

NANOFOOD

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The word "nanotechnology" is penetrating into our lives. The scientists' new invention may seem to be approaching, however, it is not exactly so. Nanostructures have always existed, but it has been impossible to study them until recent times. For example, examining mayonnaise with a strong microscope, one can notice lipids placed in capsules that are few nanometers in size. A new leap of progress has reduced the distance between technology and mankind.

Nanotechnologies can be used in the production, storage and packaging of food and products. They let us "collect" things out of atoms, and food is not an exception. Scientists assume in the future the possibility of integrating nanostructures into products without the slightest concern about their behavior after getting into the human body. So far this problem involves much discussion since the artificial nanostructures have not been studied thoroughly.

Food industry presupposes two uses of nanotechnology. The first one - is the design of food products, that can significantly reduce the costs (time and labor) spent on growing vegetables, fruit etc. The main problem of this approach is not excellent studying of nanostructures and their behavior in the body. Now the world community carries on a struggle against genetically modified organisms (GMO), which have appeared to have a pernicious influence on health. Scientists fear that introduction of nanotechnologies in food production can lead to similar consequences. The second one is the usage of nanoparticles in the area adjacent to food industry. For example, it will be possible to specify the date of manufacturing of the product with the help of an implanted nano-sensor. Expiration rays straight through the packaging, it will be impossible to replace it. Also there is a model of an interactive drink, the main idea of it is that a person buys the same product (drink), and each time changes the taste, color and flavor on his own volition, managing nanostructures in it.

Nanoparticles that come with products can be used to deliver useful substances into the body. Thus, the products will become more useful and, in some ways, therapeutic.

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