****

ODINIL  
VOCATIONAL TRAINING CENTRE  
ENGLISH TRAINING AREA

**THE HIDDEN SIDE OF SUGAR**

NAME: ###

Trainer: Paul, Lic.

LUANDA - 2023

**INDEX**

[INTRODUCTION 1](#_Toc146996709)

[LOOKING AT FOOD IN A HEALTHY WAY 2](#_Toc146996710)

[IMMUNE SYSTEM 2](#_Toc146996711)

[ALCOHOL VS SUGAR 2](#_Toc146996712)

[FRUCTOSE 3](#_Toc146996713)

[FRUCTOSE VS ALCOHOL 4](#_Toc146996714)

[FRUCTOSE IN THE LIVER 4](#_Toc146996715)

[SUGAR IN THE ROLE OF NUTRIENTS 5](#_Toc146996716)

[STORY 5](#_Toc146996717)

[LIVER 5](#_Toc146996718)

[CONCLUSION 7](#_Toc146996719)

[REFERENCES 8](#_Toc146996720)

## Introduction

It is no secret to anyone that the consumption of sugar it only grows in the world, the disposition of foods with added sugar nowadays is much greater than 100, 200, 300 years ago. Today we have in the supermarket, store, online shops etc.

That makes it all very easy. Access to foods high in sugar is very easy nowadays, anywhere we can find.

## Looking at food in a healthy way

To better understand what nutrition is, what food is, what health is, we have to learn to look at food with the eyes that that food brings us, and it is not from a caloric point of view or from an energetic point of view that is not what is most relevant of all.

But rather what vitamin it brings, macronutrients it brings, what minerals it brings, etc.

When we look at sugar with these eyes, we will see that sugar does not bring us anything from the point of view of nutrition. It does not bring us vitamins, it does not bring us minerals, the only thing it provides us with is its calorie (energy) it is devoid of nutrition.

## Immune system

The effects of sugar on our immune system they alter, first our gut before being absorbed, then we have:

* An excess of pathogenic bacteria in our gut
* Imbalance in the intestinal flora
* Increased intestinal permeability

That sugar fosters, stimulates all of this to happen. That alone would increase a lot of inflammation, and disrupt our immune system. As a response to a virus or disease is altered as well, our tolerance to our body is altered.

As a component of our food that is not even natural, is not real food, is getting in the way!

## Alcohol vs Sugar

It is not news to anyone the negative effects of alcohol. If we consume more and more alcohol we will feel its toxic effects almost immediately. So even if a person can not explain what happens inside the body when he takes alcohol and starts getting drunk, you can see that there is a process of intoxication going on! I'm clear to everybody. This is all because the effects are perceived quickly, cognitive and motor functions are impaired, the arteries become dilated and as you drink more these effects worsen; Not to mention the headache, nausea, indisposition and a good hangover brings the next day.

It doesn't take much effort or much study to notice the toxic effects of alcohol, because they are so immediate. Alcohol is 10% metabolized by the brain and the rest almost exclusively metabolized by the liver, this metabolization in the brain is what causes the immediate effects notorious in the consumption of alcohol, that is, taken already begins to feel the effects.

But if we had a substance like alcohol that wasn't metabolized by the brain? That is, did it not have the immediate effects of drunkenness?

There is a substance that causes exactly these same problems, but that we consume every day all over the world and that does not make people get drunk like alcohol, and that substance is sugar.

Post is, sugar is undoubtedly much closer to being characterized as a toxin than a nutrient, for example, but we think that these effects will only come years and years down the road! In fact, the consequences of sugar consumption appear much earlier than we think. This sugar that we are talking about is fructose. Table sugar, for example, is made up of 50% glucose and 50% fructose.

Fructose has more detrimental metabolic effects than glucose.

What one has to avoid at all costs is concentrated fructose, when it is whole absorbed at once. We absorb the whole fructose at once, taking juices, no matter if the juice is natural or not, it will be absorbed whole at once in the first portion of the duodenum.

What can happen is that all that fructose will go right to your liver, same thing the soda all that fructose will end up there in your liver, and it will have to deal with that excess fructose. Other examples:

* Jelly
* Corn syrup

So any drink that has a lot of sugar you absorb it whole without having that digestion process to delay identifying that absorption.

If you take 4 apples, probably the average person will not be able to eat 4 apples at once in one meal. If you take these same 4 apples and process them whole in a blender, you will have about 500 ml of super sweet juices and super easy to be ingested in the same meal.

## Fructose

But why so much fructose in processed foods? It's because she works wonders at this kind of food. For instance:

* It cheapens the prices of products because it is the cheapest sugar there is
* Gives a beautiful and attractive look to food
* They stay, but crispy without getting parched
* Do not change when frozen
* They last longer without spoiling on the shelves
* The food gets addictive

And there's also the fact that fructose and alcohol alter our reward and satiety system, causing us to have to eat more and more, to have the same pleasure.

Fructose is used as a flavor enhancer in most industrialized, salty foods.

## Fructose vs Alcohol

Fructose and alcohol do not have much difference, take a juice or beer, for the metabolism of our liver is practically the same thing are very similar.

Every load of fructose we eat goes right to the liver, which managed to deal with not exaggerated amount of fructose, but from a certain limit this excess fructose takes a process called Lipogenesis de novo, (which is the formation of fat again) in this case within the liver. Part of this fat formed by fructose is exported to the bloodstream causing: weight gain, obesity, problem with cholesterol, increased risk of cardiovascular disease, and another part stays inside the liver in the form of fat.

This process is much like what happens with alcohol.

## Fructose in the liver

Fructose it causes an energy crisis in our liver, so our body directs our metabolism to detoxication, because fructose is a type of poison it serves no purpose and our liver gives priority to break down this fructose and metabolic molecule that we manage to eliminate. So at this time this energy crisis causes our metabolism to completely stop burning fat and begins to produce fat in an accelerated way.

Then fructose increases de novo lipogenesis (fat manufacturing) and this fat can be deposited in various organs that are not healthy (this is called visceral fat), and this becomes a cascade of insulin resistance. Fructose alone is a component that worsens and causes insulin resistance.

Our current consumption of fructose has increased 20-fold since the 70s because our consumption of processed food has increased a lot and 90% of our sugar consumption comes from processed foods.

* Hamburger
* Sausage
* Ketchup
* In the sauce

There are 56 names for sugar, if you don't know the name of all of them you won't be able to protect yourself against this consumption of processed food, with sugar in disguise.

Remembering that sugar is not there to sweeten, so much so that we find sugar in salty foods!

It is an additive it has some very good effects for the duration of food, the more sugar you put in, but it lasts, you have, but want to buy because it is apparently beautiful, that you can not stop eating why! We know that fructose it ignites there in our brain the region of reward. So any product that has fructose, even if you don't know it does, it's irresistible: eat 1 only.

## Sugar in the role of nutrients

Sugar it can steal nutrients, it can alter the stomach digestive environment, it can impair absorption of vitamin and minerals.

There are several ways sugar can cause malnutrition, the first of which is what we call nutritional detachment, walking dilection by the sweet taste causes you to eat more sugary foods, and this causes you to eat less nutritious foods.

## Story

If we look at the history of sugar in life, we have to go back many centuries since the expansions of European influences. Sugar was once the cause of war, of conquest, of territorial disputes between countries, and the cradle of sugar in the world was quite founded on slave labor, that is, who dominated sugar dominated everything, who held control of sugar held power. Sugar was practically the oil of the 18th century.

These days the story is not much different, just as it was in the tobacco industry. A powerful tobacco industry, with a lot of power, a lot of money and a lot of influence, the sugar industry behaved in a very similar way. When the tobacco industry, for example, began to be threatened by health issues.

## Liver

Sugar sucrose is a molecule of glucose with a fructose, when we ingest sugar it is not pure glucose, it is fructose with glucose and this fructose our body does not metabolize very well! Who takes care of it is the liver. And the liver doesn't metabolize that very well, it has a limit.

Then the excess fructose it can take:

* Hepatic steatosis (which is the fat in the liver).
* Increases uric acid (are patients with gout).
* Insulin resistance
* Obesity
* Alzheimer 's

The advertising campaign is very strong, and we are very susceptible, so we have to defend ourselves and study more, even if you are not a doctor, read more, study more, inform yourself. Because it is not possible for humanity to be led to marketing, by advertising, science is already very nebulous, there are no more groups of scientists, there are groups of religious each defending their theory no one wants to look the other way.

The food and pharmaceutical industry still has no interest in you getting healthier by not consuming the products that are the main source of income and consumption worldwide. Remembering that real food can't be addictive.

These processed products are made for you to eat to the end and want to buy more.

## Conclusion

Sugar really brings problems is not a question of which sugar is the worst, which sugar is the best, sugar is sugar. It doesn't matter if it's refined, if it's black, if it's white, if it's brown, if it's groso, if it's from honey, sugar is sugar.

Ancient civilizations sought to understand what were the best foods and thereby enhance health. Modern civilizations eat for pleasure, not health.

## REFERENCES

<https://www.youtube.com/watch?v=zgyB4IBd8jY&pp=ygUkTyBMYWRvIE9jdWx0byBkbyBBw6fDumNhciAtIFBhcnRlIDAx>

https://www.youtube.com/watch?v=7tzA5zMp2\_A&pp=ygUkTyBMYWRvIE9jdWx0byBkbyBBw6fDumNhciAtIFBhcnRlIDAx