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ХАРЧОВИХ ТЕХНОЛОГІЙ

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РОЗДІЛ 6

**СОЦІАЛЬНІ ТА ЕКОЛОГІЧНІ АСПЕКТИ  
СУЧАСНОЇ ЖИТТЄДІЯЛЬНОСТІ**

considered harmless, but it is because of their harmful effects on the organism have not yet been deduced. For example, they can decay in our organism under the influence of body temperature, or under the influence of gastric juice, into the toxic components.

Now producers say that their products are environmentally friendly and prove their health benefits through advertising. But while buying such products, it is hard to analyze its ingredients because of the large amount of obscure titles and symbols. Latin letter "E" refers to all possible additions and also there is a figure and it is how you can distinguish food additives. The letter "E" means "Europe" and the digital code characterizes the additive. It would seem that until recently, we used common spices such as salt, pepper and sugar. But foods with lots of letters "E" and other inexplicable things on the packages recently appeared on our tables.

When making a particular product, the products have a great number of different treatments, during which they partially or completely lose their taste, color, smell, in this case, food additives are the only way to return the organoleptic value of the product.

Many food additives are known to us for a long time, they are: acetic acid, soda, spice extracts. It also may be natural food coloring, grape skin extract, chlorophyll of green plants, turmeric, beet juice.

During the entire existence, food additives have confirmed its usefulness. They help keep the product or provide a certain quality, and improve other characteristics. Of course, there are many additives that one way or another hasn't the best influence on our body, however, and their usefulness is proved, for example, sodium nitrate is better known as E 250, despite the fact that it is not sufficiently safe, prevent the development of dangerous diseases such as botulism.

We can conclude that food additives improve the quality of food, they retain the color, smell, taste, extend shelf life. But also they impact on our organism significantly and some additives are not yet fully studied. Therefore, to protect the health it's necessary to be attentive to what you eat.

Supervisor – assistant, Untila M.P.

## **MOLECULAR GASTRONOMY IN MODERN EATING CULTURE**

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Our society searching new opportunities in the culinary invented molecular gastronomy. This new trend has stirred up the whole world of cooking.

Molecular cuisine is a section of trophology associated with the study of physical and chemical processes that occur while cooking. The founders of molecular gastronomy are considered Hervé This and Nicholas Kurti. Since 1992 then this unusual cuisine has become an integral part of the menu of known and expensive restaurants. Using nitrogen, centrifuge, dry ice, flasks, test tubes is unusual for humanity and very exciting and interesting.

New technologies allow to gain maximum benefit from the product, which is very important nowadays. Particular attention is paid to the chemical and physical processes during cooking.

The most popular technology of molecular gastronomy are:

— Freezing (occurs with liquid nitrogen, which has a temperature of 196 degrees Celsius, and the food is frozen almost instantly, and nitrogen is evaporated);

— Emulsification (which is a foam of fruit or vegetable juices, this effect is made by using special additives, soy lecithin);

— Vacuuming (everything is laid in special bags where it cooks in a water bath at a temperature of about 60 degrees from several hours to several days).

Gelatinization (cooking ordinary dishes from extraordinary products: the caviar from the honey, the pasta from the orange, agar-agar is used, from the natural algae):

— Using of rotary evaporator (device allows to measure the pressure in the cooking process, thus different liquids can boil at very low temperatures and essential oils that are exuded at low temperature will not evaporate);

— Spherization (take sodium alginate and dilute it in a liquid you get a thickener, and in contact with calcium lactate you get gelatinous substance. This way you get caviar with different flavors);

— Using of centrifuges;

— Dry ice (frozen carbon dioxide when heated turns into a gaseous state, is used to exacerbate the sense of taste);

— Transglutaminase (it harmless enzymes that help «glue muscle tissue»).

Molecular gastronomy is something unknown in Ukraine, it impresses not by its taste but its presentation, method of preparation, combination of flavors, textures and colors. For example, hot and iced tea at the same time, transparent pelmeni, solid borsch. A cook doesn't intend to feed, his objectives to surprise the customers. Molecular gastronomy is a deception of the senses, you will be served food and its smell will be served separately.

In the short term molecular gastronomy will be widespread, every qualified chef is familiar with this technique of cooking and can expand the range of establishment to attract new visitors to raise the level of the establishment, but this process takes time and money.

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## **STRUCTURE OF THE AIC RELATIVET GOALS LCA**

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Agro-industrial complex (AIC) – a vertically integrated and coordinated set of industries and companies engaged in the production of food products from agricultural raw materials, storage, processing and making available to the consumer.

From the perspective of production of AIC [1, 2] has a complex industrial structure. It expresses the sectoral division of labor in the agricultural production, gives a generalized description of the composition of sectors and industries. The basic structure of the AIC include: organization-functional, product-raw, territorial and infrastructure.

Agriculture is the economic sector that is most closely related to the environment. Some stages of production activities closely related to natural ecosystems, affecting them and depend on them.

Agro-industrial complex (AIC) is one of the significant factors affecting the environment. Some scientists even give him the championship in terms of human activity. This is primarily due to the prevalence of its territorial units, especially agricultural production. In addition, the reproduction of agriculture is closely linked with natural processes.

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