

*I. Dziublyk, Master student
I. Davydova, PhD of Agr. Sc., research advisor
Zhytomyr State Technological University*

QUALITY ASSESSMENT OF CARBONATED SOFT DRINKS

As you know, water is the source of life on Earth. It is not surprising that it is the main component of the human body and reaches about 70% of body weight. To maintain the water balance we should consume more than 2.5 liters of fluid a day, among which today carbonated soft drinks have a great importance. This food product is very popular among consumers, because at a certain level of development of productive forces and of the population drinks are essential, it is important attribute of civilization. Society can not give up their production and use, and today they have become products of mass consumption which is the main cause of dynamic development and expansion of product range.

Last years in the food industry of Ukrainian production of soft drinks takes first place and it is about 40% of the total output of food. At the same time, although the usage of soda steadily increases, we note that last years the rate of growth for drinks significantly behind similar indicators in other categories of non- alcoholic drinks such as juices or mineral and drinking water. Despite the increase in sales of carbonated beverages, in the structure of sales of soft drinks in general, their share is gradually declining. Obviously, this trend is due to the increase in the number of consumers that are oriented to healthier drinks. It is difficult include soda in healthier drinks because it contains a lot of sugar, and various synthetic additives and flavors.

The range of soft drinks on world markets and in Ukraine is constantly expanding mainly through the use of new, innovative materials, and various food additives that provide desired taste, color, appearance. But with the emergence of new functional drinks there are new counterfeit products that are dangerous and are a serious threat to the health of the Ukrainian population. Therefore, to prevent the harmful effects of non-alcoholic carbonated drinks and its components on the human body, we must make efforts at all levels to determine the quality of the product and prevent counterfeit products in trade.

Thus, this issue is particularly relevant as a comprehensive study of carbonated soft drinks.

It is found that examination of the quality of carbonated beverages typically conducted in three main areas:

1. organoleptic evaluation of carbonated beverages;
2. evaluation of physical and chemical indicators of quality;
3. examination of labeling and packaging.

The organoleptic examination quality of soft drinks realize on the following indexes: colour, outward look is from 1 till 7 marks, taste and smell is from 6 till 12 marks according DSTU 7099:2009 «Product of non-alcoholic industry. Definition methods of organoleptic indexes and production volume».

Physico-chemical methods of control the quality soft drinks are based on the following indexes:

- the fullness of pour;
- the content of dry substances;
- acidity;
- stability;
- the carbon dioxide content (CO₂).

During the examination of the marks and the packagings estimates the correctness of label, the fullness of information, the availability of distortions, deformation and breaches etc.

We decided to evaluate the quality of soft carbonated drinks. That's why during the further work the main aim is installation of compliance of these products of domestic production, the requirements of standard documents for organoleptic and physico-chemical indicators and marking. For realizing this aim we should solve such tasks as:

- to choose the examples of soft drinks;
- to check the conformity of marking of researching examples according to the requirements of the Technical regulations;
- to explore the examples of soft drinks according to the organoleptic and physico-chemical indicators;
- to install the conformity of researching examples according to the legislation of Ukraine.

Promulgation of these results permit to population to choose the products of the best quality that will satisfy their needs, and will not threaten to health.