

The biochemistry of food

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According to the World Health Organization about 30% of the Earth population suffers from obesity and the reasons for overweight are increased intake of high-calorie foods and low physical activity. Excessive weight, in its turn, is the reason for a number of diseases, such as type 2 diabetes, cardiovascular and oncological diseases, that may lead to the shortening of life. As long as nutrition and lifestyle influence epigenome of a person they affect his/her lifespan.

Objective: to study what happens with food in human organism at the molecular level, to learn the reasons of weight gaining from biochemical point of view and how to prevent it. The aim of the research is to help people with overweight to overcome their bad eating habits and give them the opportunity to look at the problem of obesity from the scientific point of view.

Scientific articles, documentary films and the latest studies on biochemistry and physiology devoted to this problem have been assessed.

This research represents the latest achievements in nutritional science and shows that balanced and diverse nutrition as well as daily exercise and weight control can help avoid problems with health, stabilize psychological and emotional well-being, improve physical state and decrease the risk of appearance of wide range of diseases and health issues, such as diabetes, cancer, heart failure, atherosclerosis, stroke, coronary artery disease, ADHD, anxiety, stress, depression, bipolar disorder, schizophrenia and Alzheimer's disease.

A proper diet and physical activity help to prevent certain illnesses and aid in recovery from other diseases. Following a balanced diet is the best way to ensure that the body receives all the food substances it needs. Food provides certain chemical substances called nutrients that are needed for good health. The key to good nutrition is a varied diet that includes every kind of nutrient.