# 6 Questions and 6 Answers about Free Radicals and Their Causes

## Question #1 What are free radicals?

It's both simple and difficult to answer this question. They are bad for your health - this is the simplest explanation. If you are interested in a more profound answer, you should know that **free radicals** are oxygen atoms, but unstable, which means that they are missing one electron from the pair. That's when it becomes unstable and reactive. One **free radical** begins a new cascade in our body, therefore, grabbing other **cells** and damaging them.

According to the statistical research, every ten seconds radicals attack every body **cell**. The best way of protection is to keep **antioxidant** levels high.

## Question #2 Why are they so dangerous?

These unstable radicals do their best to get electrons and be stable. However, if they just steal an electron from a healthy **cell**, this will cause some serious damage to the normal **cell**. Just imaging as if your body **cells** are rusting - scientifically, it is the similar process.

Here is a list of some diseases caused by them:

* different forms of cancers
* arthritis
* Alzheimer's
* coronary Heart Disease
* Parkinson's Disease
* cataracts
* autoimmune Diseases
* aging

## Question #3 Why do free radicals form in my body?

Scientists estimated that every cell in our body is attacked by **free radicals** for about 10 000 times a day, and as we grow older, their number increases. For some of you it must be unpleasant to read that several types of physical activities help to produce more **free radicals**: exercise and bodybuilding.

There are environmental causes of radicals formation in our body:

* ozone depletion
* radiation (sun UV rays)
* air pollutants
* industrial chemicals
* inflammation
* smog
* processed foods
* smoking
* alcohol
* drugs (both prescription and recreational)
* emotional and physical daily stress

This is not a full list of causes, however, it might give you an idea why they are formed and what you should do to slow the formation process.

## Question #4 Are free radicals destroying my body?

No. Though they can damage our body, our organism couldn't live without them. They also attack germs and help to produce energy. You don't need to try hard to eliminate the number of **free radicals**, you should just check them. The main key to that are **antioxidants**.

## Question #5 What are they?

These are substances which help to slow or prevent oxidation processes. They donate electrons to free radicals to make them stable oxygen molecules. There are many types of them: among them are coenzymes, enzymes, sulfur containing compounds and vitamins. Our body produces certain amount of these compounds to combat **free radicals**; however, most of them should come from the special diet.

## Question #6 What diet should I keep to?

There are thousands of **antioxidants** in plant foods, while the best sources are vegetables and fruits, among them are:

* raisins
* prunes
* oranges
* cherries
* red grapes
* berries
* broccoli
* spinach
* beets
* kale
* red bell pepper

Research has also shown that those who intake about 9 servings of vegetables and fruits have lower risks of developing cancers. If in your opinion 9 servings are impossible, you should consider the sizes of portions and calculate the amount of fruit juice or number of fruits and vegetables you'll consume during the day.

You might also make up your own **antioxidant** menu dividing your daily meals into 4 categories: breakfast, morning snack, lunch and dinner that will contain 9 servings of **antioxidant**-rich foods.