# Ten arguments against green shakes

**Nutrition** 



They take a decade to be the feeling of the streets, stationed in the windows of the local inn of our cities, as one of the greatest inventions of the hipster culture. They are the green shakes, also known as detox shakes, designed and designed as the alternative to alcohol in leisure, or as a depurator after a stressful day or abuse of toxins of various kinds. In appearance they are not bad products, since they consist of fruits and / or vegetables combined, crushed and served in shakes more or less liquefied. However, its structure and its preparation make them very counterproductive compared to the traditional alternative of fruit and vegetables in pure and hard salad, ingested by chewing. Here we present ten arguments against green shakes.

### 1. In them the skin and the insoluble fiber are eliminated

In fact, to make the shake it is almost necessary to eliminate the hard and woody parts of the vegetable piece, either the skin or the harder fibers, all of them parts of the vegetable fiber portion known as insoluble fiber. In doing so, we eliminate the part that concentrates the highest proportion of minerals and vitamins, as well as antioxidants. But we also disregard the fundamental fraction of cellulose and lignin to give stool consistency. If we live with green smoothies, we will go to the bathroom like the little birds.

### 2. The satiating power is lost

By eliminating the fraction of insoluble fiber we also discard part of the soluble, especially pectins that stand out by swelling when absorbing water and therefore give a feeling of satiety. If we change salads for green smoothies, we run the risk of never having enough.

## 3. Rations are poorly measured

As a result of the absence of satiating power we run the risk of passing on the portions of vegetables we eat, in the same way that we do with fruit juices versus whole fruit – in what is known as the 'orange juice effect' '-: when you drink a juice you express three oranges; when you eat an orange, you do not go for the second and much less for the third because you are satisfied thanks to the fiber. Going with the vegetable has consequences.

## 4. The risk of kidney stones is increased

Among others take excessive doses of certain compounds present in vegetables and fruits in normal portions have no consequences, but they can bring them in a situation of abuse. This is the case of oxalic acid, which produces a certain 'orange juice effect', since the shake tends to concentrate this compound, present in various leafy vegetables. Ingested in quantities sensitive, oxalic acid can form with inorganic ions such as calcium salts known as oxalates, which precipitates and binds n as classical kidney stones. An excess of vitamin C in the plasma may contribute to this. In milkshakes this vitamin is particularly abundant with A. For this reason, the EFSA (European Food Safety Authority) has cited the shakes among the 13 emerging health risks.

### 5. We increase the risk of anemia and bone breaks

Another consequence of the 'orange juice effect' is that in the green shake the concentration of phytic acid increases with respect to the

intake of a salad, for example. This compound has a high chelating power, that is, it can 'sequester' calcium ions, iron, potassium and other minerals, through colloidal associations of electrical affinity that will prevent these minerals from being absorbed in the intestine. If we abuse the shakes, we can present deficiency of them and eventually suffer from anemia -the iron- or bone lesions due to loss of density in the bone, something that will not happen based on eating salads.

## 6. We become more prone to diabetes and obesity

In the shakes water is usually added, which dilutes the concentration of vegetable fiber and therefore its sanitizing power, but also its ability to 'capture' the oligosaccharides – glucose and fruit – to prevent them from passing immediately into the blood, raising the glycemic index. If we maintain the high glycemic index we will be more prone to diabetes and obesity , as we will be forcing the pancreas and providing empty calories to our diet.

### 7. We increase the risk of poisoning

Another of EFSA's concerns regarding green shakes is the conditions in which they are made, over which they have worse control than on raw vegetables. Not only is the issue of properly washed to prevent bacterial, viral or fungal foci; There is also concern about the risk that the conservation method may not be adequate and that new populations may flourish, possibly resulting from fecal bacteria, given that the beating is, after all, a breeding ground. If the shake is not

stored in the refrigerator, if we open it and then keep it at room temperature, etc., the risk increases.

## 8. We contribute to the atrophy of the jaws

With the shake we avoid chewing and therefore the work done by the maxillary muscles when crushing the food, especially the insoluble fiber. As a result we are unaccustomed to chewing, a task that will make us more and more lazy. Thus, we can enter a vicious circle of smoothies, purées, juices and finally soft drinks with added sugar.

# 9. We move away from the knowledge of vegetables

In fact, if we live with green smoothies, we say goodbye to knowing how to wash, how to cut and how to cook vegetables, and therefore we move away from the pattern of a diet rich in fruits and varied plant elements, which is what is known as Mediterranean diet. That is, we become nutritional illiterates. From there to the increase in the incidence of cardiovascular problems there is a step.

# 10. Dental hygiene gets worse

The absence of insoluble fiber and of chewing make lose the effect of dragging and cleaning of the solid elements on the bacterial plaque; On the contrary, its pasty nature and the passive mode of ingestion cause the fibers of the shake to remain between the teeth staining them green and increasing the risk of staining, as well as favoring the formation of elements of bad breath, such as putrescine and the cadaverine. In this way we convert whole foods that favor dental hygiene into a danger for it.