# AM and PM Substances

### The Right Substances at The Right Time

When talking about vitamins and trace minerals people tend to think of them as the go-to remedy for diseases arising from malnourishment. They believe that dietary supplements supply all essential nutrients they lack. But, there is much more to this. Nutrients are essential accelerators of countless biological processes in the body and can direct them whichever way. They play a part in everything, even deep in our seventy billion cells, for example: In every process controlled by enzymes.

In this function they are way more important for our health than fighting conditions arising from malnourishment such as rachides or scurvy. Leading universities have come to the conclusion that most people do not obtain the recommended amount of micronutrients form their diet or other sources.

### Even Vitamins Know Day and Night

The uncertainty about the correct timing of vitamin intake for optimal effectiveness is great. Myths from our ancestors still exist, like:

"Vitamins are supposed to be taken in the evening so that the body has enough time to digest them."

Back then, people did not know that Vitamin C, for example, only has a half-life of thirty minutes, because it is broken down quickly and acts proenergetically—it elevates the energy level which is counterproductive for a good night sleep.

For most people the word “vitamin” sounds healthful. Only a few are concerned whether or not it is better to take them in the morning or evening.

Inadequate intake of essential nutrients takes a toll on health, especially in the aging population. Such health risks are heart failure, cognitive decline, cell dysfunction, muscle athropy, partial blindness, hardness of hearing, and collapse of the immune system. The importance of the influence of vitamins and mineral compounds must be upheld.

With aging comes a decrease in metabolism and degeneration of organs which compromises the effectiveness of vitamins and trace elements and ones health.

Thanks to [chronopharmacology](http://www.chronobiology.com/health-benefits-of-chronopharmacology/) we know today better than ever before, which substances yield the strongest effectiveness with the least amount of side effects at a certain time of day, and, which specific circumstances have to be considered.

Just like our inner organs cannot escape fluctuations in the body, neither can administered substances, whose effectiveness may be influenced by those. Taking the circadian rhythms into account forms the basis of an intelligently formulated nutritional supplement. We are talking about essential substances that can either not be produced by the body, or not in sufficient amounts. Therefore, they have to be supplied through food or nutrition supplements. Most of us, however, are incapable to obtain adequate amounts of either. The reason for this is that our foods are filled with additives in order to ease production and production costs and to increase shelf-life, as well as our unhealthy eating habits. While it is a fact that almost all of us do not receive an optimal supply of nutrients, we can only begin to wonder what kind of deficiencies will arise from it in the long run.

Knowledge spreads rapidly in the 21st century. Until now we only knew this about vitamin D3: It is indispensable for our bone health. Latest studies show that it is absolutely important for many brain functions. For this reason, many scientists refer to it as neurohormone D3 (also called “sun hormone”), because without this messenger substance complicated brain operations would not be possible.

Like for all bioactive substances there are “windows of opportunities” for vitamins and trace elements, as well, as they have phases of particular effectiveness—due to their biochemical properties—which are beneficial for desired therapeutic effects.

### The Timing of Vitamins & Co.

The intake of specific substances in the morning or evening support the performance of a certain organ.

Some substances are suitable for day time or night time application, for example, when the necessary dosage does not fit into one single capsule. Provided, they are effective around the clock and do not interfere with the bioactivity of other substances. There is most certainly a lot to uncover about chronobiology in the years to come, but what we already know, today, delivers a solid foundation for our daily decision about how to support the performance of our organs and to prevent lifestyle or age related diseases.

### Vitamins in the Morning

Vitamin A

Vitamin  C

Vitamin D

Vitamin E

Vitamin B6

Vitamin K

Choline

### Vitamins in the Evening

Vitamin B1

Vitamin B2

Vitamin B3

Vitamin B5

Vitamin B12

Niacin

Pantothenic acid

Biotin

Folic acid

### Phytosubstances in the Morning

Resveratrol

Acai berry

Goji berry

Lycopene

Green tea extract

Mangosteen

Noni

Banaba extract

Gymnema sylvestre

Bitter melon

Pomegranate

Catechins

Bioflavonoids

Vinpocetine

Dong quai

Muria puama

Damiana

Taurine

Guarana

Lutein

Zeaxanthin

### Phytosubstances in the Evening

Resveratrol

Quercetin

Isoflavones

Ginger

Panax ginseng

OPC

Ginko Biloba

Lutein

Citrus Aurantium

Capsicum

L-cysteine

Plantago major

Nattokinase

Aloe vera

### Minerals, Chemical Elements, Enzymes, Peptides, Phytohormones, Alcohols in the Morning

Q10

Calcium (major portion)

Manganese

Glucosamine

Chondroitin

MSM

Hyaluronic acid

Selenium

MCHC  
NADH

L-Glutathione

Iodine

Inositol

L-Carnitine

L-Arginine

Alpha lipoic acid

Magnesium (small portion)

### Minerals, Chemical Elements, Enzymes, Peptides, Phytohormones, Alcohols in the Morning

Omega3

Potassium

Zinc

Glucosamine

Chondroitin

MSM

Iron

MCHC

Copper

Phosphatidylserine

L-Carnitine

Royal Jelly

Magnesium (major portion)

Calcium (small portion)