



## CAUSES OF AGING OF THE HUMAN BODY AND WAYS TO PREVENT EARLY AGING

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### Abstract

Researchers say that the active forms of oxygen that appear in human organs accelerate its aging process. Active forms of oxygen destroy all cellular components in the internal body and the cardiovascular system. The only remedy against this is said to be starvation. It is not for nothing that scientists have scientifically proven that fasting strengthens the immune system against diseases, and the number of cells that serve this purpose increases tenfold in a fasting person. Also, the higher the calorie content of the food consumed, the more active forms of oxygen more it increases. Therefore, it is advisable for those who want to live a long life to eat more wet fruits and vegetables together with low-calorie foods, and to drink juices, infusions of medicinal herbs and green tea.

**Keywords:** early aging, daily exercises, sirtuin genes, oxidative stress, diet, fasting

### Introduction

When the results of a study conducted by scientists of the National Institute of Aging in the USA on prolonging life with starvation were announced, it was met with great interest by the general public. For half a year, 48 people were limited to eating only a quarter of the usual amount of food. And the results showed that the process of stopping aging in their organs increased dramatically. According to gerontologists, the longest-lived people on our planet are the people of Abkhazia, Hunza region in Pakistan and the village of Vilcabambe in Ecuador. All three regions are mountainous areas, and although the people living there live for a century, they are distinguished by their mental and physical freshness. When scientists studied their way of life, it became clear that the inhabitants of this land were not fed enough since childhood and were often used to going hungry. According to experts, there are some similarities in the lifestyles of long-lived people. For example, none of them are overweight. It is known that accumulated fats in the body can have a negative effect on the heart and cause atherosclerosis. That's why diet is the key to a long life. Avoid fatty foods and eat more vegetables, greens, and wet fruits. Avoid stress. According to another condition of long life, one should never lose physical activity.





## Materials and Methods

Sirtuin genes act as sensors that detect the availability of cellular energy, which confers metabolic benefits, as caloric restriction extends lifespan in organisms ranging from yeast to mammals. The mammalian ortholog of Sir2, SIRT1 (sirtuin 1), has been shown to activate a critical component of caloric restriction in mammals, namely fat mobilization in white adipocytes. Recent studies suggest that mammalian SIRT1 plays a role in adequate cellular responses to metabolic stress, such as nutrient deprivation or overload, and that SIRT1 and its activators protect against the deleterious effects of metabolic stresses.

### Food products

Foods rich in polyphenols are good for you. However, it is difficult to know whether this benefit is actually due to a specific plant compound or to other phytochemicals found in whole foods, fiber, and other foods.

Polyphenols generally serve as antioxidants. They can help prevent cellular damage from environmental pollution, smoking, fried foods, and free radicals that occur as a byproduct of normal metabolism. Polyphenols are also believed to help the body in an anti-inflammatory state. It is also associated with the risk of several chronic diseases. Polyphenols are a group of over 500 phytochemicals that are naturally occurring micronutrients in plants. These compounds give the plant its color and help protect it from various dangers. They are often the subject of research news. Claims can include anything from red wine, coffee, and tea to fruits and vegetables that help lower cholesterol or blood pressure, lower the risk of diabetes or cancer, or increase life expectancy.

Antioxidants are chemicals involved in metabolism. They absorb free radicals, slow down oxidation processes and cleanse the body of harmful effects. As a result of complex processes, cell aging is inhibited, well-being improves, which also affects the appearance. In addition, antioxidants are a preventive tool against many diseases, such as reducing the risk of cancer and cardiovascular diseases.

Many vegetables, fruits, and other foods are excellent sources of antioxidants, including anthocyanins, carotenoids (such as beta-carotene), lutein, lycopene, resveratrol, selenium, vitamin C, and vitamin E.

## Result and Discussion

In addition, many foods contain different antioxidant compounds, each with its own unique health effects. For example, grapes contain anthocyanins, vitamin C, resveratrol and selenium. Dark leafy green vegetables like kale, spinach, and collards offer vitamins C and E, and antioxidants called lutein and kaempferol.





While vegetables and fruits serve as the best food sources of antioxidants, you can also fill up on antioxidants by eating legumes and nuts, drinking tea (such as green tea and black tea), and using herbs and spices in your cooking. . Snacks like popcorn and dark chocolate also contain antioxidants.

#### The importance of fasting

Along with the positive effects of fasting on human health, as a result of starvation, the amount of NAD<sup>+</sup> increases, which in turn activates sirtuin genes. Sirtuin genes serve as intracellular factors that prevent premature aging.

Nowadays, there are many people who suffer from excess weight. Various methods of treatment have been devised to treat them. But these methods can reduce the amount of water in the human body and harm health. And fasting is an unparalleled way to get rid of excess weight without harm. In this case, it is necessary to eat food in moderation, in accordance with daytime activity. Many poisons and harmful substances accumulate in human tissues. These substances appear mainly through the food we eat. Especially, almost all of the food products currently being prepared contain small amounts of "poisons". They are caused by pesticides applied to plants, colors added during the preparation of products, and chemicals added for flavoring or preservation. In addition, toxic fumes emitted from cars, plants and factories are inhaled through the air. Medicines made from chemical substances are used in the treatment of diseases. These substances are absorbed into the blood and cause the destruction of cells.

The liver is an organ that performs an important task in cleaning the body from poisons and all harmful substances. When harmful substances appear in the body, liver function is disturbed. The role of fasting is incomparable in bringing it back to its original state. Fasting removes excess fat from the body and toxins around the liver.

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