea" is also important is important. For most, including for doctors, the concept of "tea" is associated only with black tea, and with the most diluted, "sick leave". Of course, such tea does not have any healing properties. As for black tea, it is not able to act in the same way as the green, and from it the green one, and from it, of course, you can't wait for the effect during hemorrhages or dysentery.

The use of tea for therapeutic purposes should be based on good knowledge of all types and types of tea and their actions. But this is not enough. It is necessary that the tea used is properly welded, taken in the correct proportions and norms. Failure to comply with these rules sometimes leads to the fact that tea has a negative, harmful effect on the body. So, with a high concentration of infusion, tea can cause a state of increased vigor, in particular insomnia (if the tea was drunk immediately before bedtime), and with a super -high

Concentrations - quick and deep sleep [6]. That is why often in ancient books you can find a strange, seemingly indication that tea is a sleeping pill. Yes, tea can also act as sleeping pills depending on what quantities, in what concentration it will be used. Usually this effect has more than

A tenfold dose of tea (in the volume of a glass, of course, and not ten glasses of tea). But it would be a mistake to think that a strong infusion of tea

harmful By his own

physiological consequences, and liquid tea is harmless. As rightly noted by Professor S.D. Kislyakov, the introduction of large quantities of hot water in microscopic brewing is especially harmful, because in this case only affects

negative properties Big quantities boiled Andoften Respectable liquids, but the positive properties of tea cannot affect at all, the role of which, in essence, is reduced to the role of a water tint. Therefore, not so much too strong as too liquid tea is harmful.

Meanwhile, the fears that "strong tea acts narcically", perhaps the most common among consumers and among doctors. As mentioned above, there are no narcotic substances in tea, and the percentage of caffeine used for tea drinking is negligible, especially compared to the content of caffeine in coffee (in a single portion). So there can be no talk of any narcotic effect of tea. However, the belief of this is so firmly that the reason for it should be explained in more detail.

The fact is that many are aware of the effect of a person to get used to tea. This addiction occurs for a very simple reason: a person feels better, accustomed to drinking tea regularly, and therefore does not want to, of course, abandon this drink. However, this addiction is fundamentally different from the narcotic (or alcohol and nicotine) addiction, from which a person is unable to get rid of, despite his desire. People cannot even quit smoking for years, and you can stop drinking tea instantly. This alone is breaking the myth of the "narcotic" effect of tea.

Another argument is no less convincing. As you know, tea is regularly used in large quantities: for example, the British, Irish, Tibetans, Japanese, Mongols, Uzbeks. Their "addiction" to tea has become a national tradition, the habit of many generations, firmly entered everyday life and, most importantly, contributed to streamlining this life, gave rise to discipline in everyday life. If tea was a drug, then a completely different situation would have created - not only life, but also the social life of these nations would decline.

Recently, messages have appeared in the foreign press about the carcinogenic effect of tea. These rumors - otherwise you can't call them - have no scientific basis. Just green, especially green, due to the presence of pectins, catechins and theatlavins, is a preventive tool that protects our mucous membranes (from the mouth to the intestines) from all kinds of infection, as well as from the ingress of carcinogenic substances.

Of course, people who love to drink burning tea need to be warned against burns of mucous membranes. Such burns from hot water can lead to lip cancer and esophagus. But it will not be guilty of this not tea, but the very fact of a burn. If the tea is strong enough, then even with a burn such tea cannot be negative consequences, especially if this tea is green.

A negative effect on the body can have poor -quality tea that appears as a result of either improper industrial preparation of it or improper storage.

Thus, the study of some African (Kenyan, Ugandan), South Indian and Ceylon teas showed that with extremely severe grinding of the sheet during heat treatment, as if frying, more precisely, the burning, carbonization of the seas, as a result of which carcinogens were discovered in many parties of small teas formed from the baking of the tannin and especially tea resins and proteins. These processing defects are inherent in exclusively foreign chopped teas, everyone can detect this

attentive	consumer,	So	How	infusion	Such	spoiled	tea has	cutting
Metal or burnt ta	ste. It is much mo	re difficul	t to rec	ognize oth	er, more	dangerous defec	ts: tea arising from	

improper storage. Tea is able to absorb vapors of gasoline, naphthalene, insecticides, pesticides, washing drugs and accumulate them in an extremely large

concentration. Therefore, with improper storage of these drugs and tea - in a modern household or in a warehouse - poisoning with such "tea" is possible, and they can be unclear, unshakable, which is why it is difficult to recognize and treat them in a timely manner.

Of great importance for achieving the beneficial effect of tea on the body is its correct brewing. It should be emphasized with a certainty that the diverse beneficial properties of tea, which are mentioned above, are only a high -quality product - to clean, without any impurities of tea, provided that it is properly storage and preparation. But it is a mistake to think that high -grade tea will give the high quality of the infusion itself: tea still needs to be welded correctly.

We should not forget that different external conditions and different types of people require their own types and varieties of tea. In relation to people here, not only the rule "not argues about tastes" acts, along with it the individual physiological characteristics of the body of each person play a significant role: that which seems too strong for the other can be simply normal.

For Everyone man good, Right brewed, Drunk V moderate
The quantity and, moreover, is not too hot tea is extremely useful and absolutely cannot be detected even with the
most frequent, systematic use. That is why tea should be drunk in the morning and at noon, after a tight breakfast
and lunch, as well as after a daytime sleep. However, avoid drinking it too late in the evening, especially
immediately before going to bed.

We will tell you about what is considered normal and correct brewing, how to cook tea in the next chapter.

## Chapter 7 Tea as a drink

#### 1. "Tea" and "coffee" zones

Tea as a drink has its own story, which is significantly different from the history of its spread as a plant.

In China, tea became an everyday drink only in the VI century, although before that it was known for more than two hundred years as a medication.

But as a drink, tea was first consumed exclusively in an aristocratic environment. It took three more centuries before the tea turned (at the beginning of the 9th century) into

National drink of the Chinese. The same thing happened in Korea and Japan, where tea was brought from China, respectively in

510s and 552 and where, as a cult, religious and ceremony drink, it has been used from the 9th century, while the masses were able to use it no earlier than the 17th century, i.e. Already after tea has entered into European countries.

Finally, a tea drink appeared early in India, in 527, but never went beyond the narrow layer of Buddhist monks. The broad masses in India met tea only at the end of the 19th century and even at the beginning of the 20th century, mainly through the British. Thus, the gap between the cult and domestic use of tea in all countries of the East was very significant - we are calculating several centuries.

Europe also needed a considerable time for the spread of tea, although much less long than in the homeland of tea - in Asia.

In Europe, a tea drink penetrated two completely independent from the other - from the west and from the east.

Portuguese sailors were first brought from China to Western Europe in 1517, but he did not go beyond the limits of the little Portugal, firmly stuck for a century in this country, where it was occasionally used at the royal court. In 1610, the Dutch made a second attempt to familiarize Europe with tea, but this time this drink did not go beyond the narrow circle of Amsterdam and Antwerp Patricians. Finally, in 1664, the East India Company sent as a gift to the English king as the greatest rarity two pounds (906 g) of tea, out of the Dutch. The gift coincided with the advent of the new queen in England - the nee Portuguese princess Katarina Braganz, who "brought" his wife Charles II as a dowry not only of the Indian city of bombs, but also the custom of drinking tea. But only at the beginning of the 18th century, the tea ceased to be a court drink in England and began to spread among small nobility and merchants. Since the middle of the 18th century, a tea party from England as a new European fashion began to penetrate into other European countries, of course, capturing only privileged classes.

However, in France, Spain, in Italian, Austrian and German lands, tea came across a strong competition of coffee and cocoa. Both were brought from the overseas colonies of the Bourbon and Habsburgs, the various branches of which ruled in the countries of southern and central Europe. Coffee was especially fixed in these countries, brought to Europe more than a hundred years before the appearance of tea.

It was not only that coffee managed to become a habit of at least three generations of the nobility, but also that he was quite firmly entered into the life of burgherism; The relative cheapness stimulated its spread, since the coffee production at that time was completely based on cheap slave labor in "its" colonies, while tea was quite expensive, it had to be bought from China, and even then in limited quantities. Since at that time trading with China was held in their hands in

Mostly England and Holland, it is quite natural that, first of all, tea began to spread in these countries.

Partly tea penetrated into Denmark, which also had its own Ondim company and its colonies in Asia, and also managed to establish contacts with Siam. But the three other Scandinavian countries - Sweden, Norway and Iceland - remained adherents of coffee, which in the first half of the 17th century, during the thirty -year war, penetrated there from Austria and Germany and was so widespread that it became a national drink of these very distant ones From the south of countries.

The Austrian, German and Scandinavian lands thus constituted a continuous "coffee zone" in Europe, through which further to the East - to Slavic lands - the path of tea was tightly closed.

The sympathies of the peoples of Europe to coffee and tea and the subsequent division of European countries into "coffee" and "tea" are not explained by the random whims of taste, but by the originality of the foreign trade situation and the foreign policy of forces in Western Europe of the late 17th century [7], and as a monument of that distant This division exists today, although it has long lost all political meaning.

Tea came to Russia from Asia completely independently, regardless of Western Europe, through Siberia. Back in 1567, the Cossack chieftains Petrov and Yalyshev described in China described an outlandish Chinese drink unknown in Rus'-tea, which was already widespread by this time in Southeast Siberia and Central Asia. But only almost a century later, in 1638, i.e. Much earlier than in England, tea appeared at the royal court. He was brought by the ambassador Vasily Starkov as a gift from one of the West Mongol khans, who literally imposed on the Russian diplomat in exchange for sables a rather significant supply of tea - 64 kg. The king and the boyars liked the new drink, and already in the 70s of the 17th century, tea became the subject of import to Moscow, where he was sold in the market, in simple shops along with ordinary goods. Thus, in Russia, tea as a drink "democratized" was much faster than in the countries of the East, and "penetrated the bottom" much earlier than in European countries, where its relatively widespread spread began only in the XVIII century. But at the same time, one should not forget that, unlike the East and Western Europe, tea in Russia was exclusively "urban" drink, and for a rather narrow circle of cities. Until the end of the 18th century, tea was sold only in Moscow, except for wholesale trade at the Irbit and Makaryeva fairs (Nizhny Novgorod). Throughout the 19th century, Moscow remained, although not the only, but dominant distribution market for tea in the European part of Russia. Even to the capital, in St. Petersburg, tea was imported from Moscow. Until the middle of the 19th century, there was only one specialized tea store in St. Petersburg, while in Moscow already in 1847 only specialized tea shops there were over a hundred (!), And there were more than three hundred tea and other tea-playing establishments.

In Moscow, they really appreciated and loved to drink tea. This was reflected in proverbs and sayings, although sometimes in a slightly distorted form. Thus, the respectful expression "Muscovites-Chayvniks", the meaning of which was well understood by the closest neighbors of Moscow in the Central Russian regions, was transformed into a neglect of "Moskali-water" among the population of Ukraine, the Middle Volga region, Don region, i.e. The Ukrainians and Cossacks who identified drinking tea with drinking water, since even in the 19th century they knew about tea in these areas.

In fact, all the tea "settled" in the area in the area, which was imported into Russia until the middle of the 19th century, the extreme northern point of which was Petersburg, and the extreme southeastern-Kazan. Moscow (more than 55-60 %) took the lion's share, the rest was scattered in other cities and landowner estates of Central Russia. If we take into account this feature not a continuous, but the "point" spread of tea in Russia, it should be recognized that its consumption was very high. Since the beginning of the XIX century, it has grown steadily: in 1801-1810. On average, they purchased by

75 thousand pounds per year, in 1820-1830. -140 thousand pounds each, in 1840-280 thousand pounds, and in 1850-360 thousand pounds in the amount of 5-6 million rubles. Tea at that time amounted to 95 % of Chinese exports to Russia. To cover gigantic tea costs at that time (for comparison, we indicate: the cost of bread export - the main article of the export - from Russia itself was 17 million rubles, and the cost of importing expensive French wines - 5 million rubles), Russian merchants brought to China in exchange for tea cloths, drads, velvet, linen canvas, Yuft and other types of skin, sables, ermine, bear fur, iron and cast -iron products of the Ural plants and other goods. To understand how highly the tea was appreciated and how many goods had to be sent to China (tea trade was only menova until the end of the 19th century!), It is enough to say that in the middle of the 19th century 62 % of all the furs exported by Russia came to China. But this only partially covered the costs of tea. Nevertheless, tea trade was beneficial to the tsarist government: it taxed tea with a duty, ranging from 80 to 120 % of the cost of tea, so that the tax on tea gave the treasury 5.5 million rubles, i.e. The tsarist government earned some tea as much as Chinese merchants received for it. If we take into account that the Russian merchants sought to get the same profit plus to justify their transport and other overhead costs, then you can imagine how expensive tea has cost the Russian buyer in comparison with other food products.

Nevertheless, the demand for tea in Russia increased, and China, who experienced just at that time the pressure of the Western powers - England, France, imposing unequal agreements to him, literally saw a outlet in the trade with Russia that was advantageous to him. Therefore, it was at this time that the assortment of Chinese teas imported into Russia was quite diverse. For example, since 1841, the import of three varieties of yellow tea, including San Phyn (Mandarinsky), was allowed into Russia. From the beginning of the 19th century, the highest varieties of green tea were imported (these teas were jellied, while black - only scatter) in pound and five -pound (2 kg) cans of leaf tin. The highest varieties of flower are imported from black teas, as teas with tips were then called, and extremely large number of ordinal varieties of black tea. In addition, brick tea was imported, as much as there is as much black, i.e. 130-140 thousand pounds. But the more black tea in Russia spread, the more green was reduced. In 1810, 12 thousand pounds of green tea were imported, or 1/6 of the total tea imports, in 1830 - 1.3 thousand pounds, and in 1850 - 0.5 thousand pounds, which amounted to 1/750 part The teas imported then. In the 60s, the import of green tea practically stopped, because since 1862 permission to import cheap Canton black tea in sea to Russia followed. Green tea, which cost 6-10 times more than black by this time, of course, could not compete with it.

However, until the end of the 19th century, the bulk of the tea entered Russia through Siberia. The path of tea from the place of its preparation to Moscow was a total of 11 thousand km and took 150-160 days, i.e. Almost six months. This even more expensive than the cost of tea, since transportation costs and feeding of the carters and protection exceeded the price for tea paid by merchants at the border. If you add another 120 % of the tax here, it will become clear why the retail price of tea in Russia was 10-12 times higher than in England and Germany (in comparable prices), and why it was not for a long time to make a common people. Only with the advent of the Samaro-Ufim and Yekaterinburg-Tyumen Railway in the 80s of the 19th century, the deadline for the delivery of tea to the European part of Russia has significantly decreased, and its market value has decreased so much that it gradually gradually from the late 80s and early 90s It becomes a necessary, mass Russian national drink. Since 1886, tea has been introduced in the Russian army as one of the main forms of allowance, since the mid-90s, tea appears in contracts of artisans and artisans with entrepreneurs as one of the three components of the mandatory parts of wages (money salary, grunts, tea) [8] .

In the second half of the 19th century, tea trade is concentrated on the Nizhny Novgorod Fair. The sale of the first teen of tea was considered an act of the actual start of the work of the fair, a more important sign than the official discovery. Since the mid-60s, tea began to be sold

Also in Odessa, Poltava, Kharkov, Rostov, Orenburg, Samara, Uralsk, Astrakhan, i.e. The area of its distribution began to expand significantly.

By the beginning of the 20th century, our country was the most tea parting country in the world. Tea warehouses and shops were opened in Rostov-on-Don, Kazan, Ufa, Tyumen, Perm, Kurgan, Chelyabinsk, Tomsk, Omsk, Barnaul, Krasnoyarsk, Irkutsk, Biysk, Semipalatinsk, Vladivostok, Tashkent, Samarkand, Yekaterinburg, Kyiv, Kokanda, Tiflis. Tea trade turnover reached this time several hundred million rubles a year. Kuznetsov sold only on the eve of the First World War of tea for 50 million rubles. annually, and the company high is 35 million rubles.

In the most difficult years of the Civil War and intervention in Moscow, a single body was created, which was in charge of the workpiece, distribution and trade of tea in the country, Centrcha. Already on April 16, 1918, a month after moving to Moscow, V.I. Lenin considered the draft decree on tea, and on April 19, 1918 this document was signed. According to him, clear rules for the distribution and trade of tea, as well as prices for it, dependent not on the variety of tea, but on the class belonging of buyers are established. Workers, especially members of the trade union, received tea for free, and representatives of the bourgeoisie had to pay for it

The highest price. It is important to emphasize that even in the most difficult years of the Civil War regular

The supply of the population of tea - and primarily the Red Army soldiers and workers - was not interrupted, all the time remained under the control of the government. Already in June 1918, the state harvesting commission was also organized under the centrochi, which had been jammed by the possibilities of new purchases of tea from China since 1919.

Thus, the "tea question" not only received priority in the supply of Soviet Russia with food during the years of the revolution and the Civil War, but was also completely resolved without causing any complications.

Having received recognition in Asia and Europe, tea moved to America at the beginning of the 18th century. For the first time, tea was brought by English colonists to North America in 1704 and immediately became the main drink of Puritan of New England. The colonists began to import tea from China on special ships - "tea clippers", bypassing English customs, i.e. smuggled. This caused great damage to the English treasury, as she imposed a 120 percent fee on tea. In 1767, the English parliament adopted a law on the monopoly right to import tea into America only on the ships of the East India Company, which had the right to set prices for tea. The company increased tea tax to 200 %. This measure not only painfully hit consumers, but also undermined the economic positions of the American merchants,

a tea -bold import of tea. That is why she caused universal indignation in American colonies. From 1768 to 1773, several conflicts occurred on this basis, the largest of which occurred in Boston on the night of December 15 to 16, 1773, when sixty Bostonians, outraged by a high duties for tea, decided to teach an East India Company in an American way . They sailed to three tea cliphers standing on the raid in anticipation of unloading, and drowned them, "brewing" in this way in the waters of the small Boston bay 227 thousand kg of selected tea. This event, known in history as "Boston tea drinking", was the impetus for the separation of American colonies from England and the formation of a new state - the USA.

The British government, having received the news of this "tea party", sent a military fleet to the shores of America for response repressions. And the Americans arranged several more of the same "tea parties" in New York, Philadelphia, New Jersey, Annapolis, Charlestone, which finally called the Anglo-American war. Of course, the conflict because of tea was just an occasion, the last straw that overwhelmed to the edges of the bowl of Anglo-American contradictions accumulated by decades. Sooner or later, the United States would separate from England without Bostonian tea drinking. However, it is significant that it was the prospect to remain without tea that

So acutely perceived by the population of American colonies. No product seemed so necessary for them. Everything else could be found in America, but not tea.

So tea became the national drink of the United States until the 60s of the XIX century, i.e. Before the war of the North and South, successfully opposed the competition of coffee and cocoa. Nevertheless, now the Americans consume coffee 25 times more than tea. The "old states" of the eastern coast, drinking black tea, and California on the Pacific coast, whose population consumes green tea, continue to remain tea areas in the United States. In the south and Middle West, coffee domes. However, the clear border between the "tea" and "coffee" zones in most states is difficult to draw because of the extraordinary national and social uniform in the United States and the complete destruction of all traditions in this country.

But in general, the United States is still attributed to the "tea" countries. Thus, all the largest countries in the world prefer tea to other drinks.

In addition, tea is common as a drink in all countries of the Southeast, Central Asia and the Middle East, as well as in East Africa. The countries of the Middle East and the Arab countries of North Africa belong to the "coffee" zone, with the exception of Morocco and partly Egypt. The same "tea" exception in the predominantly "coffee" Latin America is Argentina. Tea is partially common in its South American versions (Mate, ONSE) in Paraguay, Chile and Peru. Therefore, the vast majority of the population of the globe uses tea as the most ordinary non -alcoholic drink.

# 2. Everybody drinks tea, few people can drink

The massive distribution of tea as a drink dates back to relatively recent times - by the end of the 12th century, when China's tea monopoly ended and the products of new tea -derivative countries began to enter the world market - India, Ceylon, Indonesia, which caused a significant reduction in tea.

As a cheap drink, tea began to use such categories of the population that had never drank it before and had no traditions of preparing it. This led to the fact that the percentage of people who could properly prepare and drink tea decreased sharply and continued to decline as the consumption of tea expanded. A similar situation has developed in our country. Significant growth in the production of domestic, cheap tea, introducing to this drink of wide layers of not only urban, but also the rural population,

The distribution of tea through the catering network went in parallel with the loss of knowledge about all the features and rules of the preparation of tea, which were strictly observed, while the tea remained a drink of a relatively narrow circle of people. As a result, a significant number of consumers of tea does not receive genuine pleasure from him, but often drinks it as water or simply because of a habit.

We should not forget that at one time one of the reasons for the slow introduction of a tea drink in Europe was an inability to treat it at first. This inability sometimes reached the curios. No wonder in almost every country there are various jokes about the preparation of tea. Well, for example, a joke about the English sailor who sent his mother as a pound of tea is known. Mother, wanting to treat the neighbors with an exquisite overseas dish, welded the whole pound in the saucepan at the same time and, draining the bitter and, in her opinion, unnecessary brown water, laid out sown leaves of tea on plates, fixing them with sour cream.

Similar curioses took place in other countries, including in Russia, but here they had their own national flavor, which was reflected in folklore and literature. In one Russian folk song of the mid -19th century, the following story was told by the lips of the courtyard peasant:

Once he sent me the master and ordered him to cook, but I don't know how to cook the damned tea, then took the water, I poured all the tea in the pot and seasoned with pepper, onion and parsley, the spine.

Further, the song in the same humorous tones reported a tragic denouement followed after the master was served such a "tea".

Of course, this time has long passed. But it is very characteristic that the song, apparently created by the city author, makes fun of the peasant, who did not even go for the future:

I thought for a long time, surprised what I could not please, and then I guessed that I had forgotten to salt.

The peasant population of Russia until the revolution itself consumed tea very little, considering it an inaccessible object of luxury, a whim requiring both free time and considerable costs for the purchase of a samovar, tea dish, sugar. That is why the majority of the peasant population of Russia, especially in the European part, is not skillfully prepared or correctly drinking it, "indulging in a seagull" only on holidays, when visiting cities, in taverns.

Paradoxically, but the fact that only a few are able to truly brew tea up to the present. Even among those who consider themselves true tea lovers, genuine experts who understand varieties and drinking tea according to all the rules, preserving the aroma, without any extraneous impurities, are extremely rare. Most

"Lovers" of tea cares little about what kind, variety and quality they drink tea, and love to drink it for a long time, at any time of the day and, moreover, treat him incorrectly: they heat tea are on fire or steam, letting them insist for a long time She, sometimes add "collar substances" - soda, sugar, salt to strengthen the color of tea, absolutely do not care that tea is always only freshly brewed. A survey of the readers of the Week in 1980 about how they usually brew tea showed that the people have the wrong ways to brew tea, which, unfortunately, were "enriched" with modern details that could not be in the 19th century. For example, tea is brewed in thermos, flasks (even in tin cans!), For preparation it is used by electric boots,

Dry tea on the batteries of the heating system. And all this - in order to accelerate brewing, as readers explained. Such woe-amateurs of tea harm not only to themselves, but also to others: they are involuntarily distributors of incorrect and harmful ideas about tea among the population.

#### Notes

[1] In the English army, tea was introduced in 1802, in Russian-during the Russo-Turkish War of 1877-1878. in the army, and in peacetime - since 1886 as a replacement of a "wine portion." <<

- [2] That's why in Burma, Indochina, a tea leaf is eaten entirely in fresh or sauer form. Squirrels pass into the tea infusion only partially (amino acids and a certain number of pectins) <
- [3] Berdyeva S. I am the antimicrobial properties of green tea. news of the Academy of Sciences of the Turkmen SSR, 1955, no 3. <
- [4] In these cases, as well as in acute gastrointestinal diseases, tea is used not as a drink, but introduced into the intestines using an enema. <
- [5] Strong tea Performs Often function adsorbent, "Cleaner", How And Activated carbon, which is used in the latest medical invention, known as "Artificial liver." <
- [6] For the normal fortress of tea, see the "Norms of Holding" section. It should be emphasized that strong tea does not pose any danger to health only if proper brewing. Moreover, strong tea is specially used in the treatment of scurvy and dysentery (mainly green tea), and such treatment is carried out only in clinical conditions, and by no means independently. However, it is necessary to warn the reader against the existing perversions in the preparation of strong tea, known under the jargon name "chifer" or "chifir" (from the distorted "chagir", i.e. the surrogate of tea used in the past in Eastern Siberia). The harm of the "chifir" lies not only that for its preparation a large dose of brewed material (dry tea) is taken, but also mainly in the fact that this tea is subjected to prolonged boiling and evaporation, as a result of which substances that are extracted from dry tea, insoluble In water with ordinary brewing, while everyone else. Useful components of tea from Chifye are completely disappeared or chemically change under the influence of boiling. As a result, the Chifir is a concentrate of harmful alkaloids (including guanine, as well as destroyed thein), which together have a destructive effect on the central nervous system. Thus, the Chifir has nothing to do with the chemical composition with tea, even with the most tight -haired. <

[7] Recall that in the second half of the XVII century. England was constantly in a state of wars and exacerbation of relations with France and Spain, Holland - with Spain and other Habsburg lands, Denmark with Sweden and its colonies (Norway and Iceland). It is characteristic that even among German lands, in general, the former "coffee", "tea" position was taken in the late XVII - early XVIII centuries. The Brandenburg-Prussian Elector, which is in this period in a state of struggle with the Habsburgs. However, subsequently Prussia, surrounded by the "coffee" lands, together with all of Germany became the "coffee" country. <

[8] See: Lenin V.I. Poln. Sobr. Op., t. 3, p. 548. <

## Chapter 8 brewing

# 1. The secret of brewing

Those who expect that this heading will follow a brief and accurate recipe for brewing, as well as instructions on which tea is "best" will be disappointed. They will have to arm themselves with patience and read the whole chapter as attentively as possible, because before starting breeding, you need to learn something about its three indispensable conditions.

As for a brief recipe, it is unlikely to help those who do not know how to brew tea. Indeed, on each pack there is an indication of how to cook it. Nevertheless, only a few brew tea correctly and possess the secret to cooking a fragrant drink.

What is the matter? Firstly, the indications on a pack of tea are extremely brief and schematical, they do not have a number of details that are essential for the preparation of tea. Secondly, not everyone correctly understands and interpret these instructions. And thirdly, people usually ignore even these minimal instructions or adhere to them very approximately.

As a result of all deviations from the rules of brewing, a tea infusion, which drinks the vast majority of people, is very different from the ideal and often get tasteless, loses its valuable properties. Meanwhile, we must not forget that tea is a delicate, delicate product and it should not be brewed approximately, not by eye, but according to the most stringent rules. This is the secret of those "wizards" who can prepare amazingly fragrant tea.

However, this does not mean that the preparation of tea should certainly take a lot of time.

Main - V thoroughness, accuracy, cleanliness preparations, V Strict sequences of simple operations, accuracy and speed of their implementation.

So, clear execution Rules Andaccuracy - foundation Secret Successful brewing tea, one of its indispensable conditions. Two other conditions are the presence of good, unspoiled tea and good, suitable for brewing water.

## 2. On the condition of tea and its safety

Speaking of good tea, we mean not so much his high variety as high condition, i.e. A high degree of preservation, or, in other words, its failure. If it was about any other food product, it would be appropriate to talk about freshness. But such a definition cannot be applied to tea, for fresh tea, i.e. Just cooked in the factory, can improve with proper storage. That is why we are not talking about freshness, but about a high degree of preservation as an indicator that more accurately reflects the quality of dry tea.

As you know, dry tea refers to colloid-capillary-porous bodies, which means that it has two main physical properties-solubility and hygroscopicity. The first of these properties is positive and desirable, and it is it that gives us the opportunity to use tea as a drink. On the contrary, the second property, if not completely negative, then in any case very undesirable and uncomfortable from the point of view of the consumer. It makes tea a vulnerable product, complicates its storage, facilitates its damage. Due to its hygroscopicity, tea is extremely easy to absorb, give and hold, firstly, moisture, and secondly, smells from the environment. Both leads to damage to tea, i.e. To a change in the tea substances contained in tea.

The normal dry black baychian tea should contain 3-7 % moisture (in green tea-5 %). With an increase in humidity to 8 %, tea begins to deteriorate, i.e. Loses his own

Aromatic and taste, or, as the teapodes say, "ages". With a further increase in the humidity of dry tea to 11-13 %, he begins to mold, and the most insignificant amount of mold is enough so that all the tea is spoiled, because the musty smell will be perceived by the whole batch of tea, no matter how great, and not just affected mold places. As you can see, in this regard, tea is significantly different from other products (cheese, oils, fruits), where it is enough to cut or eliminate the part affected by corruption, and therefore its thorough storage is extremely important for maintaining the condition.

Hygroscopicity of various types and varieties of tea is not the same. The least hygroscopic are all types of pressed teas. Therefore, ceteris paribus, they are preserved better than the kayaks. Among the canes of bay teas, green are less hygroscopic than black. In addition, black loaf teas of different varieties have various hygroscopicity. High varieties in which a whole sheet and twisting of the sheet are preserved is better than in low varieties, of course, differ in less hygroscopicity, which means that they retain their high qualities longer. But this rule is true only on condition that high-grade tea is stored with all the necessary precautions. With non-compliance with storage conditions, the highest, most exquisite variety of tea can be much worse in taste and quality than a low variety of tea of good preservation.

How should tea be stored? To answer this question is easy, much more difficult to fulfill the necessary conditions.

First of all, the degree of preservation of tea is directly proportional to the tightness and sterility (purity and absence of extraneous smells). This means that the packaging or container intended for storing tea should not only close so that the air practically does not penetrate there, but should also be made of such a material that would not have any of its own smell, would not miss, do not absorb and do not absorb and I would not perceive either moisture or extraneous smells, and would also have the ability to wash well and not interact with the chemicals contained in tea.

Such an ideal material was and remains porcelain, as well as glass and to a lesser extent foil. Consequently, at home, tea is best stored in porcelain or earthenware teapots or in glass jars (bottles) with a wiped glass cork or a screw cover. In all other hermetic vessels

(metal, plastic, plastic, etc.) Tea cannot be stored.

From modern packaging materials Plastic absolutely Unfulfilled For Tea storage, as they enhance its moisture (the tea in them is "suffocating") and, in addition, give it their own smell. The most suitable for temporary storage is an old tested tool - tin or aluminum foil. But it is natural that for a long time it is impossible to store tea in paper-folus packaging, because it does not provide the necessary tightness. It is absolutely impossible to store tea just in paper (in bags, kulechki, etc.), because tea quickly perceives not only moisture through paper, but also the smell of paper, and even more so the sulfite or sulfate contained in it.

In addition to the dishes in which tea is stored, its safety also depends on the nature of the room where it is located. The dishes with tea should be kept in warm (but not hot), dry, clean, often ventilated. In the cold, and even more so raw room, you cannot store tea even in a rather good package. So, with air humidity 70-80 %, tea in standard factory packaging still begins to deteriorate quickly. Tea in conditions of improper storage can completely lose its smell in one day.

In good conditions, tea is able to persist for several months or even years, absolutely without losing quality. Dry tea in a glass bowl with a perfectly grated traffic jam is able to be stored with a moisture content of 3-4 % for more than ten years. Sometimes, as a result of long -term proper storage, tea becomes even better than the previous one, acquires a new, even more persistent and strong aroma.

Thus, with proper storage in tea, certain chemical processes occur, but they occur without air and moisture access and therefore do not cause oxidation and decomposition reactions.

Since ancient times, the Chinese learned to keep tea for years, to withstand it so that it, like good guilt, acquires a sophisticated aroma and a special fortress. Tea, once transported from China through Mongolia to Russia on camels and horses, reached the consumer sometimes years after manufacturing, but from this he not only did not get worse, but, on the contrary, acquired such high quality that he was valued significantly in the world market. Above teas imported into Europe by sea. This "caravan tea" was transported in wooden boxes made of a special, well -dried and devoid of the smell of wood (albious tree), laid out inside with tin sheets, and outside covered with a dense layer of waterproof varnish. Moreover, the boxes were glued with paper (such as waxing), placed in double bamboo braids, and then sheathed with leather or skins (wool out) so that the seams were blocked twice. This, although very primitive and bulky, nevertheless extremely reliable sealing made it possible for tea without any damage to its quality to be in adverse conditions of the paths of up to 18 or more months, not counting further stay in tea warehouses and in stores.

The above example shows how great the proper storage of tea is. This should not be forgotten both when choosing tea in the store and (especially) when storing tea at home. It is characteristic that most modern attempts to change the methods of storage and packaging of tea, i.e. To simplify it or introduce new isolating materials (for the sake of reducing the cost of containers from expensive plywood) either do not give positive results or lead to a deterioration in tea condition. For example, tea is acutely reacting to the replacement of wooden packaging of plastic, foam rubber, polyethylene, in which it quickly "suffocates", moisturizes, rot or completely loses the aroma, perceiving the smells of the film. At the same time, he perfectly tolerates complete sealing in porcelain, glass dishes, where, it would seem, there is also nothing to breathe, and in the food foil, i.e. In materials that do not interact with him. Apparently, it is best to create materials for storing tea that would be two-layer: the outer layer-

#### Plastic, internal - glass.

Most of our domestic teas, as a rule, reach the consumer 7-8 months after producing tea factories. With proper storage, such a period is completely insignificant. But in case of violation of the storage conditions of this period, it is quite enough for the tea to a large extent to lose its qualities. CHEVEVEDS specialists have established that there are frequent cases when excellent spheres of tea taken from the retail network is completely inappropriate for the quality of the assessment that he received when released from the tea factory. For example, the moisture content of tea, which is stored in the conditions of a non -specialized (grocery) store, after 136 days increases to almost 10 %, as a result of which the extractiveness and astringency of tea decrease sharply. In addition, in such conditions, tea may lose its smell and perceive an outsider. If the percentage of humidity can be set in a timely manner and quite easily with the help of devices, then the penetration into tea of an alien smell is installed, unfortunately, even when it is too late - after brewing, at the time of tea party. That is why it is best to buy tea in specialized tea or confectionery stores, as well as in the tea departments of large food stores, where there is a complete guarantee that tea is not stored in the same room with soap, cheese, meat and fish products.

At home, it is best to store tea outside the kitchen or to allocate a special place isolated from other products in the kitchen.

In no case should you open tea during cleaning of vegetables (especially garlic and onions), fresh meat, fresh, salty and smoked fish, and you should not take a jar of tea

with the hands on which there are at least traces of the smell of toilet soap, tobacco and spirits, not to mention the vacation, gasoline and oil products. All these smells act murderously on tea, irrevocably destroy its aroma, taste. It must be emphasized that such an indicator of the quality of tea as the aroma is not only an aesthetic indicator, but also an essential element, for which the degree of usefulness of tea as a food product is established. Therefore, careful protection of tea from extraneous smells is not snobbery, as they sometimes think incorrectly, but an elementary sanitary requirement, similar in nature with washing hands before eating.

But even when storing tea in an isolated room, in domestic porcelain or glass teapots, air contact with air is almost very large, since we open the seaps several times a day. Therefore, in order to achieve greater preservation of tea, it is advisable to store daily consumed tea in small portions in small teapots in size. The fact is that the greater the distance between the lid (traffic) the teapot and tea, the sooner the tea spoils. Thus, tea, which is in a small teapier (50 g) in a small volume, will not only contact the air less than a large portion of tea in a large teapier (say, 500 g), but also the number of air included in a small kettle It will be with each opening ten times less.

So, now we know the second indispensable condition for successful brewing-the presence of not at all some tea, but tea with a high degree of preservation and, if possible, high-grade.

#### 3. Water for tea

Caring about the quality of dry tea, many of his lovers usually think little about water, considering it a kind of granted tea solvent. Meanwhile, the water is not only an indispensable component of a tea drink, without which it is simply impossible to prepare tea, but also an extremely important component for obtaining high -quality tea infusion.

Contrary to common opinion, role water V tea Not limited role neutral solvent. Perhaps for many it will be a discovery that not all water is suitable for tea. No matter how excellent the variety of tea is, no matter how high its condition is preserved, if unsuitable water is used for welding, the tea drink will not only not be high -quality and tasty, but can simply be spoiled.

First of all, water for tea should not have any, even minor side specific and extraneous smells. Especially it should not be given with shackles, rot, rust, smells of chlorine lime, soap, hydrogen sulfide and petroleum products. Water should also not contain any suspended particles, even if, in our opinion, they are deprived of smells. That is why the water of mineral springs, marsh and pond waters, as well as water from village wells and silty rivers are absolutely unsuitable for tea. As for the water supply in large cities, which is often excessively chlorine, it must be withstanded for at least a few hours (for example, during the night) in an open vessel so that the smell of chlorine flies, and the water itself is thoroughly settled.

The second important requirement for tea water is a low degree of content of dissolved minerals in it.

Water, in which a significant amount of mineral salts is dissolved, mainly bicarley and sulfate of calcium and magnesium, are called strict. Such water is either unsuitable or not suitable for cooking tea, since it not only restrains extracting, but also spoils the taste and aroma of tea, killing it with sulfur and carbon dioxide compounds. Therefore, tea cooked on hard water is not only less pleasant and tasty, but also less useful for humans.

Water containing an extremely small amount of dissolved mineral compounds is called soft. It is soft water that is most suitable for cooking tea. More

Spafarius, the Russian traveler of the XVII century, was surprised to note that in Beijing, they sell water for tea on the market, and for a rather high price, along with other food products. Attaching extreme importance to the correct brewing of tea and the quality of the infusion, the Chinese specially imported soft water from rather distant mountainous areas to the capital, where there were keys. And it is the key, spring water that is considered the best for brewing tea. In second place is the soft water of fast rivers with a rocky-sand bottom, as well as the water of flowing glacial lakes. Well filtered, biologically purified soft tap water from river and lake reservoirs is also suitable for brewing tea, although, of course, it is incomparable in quality with natural spring water.

But what to do to residents of those areas where water is characterized by increased stiffness? Firstly, to defend it at least a day before consumption for brewing. Secondly, it is advisable to use special softeners of water produced by our

industry (For example, filtering softener "Rodnichka"). AND Thirdly, use For Hacks those varieties tea, which possess increased degree extractiveness.

Most do it purely intuitively. After all, one of the reasons that the modern consumer is more inclined to appreciate small rough-cut teas, and not tender leaflets, must be seen in the deterioration of water quality, in the overall spread of more rigid, waterwater.

Finally, with rigid water, it is necessary to slightly increase the rate of laying dry tea, as well as the time in which the brewing occurs so that extracting occurs more fully. True, as we will see below, other undesirable phenomena can occur from the overexposure of tea and, above all, the loss of the aroma of tea.

If the stiffness of the water reaches 8 m-EKV per 1 liter and above [1], then it should be considered absolutely unsuitable for brewing tea, because in this case the infusion is extremely unpleasant. In the presence of a sulfate of manganese, the infusion of tea is very weak in the water in water. It should be borne in mind that the rigidity of river water is not constant during the year, but increases significantly in winter and drops sharply in the spring, during the flood. In large rivers (for example, in the Volga), the stiffness of water is not always constant throughout the river. In such large Russian rivers as Pechora, Neva, Volga (above Nizhny Novgorod), Oka, Northern Dvina, as well as in all the Siberian rivers: Irtysh, Ob, Yenisei, Lena - the water is soft. In the Moscow River, the Volga (below Nizhny Novgorod), Kama, Don, Amu-Darya, water is moderate, quite acceptable stiffness. But in the rivers of Donbass, Krivorozhye, Stavropol and the North Caucasus, the water is very hard-in some cases even above 45 m-EKV. This circumstance partly explains why, for example, among the population of Siberia and the European North, as well as the central strip of Russia, tea has always been in much greater honor than the inhabitants of Ukraine and Stavropol, where tea was practically not distributed and where people simply do not understand which From him, a lot about him.

Thus, the degree of stiffness of water plays a huge role for the quality of a tea drink.

The fact that tea is brewed in different water in different water has been taken into account for a very long time to take into account the tea tramps in a number of countries. In England, for example, tea companies began to make water samples in many cities and in accordance with this to create such bathing tea that gave the greatest effect in the water of this city. The company "Lipton", which began to indicate on the packs of tea, to this, to this, to this, to which the water, which terrain, it approaches. So there were varieties intended for a number of cities. Because of this, the Lipton teas received a large

The popularity, which was a consequence of not their high quality (by the way, the average), but their best adaptability to brewing and cheapness (due to low quality).

This young company, founded only in the 19th century, therefore became better known to a wide, mass buyer, and its teas began to be in greatest demand.

However, not only the degree of stiffness of water is important for the preparation of tea. Until now, we have talked about the properties of water in its natural state, i.e. About cold water before her boiling. Meanwhile, preparing tea, we are dealing with boiled water.

In the instructions on the method of brewing tea placed in table books and on packs of tea, usually we are talking about "boiling water" or "boiling boiling water". These expressions serve as a source of diverse and in most cases of incorrect interpretation.

What should be understood by boiling water when brewing tea? At first glance, this question may seem far - fetched, because it is known that boiling water is usually called boiling water, and water boils at a temperature of  $100 \,^{\circ}$  C

However, boiling water is a complex process consisting of three clearly distinguishable from one other stages.

The first stage begins with a skip of small air bubbles from the bottom of the kettle, as well as the appearance of groups of bubbles on the surface of the water at the walls of the kettle. Then gradually the number of bubbles arising in water and tearing to the surface increases more and more.

The second stage of boiling is characteristic of the mass swift rise of the bubbles, which first cause a slight clouding, and then even the whitewashing of water, reminding the rapidly running water of the spring. This is the so-called boiling with a "white key". It is extremely short and soon replaced by the third stage - intense storm of water, the appearance on the surface of large bursting bubbles, and then spray. Spray will mean that the water has very much thrown.

Not only the overwhelmed water, but also the one, whose boiling was stopped at the beginning of the third stage, is unsuitable for brewing tea. Water, which was unfulfilled, is considered unsuitable at the first stage. Unlucky water, however, is not able to ruin the quality of tea, it can only slightly reduce its extractiveness. For some types of tea, a specially undercuted (at a temperature of 50-60 ° C) water is used. But in the vast majority of cases for brewing, you need to take water in the middle of the boiling process when it boils with a "white key", i.e. At the beginning of the second stage of boiling. Therefore, not every boiling water is suitable for tea.

But how to keep track of this very short -term boiling process? People drew attention to the fact that three stages of various states of water during

Boiling corresponds to three types of sounds made by her. At the first stage of the boiling, we hear a thin, barely distinguishable solo sound. In the second stage, he becomes like the noise of a small coherent bee swarm. In the transition to the third stage of the boil, the sounds are sharply enhanced, but their uniformity is disturbed, they, as it were, tend to get ahead of each other, grow randomly.

Thus, by sound, as by signal, you can know for sure when water reaches the desired degree of readiness. It was this property of boiling water that was based on the invention of the samovar - the Russian tea machine, as it was rightly called in Western Europe.

What samovar Necessary emphasize Original Russian invention. "Tea adapted specially For car". Attempts tea, exactly The predecessors of the samovar in other countries, often undertaken by art historians, archaeologists, are based only on the external similarity of certain household items with samovars. So, the Roman bronze authents found in Pompeii, although adapted for boiling water, is simultaneously more fried and built on a different principle. The fire there is bred on the open area, the water is not covered. The so -called fountains (eastern and European, having a crane, this similarity with the samovar and limited!), Use to heat or, more often, cooling wine, do not belong to samovars. The closest to the samovar Chinese HOO-Mo-Mo-Mo-Mo-Mo-Mo-Mo (metal and porcelain), which do not have a crane, but there are blown and which the Chinese use to serve boiling soup to the table. For heating

They use water, like the Japanese, special jugs with a lattice - Tsibati. It is possible that the Russian craftsmen created a completely original, convenient, portable and adapted to Russian winter conditions - a combined device - samovar,

Structurally combining the ideas embodied in the HOU (blurted out a pipe) and Tsibati (grille). However, in order to do this, it was necessary to have a very clear idea of what the meaning of boiling water for tea and what it should turn out. Thus, in the samovar it is necessary to be amazed not so much as a form as a high adaptability of a constructive solution to create precisely "tea water". The first samovars - by the way, in the form of teapots with a lattice similar to Chinese and Japanese - appeared in Russia in the first half of the 18th century, but only samples of the late XVIII century were preserved. Samovars in Russia made not only from metal, but also from porcelain, faience, Mayoliki and even crystal, although samples from these fragile materials have not survived to this day (except for porcelain). In any case, we can assume that the first samovars were made not in Tula, but in the Urals, i.e. On the way from China and Siberia to Russia, in places where metallurgy and metalworking industry were developed, where the sliders, Frolov, Cherepanovs, Safonov, Ears, Kuznetsov, Istomin - Istomin - were created

Inventors of the steam machine, hydraulic turbine, steam locomotive and steamer. Due to his form, which enhances resonance, has a wonderful

The ability to make sounds that accurately signaling the state of boiling water: it "sings" (the first stage), "noise" (second stage) and "seething" (the third stage). And it is no coincidence that the phrase "Samovar noise", "The noise of a samovar" became the most commonly consuming both in everyday life and in fiction. This signal announces that you need to brew tea.

Since the heating of the samovar went over low heat (on the charcoal), it was precisely through the samovar that it was especially convenient to fix the speed moment of the second stage of the boiling. The samovar was a kind of "automatic machine", by the way, performing

At the same time, several operations (we will talk about other functions of the samovar below). So that a simple aluminum kettle for boiling water publishes quite clearly the same

Sounds that the samovar should have a curved (and not direct) neck and fill it with water not to the top, but not too little, but so that the water level is above the hole of the neck from the inside of the kettle by at least 1-0, 5 cm. In this case, firstly, the air will not have access to the kettle from the outside, and secondly, from the surface of the water to the lid of the kettle there will be a free space playing the role of the resonator. Boil water in a kettle on slow, calm fire.

So, water for brewing tea should in no case be brought to a reset. Threaten water spoils tea, gives the drink stiffness and makes it empty, impoverishes it, not to mention the fact that the aroma of tea is almost completely disappeared. Meanwhile, our housewives completely leave a few minutes on the plate for several minutes and after that they still complain about the "poor quality" of tea.

But boiled water has another feature that affects the quality of the tea drink: water should always be fresh, boiled once. If the water is heated or brought to a boil secondary, then the quality of the tea infusion will sharply worsen and the actual tea will not work. Tea is especially spoiled if you pour fresh water in already boiled water, and then boil this mixture. Tea, brewed in many times by valuable and boiled water, completely loses its aroma, taste and healthy effect on our body. There is no tea in such a drink - this is only dyed water.

It is not suitable for the preparation of tea that water, boiled not on fire, but with the help of an electric heater immersed in it. Electric teapots and electric samovars created according to the same principle have nothing to do with a real samovar, except for external similarity. The same can be said about the titans in which water sometimes boils continuously for several hours and which is periodically added without emptying

completely [2].

Unfulfilled for tea and water, melted from snow or ice, although in everyday life is considered the most soft when it comes to the use of it as a detergent.

Thus, not only any mechanical sealing of water or its various natural origin affects tea, but tea shows extreme sensitivity and to any physical and chemical changes taking place with water, exclusively sensitively reacts to such insignificant deviations that are measured by cellular and thousands shares. However, these deviations are enough for the tea to completely lose the aroma (first of all, the aroma is lost!) To change or worsen the taste and, finally, that it partially or completely lost those useful components for which we love it and appreciate it. Иногда же повышение шёлочности воды, а также другие её изменения способствуют выходу в настой чая нерастворимых в обычных условиях химических

Dry tea components, which also seriously worsens the quality of the infusion. So, the quality of water is crucial for the preparation of tea.

## 4. Tea dishes

Since dry tea and water for tea are such sensitive components of a tea drink, it is quite clear that the correct choice of dishes for making tea also is of no small value.

Tea water can be boiled in metal teapots, but necessarily puddled or from modern alloys of the so -called "white metal", and in enameled, where water contact with metal is completely absent. However, it should be borne in mind that, firstly, a thin layer of scale, formed in metal teapots, should not be cleaned. So that this thin layer does not grow into a thick one, it is necessary to remove the kettle from the heat on time, not to allow the water of the water. As for enameled dummies, in them, as in general in enameled dishes, the water boils very quickly, and therefore it is easier to miss the second stage of boiling.

You can brew tea only in a porcelain or earthenware, but in no case in a metallic. Porcelain is preferable to faience for the reason that it is able to quickly and strongly warm through, and this is of essential importance during brewing.

The teapot for brewing should have a hole in the lid and close quite tightly. Especially good teapots with cylindrical lids that are deeply included in the kettle.

In addition, special teapots with porcelain lattice cups are used to brew red and green teas where tea is poured. They make it possible to get a stronger tea infusion, since the water in this case covers and rinses the seagots from all sides, and is not above them. In them, tea can be squeezed with a spoon, contributing to the greater release of the tea infusion.

Dimensions (volume) and the shape of the teapot also matter. The best geometrically correct form (spherical, cylindrical), which makes it possible to more accurately determine the share of volume (quarter, third, half) of the teapot when brewing.

For a small family of 3-4 people, it is most rational to have a teapot for brewing with a capacity of about 1 liter, i.e. About 5-6 glasses of water, and for more people it is advisable to brew tea in porcelain teapots of an even larger volume (there are kettles with a capacity of up to 3 l) [3].

Drink tea is also best from porcelain dishes. Glass utensils (glasses) is theoretically suitable, but almost less convenient for proper tea drinking, since the texture of the glass does not make it possible to evaluate the taste of tea to the same extent as a delicate surface of porcelain, which causes a positive reaction in the touch organs, softens the temperature of the tea and Thus, it enhances our general favorable sensation.

It is far from accidental that the spread of a tea drink in Europe coincided with the heyday and expansion of the production of porcelain dishes for tea and even caused the invention of cups in 1730. Before that, for almost two hundred years, coffee was calmly drank from a metal

dishes. The need to drink porcelain tea first forced China to buy a rare and extremely expensive tea utensils from China, also extremely uncomfortable for Europeans, because Chinese cups are Gaivani, like the bowls made according to their type, had no pens. Therefore, the spread of tea in Europe caused the need to create porcelain dishes convenient for Europeans for drinking tea. So the European (Vienna - at the place of the invention) appeared a cup, i.e. Piala with a pen. Porcelain and earthenware dishes for tea were widely used in Russia. Only starting from the end of the 19th century with the turning of tea into a mass, "tavern" drink began to get into use cheap glass dishes - glasses. Hence, in the Meshchanskaya and rural environment, it was concluded that men should be drinking from glasses-they, by regulars of taverns, it is more familiar, and drinking tea from the earthen or porcelain cup-the privilege of women. This extremely ridiculous relic, unfortunately, has been preserved in some families to the present day.

So, a full -fledged, proper tea party involves not only the use of good water and tea quality, but also requires the use of proper dishes for boiling water, porcelain teapot for hiding tea and porcelain cups for drinking prepared tea.

It goes without saying that all tea utensils must be kept in exceptional cleanliness. This does not only mean that it should shine with a whiteness outside and inside, and the nose of the kettle should be constantly cleaned of tea plaque, but most importantly, no extraneous smells should concern tea utensils. To do this, if possible, you need to store tea utensils separately from the rest of the kitchen utensils and away from cans with spices, as well as from other products. Wipe the tea dish with a special, tea, and not a common kitchen towel. How important it is to observe these precautions, it is evident from the fact that it is enough, for example, to cut onions on the same table or clean the garlic or take a kettle with puffed hands on the quality of the brewed tea next to a empty teapot: its aroma will actually disappear or so It will fade that we will not perceive him.

In addition to porcelain teapots and cups, tea tablespoons (best silver) and linen napkins to cover the teapot are also included in tea dishes. In addition, it is also desirable to have a sand clock - "two -minute". The only requirement for all this simple inventory is to maintain its perfect purity and also protect from extraneous smells.

#### 5. Time and place of tea party

It would be ridiculous if, after all the precautions, with which the storage of tea was connected, the choice of water for it, not to protect the finished drink from extraneous smells and influences. That is why real tea drinking has always been separated from the rest of the meals. So, from the 18th century, the British as a meal at 17 o'clock is isolated from dinner at 13-14 hours and dinner at 19-20 hours. This was perceived in all other countries of Europe. We have tea in a separate meal in all holiday houses and sanatoriums. Separately, evening tea (after dinner) also dissolved from eating: everything eaten is removed from the table and take a break, at least for a quarter of an hour.

In China and Japan, there are special tea rooms - dry, which means "a place of fantasy", and less wealthy people are part of the room where they drink tea are fenced off with scrames. In Japanese restaurants, dining rooms are located completely separately from dining, sometimes on another floor. In this type, teahnses were created in the Middle East, and in Russia tea are created by institutions, where, unlike taverns and taverns, they mainly drank tea, and not ate. Teahikhan is the initially purely tea terrace or one of the rooms of the duck (restaurant) or caravanserai (hotels). In recent years, the names "Teahina" and "Tea" are often given to snacks, cafes. But this is already a deviation from the good

Rules, violation of tradition. In Azerbaijan, by the way, still in tea pavilions they do not trade anything but tea, and these pavilions themselves have in the cleanest, attractive corners of the parks. And there are always a lot of visitors there, because the tea is tasty there. Thus, a special place for tea is not a luxury, but the desire to emphasize the nobility of tea as a drink. No wonder tea is considered a drink of sedentary, a symbol of comfort, a family.

## 6. The procedure for brewing

There are several ways to brew tea. We will say about the most distinctive of them in the section on the national features of the preparation of tea. Here we will set out only the basic rules of brewing, which are mainly related to black tea.

1. Before brewing, an empty porcelain kettle should be well heated. This is done in order to enhance tea extraction. The usual method of warming is to rinse the kettle 3-4 times with boiling water. If we take into account that it is the porcelain kettle that is able to warm up faster than the earthenware as a result of rinsing to a temperature of  $60\,^{\circ}$  C and above, it will become clear why it is preferable to brew tea in a porcelain kettle. You can warm the kettle in another way - lower it into boiling water (this is not so convenient, but it gives a good result) or put in hot air.

By the way, a special round grille inserted above the samovar chimney is intended just so that an empty kettle is warmed on it before brewing. At the same time, the kettle before brewing not only warms, but also dries (also one of the functions of the samovar). It is better if the kettle is dry.

But putting the kettle directly on fire before brewing for preliminary warming is not recommended, since in this case the degree of heating of the bottom of the kettle compared to its walls will be much larger than with indirect contact with the heat source (through water, air), and the kettle can split, although with proper heating this method is good.

- 2. When the porcelain kettle warms, and in metal water boiled with a "white key", a portion of dry tea is laid in a porcelain and immediately poured with boiling water. At the same time, it is very important to observe the accuracy that we have already talked about. If a product with a smell is nearby, and especially raw meat, fish, butter or lard, then no matter how you brew, real tea will not work. Its aroma, taste is lost.
- 3. First, water is poured only to half of the kettle or depending on the type and variety of tea to one third (a mixture of green and black tea) or to one fourth and less (green tea).

Baying dry tea with the first fill, the kettle should be quickly closed with a lid, and then with a linen cloth so that it covers the holes in the lid and in the nose of the kettle. This is done not so much for insulation as so that for the cloth of the napkin to absorb water vapors leaving the kettle and at the same time would not let (delayed) flying aromatic essential oils. To this end, it is even better to cover the kettle with linen bag filled with dry tea leaves. But in no case can you cover the kettle with various heater-podsa, dolls-mattresses on cotton wool, etc. In this case, the tea is and made tasteless, as they say, smells of a broom.

4. Such a welding procedure was and remains classic, provided that the dry tea that you use has high quality, is well extracted and does not need to be artificially helped to "brew".

However, modern "medium" tea, be it at least Indian, at least Georgian, is the result of such frequent technological errors that it goes on sale either unhappy or overdred, or half -"exhaled". In such cases, it seems necessary to "squeeze" the maximum of what remains in it, and to squeeze in the literal sense of the word mechanically. For this purpose, you can apply

A method that any XIX century sector would regard the "barbaric", but which is now dictated by the modern low quality of teas. It consists in the following: the bay on dry tea in the teapot is a little boiling so that it (boiling water) only slightly covers the seagulls, moisten them, but would not give them the opportunity to surge and swim on the surface of a large mass of water (which happens very often, For tea is too light, i.e. has an insignificant specific gravity compared to the required norm), you need to take a pure spoon, well -cut with silver or stainless steel) and carefully, but carefully, grind On the walls of the kettle, then immediately add boiling water to a third or half of the kettle. After that, you need to close the kettle with a lid and then do it as it is said in paragraph 3.

- 5. Closing tea, let him stand. The time of infusion, depending on the stiffness of water and the variety of tea lasts from 3 to 15 minutes. The best period for good varieties of black teas with soft water 3.5-4 minutes. During this time, the delicate aroma of tea does not have time to disappear and at the same time, tea basically manages to extract. In the past, the Chinese, brewing tea without a kettle, directly in the cups of the newspapers, withstand the hoteling of particularly delicate varieties for only 1.5-2 minutes, believing that after this period the thinnest smells of tea disappeared. But we are not dealing with Chinese, but with Indian or Georgian teas. And they give the greatest concentration of aroma with very soft water by the end of the 4th minute, and with a strict-by the 7-8th minute. As for extractiveness, with hard or medium water, sometimes you have to withstand tea for infusion for up to 10 minutes. Green teas, where not the aroma is more important, but the taste, you can insist from 5 to 7-8 minutes, depending on the variety, and the gross grades of green and tile teas are even longer, from 10 to 15 minutes.
- 6. When the tea is infused, the kettle is added with boiling water, but not completely to the top, but leaving free 0.5-1 cm to the lid (when brewing green teas, poured the second time after 3-4 minutes to 3/4 or 2/3 of kettle The third time, after another 2-3 minutes, poured almost to the top).

The meaning of several consistent water filling for brewing is to maintain the equally high water temperature all the time. The constancy of a fairly high temperature during the entire brewing time is more important even than the initial high temperature at the beginning of brewing. From here it is clear why the air temperature of the room in which tea is brewed is important. The high air temperature of this room prevents a sharp drop in temperature in the kettle by the end of brewing. Experiments G.G. Mikeladze showed that the best ambient temperature for brewing tea should be considered 22-25 ° C. At this temperature, there is almost no need to make several fills.

At the end of brewing, it is necessary to pay attention to the appearance of foam. If there is a foam, then the tea is welded correctly: the time of boiling water and brewing the infusion is stood accurately, the tea did not stop, and the aroma did not disappear from it. If there is no foam, then, apparently, some kind of violation of the rules of brewing was allowed.

This foam should not be removed, unless it has extraneous smells. It is undesirable to allow it to be smeared and settled on the lid of the kettle - that is why the distance from the cover to the surface of the filled tea should be at least 1 cm.

So that the foam does not settle on the walls of the kettle, but entered the infusion, the tea is stirred with a spoon (it is better, of course, silver). You can also pour at first part of the tea from the kettle into a clean cup and then pour it back into the kettle so that all the tea mixes well. In the east, in Central Asia, the first bowl is always immediately poured back into the kettle. In the local population, this is called "Marry Tea."

7. After all this, tea can be poured into cups. Usually, in the instructions for the preparation of tea, they add: "Pour to taste." This somewhat vague indication in practice led to the fact that already brewed tea began to be systematically diluted with boiling water.

The reason for this at first was that the tea saved, and then began to do so due to misunderstanding of the appointment of tea and even beliefs that tea in other doses, than microscopic, was harmful. It was then that the concept of "pair of tea" appeared in Russia, i.e. Separation of tea into brewing and boiling water contained in two different teapots. Meanwhile, in the east and in a number of European countries, especially in England, where there are long -standing traditions of tea drinking, brewed tea is not bred.

It is necessary to immediately prepare the tea of the desired concentration and pour the kettle into the cups from the "collar" kettle without additional dilution with boiling water. Only in this case it can be guaranteed that you will really get a real, high -quality drink, pleasant to taste and not lost the aroma. And since different amounts of tea are required at different times, it is better to have teapots of different volumes on the farm. If the teapot for brewing is small, then in it during tea drinking you can add water, but so that the tea leaves do not merge more than half and the leaves of tea do not expose. Tea should be consumed within a quarter of an hour after brewing.

You can't leave tea for several hours, and even more so the next day. "Fresh tea is like a balm. Tea left overnight is like a snake, "is figuratively said in one eastern proverb. This primarily applies to black teas, which can only be consumed fresh.

# 7. Breeding mode

As can be seen from the above rules, two factors are far from indifferent for the quality of tea leaves: water temperature, as well as the environment and brewing time. Both should achieve a certain level, but not to step over it. The fact is that the transition of soluble substances of dry tea into infusion is a very complex process, because the solubility of each chemical compound is different and requires different temperatures and different times. In addition, not all compounds in tea are equivalent in their aromatic and taste qualities. Therefore, it is impossible to set yourself only a goal - to squeeze as many soluble substances from tea. Solubility has a certain limit (for each type,

varieties and varieties of tea). Moreover, trying to artificially affect tea (increase temperature, pressure, etc.), you can ultimately extract from it unpleasant to taste and useless (or harmful) chemical compounds for health.

So way, quality tea infusion Determines most successful kit contained in the tea of useful chemical compounds and their combination in the solution. To achieve such a set and combination, it is necessary to strictly comply with the rules of brewing.

Any, even the smallest deviation from the correct extraction regime can cause a violation of the most favorable balance of substances in tea infusion.

At home, such deviations from the norm may not be so important: in any case, we will only suffer from this, we will lose the well-known pleasure. Another thing is a violation of the brewing regime allowed in the tea industry at

Titesteric samples in order to determine the quality of large batches of tea. Such a violation can cause an error in assessing the quality of dry tea for one or two varieties, because the Titester determines mainly the value of tea by the quality of the infusion. Since the estimates of the tittors relate to large batches of products to large amounts, it is quite clear what the error in brewing can sometimes cost. Here you have the "tea leaves" of tea! Here you have a simple thing!

Naturally, the brewing mode depends on the type and variety of tea. For delicate, aromatic, high varieties, it is better to soften the regime or shorten the time

brewing with more or less rigid mode. Good black teas in any case can be brewed for more than 5 minutes if they

leaflet, and no more than 4 minutes if they are small. The best time with high thermal mode (hot dry kettle, warm room, soft water boiling with a "white key", and

Two-time filling)-3.5-4 minutes. More rough black teas can be subjected to a slightly tougher regime: a heated dry kettle is stronger, withstand dry tea in it for 2-3 minutes, then two- and three-fold pouring for 4-4.5 minutes, and the weight should be increased in one and a half times (the total brewing time can reach 7-8 minutes, and in some cases (cold room) 10-12 minutes.

On the contrary, floral teas insist only 1.5-2 minutes. For green teas, more stringent brewing modes are acceptable. You can insist up to a maximum of 8-10 minutes (instead of 5-6). It is best to pour three or four times: the first pouring -. Water with a water 1 cm layer with an exposure of 1-2 minutes; The second-up to half of the kettle-after 3-4 minutes; the third-after another 2-3 minutes-to the top or up to 3/4 kettle; The fourth - after 2 minutes - to the top.

A flavored green teas can be brewed twice: for the first time the infusion is kept for 4 minutes, after which the tea is drunk, leaving at least a third of it in the kettle, and then poured a second time for 6-7 minutes.

For brewing red teas, two modes can be used. At the first in a dry, heated kettle, a double hitch of red tea is poured and withstand for about 2 minutes, after which it is poured with a small amount of water (2.5 cm with a layer), after 1-2 minutes pour the second time to half the kettle, and after 2 minutes another 2 minutes, for the third time, to the top. The total time of brewing is 3.5-4 minutes.

In the second mode, a triple hut of tea is poured into a well -heated dry kettle, pour it with boiling water immediately to the top and withstand 3 minutes during which the kettle with welding is doused with steep boiling water from above, from the outside.

For yellow teas, only soft tea leaves are permissible, with an abbreviated time. After the first filling, yellow tea insists only 1-1.5 minutes, then it can already be drunk, and at the same time brew a second time, withstanding the infusion for a longer time-3 minutes; And in the case of the third tea leaves - 4 minutes.

A similar increase in the time of insisting is used, as we saw above, to flavored, floral and generally to all other most high -quality tea, if they are brewed a second time. In this regard, the question arises: how many times can you brew dry tea and is it not more correct to refuse at all from secondary tea leaves?

Usually, with normal, moderate mode, tea is unable to give all extractive substances into the infusion during the first welding. If the maximum amount of extractive substances that should go into the infusion is taken in 100 %, then during the first welding, 70-75 % of caffeine and 40-55 % of the tanin are released in the infusion. At the same time, leaf teas are extracted worse, or rather - slower than small ones. Therefore, from small teas in the first tea leaves, much more soluble substances go into the infusion. Small teas give 70 % of all soluble substances to the first welding, 20 %in the second, and 10 %in the third. This is, for example, the return of Georgian tea. In general, domestic teas have the ability to give maximum extractive substances at the first tea leaves. Thus, if after the first tea leaves the normal tea of the middle fortress is obtained, then after the second infusion will be more than three times weaker. That is why almost the second tea leaves can be neglected, and in order to achieve a 30 % soluble substances remaining in the solution, in addition to the first tea leaves, add a teapot with infusion during the tea party another or twice if you brew a high -leaf tea or tea of a high varieties. Moreover, it is necessary to add boiling water on the principle: "So much in the welding, in the first valve is half a hundred, and in the secondary share a quarter." It is best to add newly flashed water. First, it is to add when a third of the teapot is drunk, and the second time - when only a quarter of the kettle remained. Draining tea from the kettle, until the tea party is over, is not recommended. In the language of tea lovers, this is called "sleeping tea", because the bare leaves of tea will not be broken a second time and the infusion will not work, the tea will be pale and completely devoid of taste.

Tile and tablet teas are brewed like kayaks, but with some difference: the time of brewing the tablet teas is always precisely indicated in the attached to them

Instructions-usually 3-5 minutes, and tile teas require much more time for brewing than their kemetal varieties-usually 7-8 minutes, but not more than 10 minutes. Extracted teas are not brewed: they dissolve in any water instantly and without sediment.

As for brick teas, they are prepared by cooking and brief boiling. At the same time, brick tea is laid in water (cold or hot) before it boils, and brought to the second stage of the boiling, even to its end (for obtaining tea from brick teas, see).

## 8. Norms of brewing

Golded books and some works about tea are unanimously silent when it comes to the appointment of a tea leaves. The Norm of Holding is considered a matter of taste. However, this point of view is an attempt to get away from the answer to the question on the merits. After all, it is possible to talk about variations of taste only when it is known what average norm these variations should be, namely, such an average norm is not indicated anywhere.

We are talking about the concentration of a tea infusion, about the average, necessary and permissible norm of concentration, in which tea can really be called a drink, and not slightly tinted with boiled water.

It is interesting that our modern norm of concentration of tea infusion, adopted in the catering system (4 g of tea per 1 liter of water), is noticeably different, for example, from the "Japanese", "Chinese" and "English" (25-30 g per 1 liter), "Swedish" (12 g per 1 l), "Indian" (44.5 g per 1 l).

Thus, our existing average norms should be recognized as minimal. However, what should be the average welding rate? Such a norm can be considered

The old Russian norm, which makes up a 1 teaspoon of dry tea on a glass of water plus 1 teaspoon of tea per kettle, regardless of its volume, provided that during the tea drinking the teapot will be added. In other words, in a kettle with a capacity of 1 liter (4-5 glasses), 4 teaspoons of dry tea should be put and another 1 teaspoon additionally, i.e. In total, about 25 g of dry tea per 1 liter of water, then added by about 50-75 %, i.e. In total at 1.5-1.75 liters [4]. In this case, the infusion of tea of the middle fortress is obtained.

This norm mainly coincides with the average norm of tea welding among peoples inhabiting "coffee" zones. Therefore, this norm can be recognized as a minimum and deviation from it towards an increase is considered as a matter of taste.

It is worth noting that the systematic use of tea infusion is quite high concentration does not cause any negative health consequences. On the contrary, the Scots, for example, are famous even among the inhabitants of Great Britain with their addiction to strong tea, are distinguished by good health and exceptional longevity, the Chinese are known for their endurance even with meager nutrition, and the Japanese - strong nerves, endurance and strength, despite their rather modest physical data .

In addition, it should be borne in mind that the use of strong tea does not mean excessive consumption of tea drink. Rather, on the contrary. The Japanese, drinking a strong infusion of green tea, absorb much less water than us. Tea cups of the Japanese are so small that they contain no more than 30-50 g of liquid. To drink 5 such cups of strong tea for an hour is much more useful than 2-3 cups of the usual liquid seagull "gulp".

The centuries -old experience shows that a person can and should even consume at least 10 g of dry tea per day. Based on the norm indicated above, you can always calculate the amount of dry tea, which is required for the preparation of the drink for a different number of people, according to the following formula (for black teas):  $T \cdot Kh/2 + T$ , where T is a constant value equal to 1 teaspoon of dry tea, and x is a variable value equal to the number of glasses of finished tea, which we intend to drink. So, for ten people should take  $1 \cdot 10/2 + 1 = 6$  teaspoons of tea, or 30 g, if you take the mass of a spoonful of tea for 5 g for 5 g.

As for the breeding rate of green and other types of tea, they are mainly similar to black tea brewing standards, but sometimes they have their own characteristics.

So, when brewing Georgian green tea, it is advisable to take a hitch one and a half to two times more, i.e. Approximately by the TX + T formula or even 2tx. On the contrary, when using strong varieties of Japanese and Chinese flavored green teas, you should either use a formula for black teas, or take tea about 1/4 less. And the norm of use of heavily flavored black teas is calculated according to the formula (tx + t)/2. So, if 17.5 g of dry tea is needed to brew 1 liter of black tea, then about 30 g, and to brew the same amount of Georgian green tea, and flavored teas - only 15 g.

yellow, Norm brewing A Also Flower Find Formula tea flavored By Formula Chayov, A red doubled or even Charmed flavored teas in accordance with the welding mode elected for them.

Thus, teas of expensive, high varieties drink not only more pleasant and useful, but also more profitable from the point of view of an ordinary consumer, because they are consumed much less when brewing.

The Norm of Holding for tile - black and green - tea is similar to the norms of the corresponding loaf tea, and the norm of brick teas is almost twice as much (2tx).

On the contrary, microscopic doses will be required to brew crystalline tea (per 1 liter of water - only 2 g of crystalline tea). In this case, the norm of tea leaves is calculated by the formula TX/10.

As for the breeding norms of mixtures from various types of tea, here we must take into account the features of the components. Mixtures of different varieties of the same type of tea and mixtures of different types of tea should be distinguished. The latter should be more careful and best not to make them in advance, but to fill up various types of tea directly into the kettle before brewing.

A mixture of different brands (varieties) of green and black teas can be made at the rate of half to half. At the same time, 10 g of black and 10 g of green tea, or 4 teaspoons are placed on 1 liter of water. Even better, when one of the species prevails in the mixture, for example, 2 teaspoons of black and 1 teaspoon of green tea or vice versa.

## Chapter 9. The main indicators of the quality of tea

The centuries -old practice has developed a strictly defined set of indicators of the quality of tea, many of which are special. We will dwell only on the most basic ones - on those that interest each consumer, being the main characteristic features of the tea infusion. This is color, fortress, taste and aroma.

In addition, foaming during brewing is the criterion for assessing the quality of tea infusion and tea as a whole. It was established that infusions of high -quality teas are easier and in larger quantities form foam. It is also noted that the aged or otherwise spoiled tea, losing its high quality, loses its ability to foam formation.

The appearance of a yellowish-brown, as if dirty foam at the end of brewing indicates the correct welding and good quality of tea. On the contrary, too white, pure and abundant foam indicates that the water taken for brewing has not been a little to boil, although the welding is carried out correctly and the quality of tea is good. The infusion of such tea is not strong enough and tasty. Usually, along with foam, part of the teas pops up to the surface. The complete absence of foam is an indicator of poor quality dry tea or significant violations of brewing rules.

The color and fortress of the infusion. Many consumers of tea are mistaken, believing that the color of the infusion is determined by its fortress. All the next to the strong tea implies a tea infusion of dark color. In fact, the fortress of tea and the dark color of the infusion are concepts that are far from coinciding.

The strength of tea is understood to mean the degree of concentration of soluble substances of the tea sheet in a teaspoon: the more of them went into the infusion, the stronger the tea. The fortress, therefore, depends primarily on the quality of dry tea, as well as on the rules of brewing. The norm of laying tea and the time of insisting, although they also practically affect the increase in the fortress, but from a fundamental point of view are not related to it: no matter how bad the bad tea and no matter how much it insist it - it will still remain bad, it will be empty, tasteless, although Dark -colored.

Many types and varieties of tea, distinguished by high extractiveness, giving a large percentage of soluble substances into the infusion, at the same time not very intensively stain it. These are all yellow and green teas, giving a light, yellowish-greenish infusion, as well as many high varieties of red and black teas, giving an infusion of weaker coloring than low varieties of the same type. So, leaf teas pigment the infusion not as intensively as broken and small. True, for most consumers, the discrepancy between the color of the infusion of his fortress in black teas is less noticeable. This happens due to the lack of the possibility of comparing different varieties, as well as due to violation of the rules of brewing.

The infusion becomes strong with proper brewing already in the first 4-4.5 minutes, and the most enhanced pigmentation occurs 8-10 minutes after brewing, because by this time the fortress partially decreases due to the evaporation of the esters and, therefore, the loss of the best taste and aroma. At the same time, after 10 minutes, such fractions come into the infusion that worsen its quality, spoil its taste, give tea bitterness. Usually the consumer also considers bitterness an indicator of the strength of tea, although it testifies

Exclusively about the wrong, harsh breast regime. Therefore, the fortress of tea is characterized by the fullness, saturation of taste and

aroma, not the degree of coloring of the infusion and not its bitterness. The fortress of the infusion of tea can be weak and good. She can also practically

be absent or not insignificant. The infusion of a weak fortress can be made of fresh tea leaves and be a result or

weak concentration of extractive substances in good teas (when it is taken for welding

A small dose of dry tea), or the result of a low original fortress of finished tea (when low -grade tea is welded). Such tea is benign and freshly has a weak, but still distinguishable taste and smell. In the first case, it will be lightly painted (liquid tea), in the second - more intensively, but in both cases it will be tea of a weak fortress.

Another thing is when a weak infusion is a consequence of repeated brewing (sleepy tea). Such tea has a slight fortress (if it is not absent at all), and the infusion of sleeping tea is completely tasteless and watery, but in color it can be very dark, especially if it remains for several hours or was specially warmed up

Directly on fire. The most sharply darkened from heating and boiling with a sleepy green tea: almost colorless at the beginning, it can then acquire even a brown tint. But the fortress of such tea remains insignificant. A sleep can not be benign, he, as the teapodes say, is completely empty.

The infusion of a good fortress has any properly brewed tea of high and medium varieties, if it also has good condition. If they talk about a high fortress, then they mean a much higher concentration of extractive substances per unit of water, which is not so much the result of a high grade of brewed tea, but by a consequence of an increase in the dose (suspension) of dry tea compared to the norm.

In general, good varieties of tea are always stronger than bad varieties of the same type. As for the comparative fortress of teas of different types, the yellow and green teas are stronger than black and red.

One of the indicators of the strength of tea is the stratification of the infusion, since it indicates the degree of extractiveness of soluble substances of tea - at least the degree

Tanin's extractiveness. Another, even more visual indicator of the fortress of the infusion is the so -called "cream".

Many probably noticed that on the surface of cooled tea sometimes appears, as it were, a fluff. This is tea "cream". The "cream" is a mixture of caffeine with catechins, well-soluble in hot water, but falling in strong teas in chilled infusion. When the "cream" begins to settle, the infusion of tea is cloudy, and after a long defending "cream" can be settled on the bottom of a cup or kettle in the form of a film. If tea quickly cloudy when cooling, then it is really strong. If the "cream" settles quickly, then the tea is very strong. Tea with weak infusion does not have a "cream". The "cream" is also not formed in the teas that give a light infusion (in green, yellow), especially in delicate and fragrant teas with a large content of ethers (aromatized yellow and green teas, selected red varieties, furons, flower teas).

If the presence of "cream" indicates the fortress of the tea infusion, then their color serves as an indicator of its quality. The bright dark orange color "cream" with a reddish tint is a sign of good high quality tea, and a dull, dirty color is of low, poor quality. As well as the color of the "cream", the color of the infusion is also of no small importance for determining the quality of tea, although, as we have seen, it is in no way an indicator of the tea fortress.

The color of the infusion is primarily indicated by the type of tea (green, yellow, red, black), its variety (infusions of tile and brick teas have a characteristic color), and is also directly related to the quality of tea.

Speaking about the color of the infusion, the density, the intensity of coloring and its brightness, or, as experts say, Koller should be distinguished. Brightness is much greater important for the quality of tea than the color (degree of color). The degree of brightness always exactly corresponds to the degree of quality, which cannot be said about color. Brightness is always accompanied by transparency of the infusion. A bright, but bright infusion will always be a sign of good quality of tea. On the contrary, a dark, densely painted, but dull opaque infusion speaks of poor, low quality of tea.

There are the following shades of brightness (ring) of infusion: light, good, muddy.

A light kner should not be mixed with a little painted infusion, nor with infusion, weak in the fortress, or with liquid tea, all the more sleepy. A light kner is not at all a defect in tea, and sometimes even the opposite (in yellow and flower teas) serves as a positive indicator, since in some varieties, the methods of factory processing that enhance the color of tea automatically reduce its quality. Therefore, the light coler of the infusion in such cases serves as a guarantee of the correctness of technological processes, the safety of the quality of tea.

A good kner has intensive coloring, transparency, brightness and serves as an indicator of good quality and proper brewing of almost all types of teas, and especially black and red. For the latter, a good kner also serves as an indicator of the fortress. As for the green and yellow teas, it should be borne in mind that with a good fortress they quickly darken and slightly cloudy immediately when pouring from a kettle to a cup, and therefore their kner with high quality will not be bright after 3-4 minutes. Pressed teas are generally devoid of a large extent of such an indicator of quality as brightness, because in their infusion there are always too many balanced particles, which is associated with the peculiarities of their preparation.

The muddy kner, characterized by a dim-brown, opaque color of the infusion, always indicates that the tea is spoiled (old), or incorrectly brewed, or was generally very low. In this case, one should not be confused with the muddy tint of a muddy, but not dull infusion obtained from pressed teas (tile and brick). The taste and aroma will always be accompanied, while teas giving a muddy kner will be deprived of both taste and aroma these most important indicators of the quality of tea.

There is a simple way to check and difference in the brightness of the infusion from its coloring. For example, high -quality teas, especially Ceylon and South Indian, have a not very painted, but bright infusion, which we usually call a beautiful color. If milk is added to such tea, then it becomes bright orange, sometimes with a pinkish tint, if the variety is very high. But if you add milk to infusions of low varieties of the same Ceylon or Indian tea, then it will acquire a dim grayish-beige color.

The incorrect ideas of consumers about the fortress and color of tea in the past used, and to this day various tea falsifiers use abroad. Pulling the taste of the buyer, they tint the bad teas or add various impurities to them, thereby reaching the thick color of tea, which is so appreciated by consumers, passed out as the fortress. Another way to achieve a dark infusion, used in the past in taverns and restaurants, is the addition of a small amount of soda to a nasty tea and its further heating and boiling. At the same time, an additional amount of pigment is driven out of the tea sheet in the solution, which enhances the color of the infusion to dark brown, dull color. It goes without saying that there are no nutrients in such tea, but alkaloids such as guanine are quite harmful to health (usually this alkaloid is contained in a bird droppage - guano).

So, properly brewed strong high -quality tea should not be too dark or bitter in taste, but should have transparency, brightness, beautiful color, be fragrant, soft and pleasant to taste.

Taste and aroma. No matter what positions we evaluate tea, we always come to the conclusion that the taste and aroma serve as indispensable signs of its quality. Meanwhile, most consumers do not see the difference between these two concepts and most often notice only the taste of tea, but do not distinguish its aroma. This happens primarily due to improper brewing tea. The aroma of tea, especially in thin varieties, is formed in the very first one and a half to two minutes after brewing and during overexposure of more than 6 minutes it completely disappears. That is why for the sake of maintaining the aroma, brewing (at least black teas) should be stopped after 4 minutes.

Taste and aroma are connected with each other. Tea with a pleasant, strong aroma has a good tart taste. The combination of taste and aroma creates the so -called bouquet of tea, perceived better than the organs of touch than the sense of smell. This circumstance also provides

The influence on people with poorly developed smell, which do not see the difference between taste and aroma. The aroma as a kind of pronounced special quality of tea for them does not exist.

Despite the relationship, taste and aroma are different qualities of tea, and they are created by unequal substances.

The taste of tea is much more stable than aroma, and perceiving it is easier. Mostly the catechins, the tannin of tea participate in its creation. Compared to the aroma, the taste is much easier. The taste is clearly detected through the tread of tea, even an inexperienced consumer is easily distinguished by black teas from green and yellow, brick and tile from the canes.

Another thing is the aroma. It is thinner, extremely unstable, can easily disappear, and not everyone can feel it, especially if the tea is incorrectly brewed. At the same time, the aroma of tea is immeasurably more diverse than the taste. It is enough to say that there are thousands of varieties of tea, and each of them has its own, unique aroma, or rather, a combination of taste and aroma - a bouquet.

The aroma of tea is the final result of complex chemical and biochemical transformations that occur both in the process of growth and processing of the tea sheet, and during its storage. Until recently, the teapods could not accurately explain the secrets of the formation of the aroma of tea, although they knew that its basis was essential oils and their compounds with organic acids of tea. Soviet biochemists showed the meaning of aldehydes and

Flawonolglucosides, as well as catechins in the formation of tea aroma, English teaspoon indicate the decisive role of three components in the creation of a characteristic aroma of tea, namely phenylene (aldehyde), citronelol and hexenool. The aroma of each of these three substances differs from the usual, familiar specific tea aroma, which is obtained only as a result of their connection. In addition, it is during the transition of these substances to the infusion that Titester reveals indescribable freshness of the aroma.

These qualities, along with the actual aroma, make up the most precious properties of a tea drink. Thus, the aroma is not only the result of a complex composition of substances, but also a concentrated combination of many tea substances. Therefore, it is clear that the loss of aroma deprives us of not only the pleasure of a tea drink (although this is also important), but also many valuable, beneficial substances contained in tea. That is why the aroma has always been considered one of the most important indicators of the quality of tea. It is the tenderness of the aroma, its increased volatility [5], the ability to disappear from any gross extraneous smells and dictates to us a delicate treatment of tea during storage and choosing brewing modes.

The aroma is mainly contained in a foam that appears during brewing. In properly brewed, good tea, the aroma should be quite clearly expressed in a cup of infusion (mainly in the first cups that fall the upper, most light layers of tea infusion, saturated with essential oils). It remains clearly tangible on the walls of the cup even after the tea infusion is drunk or pouring it. It is enough to smell the walls of such an emptied cup to understand how much the aroma is different from the taste, how much thinner, exquisite, more tender, the most soft and velvety taste.

In the same way, the aroma of tea can be easily felt by sniffing a spoon, which was rubbed in the brew. He, this fragrance, will be indistinguishable only if it is completely absent from this tea or tea, dishes or spoon, due to the inaccence of its owner, some alien, side smells.

But the aroma is harder, or rather, it is impossible to describe in words. Titesters have some definitions: rosagan, honey, fried, smoky, leathery - which convey only one of the aroma, and the most pronounced, dominant in one or another variety of tea, but by no means the only one. In general, the tea aroma resembles, of course, the smell of flowers, sometimes it can be similar to the smell of roses (rosary) and citrus fruits, it can be a mixture of the smells of strawberries, geranium and blackcurrant juice, but in general the aroma of tea is not similar

One of them separately, it is immeasurably thinner and pleasant, as well as slightly exciting.

## Chapter 10 Testing tea

The method of determining the quality of tea in all its numerous indicators has developed gradually, historically, as a person's knowledge expands about tea. For a long time, the main and almost only way to determine the quality of tea was the organoleptic method, i.e. Testing samples of tea by a person to the touch, by eye and taste. This extremely subjective method has generated a special profession - titesters, people who actually devoted their lives to the definition of the qualities of tea and for the sake of this forced to go to a number of restrictions and strict discipline in all of their not only official, but also everyday life. Only in such a way the definition of a seemingly subjective concept as taste rises to a high objective level, and so accurate and thin that no devices can replace or reproduce this human assessment.

Of course, in order to be a titester, a natural talent is necessary, and not only a rare, like, say, among singers or artists, but the rare, since there are very few people with an ideal sense of smell and an accurate sense of taste, and people who have preserved these rare natural qualities From birth to adulthood, when the issue of choosing a profession is resolved, and even less. In each country, they are literally units. This is partly due to the fact that natural talents in this area disappear more often than in any other, since in childhood, and in adulthood, relatively few people know about the profession of a titter and even fewer people imagine what kind of profession this is And what qualities you need to possess in order to be a titr.

Often, even in the press, tittors are called tea tasters. This is absolutely wrong. Tasting only applies to sample of food and drinks, including alcohol, primarily different wines, and involves testing the finished food product in order to determine its taste characteristics and differences from products of this category. At the same time, the taster is obliged to eat at least a small part of this food product (except for alcoholic beverages).

Testing tea - much more difficult And various process, how tasting. It includes the determination of the quality of the tea sheet at all stages of its production, testing the finished dry tea to the touch, in appearance, according to a variety of indicators (fragility, density, cleaning quality, the presence of tips, color), determining the aroma of dry tea, and, finally, testing of a tea infusion for indicators such as aroma, taste, color, brightness, strength, transparency, kner, column intensity, degree

extracting. In addition, Titester must conduct the same studies with respect to a boiled tea sheet. Only the entire amount of information received in this way with setting assessments for each control position (in total 25-30) and their generalization makes it possible to endure their verdict about the quality of a particular variety of tea. That is why the opinion of Titester is considered "objective", despite the fact that it is a purely personal opinion, and supported by unquestioned authority. It is practically not painted by some subjective moments. This is the opinion of a strict professional - a specialist in the highest category.

The profession of Titester requires not only talent, but also of great knowledge and experience. It is associated with great material and state responsibility, with thorough knowledge of not only disciplines such as biology, botany, biochemistry, geography, physics, but also the economy of the world market, and especially the tea trade economy. The profession of Titester involves the ability to keep in memory a whole collection of tea odors and to know their origin, pedigree and history. A good Titester knows the features of all or most tea plantations in the main tea -producing countries. Finally, the profession of a titester requires great self - discipline, accuracy, accuracy and endurance, as well as

skills withstand physical loads. Sometimes Titesters international class We have to produce up to 1000 teas a week and not just "make 1000 sips", but to do numerous operations related to testing and give their decisive conclusion on them.

It is not surprising that the profession of Titester, although extremely honorable, is included in the category of heavy professions along with the professions of Shakhtar and Metallurg. Naturally, therefore, that the work of titesters is extremely high. The health of testers (or rather, their nasopharynx) is insured for some English firms for 1 million pounds. A runny nose at Titester is an event that can cause huge losses of a tea company.

The profession of Titester requires a person of many victims. Naturally, he should not smoke, eat alcoholic beverages, is obliged to refrain from eating all food, which has any pronounced own aroma. Therefore, Titesters never eat onions, garlic, pickles and smoked meats, use very little salt, limit themselves to use even spicy herbs and sweets. Their destiny is neutral milky-ray food, poultry, boiled river fish, young meat, some eggs.

Tester has no right to use perfumes, cologne, i.e. With odorous substances, flavored toothpaste, fragrant toilet soap. He is obliged to wash his hands only with tea soap. Moreover, his linen, clothes, shoes should not be subjected to the latest synthetic detergents so that no extraneous smells can influence his assessments of tea. It goes without saying that Titester protects himself from a cold. His working room - a clean, large, necessarily sunny room - is ventilated all the time. In his communication with other people and the world around the world, Titester must constantly proceed from all of the above rules. This means, for example, that he should not have acquaintances who smoke, use the spirits, etc.

Testing the tea infusion, Titester does not drink tea, but only rinses the oral cavity with them, then trying to determine the taste by rubbing the droplets of tea with the tongue about the palate. In the same way, determining the aroma, he does not stick his nose into a cup of hot tea, but sniffs an empty cup that was rinsed with tea, or carefully sniffs the collapsed, but not hot tea leaves from which the tea is merged. In other words, in all cases, the Titester spares his olfactory apparatus, which is able to give him comprehensive information about the aroma of tea by signs barely noticeable for an ordinary consumer.

The uniqueness of the Titesterian profession, and even more - the rarity of the appearance and long -term preservation of the qualities of a good titester, more and more force the tea industry and the science serving it to look for the possibilities of laboratory, objective methods

Determining the quality of tea. Today, biochemical, chemical, gas analyzes, fluorescent assessment, chromatography and theatlavin scale are already used to determine some indicators of the quality of tea, mainly at certain stages of its production, when it is necessary to adjust the mode of this or that technological operation and in the teasual sheet it is important to determine any kind of determine any One important quality for this operation. However, all these methods of objective assessment cannot yet give any clear idea of the taste and aroma of tea and about the totality of its qualitative indicators. Therefore, it is impossible for them to so far based a general assessment of the dignity of tea, which is determining to establish the cost of tea. This is still a responsible business is still entrusted to a person- a specialist-tester, a living, direct impression of which, paradoxically, is more objective and accurate than testimony testimony.

In this sense, the organoleptic method is apparently indispensable, and, despite the development of technology, it most likely will not lose its significance until people drink tea.

## Chapter 11. On the falsification of tea

The falsification of tea is almost as ancient as the production of tea itself. In all countries, it has the same reason - the benefits of the wide consumption of tea by the population and the possibility of easy introduction of large circulations

A falsified product in such a large amount of real, solid tea, under the guise of which a falsified product is usually sold.

However, the types of falsification of teas, the methods and nature of the falsified product in different countries are different.

If, for example, in Western Europe, including in England, in the XIX - beginning of the 20th century, the type of "falsification" was widespread as the worship of rusty metal sawdust, which greatly increased the weight of each pack, and, therefore, allowed to sell less The amount of genuine tea for more, and put the difference in price in a pocket, but at the same time not in any way to affect the quality of the product and do not even harm the health of the buyer of such "weighed" tea, because the metal was easily eliminated or, in case of untimely detection, simply remained at the bottom of the teapot, then in Russia methods

Falsification, along with the above and primitive body kit, has always been distinguished by the variety, sophistication of deception, and most importantly, as a rule, they were harmful to the health of the buyer.

Russian falsification of teas can be divided into two main types. The first is the use for falsification of these tea of natural plant products of local origin. The second is tinting and chemical processing, as well as secondary processing of sleepy tea. Surrogate plant products belonged to: carrots, cypray, Badan, as well as partly and occasionally - certain types of Caucasian laurels. The main raw material for falsification of tea was cypray, and in Siberia - Badan. All these fakes, as a rule, are easily distinguishable in the first tea leaves, because they do not give a characteristic tea taste, not to mention the aroma, but only imitate the "tea" coloring of the infusion, and always very intense, which bribes undemanding, poor and ignorant consumer. For health, such fakes do not pose any danger, and sometimes even more useful than the use of just pure boiled water. However, their danger is that, collecting and processing a large number of kyra or badan into "tea", plants growing whole thickets, colonies and therefore allowing to use mechanical remedies - a braid, sickle, collectors of this raw material, and especially him

Processors, people, in principle, are completely unscrupulous, since they deliberately carry out fake, always capture other plants, or related to Cyprus and Badan, or difficult to distinguish from them. Meanwhile, such fellow travelers are extremely poisonous. The so-called false Badan, as well as a lobillar, which are introduced into a mass of badan bushes, is especially named. Without sorting, without eliminating the collected, because it is difficult and unprofitable due to loss of time, manufacturers of surrogate tea sometimes involuntarily, not wanting it, create rather poisonous mixtures that are the cause of poisoning, and sometimes the deaths of consumers of surrogate tea.

That is why even seemingly "harmless" falsification of tea using natural plant materials was still regarded as fraud, dangerous to health, and until 1941 was persecuted by law.

Moreover, all other types of falsification of teas were declared punishable: the use of tinted sleeping tea, aromatization by aldehydes of the sleeping tea,

the use of indigo and other arrangers for falsification of green tea from non-native plants (refinging in combination with a weak yellowish-brown infusion of any

Full leaves gives, as a rule, an intensive coloring of the infusion, reminiscent or even completely coinciding with the color of good green tea).

It is necessary, however, to emphasize that all falsified teas, which outwardly indistinguishable from real tea are either dry, like a canopy, or in the infusion, whether it is black or green tea, excellently distinguishable from real tea to taste and complete lack of aroma. That is why they, as a rule, are found in public nutrition, in transport, where the consumer does not make any special requirements for tea, he is used to the fact that he is adapted tinted with water, and where his acquaintance with falsified tea is a fleeting, episodic character, most often left without any negative consequences, except for the spoiled mood and insignificant loss of some money.

Due to the fact that during the years of Soviet power, since 1924, he was enhanced by the spread of the spread and illegal sale of falsified tea, falsified tea in the USSR had not appeared since 1932-1933, especially since several "tea" scammers were indicatively convicted as malicious pests. And therefore, after the war, during the revision of the laws, those articles that provided for the punishment for falsification of tea were removed as an anachronism. Those who still remembered them joked in the early 80s that they should be introduced again in order to punish the production of disgusting Georgian tea, which catastrophically reduced their quality during the period of "perestroika".

However, the danger of falsified teas was really approaching. Since 1992, various imported teas with bright "foreign" labels, as a rule, in English, were flooded the country, regardless of the production of which country is indicated on them. Most often, these were Chinese and Ceylon (by name on the label!) Tea, but there were also teas, on the labels of which it was indicated that they were produced in Germany or Holland. The vast majority of them were falsified or extremely low quality, which forced the consumer protection society from time to time to publish in the press the name of firms and brands, whose tea not only does not satisfy the elementary requirements of GOST, but also contains impurities dangerous for health.

Since the consumer is still not able to remember all firms and tea brands written in English, which now have walking in the wide expanses of our country, we give a set of rules below, according to which we can distinguish falsified teas from genuine ones.

This is all the more necessary that individual companies and grades of tea can disappear and appear, so no list of falsifiers will help, while knowledge of general rules, who can and who cannot be trusted will help at any time to be vigilant All kinds of fakes and avoid the acquisition of falsified goods.

1. First of all, remember that tea can produce only tea-chawge countries from truly tea raw materials: China, India, Indonesia, Sri Lanka, Japan, Georgia, Azerbaijan and several other ones indicated in the first chapters of this book.

This means that tea from the USA, Germany, Holland, Denmark, etc. is either a re-export of Asian teas or a fake. As for the re-export, it can be conscientious, and then such tea is highly expensive, or it is extremely low varieties, blended and outwardly beautifully designed, equal to the selling price of ordinary good tea, but far from equal to it in quality. It is best, therefore, to avoid the purchase of teas from non-core countries.

2. At all, you should not buy any tea with a "foreign" name (regardless of the country, language and company, even if they are indicated), if such a name sounds strange or generally inappropriate for tea. This is usually the most frank falsification, designed for simpletons that do not understand anything in the teas, but prone to bright labels, to unusual or, conversely, to too understandable, easy names. An example of this kind of "foreign" teas, we can consider the tea under our commercial tents under

The next "English" name, without indicating the country of production and the company: "Volga, Ortodox Leftea". ("Volga. Orthodox leaf tea").

How not to recall the prophetic words of Ostap Bender that all the smuggling in our country is made on Malaya Arnautskaya Street in Odessa. Meanwhile, it is precisely such illiterate in tea business that primitive scammers find support in the person of ignorant

Buyers, for whom the quality of the inscription in English, serves as an indicator of quality and the ignorance of which is so deep that they are not alarming even the word "Volga" in combination with a tea plant completely unthinkable on its shores. This once again suggests that, preferring the book about tea about the detailed chapter about the tea plant and the geography of its spread, we made absolutely correctly, and not only in order to expand the horizons of readers, but also based on the practical interests of their buyers.

3. As for the teas brought, according to the designation on the label, from China or from India, differentiation should be approached with them. First of all, the indications of the type: "Made in China" or "Made in India" do not say anything. Rather, they only say that such an inscription cannot still serve as a confirmation of the place of production. Why? Yes, because it alone is not enough for such confirmation. And if there is nothing else besides this inscription on a pack of tea, then you can be sure that this tea has never crossed the Russian-Chinese border, and maybe no border at all.

Real Chinese tea is exported from China only the "Chinese National Import Corporation of Tea and Local Products" ("China National Tea & National Product Import & Export Corp."). There should be an inscription in English about this. In addition, after this inscription, the indication of which province of continental China must be followed, because the corporation has branches in different provinces: in Fujiani, Sichuani, Humani and Yunnan. By the way, these instructions are very important for people who truly love good tea, because the gravity and differences in quality and in the form of teas are associated with their production in different provinces, and are not at all reflected, as we are used to, in the numbers of the variety or in any That is a special epithet: excellent, selected, higher, extra, etc.

But in addition to indicating the full name of the corporation and the name of the province, where tea is collected, truly Chinese tea labels are also indicated below the first two inscriptions that this is the "product of the People's Republic of China" ("Produce of the Peole's Republic of China"). There are no inscriptions like "Made in China" in real Chinese tea and cannot be! Moreover, the presence of a detailed inscription should clearly indicate that we are dealing with a clear fake, Western or domestic. Fraudsters are simply illiterate and do not know how the Chinese tea is indicated, and they are also afraid to fake the brand of the Chinese corporation, because a very high punishment should be for the fake of a foreign treasure brand.

And for the fake of tea, they, as a rule, do not suffer at all, except for the curses of unlucky buyers. Meanwhile, both commercial and almost all privatized stores are literally stuffed with such "Chinese" teas, because their wholesale price is very low and their acquisition from unscrupulous wholesalers is extremely beneficial for modern businessmen.

There is also Chinese tea from Taiwan. But in these cases, it should have a complete inscription of the Taiwanese company, an indication that the product was taken from the capital of Taiwan - Taibaya, as well as the local name of tea in English and Chinese. In any case, there should be several inscriptions. If, in addition to hieroglyphs, which no buyer disassembles, only the notorious "Made in China" stands on the label of Chinese tea, then you can believe with confidence at 99.99 % that they are trying to foil a surrogate or very bad, fake tea.

Finally, if the tea was brought from China himself by one of your friends or acquaintances that have been there and was purchased in Chinese stores or was taken to our country by some Chinese organization according to Barter of the Russian Organization, that is, he was bought on

The domestic market of China, and did not go into our country as an export product through an import-export tea corporation, then on the labels of such tea will only be inscriptions in Chinese and more in any other way. In other words, the whole label will be covered with hieroglyphs. And there will also be several Arab numbers. These are the numbers of Chinese GOSTs and weight number.

Such tea is also guaranteed to be genuine and at least medium, normal quality. The best Chinese teas are exported in metal packaging, in beautiful banks, while preserving all the above inscriptions. The simpler, the more primitive tea packaging, the worse the tea. Tea in cellophane or in plastic packaging is not worth it to be bought. This is a meaningless transfer of money.

4. With Indian tea, the situation is somewhat more complicated, in the sense of determining their authenticity. The fact is that on fake and good Indian teas there may be an inscription "Made in India", so this sign cannot serve us as a guiding star, to distinguish genuine teas from fake.

But in India, there are several famous companies whose name can serve as a strong guarantee that tea with their name should not be bad and, in any case, it is always genuine, Indian, and not fake. These companies are as follows: Davenport, A. Toch, CTC they export to 60-70 % of Indian teas. Their names are short, well remembered. By the way, on their labels, truly high -quality teas also do not stand the brand "Made in India", but instead it is indicated: "Indian tea Tosha", "Indian tea of Davenport", "Indian tea CTC".

And Respectable On trading brands responsible firms, usually (Althoug|They Sometimes Very crayons) exporting tea. Can Also Images of the head of a ram or circul. This symbolizes high -quality tea, "a strong forehead," (much stronger!) Or "compass - a measure of accuracy" (this is definitely Indian tea, we guarantee it as accurately as the point of the compass). Typically, these companies put their name in a smaller font than the name of the variety that they advertise. But since the names of the varieties often change, the foreign buyer should focus on the name of the company and not particularly pay attention to all other inscriptions on Indian tea.

Basically, Indian tea continues to be supplied to our state tea -factors and packing in Russian packaging in our country. Moscow tea -factor guarantees good quality tea. As for the Ryazan, Serpukhov, Odessa, tea, which goes on sale from these chara -recruiting factories, is much worse in quality compared to Moscow. You should also not buy tea if the pack indicates that it was not hung in a cup of a cup of a factory, but at a food production plant

concentrates, etc. There, tea often perceives the smells of other goods and usually loses its own.

5. Ceylon imported tea is also very often the object of fake, since when it is chewed, small wholesalers mix other low-grade teas.

Ceylon tea is usually produced in the form of a broken or fannings, and this is well masked by other mixed teas of the same fractions, while with leaf tea, it is easier to detect with simple visual control.

However, good Ceylon firms, valid for their trading reputation, are fighting against pseudo -challenge tea in the markets of other countries as approximately in the same way as China.

Thus, the best companies Annabel and Dilma (Dilmah) indicate their labels that tea is "Packed in Sri Lanka" and avoid using the usual formula of American and all kinds of fraudulent firms "Made in Shri Lanka." In our country, only these companies are carried out by the main import of good quality tea. All the others, who call themselves Ceylon, cause, based on the analysis of their labels, a very strong doubt about the adequacy of this country.

#### Chapter 12 National Methods of Preparation of Tea

#### Drink

Many peoples have developed and have their own national methods of preparing tea. And although not all of them are correct from the point of view of our modern scientific ideas, nevertheless, many of them have developed into a very strong tradition, very tenacious and remain almost unchanged to this day as peculiar persistent ethnographic features. As specifically national, we consider the methods of preparing tea in Mongolian, in Tibetan, in Japanese and even English, not to mention the classical Chinese method.

It is understandable that national methods of brewing tea are the result of the centuries -old experience of each nation, prolonged use of tea in specific conditions of a particular country. Therefore, they are closely related to the geographical, climatic, social and other conditions of individual countries and can be understood only against the general background of their national conditions. That is why it is impossible to mechanically use these methods in other conditions or to regard them as incorrect. Often they are associated with a different, "not our" power system and are completely explained in its framework and, moreover, are rational.

#### 1. Chinese methods

Over several centuries of tea culture in China, many ways to prepare it have been tried, starting with primitive cooking of dry tea and ending with instant dissolution of tea extract in hot water. However, both the simplest and most complex methods were rejected over time. The most rational was left - the one that formed the basis of the international method of brewing and to which we follow in general terms.

In tea or with tea, everything is tried, and our task is to not forget this heritage of a multinational culture. That is why the questions of some readers, asking what new ways of brewing have appeared recently, seem to be naive. Already in the VIII century in China, strict breastfeeding rules were established and the cook of tea was discontinued. And in the second half of the X century, the first major reform of the preparation of tea occurred. From this time, dry seagots, which were initially weakly reduced, began to rub in stone mortars to a powder state, and then whip from bamboo in hot water, which was first taken equal to the volume of tea powder, and then gradually added water and brewed a whipped thick mixture. The new method coincided with the appearance of improved porcelain dishes - from white porcelain, glazed inside. This immediately made it possible to distinguish between not only taste, but also shades, colors of color and most importantly - the aroma of tea, especially developing during whipping. The interdependence of the tint and aroma has become obvious. And this immediately affected the production of tea. They began to strive to maintain its aroma, following the change in color during production. So improvement

Breaking has led to an improvement in tea affairs technology. Different varieties of tea arose, until then the former only green. At first, it was possible to create about a dozen varieties, by the eighteenth century, their number reached a hundred, black and red teas appeared. In this regard, they even began to arrange tea competitions at which they awarded those who were more accurate and faster to guess various varieties and their mixtures.

When there were a lot of varieties and their characteristic features were known to everyone, the need to rub the tea before brewing. On the contrary, in the production of highly air varieties, attention was paid to the preservation of the sheet intact (guarantee

preservation of the thin aroma in tea), especially for cleaning the sheet, which was associated with the aroma and by which they began to distinguish varieties even before the brewing of tea. So, approximately in the XV-XVI centuries, they completely switched to brewing in the Gayvani-special cups such as Piala with a volume of 200-250 ml, but with a sharp expansion in the upper quarter and with a lid, the diameter of which is less than the diameter of the upper edge of the cup.

4-5 g of tea are covered in such a cup and immediately poured with water on 2/3 or up to half the volume. The brewing time does not exceed 2-2.5 minutes, a maximum of 3-4 minutes for some varieties of tea. From Gayvani, tea is poured into a cup for drinking so that the lid does not even rise (so as not to release the aroma), it is only leaned to the edges of Gayvani, and the tea spills through the gap formed in this way. They drink tea hot in small siples, without sugar and other seasonings, which, according to the Chinese, completely distort the true aroma of tea.

The Chinese do not need to partially have a part in the receipt and embellishment of tea because they consume mainly yellow, red and green flavored teas that have an exceptionally delicate and strong aroma.

Having drunk 3/4 of the contents of the Gayvani, the remaining quarter of the infusion is again poured with boiling water. High -quality tea can be poured in Gayvans up to four times (without draining it), but

Others are only two, a maximum of three times. The first cup of tea with such brewing has a weaker infusion, light ring,

But fragrant. The taste of tea appears after the second, third fill. Therefore, the Chinese can find such an affirmation that the second tea leaves are the most delicious. But this applies to brewing in the Gayvani. The brewing of tea in a simple cup or in a PIAL can not be compared with brewing in the Gayvani. Therefore, those who brew tea in cups, believing that they follow the Chinese method, are not only mistaken, but also spoil tea: without a lid, he immediately exhales and weakly infused, and when closing the cup with a saucer, they lose their taste, as it "sniffs", "" Previs", because in the saucer there is no hole for the output of the steam.

When brewing in teapots, especially in large ones, 3 liters or more, the most delicious, of course, is the tea of the first fill. Breaking in Chinese teapots differs from our fact that most often it occurs through a porcelain glass-grid. This allows tea to be more fully extracted, since a glass-grouse filled with dry tea is not only washed well with water, but the tea in it during brewing is slightly squeezed a porcelain or silver spoon and tamp it, which helps mechanically, without increasing temperature and changing the taste of tea, get the maximum number of "delicious fractions" from it.

Breaking with porcelain glass cups is especially applicable to green and red tea. At the same time, a one-time filling into the kettle is always equal to 1/2 or 2/3 of the volume of its cup, i.e. From 10 to 25 g. Having a kettle with a capacity of 1 liter, you can get 2-2.5 liters of tea infusion of almost the same fortress. This method of brewing is not only very beneficial, but also convenient.

In the southern and southwestern provinces of China, national minorities (nationality of meo, Tai and Nasi) use various varieties of pressed black teas, giving a tart infusion, which a variety of spices are mixed to after preparation: Ginger, Badyan, Cardomon, Cinnamon (in combinations or separately ), and also drink tea with almonds.

#### 2. Tibetan method

In Tibet, tea is eaten both in the usual liquid form for all peoples and in dry.

A tea drink in Tibet is a clock, is a strong brick tea (approximately 50-75 g of dry tea per 1 liter of water), in which butter (necessarily ghee) yak (100-250 g per 1 l) and salt to taste are added.

All this mixture (hot!) Is beaten in a special oblong barrel, similar to a Russian oilbox, until a thick drink is uniform in consistency - a very high -calorie and peculiar in its tonic effect, and therefore capable of almost instantly restore the forces of a weakened person.

In conditions of the harsh, sharply continental climate of Tibet, such a drink is directly irreplaceable.

In Tibet, tea has been drunk since 620. This is the oldest way of brewing. Chinese books say: "Tibetans live in tea. Without having it, they suffer to such an extent that they can get sick." It is no coincidence that the folk measure of the distance in the mountains (not in a straight, horizontal surface, as in the valleys, but along a winding line and vertically), expressed not in units, but in the Pias of Tibetan tea! So, three large bowls of tea are approximately 8 km of path. Tibetan tea is common not only in Tibet itself, but also in the high-mountain regions of Afghanistan (Gindukush), Pamirs and in countries located in the Himalayas-Sikkima (India), Butan and Nepal.

Dry tea in Tibet is used for the preparation of the National Enembows "Zambemu" - flour of pre -bruised grains of barley, mixed and carefully wiped with yak oil, dry brick tea and salt.

## 3. Mongolian method and its options

The Mongolian method of drinking tea is similar in principle with Kalmyk and partly with the Kyrgyz. Therefore, it is also often called Kalmyk - in the European part of the CIS, Kyrgyz - in Central Asia and Western Siberia and Karymsky, or Karymnaya, tea - in Transbaikalia and Eastern Siberia, since it is brewed in this way Aginsky Buryats (first of the Karymsky).

This is one of the oldest methods, and its relatively wide geographical distribution from the deserts of the gobi and the Sahara to the Nogai steppes of the interfluve of the Volga and Don testifies to this.

In Russia, he has been known since the end of the XVII century under the name "Bogdhaian tea". Its main components are green brick tea, milk, butter, flour and salt. Depending on the national area where they use tea in Mongolian, all its elements, except for brick tea, can vary. So, milk can be cow, goat, sheep, mare, camel, and oil can sometimes be completely absent or replaced and supplemented with baked bacon (beef, lamb); Flour can beat wheat, barley, rye and complemented by rice, millet (Gaolyan). Sometimes, along with salt, black pepper with peas (Gorky) from the calculation of one granny on a glass, and Kalmyks - bay leaf, less often nutmeg.

Here are two recipes for making Mongolian tea. Mongols pre-rub brick tea into powder and pour 1-3 tablespoons

tablespoons of this powder with a liter of cold water. As soon as the water boils, 0.25-0.5 liters of cow, sheep or camel milk, 1 tablespoon of ghee of butter Yak (Shar Tos), camel or cow, as well as 50-100 g pre-stohed with oil of flour are added to it. (grout) and half or a quarter of a glass of any cereal (rice, millet). All this is again brought to a boil and readiness, and salt is added to taste. If the cereal is not put, then the salts are added very little, and modern city Mongols are sometimes not added.

Kalmyks usually do not rub green brick tea, but put it in pieces in a boiler with water (sometimes slightly warmed) from the rate of one handful (50 grams) per liter of water and boil to a boil, and then add twice as much milk (about 2 l) and then) and Salt to taste. This mixture with constant stirring is boiled for 10-15 minutes, and then filtered through a hair sieve, and the boiled tea is squeezed. Sometimes very little water is added, only 1-1.5 cups, and

Tea is boiled in milk. This is due to the absence or lack of water suitable for tea in salt marshmallows. It is this circumstance that should apparently consider the main reason for the occurrence of a number of steppe peoples the traditions of making tea with milk. In addition to milk and salt, a bay leaf, nutmeg and cloves are placed in tea, and only sometimes a little bit of butter. As a rule, they drink tea without oil, but with wheat crackers made of oil dough.

#### 4. Turkmen method

The name of this method is conditional. It is used only by the Turkmens of the northwestern regions of Turkmenistan, as well as the Kazakhs of Western and Southern Kazakhstan. This is not due to national, but with natural-climatic and economic conditions.

The tea is brewed not with water, but with milk, and milk is very fat, as a rule, camel.

This method is acceptable in the conditions of a hot climate of deserts and salt marshes, where the absence of water and the presence of hot sand  $(60-80 \,^{\circ} \,^{\circ} \,^{\circ} \,^{\circ})$  creates the main conditions for

carrying out such brewing. A large earthenware kettle of 2.5-3 liters is placed in hot sand for warming up.

Then, black baychian tea is covered in it, as a rule, small Indian low varieties, from the rate of 25 g per 1 liter of milk, "moisten" it with a glass of boiling water so that the tea is slightly "straightened", and then immediately poured with boiling camel milk and They are kept for up to 10-15 minutes, after which they are added by cream formed in the preparation of the chal (its first fraction). After that, the tea is necessarily shaken strongly in the kettle or several times pour from one dishes to another so that it mixes. Such tea is different from other combinations of tea with milk. It can, of course, be imitated in urban conditions, but subject to the same thermal regime.

#### 5. Uzbek method

In Uzbekistan, the national drink is green tea, which is drunk in all areas and cities of Uzbekistan, with the exception of Tashkent, where they mainly use black tea.

For the preparation of green tea in uzbek, or cocktail (doll), dry green tea is covered in a well-barched teapot (porcelain) from the calculation of TX + T, then slightly poured with boiling water (no more than a quarter of the volume of the kettle) and placed for 2 minutes in a hot current air (for example, in an open oven), but not directly to the fire, after which the kettle is added to half, covered with a napkin, and after 2-3 minutes, pour boiling water on top and add up to 3/4 volumes and then withstand another 3 minutes and added to it and add Almost to the top.

Along with Kokcha, the use of tea with pepper, honey and milk is common in Karakalpakia, and black tea is used in this case.

Tea with pepper (Murch Choi). It is prepared as ordinary black tea with the addition of dry black pepper (crushed) for each teaspoon of dry tea.

Tea with black pepper and honey (Ashal Murch Choi). 2 teaspoon of honey and 2-3 peas of black pepper are taken for each teaspoon of dry tea. All this composition is covered in a kettle and brewed as usual.

### 6. Japanese method

In Japan, they drink green and sometimes yellow tea. Yellow teas are brewed according to the Chinese classic method-right in Gayvan, with an exposition of 1.5-2 minutes. As for green teas, in most cases the Japanese before brewing them first rubbed into

Powder in special porcelain mortars, and then poured with boiling water in porcelain, previously warm spherical teapots with a capacity of 0.5-1 l. Dry kettles are heated on special roasters in the current of hot air or in such water lines and heated evenly the entire surface (and not just the bottom) to a temperature above  $50\,^{\circ}$  C, but not higher than  $60\,^{\circ}$  C. Therefore, the pens of Japanese dummies are either made entirely by bamboo or braided with a reed so that it is impossible to burn about them.

The norm of laying tea is on average - 1 teaspoon of powder of tea per 200 g of water, sometimes slightly larger. An important feature of the Japanese method is that not only a kettle, but also the water for brewing tea is brought to a temperature not higher than  $60\,^\circ$  C. To obtain such an accurate temperature and to maintain it, special, slowly heating heaters are used. The brewing time does not go beyond 2-4 minutes, which guarantees the safety of the maximum of the aroma in the drink, although it does not provide, taking into account the temperature of the water, full extraction of tea. However, it is the presence in the fragrance of the fragrance that the Japanese attach crucial importance. This tea in the form of a pale green liquid very poorly-intensify in color is poured into small cups with a capacity of about 30-50 g and drunk without sugar or other impurities with tiny sips and very slowly. Several cups are drunk before eating (breakfast, lunch, dinner) as a kind of aperitif and several cups - after eating. Usually, rice is washed down with this tea, and it is an indispensable element of any meal, especially dining.

In addition, ceremonial tea is being used in Japan - in solemn occasions or when performing a religious ritual, regardless of eating.

Cooking ceremonial tea And myself process solemn tea drinking Indeed, it is a very long ceremony that takes place entirely in front of the participants in the tea party. This is not only a tea party, but also a rather colorful sight like pantomime.

At first, women erase the sheet flat green tea "Tench" in the finest powder, accompanying this work with beautiful plastic gestures and gestures. Then this powder is reverently covered with small portions in special ellipse -shaped kettles, where, after each filling, hot water is poured with the same drip doses. Each new portion of tea powder is knocked down with a portion of water with a special rice panicle to the creamy mass, after which new portions of the powder of tea and water are added, and the operation is repeated again and again until the kettle is filled. The tea obtained in this way is close to liquid sour cream or sauce, and in color resembles spinach paste.

The tastes of ceremonial tea is extremely a terminal, but at the same time very aromatic. Its concentration corresponds to approximately 100-120 g of dry tea per 500 g of water.

## 7. English method

The British is one of the most tea -parting nations in the world. The British drink black teas, mainly South Asian -by 50 % Indian and 30 % of the Ceylon, as well as the East African (about 10 %), and only a small number of people in England use Chinese tea, including oolong.

The cult of tea prevails in almost every English family, and still tea party is one of the most characteristic national traditions of the British. That is why we can rightly talk about the English method of tea drinking, especially since it is developed in relation to the sharp, highly extractive South Asian tea. The British drink tea with milk or cream.

Pre -heat a dry kettle. Then, tea is poured into it at the rate of 1 teaspoon per cup of water plus 1 teaspoon "per kettle". The kettle is immediately poured with boiling water (twice) and insisted for 5 minutes. While the tea is infused, heated (but not boiled) milk is poured into heated cups-2-3 tablespoons (to taste) and then in

Milk pour tea. It should be emphasized that the British strictly adhere to the rules to pour tea into milk, but in no case vice versa. It is noted that the complementation of milk into tea spoils the aroma and taste of the drink, and therefore such a mistake is considered as ignorance.

The British drink tea in strictly defined hours: in the morning at breakfast, during lunch (13.00) and in "Foil O'Klock", i.e. At the afternoon day (17.00). Although the British drink extremely strong tea, they use a rather small amount of water: firstly, because they drink at a time no more than 2 cups, and secondly, because this amount of liquid by 20-30 % of milk consists.

The English method has become widespread in the USA, Europe and former English colonies and dominions.

#### 8. Indian method

In India and Sri Lanka, they preserved, and in some cases they further increased the English norm of laying dry tea and the English method of brewing is used, but without intermediate filling with water, part of the kettle, and do not always use milk.

For example, in Sri Lanka, the kettle is poured immediately at the norm that corresponds to the backfill of dry tea, but the welding is maintained differently: 3-4 minutes, if tea is prepared for 2-5 glasses, and 5-6 minutes, if more than 5 glasses. The norm of backfill of dry tea in Sri-Lanka is quite high: 1.5-2 teaspoons per glass. They prefer to drink their strongest tea with milk.

In India, especially in cities, tea is also drunk with milk, in English. But the Indians prefer to drink their best varieties of tea (Darjeling) without mixing them with anything. The norm of laying tea is similar to Ceylon, and sometimes higher. They insist tea usually for 5 minutes.

The national drink in India is the so -called frozen tea. It is prepared as follows: 3 teaspoons of the best tea are placed on 300-350 g of water, which is brewed in the usual way for 5 minutes and cool. Then, a special glass with a capacity of 0.5 l is filled with several ice cubes, pour all the cooled tea into it, add sugar and lemon chopped with slices, about half the fetus, and sometimes the juice of the entire fetus, which is squeezed into a glass, after which they drink tea with extremely small sips .

There is another proportion of frozen tea: 1 teaspoon of dry tea for every 150-180 ml of a drinking vessel.

In the latter case, more frozen tea is obtained.

## 9. Iranian method

The originality of the Iranian method is not so much in brewing as in drinking tea. It is common in Iran, in the areas of Afghanistan, in Azerbaijan and Kurdistan in Iraq.

Typically, Chinese or local (Iranian, Azerbaijani) black baykhovy tea of the middle or high fortress is brewed, but with a fairly fast exposure - 4 minutes. Pour such tea in Ormuds - small glass cups with a "waist", in the form of a vase. At the same time, they really appreciate the coler of tea-it should not be too dark, but necessarily bright, transparent, cognac with a slightly reddish or raspberry tint. They drink it with hot, small sips of a point with small pieces of stab sugar.

When brewing, they are placed with tea, and more often in a glass, a piece of cinnamon (darkin) or ginger.

## 10. Method of brewing Georgian tea

Georgian tea has a number of positive and negative aspects, the totality of which determines a special way of brewing it, in which the necessary effect can only be achieved: a good, benign tea infusion is obtained.

The pluses of Georgian tea are as follows: the presence of tips, especially in the highest varieties -bouquets, emergency, higher and first and the ability to quickly extract (sometimes too fast!). But Georgian tea also has considerable disadvantages-general sloppiness, negligence of its preparation, manifested in violation of the standards, which is why Georgian tea, firstly, is replete with "sticks"-fragments of stems, stems, which collectors do not separate during the collection of leaflets (flash) and "for the mass of the plan" is handed over to tea finals. Secondly, during sloppy production, a large mechanical damage to tea occurs and a large amount of baby appears, which should be filtered! If you take a pack of Georgian tea and sift it through a small sieve, then 15-20 g per 100 g of tea is souched as a crumb. This baby must be carefully outlet and thrown away, because it is precisely its presence that the Georgian tea spoils, which acquires not only a muddy color, but also loses quality. Since the crumb has a lot of dust and dirt is by no means tea origin, the tea infusion loses the aroma and taste that is inherent in it. And it is precisely this phenomenon that is finally discredited by Georgian tea in our eyes, because, if not it, we would drink a pretty good tea drink in quality. In connection with the indicated "features" of the technical and high -quality level

Modern Georgian tea can be proposed and applied the following method of brewing it, which is not national, Georgian, or can be defined as rational, adapted for Georgian tea (but in any case for any other!).

The main and decisive feature of this method is that the kettle in which tea has to be brewed should be well warmed up, more precisely, very warmed up, hot to a temperature of at least  $100-120\,^{\circ}$  C, while remaining dry from the inside. Rinse the kettle with hot water for this method is unacceptable. It is best to warm it in a pot of boiling water (while it is empty) or in the current of hot air. Direct heating on fire is possible, but dangerous, because in this case only the bottom can be repented - and the kettle will crack as soon as water is poured into it. Therefore, it is necessary to heat the entire kettle on a gas burner, turning it from side to side. Such warming is safe.

When the kettle is heated enough, a one and a half-time sample of dry tea from the calculation of 1.5 teaspoons per glass plus one and a half or two per kettle is covered in it and immediately poured with hot water, necessarily soft (with stiff water there will be no effect). Exposure does not exceed 3-3.5 minutes, sometimes 2 minutes are enough. If brewing is carried out correctly, then when filling water, a characteristic hiss and a strong, clearly tangible aroma with a rosanous shade should occur. The meaning of this method is that literally a few moments before brewing in a hot kettle

Additional heat treatment of tea, stimulating the sharp allocation of a "who fell asleep" in tea, especially if the tea was fresh and was undergrave at the factory. This effect is inherent only to Georgian teas made using new technology, i.e. A little unfinished. Tea is exceptionally fragrant.

# 11. Method of brewing Turkish tea

The purchase of trading organizations of our country in the late 80s and early 90s of Turetsky Tea-the greatest mistake. In the tea world, the very concept of "Turkish tea" is practically not quoted. "Turkish tea" is not a traditional concept in tea business.

This, so to speak, is a "remake", legalized surrogate of tea compared to its classic patterns. Even in Africa - in Kenya and Uganda - tea is more tea than in Turkey.

But since Turkish tea is nevertheless imported into our country, you need to know what it is and how to do it.

Turkish tea is pure tea, it is well pulled away from the crumbs, and even the crumbs in the quantity in which it appears in Georgian tea, in the Turkish tea industry. These are not clogged with impurities, homogeneous tea, but due to natural and production conditions, it is much worse in the aroma and taste of even Georgian. Therefore, Turkish tea is able to give a transparent, pure, but not intense infusion, also devoid of any aroma. He does not have aroma, for he is deprived of tips and after fermentation - overdry.

But the taste from it can still be "knocked out", brewing in the usual way, that is, not by filling dry tea in a teapot with boiling water, but by pouring dry tea in boiling water in a teapot of heat -resistant glass, with simultaneous intense intensive

Putting and rubbing this tea with a spoon for half a minute, and then, after removal from the fire, with an aging of 6 to 8 minutes in a tightly closed dish. With ordinary brewing, even the excerpt of Turkish tea in 15 minutes does not give a good effect, does not lead to its steaming and to the appearance of his taste, because negative phenomena from such a long brewing are already growing.

But Turkish tea can even be supplied to boil one minute on fire in a heat -resistant bowl, that is, treat it as barbarously as with no other tea. He will withstand it. But this must be done carefully and carefully, for sure, not by eye.

# 12. Uryanhaisk-Zabaikal method

In the upper Yenisei, on the territory of Tuva, as well as in the Trans-Baikal steppes and taiga, a peculiar way of brewing tea, which the original Siberians-Cheldons and Guran, call the "tea-sister" among the Russian newcomer.

The principle of brewing such tea was borrowed by the Russian Transbaikal Cossacks among the Tuvans, Shorsov, Khakasses and other ancient residents of the Uryanhai Territory and applied to both black baycho and green brick tea. It consists in the following.

Dry tea is covered in a large porcelain or earthenware, warming up, poured with cold water for about one third or half and immediately fall asleep with a handful of small red -hot stones (quartz, basalt pebbles, etc., which are prepared in advance and carried with them in a special bag ). Then the cold water is added and hot stones are laid again.

The capacity of the kettle or any other closed dishes usually is at least 2 liters. You can pour water at once, once, if the volume of the liquid displaced by the stones is verified, and their heat transfer (temperature) is known.

This method was distributed among hunters, geologists throughout the territory of the interfluve Yenisei and Lena. He makes it possible to brew tea right in the taiga, in any weather, even in the cold. After all, there is no need to use the kettle - any dishes with a lid are suitable. Thus, you can brew tea in clay dishes (kings), which expands the possibilities of using non -metallic dishes that do not spoil tea.

As for the correctness and hygiene of this method, they are obvious, especially in the field. Firstly, the brewing process occurs in one bowl and all the brewed tea remains in it (there is no division into tea leaves and tea drinks). Secondly, the beneficial substances of tea do not disappear. Thirdly, it is enough to have a few well-washed pebbles and heat them on fire (bonfire, on charcoal, in any furnace-that

Makes them even cleaner) in order to prepare absolutely hygienic (in the presence of pure water and dishes) tea without much difficulty.

Finally, it should be noted that the taste of the sister-foal is much superior to the taste of tea brewed in the usual way. Therefore, even those who live in settled conditions, especially in villages, use it in Tuva and Transbaikalia. In urban conditions, it is much more difficult to use in this way, because the stones can only be hot on very clean drives of electric stoves, but in no case on the fire of gas burners, where they acquire an unpleasant odor, of course, turning to tea.

### 13. Latin American, or Cuban method

In Latin America, they drink mainly a mat or onsa - drinks that differ in botanical origin and taste from real tea. In Cuba and Jamaica, as well as in Barbados and other former colonies of England in the Caribbean, in Guatemala, Honduras and Belize in Central America, black buttonholes are also drunk, but they cook it like a mate, in Latin American. In the absence of mate, you can also use a bathing and green tea in a ratio of 2: 3. They take 4 teaspoons of black tea and 6 teaspoons of green (or 7 teaspoons of only black), 1 liter of water, 1 pineapple, 1 lemon, 15 teaspoons or pieces of sugar, 2-3 teaspoon of the Cuban rum, 20 ice cubes.

Pineapple is cut with dice 1 cm3, poured with rum, filled with powdered sugar, closed and put in the refrigerator for 1 day. Prepare tea bathing, brew tea, withstand tea leaves for 10-12 minutes, cool. They rub the zest from lemon into tea, squeeze its juice, add pineapples and ice impregnated with rum and pour it into glasses.

## Chapter 13. with what and how to drink tea

How can you drink tea right in order to get maximum pleasure and benefits from him? Here, of course, it is impossible to approach only from the point of view of individual nations, because habits are very relative.

So, from the point of view of the Chinese or Japanese, who retained the most classic tea drinking techniques, i.e. Accustomed to drinking tea in its pure form, without any impurities, snacks, etc., all other methods seem barbaric. Already in the First Code of Tea, in the "Book of Tea", at the end of the VIII century, the principles of the purity of tea were formulated, i.e. The ban on mix this drink with something.

In addition, the Chinese and Japanese drink tea very often, several times a day, but in very small portions. Indians willingly mix tea with milk, and also consume tea with lemon and sugar. Tea with lemon is also drunk in Iran and Turkey, biting instead of sugar with raisins, figs and almonds. They do not refuse here to flavify the already finished infusion of tea with ginger, cardamom, a battery, fragrant pepper (a glass on a glass), cinnamon and other spices.

In the Arab countries of North Africa, they drink hot green tea, insisting it along with peppermint and then adding sugar (but not always). Sometimes, like other peoples of the East, North African Arabs drink green tea with ice and in this case add citrus fruits (lemon, orange, grapefruit) to it.

In Europe, tea is drunk almost everywhere with sugar, but, as a rule, not particularly sweet. They do not use sweets with tea at all.

In Russia, due to the fact that tea was not perceived as an independent drink and always prepared quite liquid, in the past, even in wealthy layers, it was created

The need to "embellish" tea not only with sugar, but also with all kinds of confectionery: syrups, jams, cookies, cakes, butter bread, simple bread with butter, as well as candies, lemon and in some cases with figs, spices and milk. Thus, in Russia, all types of tea drinking were accepted, united and significantly supplemented, as a result, a Russian, national method of tea party was created.

Of course, it would be ridiculous to condemn any method of tea drinking or calling for a rejection of it on the grounds that it does not correspond to a classic or scientific model. In addition, it would be wrong to disclose everything that the centuries -old experience of other peoples gave. It is much more reasonable to point out the rational that they contain all kinds of methods of drinking tea, and on which they should not be unconditionally follow

As we have seen, the food products with which tea are used can be combined in the next five groups:

- 1. Sugar and other sweets (sweets, jam, honey).
- 2. Milk and dairy products (cream, butter).
- 3. Flour, cereals (rice, millet) and flour products (bread, muffins, cookies, cakes, gingerbread, etc.).
- 4. Lemon and other citrus fruits, natural juices and fruits (apples, berries).
- 5. Spices (ginger, cinnamon, pepper, cardamom, badiyan, mint, caraway seeds).

How does tea interact with these products, do they enhance or reduce the beneficial, healing or taste properties of tea?

## 1. Tea and sugar

Tea and sugar ... These two words, two concepts from childhood are perceived by us as inextricable, closely connected, like only bread and salt, cabbage soup and porridge. Such they entered our consciousness not only from home life, but also from literature, from folk tales. But should they be born for each other as we are used to it?

After all, the custom of sweetening tea is far from universal. It is used only in Europe and in some places in the Middle East. And in Europe, this "invention" came into use only three hundred years after the appearance of tea, in the middle of the 18th century, when the tea decided to sweeten by analogy with ... cocoa.

Indeed, sugar added to tea, especially in small doses, helps to improve the taste of tea infusion, and a variety of sugars that are part of a tea leaf part in the production process of black tea are involved in the formation of its aroma, since they are caramelled with heat treatment. On the other hand, too large doses of sugar worsen the taste of tea infusion, drown out a specific tea aroma. In addition, the studies of German scientists have shown that sugar acts as an absorption of vitamin B1, when we put an excessive amount of refinade in the infusion.

Therefore, you should get used to drinking tea with a very small amount of sugar or with such sweets as raisins or honey. It is advisable to do this to those who suffer from vitamin deficiency B1, nervous diseases, especially the exhaustion of the nervous system. As for other sweets (sweets, oriental sweets, chocolate), it must be borne in mind that all of them contain sugar and, in addition, a number of odorous substances, the aroma of which inevitably drowses the natural delicate aroma of tea. That is why it is impossible to get genuine pleasure from a real, properly prepared tea, jamming it at the same time with sweets or other sweets. It is better to drink unsweetened tea with sweets so that a sip of tea follows after the sweetness has already been eaten.

#### 2. Tea and flour, tea and cereal

It is unlikely that the combination of these words will seem natural to most readers, and nevertheless, very many drink tea not only with cookies and cakes, but also with bread, sandwiches. But in essence there is no fundamental difference between a glass

The flour overflowed in oil, which is falling asleep into tea, a resident of Central Asia, and the eclair cake, which a visitor to the metropolitan cafe is drinking tea. In both cases, the tea acts the role of the transponder of the flour product into our body. In addition, tea helps the digestive organs to absorb, digest heavy flour and cereal products, and also increases their nutrition. That is why, sometimes heavy for assimilation, flour products in combination with tea can even be an essential food product for a long time, capable of maintaining the life of our body in the right tone. For this, for example, the nutrition of some patients with crackers is based on this. Thus, tea complements and ennobles flour products, and not they "embellish" tea. Moreover, flour products in general reduce the taste, most attractive properties of tea, not to mention the fact that they simultaneously kill its aroma. That is why you should not look at tea as moisture moistening bread or cookies. That is why with flour products you should not drink liquid tea.

On the contrary, drinking tea along with flour products or cereals, it is necessary to increase its concentration. Consequently, the peoples of the East, seasoning with tea with flour or drinking tea, it is not by chance that they increase the hustling of tea (or increase the tea drinking up to 5-6 times a day).

Thus, they prevent, at least partially, the disappearance of the nutritious, healing properties of tea and guarantee its useful effect as a digestive catalyst.

It turns out that concentrated tea in Tibetan, with overfected flour, is much more useful and from a scientific point of view is much more correct than ordinary tea with cakes or cake. With the absorption of flour products with liquid tea, i.e. With a large mass of reserved water, we doubly increase the negative effect of these products on our body, overload it with carbohydrates, water, create a load of the heart and the entire circulatory system, and then ... we accuse of the harmful effects of tea, which, it turns out, is completely here. how. That is why, if we certainly want to eat cake or cookies with tea, then they need to be washed down with very strong tea.

#### 3. Tea and milk

Many lovers and connoisseurs of tea aroma and taste consider it blasphemy to mix tea with milk and cream, as they do, for example, in England. From the point of view of a true fan and an expert on tea, the use of tea with milk, and even more so with oil, as is customary in the Mongols, equivalent to damage to tea, drowning his bouquet.

There is almost no fundamental difference between English and Mongolian methods of drinking tea. In both cases, along with tea, the second mandatory component is unblinking (sweet) dairy products (milk, cream,

butter), differing from each other only of a varying degree of fat content, and the third component is the additives of substances that give the drink or sweet (sugar), or bitter-salt (salt, pepper) taste. But it is these "third" substances, and not neutral dairy products fundamentally change the overall taste of the drink, enter the dispute with a tea aroma and, in most cases, drown out it. Therefore, from a tasteful point of view, sugar is more changed, "spoils" the aroma of tea, changes its specificity than, say, milk. However, we are so accustomed to tea with sugar that we do not even think of them separately.

At the same time, we clearly realize that salt and pepper are not much knitted with tea, change its natural taste. But this is only a matter of habit. Many peoples add salt and pepper to tea in the same way, almost automatically as we are sugar. Meanwhile, it is salt and sugar - the pole of salty and sweet taste - are able to modify the original taste of tea much more than milk. Thus, the taste properties of tea are not exposed to destructive exposure from milk and its derivatives.

Well, what do the healing, healing properties of tea from the additive of dairy products become? Are they worsening or not? What processes occur when adding to tea infusion of milk? After all, milk is a product with a complex chemical composition.

It turns out that a mixture of a tea infusion with milk is an extremely nutritious drink that has a drink that has and

stimulating and strengthening qualities. As you know, milk contains over 100 different nutrients necessary for a person. Milk is rich in vitamins-up to 20 species, and only 3-4 species go into oil during processing, and the rest remain in waste. At the same time, solid unbroken milk is sometimes poorly digested by the stomach, which explains the desire of a person to use to nutrition to a greater extent

Recycled and shot dairy products. Tea is extremely successfully "correcting" the shortcomings of milk, facilitating the digestibility of it with the body. Moreover, vegetable fats and proteins available in tea solution, mixing with animal fats and milk proteins, create a particularly nutritious, exceptionally useful fat-white complex for humans, not to mention the fact that a rather impressive set of vitamins and stimulating is added to him substances.

At the same time, milk softens the effect of caffeine and other alkaloids, while the tannin of tea makes the mucous membrane of the stomach less susceptible to negative phenomena of whole milk fermentation. So tea helps milk, and milk - tea.

Thus, tea and milk form an ideal healing mixture, while the specific aromatic and heating qualities of tea are by no means eliminated. Of course, in this case it is about well and properly brewed tea. It should be emphasized that tea for consumption in a mixture with milk must be prepared even with greater thoroughness. Given the mitigating properties of milk, in these cases it is necessary to increase the dose of dry tea for brewing by 1 teaspoon, i.e., according to the formula (tx/2) +2t. Therefore, on a liter of liquid consisting of tea with milk (250 g), it will be required (1x5: 2) + (2x1) = 4.5 teaspoon of dry tea instead of 3.5 teaspoon, if we were talking about tea without milk.

With milk, you can use all types of tea, especially black and green, both kayak and pressed. Particularly good with milk is green tart teas in a mixture with black. The specific aroma of tea, as was said, does not disappear from a mixture of tea with milk, but it acquires, so to speak, another shade, because it spreads against the background of the aroma of milk. It is best to consume in mixtures with tea not boiled, but raw

Pasteurized milk, heated to 40-60 ° C, or milk powder milk, which does not have extraneous odors of the dishes and is not devoid of vitamins in the process of boiling.

Milk tea is thus almost an independent drink created on the basis of tea. It is no coincidence that it is widespread among the peoples of the globe.

Milk tea is a good preventive. This drink is especially useful for diseases of the kidneys, heart, as well as a strengthening agent for dystrophy, exhaustion of the central nervous system and polyneuritis.

But for a completely healthy person, whether it be an athlete or a scientist, strong, fragrant tea with milk - an excellent drink, especially in the morning or after overstrain.

#### 4. Tea and fruit

The use of fruit tea as an additional flavor and taste component, of course, does not cause any worsening of the healing and nutritional properties of tea. On the contrary, these properties are only complemented and thereby intensify. But the specific aromatic properties of tea are always changed, and in some cases completely lost. Therefore, the introduction of natural juices or fresh and dry fruits into tea (for example, fine -cut apples, raisins) is a matter of individual taste. Sometimes fruits are added to tea for medicinal purposes. In this case, tea can serve either as a "transporter" of a number of acids (lemon, apple, ascorbic), which can in pure form cause irritation of the mucous membranes of the digestive organs, or play the role of an amplifier of the properties of certain fruits. For example, with a number of diseases, it is recommended to introduce products containing pectins into a diet. Such products include apples.

At the same time, pectins contain teas. Therefore, it is very advisable in such cases to combine tea with apples, cutting them with slices directly into the finished hot tea infusion.

# 5. Tea and lemon

Most often, tea is consumed with lemon and less often with other citrus fruits (for example, in Japan with Pomeranz, in Arab countries and in America with grapefruit).

The connection of tea with lemon in one dish is a purely Russian invention. It is original and unique. Original and pleasant to taste, unique - in composition. The fact is that until the 80s of the XIX century [1] it never occurred to anyone in the world to combine tea and lemon in one food-wrap. Why? Firstly, for reasons of a purely geographical nature, i.e. Because it was impossible to meet lemon with tea. Where lemons are

We are widely known where they grow and where they are grown as the main commodity culture, i.e. In the countries of the Mediterranean, in wet subtropics: the Malaysian coast of Turkey, in Lebanon and Palestine, in Cyprus and Crete, in southern Italy and in Sicily, on the Balkarian Islands, on the southeastern coast of the Pyrenee Peninsula and in

French Provence - tea does not grow in all these seaside countries. He was always unknown there, but we don't use it to this day, because these are countries of traditional winemaking with a wide, everyday consumption of wine, as an ordinary table drink, as well as the country of "coffee" zone, where a consumable afternoon or morning soft drink has been served since the Middle Ages. coffee.

Secondly, there were also serious culinary reasons why no one could think of a lemon-channel composition in lemon countries. The fact is that in the Mediterranean, lemon from time immemorial, i.e. From the time of ancient Rome, they are considered as a seasoning for fish, for fish dishes, as a component of various gas stations and sauces that enhanced the "piquancy" of game dishes and poultry, and, finally, as an acidic additive to sweet dishes from non -acidic fruits. Thus, the sphere of culinary use of lemon was strictly determined and traditionally withstood, observed, not even allowing thoughts about some other use.

That is why in the XVIII century, when the court, "invented" culinary art was replaced by folk-in-law cooking, then in the supposedly "new" compositions, Lemon still did not leave the sphere of sharp fish and meat seasonings, which excellently proves the invented on the invented Balearic islands mayonnaise, - a seasoning with a lemon that is equally suitable for cold, fish, meat and vegetable dishes. In other words, trying to find the wider culinary use of lemon, its juice - at the same time, could not go beyond the scope of its traditional use and, even creating "new compositions with lemon", in fact they did not break "sharp seasonings" with the traditional compositions, leaving a lemon as a culinary object in the same "culinary clip" in which it was determined by the ancient Romans.

Russia, however, knew either lemon or tea, it, its people were completely free from the bonds of centuries -old culinary traditions associated with these food objects. And since both lemon and tea were "eastern" origin, as they said and thought, not very understanding the foreign geography, their combination and unification in one "dish" for Russian people seemed logical, natural and not at all "shocking", and, on the contrary, Russian is prestigious: he has tea, and lemon, and sugar- all the grounds in him!

Of course, the very first fact of such a composition was, of course, like much more in the history of culinary inventions - a pure accident. But the fact that this accident occurred precisely in Russia is quite natural, because it could not happen anywhere else: from China, a traditional, "pure" country, non -mixed tea party, such a "barbaric custom" simply could not be listed in any way. In the countries of the traditional use and production of lemons, the latter were considered the latter as culinary facilities intended and used exclusively for the fish-and-item.

So there was nowhere to borrow from. It was only possible contrary to borrowing or contrary to the foreign region to throw a certain purely Russian, "Rasy" former, a kind

Russian tyranny: they say, here you are! And it turned out - great! Who could go to such an invention? In principle, only one option is possible. The capital's rich "experimenter", an aristocrat or merchant who has a good

Taste, freely thinking, inclined to originality. He tried to put lemon into tea and began to treat friends, and those - his friends. And the fashion "went."

This introduction of fashion from above is a frequent and "tested" direction in the spread of customs and habits in Russia. The cause of a fairly fast distribution

This combination in the 80-90s of the XIX century-consists in the fact that this "invention" was taken "into service" with taverns and restaurants, which introduced it into "folk culture".

What happens with a combination of tea with lemon (or other citrus fruits), if we consider this from a modern scientific point of view? Why was this combination fixed not only as "tasty", but also "necessary", "mandatory"?

The fact is that in combination with citrus fruits, of course, the nutritional, healing properties of a tea drink are intensified: it better restores lost strength, quenches thirst. That is why tea is now drunk according to the Russian model with citrus fruits mainly in hot countries - India, Egypt, Iran, Turkey, in Florida and California (USA). But the taste of tea with lemon changes. It is made "citrus", peculiar, pleasant, but still becomes "not tea". The same thing happens when other fruits are added to tea: the aroma of tea disappears. However, it is wrong to understand that tea with citrus fruits and other fruits and juices containing acids becomes "weak". The tea only brightens, the intensity of its coloring decreases, in other words, its pigmentation, its color, changes. But the fortress of tea does not change. Fruits and juices change only the color and aroma of tea, without affecting, without lowering, and sometimes strengthening its dietary, nutritious and healing properties. But the one who wants to feel the true taste of a particular variety of tea, of course, should not mix it with anything, including lemon.

#### 6. Tea and spices

Even to a greater extent than fruits, the natural aroma of tea of various spices changes. They exacerbate in the composition of hot tea and their own aroma, which, being mixed with the aroma of tea, acquires in each individual case, i.e. With each spice separately, its own special, unique bouquet. This bouquet is usually harsh, picanten, well intelligible and is designed for people either devoid of thin smell, or those in need of acute taste sensations. With a tea aroma, it usually has nothing to do.

In combination with spice tea, a usually strong, sharply stimulating drink is given, which should be used very carefully.

The use of fragrant and bitter pepper with tea (at the rate of 1-2 grains per cup), peppermint, caraway seeds, a battery and partly ginger.

At the same time, the systematic use or increase of the dose of spices such as cinnamon, cardamom, cloves, nutmeg can cause enhanced activity or irritation of some internal secretion organs, as a result of which unwanted depression may occur with abuse. That is why spices are consumed with tea (and they are brewed along with the finished tea directly in the kettle, and the pepper-horses are pre-crushed) only in extremely small doses and, moreover, occasionally.

So, when drinking tea with any impurities, its aroma changes completely or partially, in some cases beyond recognition, in others it is only slightly, but never remains unchanged, clean. Everyone who wants to experience the natural taste of tea should take into account this circumstance.

The situation is different with the nutrients of tea: they are not so susceptible to destruction from contact with impurities as aroma. On the contrary, as we have seen, in some cases they even sharply intensify: when adding citrus or milk.

To preserve the aroma and a complete sensation of the taste of tea, it is not enough to know what to drink with, it is also important to know how to drink it.

It has already been said above that tea is best to drink from porcelain utensils, which should be not only clean and devoid of extraneous odors, but also dry before pouring tea. Tea should not be poured into the cup to the top, you should try not to add a minimum of 1.5 cm to the edges, leaving space free from the liquid.

Tea can be drunk hot enough, but they should not be burned. The pharynx should be very small, and it is best not to swallow tea right away, but to hold a little in the front of the oral cavity and even grind with the tongue about the palate and the upper gums, to make tea. This will not only help to feel the taste of tea, but also prevent the ingestion of too hot fluid into the esophagus and stomach.

You can drink warm tea, but not lower than  $18\,^\circ$  C, because with further cooling, its aroma disappears completely, and the taste is significantly weakening. You can also not leave tea open in the cup for a long time, all the more it is impossible to pour it into a saucer - this will sharply increase the surface of evaporation and, therefore, not only enhance cooling, but also weaken the aroma.

#### Chapter 14. Drinks based on tea

Tea is not only capable of showing and modifying its taste thanks to various brewing methods and thus create a variety of variations of the drink, but also serve as the basis for completely independent drinks, in which, however, it plays a very significant role. We are talking about mulledwine, glog, Castard and tea jelly, in which, along with tea, half the volume is such unlike each other as wine, vodka, starch, fruit juices, cream, eggs.

# 1. Castard. "Egg tea"

Castard is a popular hot drink in England, the so -called "egg tea", prepared as follows.

In a large porcelain kettle (800-1000 ml), tea is brewed, pouring it at first half a glass of boiling water, and then with boiling cream, and let it brew for 10-12 minutes. At the same time, egg yolks with sugar are rubbed, they are beaten and mixed with 0.5 cups of tea, pouring into the kettle, stirring two or three minutes a spoon for a minute as soon as possible so that the yolks do not curl up. Then they close, let it brew for another 2-3 minutes and drink.

On 5-6 teaspoons of black tea (Indian), 0.5 liters of cream of 20 percent, 4-5 egg yolks, 0.5 cups of boiling water, 125 g of sugar are taken.

# 2. Grog

GROG - a drink also prepared with tea, but alcoholic. The English sailors came up with Gog, and most likely the English pirates, and he quickly received

Distribution in a foggy climate. This drink can only be recommended for emergency circumstances: for the rapid heating of people who froze in the snow falling in a storm, ice water, a storm, a buran, a blizzard, during severe hypothermia, colds, frostbite associated with exhaustion of forces. In all these cases, the Skog gives a quick effect of excitement, activates breathing and heart activity. But the constant use of Skog, of course, is inappropriate.

For this grog, tea of three-five-time fortress is brewed, i.e. 1 a pack of tea (50 g) for 750-1000 ml of water. The composition of the grog also includes 0.75-1 l of any well-purified vodka by a strength of up to 40-45 ° and 200-250 g of sugar.

By boiling separately about 1-2 glasses of water, pour the same amount of vodka there and fill sugar, and then boil this mixture for 5 minutes. After that, they brew tea and let him brew. Then, the finished tea and the rest of the slightly heated vodka is poured into the hot syrup and everything is quickly stirred. Skog is drunk with very small sips, its largest dose should not exceed one glass (200-250 ml).

### 3. Tea jelly

Tea jelly - a drink consisting of tea, any fruit juice, sugar and starch, usually corn, rather than potato.

In hot, just firmly brewed and strongly sweetened tea (black, green or their blend), starch of 1-2 teaspoons for a glass of brewed tea diluted in cold boiled water is poured into cold boiled water and quickly stir, as in preparing ordinary jelly, until thickened (At the same time, dishes with tea are on fire, which is turned off immediately after adding a starch solution). Then fruit juice is poured into the hot jelly, by

The volume is equal to half the brewed tea, and also quickly stir. If desired, you can add vanilla or vanillin, clove or cinnamon and cool. It turns out a cold liquid with a pleasant, thick consistency with the taste of tea and fruits.

6 teaspoons of dry tea, 20 pieces of sugar, 0.5 1 of fruit juice (apple, iva, orange), 6-8 teaspoons of corn starch, 1 cup of boiled water (for diluting starch) are taken per 1 liter of water.

#### Chapter 15 The use of tea is not as a drink

We have already said that tea can be used as a medical agent not only as a drink, but also in the form of juice of fresh leaves, extract, in the form of dry powder for the treatment of burns, external and internal ulcers, as well as to stop vomiting. But besides these home methods of use, tea serves as an important raw material for modern

The pharmaceutical industry, where natural caffeine is produced from tea dust, and vitamin R. is extracted from a coarse tea sheet annually at each cup of grader factory, several tons of tea dust - the finest yellowish powder.

Except Togo, Created sterile preparation vitamin P from tea (For injections), used in particularly severe cases of hemorrhages and in radiation disease. Finally, tea extracts are used in pharmacology as a lifting and painkiller that replaces morphine, but not causing negative, side effects, like drugs.

An even wider application is such a product of a tea plant as tea seed oil. A tea bush gives a small amount of seeds containing from 16 to 26 % oil (some agricultural vehicles have up to 45 %). The collection of seeds for oil is produced in China, Japan, India and Kenya. The receipt of tea oil in Japan, where it is called Zbaki is especially well delivered.

Tea oil in composition is close to olive, its color is straw-yellow (if pressed in a cold way) or yellow-orange (with the thermal method of pressing). Apply it, albeit in small quantities, in various industries:

- 1) in instrumentation as lubricating oil for thin and exact mechanisms;
- 2) in the food industry instead of olive oil (only tea oil obtained by cold press);
- 3) in the soap industry to obtain soap (from hot pressing oil) containing the poisonous substance Saponin, which has good detergents. The soap made of tea oil does not need dyeing: it has a beautiful natural yellow color, in addition, soap with a saponin has significant solidity and therefore abrasions less;
- 4) in the pharmaceutical industry for the preparation of high -quality cosmetic drugs.

Partially tea oil is also used in the tea business itself - to impregnate tea containers (wooden) in order to protect it from the influence of extraneous odors. In addition to the oil, even cinema of tea seeds are used in China, which contain a large amount of saponin (7-8%). Firstly, they are used in a crushed powder form as a strong means of combating pests of garden crops, completely harmless to plants, and secondly, in briquetted form as a means for washing and strengthening hair and removing stains on the tissues.

Recently, tea raw materials have become a source of obtaining dyes. Tea dyes, characterized by stamina, attractive natural color and not only harmlessness, but also the presence of a number of useful substances (including vitamins), can serve as ideal food dyes. In our country, the receipt of tea

dyes of yellow, green and brown colors. They are used for painting and at the same time vitaminization of dragees and marmalade. These products are produced by the Moscow confectionery factory "Drive" and the factory named after Marata. Two or three pieces of marmalade,

Painted with tea dyes contain the daily dose of vitamin P (150-200 mg), the same dose of vitamin P is contained in 20 g of dragees.

As a coloring substance, tea is also used directly, for example, in cosmetics. A very strong infusion of fresh tea, mixed with henna, gives a beautiful and much closer to the natural color of the hair golden-chestnut coloring than one henna, and at the same time serves well strengthening the roots of the hair with a means of falling out, the appearance of dandruff, etc.

Hygroscopic properties tea Use For Cleaning smooth AndShiny surfaces where special cleanliness is required (for example, so that the mirror has shine, it is washed with a weak solution of tea).

But the most widely used tea is in cooking, especially in Asia. Dry tea is used in a Chinese cold and hot kitchen as a specific seasoning, especially to meat dishes and game, as well as for shaving vegetables, rice and food from fish and mollusks.

Fresh tea leaves like a salad are eaten in Burma, and in Tibet they cook soup from them, like vegetables. In addition, in China, Burma, Thailand, the eating of sauerly tea Leppet-SSO is widespread, which is used not only as an independent vegetable dish, but also in combination with meat, fish and other (molluscular) dishes.

Finally, in cooking, tea extract is also used mainly from fresh tea leaves as a powerful tool that prevents the processes of decay and damage to food products.

Interestingly, the Chinese and Burmans use tea as a seasoning in cooking in combination with garlic. As you know, during the preparation of a tea drink, you should in every possible way avoid the effect of the smell of garlic, which spoils the tea aroma, kills it. In cooking, on the contrary, a combination of tea and garlic creates a peculiar piquant aroma. At the same time, the bactericidal properties of food prepared using tea and garlic are literally doubled, and at the same time the tea absorbs, muffles and even makes the garlic usually unpleasant for the surrounding smell almost indefinitely. By the way, the cut and crushed garlic in tea infusion has long been used as a Russian folk remedy for the cessation of toothache, and the treatment of fluxes. This infusion was kept in the mouth until the flux fell and the pain stopped. The effect usually occurred after a few minutes, which was primarily explained by the bactericidal and astringent effect of this composition on the gum mucosa.

## Chapter 16. who supplies the world with tea and who drinks it

Now, when we know about tea relatively a lot, the question involuntarily begs: what about the supply of humanity tea today? Who, which countries supply the world with tea and where they mainly drink tea?

Until recently (1990), five countries - the largest tea producers gave 70 % of world production. Of these five tea countries, three belong to the number of aspirations. This is China, Japan, Russia. Almost 75-95 % of the tea products of these countries went to their own domestic consumption. Moreover, Russia and Japan, in addition to its own production, also import foreign teas to meet the needs of its population for tea. Thus, India, Sri Lanka and Indonesia, who drink tea themselves, were and remain the main exporters of tea on the world market. Behind them is an African group of countries that export almost all of the tea they produce. These are Kenya, Uganda, Malawi, Mozambique, Tanzania, Zair, Madagascar, where domestic consumption is practically absent.

Thus, the supply of the whole world by tea is largely concentrated in the hands of those countries whose very population does not drink tea and is not interested in improving the quality. (This also applies to Georgia.) At the same time, such a gigantic tea -producing country as China, practically eliminated the export of tea to foreign markets and, if exported, a little compared to domestic production. This, of course, does not mean that China has stopped producing a lot of tea. But he produces it today in quantities that cover mainly only local needs, i.e. About a fifth of world production (between 200 thousand and 300 thousand tons - data on this production have not been published for the past ten years). For a country with a billionth population, this is little, given the local traditions there. About 50 thousand tons are exported from this amount annually (in 1972 - 51.3 thousand tons. This is the last published figure!). Thus, over the past hundred years, the gradual crowding out of China from the global tea market has occurred. This is what a pace was this loss of China's positions in the World Chaytorgiva.

Since the 40s of the last century, China gave all 100 % of world tea trade. In this regard, he had no competitors. Such "great tea powers" as England and Russia, which consumed the lion's share of the tea produced throughout the world, depended on China, which supplied them with tea, and were forced to "bow to him". The very entering the world market of China with tea is the result of the long pressure of the Western powers on China, which refused to "open its doors" and went to export his tea by no means voluntarily. Only Russia and the Central Asian states, China sold tea at will, since this trade did not go with money, but was of exchange character until the end of the 19th century. But having forced China to sell tea, England at the same time began its production in India and at Ceylon (Sri Lanka). And by the end of the 19th century, the situation had changed: in the 90s, China gave 70-66 % of world tenders of tea, since about a third of world needs were already able to produce Ceylon (Sri Lanka) and India.

On the eve of the First World War, the share of China fell to 25 %, and on the eve of World War II, or rather, by the mid-30s of our century-up to 10 %.

The wars into which China was drawn in the 30-40s led to a reduction in its participation in world tea trade to several percent. In fact, it was nullified.

Only in the period from 1949 to 1959, over the decade of national authorities, the production of tea and its export to the world market were restored to the level, at half the fact that India gave and what was before the war-about 10 % of the total receipt of world market.

However, after several years of the "cultural revolution" and other shakes that deeply affected China's economic life, even this modest share fell even lower. Firstly, it fell absolutely, because they began to export less and less Chinese tea every year to the world market. Secondly, it has fallen relatively, since over the past decades, the export of tea to the world market has significantly increased not only from the tea giants-India, Sri Lanka, Indonesia, but also from the young African countries, which, although they produce not particularly large quantities Tea, but everything produced is taken out, because they do not use tea inside these countries.

As a result, the share of China in global tea trade in 1970 barely reached 4-5 % and in the 80s not only did not rise from this low level, but also in some periods fell even lower (in fact up to 2-3). Currently (the 90s of the XX century), China has slightly increased the share of tea export in the United States, especially green, as well as the export of black tea to Germany, so that the total number of tea exported to the global market has doubled, i.e. The weight is about 5-7 % of tea sales in the world market. In 1993, the export growth trend remained, so, apparently, China will soon restore its share of 10 % of world exports, but moreover it is unlikely.

It should be borne in mind that the tea tastes of the population of our planet have changed significantly over the past half a century. New generations are accustomed to sharp South Asian teas - Indian, Ceylon and quite satisfied with them.

England and Japan remain permanent consumers of Chinese tea, which, despite their developed tea production, willingly import valuable Chinese teas. A small amount of Chinese tea has been going on in recent years to Ireland, Australia, New Zealand, South Africa, USA and Germany. In all these countries, the consumption of Chinese teas that maintain high cost is increasingly limited to a relatively narrow social layer - the top of the bourgeoisie and extremely few aristocracy now.

The main consumer of tea from the countries that do not produce tea, the countries of the Anglo-Saxon zones remain, buying a total of 850-870 thousand tons of tea, as well as Arab countries, Libya, Egypt, Sudan and Jordan, importing 150-170 to the world market. thousand tons of tea. These two groups of countries consume a little more than half of the tea in the world, China, Japan and Russia "drink" the rest of the time. Against the background of these aspiration giants, the percentage of tea consumption by other countries looks scanty.

It is characteristic that the English influence in the field of domestic traditions and habits is just as firmly fixed and preserved both in countries, tightly connected with the UK in the past (Canada, New Zealand, Australia, South Africa), and in countries that have long been struggle against a long time. English colonial domination (Ireland, Egypt, Sudan, Iraq).

This fact is even more clearly confirmed by data on the consumption of tea per capita in different countries. Among the two dozen countries with the highest tea consumption (more than 0.5 kg per soul per year), three quarters were in the past or are still under English influence. The exception is only Japan, Iran, the Netherlands, Morocco and Tunisia - countries with a long -standing, Dobritian tea tradition (see table).

#### Per capita tea consumption per year

Countries	The number of tea per soul, pounds	Countries	The number of tea per soul, pounds	Countries	Quantity Soul tea, pounds
England	9.74	Sri Lanka	3.02	Had	1.73

Ireland	8.10	Canada	2.45	Japan	1.71
New Zealand	6.72	Tunisia	2.28	Juthania	1.70
Libya	6.02	Morocco	2.27	Iranian	1.69
Australia	5.95	Chile	1.94	Sudan	1.49
Iraq	5.38	South Africa	1.86	Malaysia	1.05
Hong Kong	3.04	Netherlands	1.76		

It is interesting that in this table there is no data on the consumption of tea per capita in two such great aspiration countries as China and Russia.

As for China, the data on the acquisition of tea in this country per capita have always been the subject of guesses, because there was no statistics on this subject and, apparently,. It can only be assumed that the Chinese consume about the same amount as in Hong Kong, i.e. Over 1 kg, but not more than 1.5 kg per soul per year.

The fact is that in China, unlike Japan, family consumption is family. Tea is brewed in large teapots for the whole family, so the consumption of tea is much smaller, although its fortress and frequency of consumption are no less than in England, where lonely people or families of old people out of two people are consumers of tea. In this case, the consumption of tea increases sharply.

In India, the United States per capita accounts for less than 300 g of tea, in India - 290 g, in the USA - 277 g, in Russia - 249.5 g. This is explained by different reasons: in India - the poverty of the majority of the population, to which tea is simply not according to pocket; in the USA - a significant percentage among the population of German and Romanesque peoples, as well as blacks that do not use tea as a drink; In Russia - in recent years, the habit of the majority of the population to drink rather liquid tea. At the same time, in our country there are separate areas (Buryatia, Bashkiria, Kalmykia, Tataria), where the consumption of tea per capita per year reaches more than 4 kg, i.e. Approximately at the level of tea consumption in England.

For the last place in the world in the consumption of tea for a person, Spain and Greece "argue", where each has only 20 g in a year, i.e. Almost half as much as it goes to the household for one day with a modest English family. Residents of France and Italy, content with a 50-gram pack of tea for a year, but drinking a lot of wine, left these "Champions".

There is a fairly clear distribution of tea consumption, coffee, beer and wine that never "crosses". This means that peoples consuming coffee or wine do not consume at the same time tea. The most striking examples are the French and Italians, with their 30-40 g of tea per year! And on the other hand, the Chinese, Japanese and Uzbeks, on which on average there are 0.1 liters of grape wine for a whole year.

It is no less amazing that the consumption of tea belonging to the most harmless, but rather to useful drinks, is very moderate even with the "champions" of such consumption. Tea is consumed in kilograms - from 1 to 4 kg, coffee - already a tens of kilograms - from 9 to 12 kg, wine - tens of liters - from 50 to 100 liters, and beer - hundreds of liters - from 100 to 150 liters. And after that are people who are afraid to brew tea "a little stronger"?!

## Instead of a preface

We begin our story about tea, about what this product is and a drink prepared from it. And, most importantly, about how to use it correctly.

Tea is so far the most common drink on the globe. According to general estimates, it is the main one for two billion people on Earth.

Tea is one of the most ancient drinks, the use of which is inextricably linked with the national culture, economy and historical traditions of many peoples.

But tea is not just a drink among other drinks. For some peoples and nationalities, including in our country, it is a product of first necessity. There are peoples who literally live in tea, appreciate it along with bread as a vital, non -replaceable product. Only in our country these peoples are a total of 25 million people.

That is why it is necessary to take care that the consumption of tea brings the maximum benefit, is based not only on habits and traditions, but primarily on knowledge, on modern scientific ideas about the product. In more than 5,000 years of the existence of tea culture, a huge number of books, articles, studies have been written about it. They studied tea to this day as a plant that requires specific growing conditions; like food raw materials, requiring complex, diverse and thorough processing; As a finished food product that requires special storage and transportation conditions. Hundreds of thousands of people on Earth are occupied by the cultivation, manufacture of tea and trade.

It would seem that everything is known about tea now. Nevertheless, it is very rare in the literature about tea that you can find information on how to prepare a tea drink correctly, and even more so about how to drink it. Another will say that this is a simple matter: he took boiling water and brewed "tea", there is no need for this skill. This is the deepest, ignorance!

This is how a paradox is created: knowing how to grow and make good tea, we do not attach the meaning of how to use it. Meanwhile, incorrect, inept or careless brewing, you can ruin the best variety of tea and thereby not only nullify all efforts to create a useful product, but also change the nature of the effect of tea on our body. Like some other products, tea has different effects of exposure. It all depends on how to use it.

How important it is to be able to properly brew tea, it is evident at least from the fact that even from a low grade tea with proper brewing and careful handling of it, you can get a pleasant and useful drink.

The correct brewing of tea can give us maximum benefits and pleasure from a tea drink. In other words, knowing the properties of tea as a food product, we can use it with the greatest effect. Indeed, how many drink tea correctly? And get genuine pleasure from this drink? Do you know what benefit and in what cases tea brings us? When, how many and what varieties, types, types of tea are rationally use and why?

Hardly everyone will be able to answer these questions. The author of this book set himself the task of giving wider information about tea. Over a quarter of a century that have passed since the first edition of the book about tea, the number of fans, admirers and genuine connoisseurs in our country has increased significantly. But at the same time, new generations appeared, absolutely ignorant in the tea issue. Given this circumstances in this publication, sections on the varieties of tea, about the history of drinking the drink and, most importantly, about the methods of its use, and the information in this publication warns about the falsification of tea in modern tea and the ways of recognition of falsified and low -quality and low -powerful and low -quality ones has been set out in more detail. tea.

## Chapter 1. The origin and meaning of the word "tea"

Where did this word come from and what does it mean to us? By the word "tea", we usually mean a drink (a cup of tea), and dry tea (a pack or chick of tea), and a tea plant itself (a bush of tea).

In China, tea has hundreds of names, depending on the area of growth, type or variety ("Shuisen", "Yunnan", "Sha-Outsun", "Ulun", "Lunji", "Tunchi", "Baych", "Chenlyanch", "Chicha", "Tocha", "Huach", etc.). But the most common name, generalizing and most often present in complex components of varieties, is "cha", which means "young leaflet". In different provinces, this word is pronounced in different ways, it is heard as "Ch'ha" and "Tskha", then as "whose" or "tons". At the same time, green leaves collected from tea bushes before they undergo factory processing are called "Ch'A", ready for dry black tea-"U-CHA" and a drink from it-"Ch'A-I". But the hieroglyph to refer to tea throughout China is the same. This is one of the most ancient hieroglyphs created in the 5th century, when the term itself arose, the word "tea" itself.

All other peoples of the world borrowed their names of tea from the Chinese. Of course, they slightly distorted the Chinese name, as they heard and pronounced it in their own way. In addition, it also mattered from which part of China came to one or another country.

For centuries from Northern China, either from Hankou, or through Hankow, and therefore the Russian word "tea", the closest to the North Chinese, metropolitan, or the so -called Mandarin pronunciation, entered Russia. From the Russians, the majority of the peoples of our country and such Slavic peoples as Bulgarians, Czechs, and Serbs perceived this name.

The Portuguese, who were the first of the Western Europeans to get acquainted with tea and began to export it from the south of China, from the canton, located in the position of one of the capitals, are called tea "Chaa" - also according to the Mandarin pronunciation.

The peoples of India, Pakistan and Bangladesh, where tea party penetrated from Western China, is called the tea "Chkhai" or "Jai".

In Central Asia, where the tea was previously called "ha", "tea" or "choy" has now become common. The Mongols, who met tea through Tibet, call him "a king"; Kalmyks who learned about tea from the Mongols say "Qia"; And the Arabs, who bought tea in Xinjiang, is "Shai".

The Japanese and Koreans, adjacent to Eastern China, are pronounced the word "tea" as "TA". Hence the name of tea among most European peoples, who first met tea either through southeastern China, or through Japan and exported it from Amoy, which is why the Amo pronunciation-"Ta" or "Theater"-was laid at the end of the XVIII century in The basis of the Botanical Latin name of tea (Thea), and the British began to pronounce this word as "teas", and the French, Italians, Spaniards, Romanians, Dutch, Germans, Swedes, Danes, Norwegians like "Tae".

The English and Dutch sailors first established their contacts with China through the ports of the southeastern part of the Chinese Empire and later received permission to visit only these ports from the Chinese government and not try to penetrate other parts of China. These ports were Guangzhou (Canton), the most (Amo) and Fujou, which made Chinese teas taken out in Europe, the named after Canton or Amo.

Among the African peoples, Arabic, English, French or Portuguese options for the name of tea are common - each directly depending on who first brought it to one or another African country.

The name of the Poles - "Herbata" is quite apart. The word is not Polish, but a slightly modified Latin "coat of arms", which means "grass" (remember "Herbarium"). The fact is that tea was used in Poland for a long time exclusively as

The drug, it did not become distributed as a drink, and therefore sold exclusively in pharmacies. Pharmacists and gave tea such a name, believing that the seagulls are made from a special type of "Chinese grass". However, they thought so in the XVII century in many other countries.

#### Chapter 2. Tea as a plant

#### 1. Homeland of tea and tea

The Chinese not only gave the world the name of tea and taught humanity to use tea as a drink, but also discovered the tea plant itself - a tea bush, for the first time mentioning it almost 4700 years ago. Subsequently, a legend was created that this plant grew from the eyelids of one Chinese saint abandoned to the ground, who cut them off after he fell asleep during prayer, and, angry with himself, wanted his eyes to never stick together. Until now, in Chinese and Japanese languages, the same hieroglyph is used to refer to eyelids and tea.

ANEThe oldest Mention O tea plants, Andcreated later legend, dating back to the first centuries of our era, when for the first time they began to prepare a invigorating, driving a drink from tea leaves, which was used at first exclusively with

Religious vigils indicated that only China could be the birthplace of a tea plant. It was believed until in 1825 in the mountain jungle of North-East India (Assam), Burma, Vietnam and Laos, entire groves of wild teaswood trees were found. The same thickets of wild tea were found on the southern slopes of the Himalayas, on the southeastern outskirts of the Tibetan Highlands, where the great rivers of Asia originate: Yangtsy, Brahmaputra, Mekong, Saluin, Iravadi. The opinions of scientists were divided: some continued to consider China to consider the birthplace of tea, others gave arguments in favor of the foothill region of the Gimalayas. Only relatively recently it was found that the Indochina -thickets of wild tea found in India and countries are not a primitive tea forest, but the remnants of wild trees reminding us of the oldest civilization in these places, just as the ruins of ancient temples tell about the history of the people who created them. But if dead stones are able to speak in such cases, then living trees cannot say whether they were always wild or entangled for centuries.

That is why the question of the homeland of tea to this day remained controversial. He became even more obvious after the Chinese botanists discovered huge massifs of wild tea forests in the extreme southwest of China, in the provinces of Guizhou, Sichuan and Yunnan, where tea jungle is sometimes located at an altitude of more than one and a half thousand meters above the level Seas. Here, here, a tea plant was, in all likelihood, wild, and not wild. But how to scientifically prove it? The botanists could not do this. The fact is that for them there was always a stumbling block the question of whether tea has only one species or several, in other words, whether tea is the only and unique plant in its kind or does it have sisters and sisters.

The tea bush belongs to one family with camellias, they are its cousins. For a long time it was believed that tea has only one species in its family - Chinese tea. So thought Karl Linnaeus, at the request of which in 1763, the Swedish Captain exberg first brought a live tea bush to Europe, which received the name of Thea Sinensis (lat.) According to Linneus. However, the discovery of tea trees in the Indian province of the Assam, which was very different from the tea bush by appearance, made botanists reject the classification of Linnaeus and believe that tea had two types - Chinese and Assamic. And although not everyone agreed with this, this point of view was increasingly strengthened both in the domestic and foreign literature on tea, and especially among the practitioners of the tea leadership (K.E. Bakhtadze, I.M. Akhundzade, etc.) . It seemed to botanists that the question of the existence of two botanical types of tea is obvious: Chinese tea is an evergreen bush with small, glossy, elastic, gear leaves, in adulthood, this bush reaches 2-3 m in height; And Assamian tea is a powerful tree, sometimes 15 m high, with

Large, several times larger and also not as dense as in Chinese tea, leaves. These differences seemed to speak for themselves, and therefore they began to distinguish between two types of tea plants - Chinese and Assamic and two of its homelands - China and India.

In 1962, not Botanik tried to solve this, already the old problem, but ... K.M. Jemuhadze, who, by biochemical analysis, found that wild large -faceted tea from the jungle of Yunnan and adjacent to the south of this province of the territory of Vietnam is one of the most ancient forms compared to all the well -known cultural varieties of the tea and compared to the so -called Assamian

variety. This was concluded that it was this area that is the birthplace of tea and that this variety of tea is primary, i.e. The main one, and what, in other words, tea has one species. Everything else is only its varieties, in which, under the influence of the external environment, changes in climatic and soil conditions have changed purely external, anatomical, anatomical,

Morphological signs. These wild, ancient forms of tea tree are trees on an average of 10 m (and more), extremely high -yielding and rich in the chemical composition of the sheet. This point of view has now received universal recognition.

According to the unanimous opinion of most prominent foreign scientists (C.r. Harler, T. ideas), southwestern China (Yunnan) and the adjacent areas of the upper Burma and North Indochina (Vietnam) should be considered the birthplace of the tea plant. It is here that the most ancient forms of tea bush were discovered, and it is from here that two branches of the geographical spread of the tea plant within Asia - north to 29 ° N.Sh. and south to 11 ° N.Sh.

Indeed, in this fertile, according to its natural conditions, the area of Southeast Asia, where spring is four times a year, there are ideal conditions for the growth and development of a tea plant. There in the open air all year round the atmosphere that we are used to observing only in the greenhouses of botanical gardens: hot, humid, warm air is flooded with vapors, almost noticeable, like fresh milk. Under these conditions, a tea plant grows violently throughout the year, it is covered with a large number of dense, dark green, fairly large leaves, it continuously gives new shoots-it vegetates, as botanists say, all year round.

The farther the tea tree advanced north, the less its size became, the more it resembled the bush, the smaller and denser the tea leaf was made, the less often three, two, or even once a year, only in the spring, were born on tea The bush is new leaves. On the contrary, as the same Yunnan tree moves to the south, in the forests of Indochina and India, closer to the equator, where the summer is hotter, the tree -like form has been further developed, the leaves have become even larger, but internal growth processes, metabolism, characteristic of the tea plant, from this fundamentally did not change. These were only differences in the variety, and not a look, just as children of the same parents can differ from the other with growth, eye and hair, character.

According to the modern international botanical nomenclature (K. Lynneya - O. Kunta), the tea plant has one species called Camellia Sinensis, i.e. Chinese Camellia. This species has three races (or varieties) - Chinese, Assamic and Cambodian, which were dissimulated to such an extent, i.e. They became not similar to one another that some botanists tend to consider them with the subspecies of Camellia Sinensis. Hybrids and variations of these subspecies (or varieties) are very numerous and depend on the area of growth and the degree of influence of a person on them.

As a result of selection, the scientists-CHEVEDS brought out the corresponding agrotypes within each variety or its variations, or, as they are now called, the clones of tea, which meets the special climatic and soil conditions of any narrow

geographical region. These are, for example, clones of tea bred in Georgia K.E. Bakhtadze,-Georgian No. 1, Georgian No. 2, winter-hardy No. 3-12, high-yielding clone "Colchis",

It has an increased content of phenolic compounds and other valuables. All of them are the younger relatives of one large family of the species of teas, or Chinese camellia.

The scientifically sound solution to the issue of the homeland and the form of tea is of great practical significance: it gives scientists a clear idea of the starting point from which the counting should be carried out when the cultural varieties of tea; It introduces us with biology and biochemistry of tea, with its amazing variability (under the influence of the external environment) and amazing

adaptability.

# 2. How a tea bush grows

People have long paid attention to the extreme endurance of the tea plant and its relative unpretentiousness. A tea bush can grow on meager, even almost

rocky soils, on the rocks, slightly powdered by a layer of earth. Tea makes a variety of climatic conditions: the atmosphere of the "steam bath", and the tropical heat, and snow cover, and frosts to minus 20 ° C, and five - month winter [1]. Tea is not subject to "epidemic" diseases that are so dangerous for other tropical and subtropical crops and which completely devastate the plantations of coffee, grapes, etc. Tea, finally, is not praised, it is the complete opposite of the cocoa tree (it gets sick From any temperature fluctuation or random damage, and the earth around it must be literally wiped with your hands until it turns into fluff). In addition to all this, the tea bush is extremely durable - it can live and bear fruit of a hundred or more years [2].

True, from the biological life of tea it is necessary to distinguish an economic period. Practice has shown that after a certain time, a tea bush reduces the number and partly the quality of its "products" - leaves. Therefore, it is believed that it is economically beneficial to keep a tea bush in the valleys for 40-50 years, and on the slopes-60-70 years. This is the economic life of tea. So, in Sri Lanka, beautiful high-mountain plantations were completely destroyed (cut down) after 70-80 years of existence. Two percent of the plantations is now rebuilding every year. This achieve the continuity of existence

Plantations are always in the most active, mature for fruiting age. Thus, the life expectancy of a bush of tea on the plantation on average is equal

the life expectancy of one generation of people [3].

So that a tea bush is not just a plant, but a profitable economic object, i.e. So that he gives a tea leaf, he is extremely necessary, in addition to heat, another indispensable condition - moisture, moisture and moisture again. Moreover, tea loves moisture in two types: firstly, increased air humidity, the atmosphere of a well-boiled bath; Secondly, moisture in the form of precipitation, in the form of frequent and abundant irrigation. But tea does not endure the slightest stagnation of water under the roots; They must be washed with water, and not in water. That is why tea climbs on the mountain slopes, to steep terraced hills, where water can drain rapidly, almost without linger.

Tea is bred exclusively for the sake of leaves. And they collect them as many times a year as tea is vegetative in a given area. In tropical countries, in Indonesia, Sri Lanka, South India (Maras), where it always vegetates summer and teas, a tea leaf is collected on plantations all year round. In Northeast India (Assama), the collection lasts 8 months (from April to November), and even north, in China, from four to two times a year (from April to September), depending on the growth area, in Georgia and Azerbaijani Tea is collected every 10-20 days from April to September or from May to October (Lenkoran). But the main fee in Georgia is still in May (up to 40-45 % of the collection). At the same time, not the entire sheet is collected, but only the most tender, youngest, soft and juicy leaves, just

The blossomed, and sometimes not yet blooming kidney at the ends of the escape. These first two to three leaves with part of the stalk, on which they are fortified, as well as the kidney of the still not opening the upper leaf, is called a flush together.