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**JUSTIFICATION OF THE CHOICE OF WILD BERRIES IN FOOD  
TECHNOLOGIES**

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Wild fruits and berries are a rich source of vitamins, mineral compounds, organic acids, etc. Their value as medicinal and food raw materials is determined by the complex of biologically active substances, in particular their qualitative and quantitative composition, synergism of action and high degree of assimilation by the living organism. A significant part of biologically active substances have immunomodulatory, adaptogenic, antiatherosclerotic, hypotensive, antiradical effects [1].

In the field of the latest food technologies, wild berries have a multifunctional value - for the creation of new food products, health drinks, food bio-additives of multidirectional action, natural bio-correctors, etc. Today, the field of use of wild berries is expanding, but the range of raw materials harvested in Ukraine is still limited. These are mainly currants, blueberries, cranberries, raspberries, rowanberries, elderberries, viburnums, rose hips.

Wild berries are a rich source of vitamins, pectin substances, carbohydrates, organic acids, minerals and other compounds. The value of wild berries as a food raw material is determined by a complex of biologically active substances, in particular, a significant quantitative composition of polyphenolic compounds and ascorbic acid, which are synergists both at the level of functioning of the human body and in the composition of food products. Therefore, products based on them will be of high quality and will allow expanding the scope of production and use of health products.

Cranberry berries contain the maximum amount of pectin substances (1% by weight of the product). Moreover, 59% of this amount falls on soluble pectin, which is characterized by high biological activity. Of the studied types of berries, only viburnum comes close to cranberry in terms of these indicators.

Pectin participates in the processes of aroma formation, and also has the ability to preserve the natural color and aroma of fruits in finished products. Therefore, the use of freshly frozen cranberry semi-finished products will provide the finished products with high organoleptic properties and detoxification capacity in relation to heavy metals, radionuclides, and other xenobiotics.

An important characteristic of wild raw materials is the content of organic acids in it. Thanks to a certain pH value, which is created by organic acids, the development of mold and other microorganisms is suppressed, certain acids (for example, malic) have a radioprotective effect; being in a certain ratio with sugars, organic acids determine the taste qualities of both raw materials and finished products.

Wild berries contain significant amounts of ascorbic acid. In the human body, it participates in the regulation of redox processes, affects cholesterol metabolism, increases the body's resistance to colds and infectious diseases.

The greatest effect of ascorbic acid is manifested in its joint action with bioflavonoids. Moreover, today the mechanism of the physiological effect of polyphenolic compounds is associated with their interaction with ascorbic acid, and the multifaceted therapeutic effect of polyphenols is associated with the properties of vitamin C.

Among all studied wild plants, the maximum content of polyphenolic compounds was found in blueberries and black currants, and the lowest in viburnum berries. Raspberry and cranberry berries contain the same amount of polyphenols, much more than viburnum berries. However, cranberry berries have the maximum content of ascorbic acid, which confirms their high biological value.

**Conclusion.** Biocomponents of fruit and berry raw materials, transforming in metabolic processes into structural and functional elements of cells of a living organism, ensure its physical and mental performance, adaptive capabilities, immune status, determining the state of human health, life expectancy, social and individual activity.

#### **Literature.**

1. Afukova N.O., Golev D.A. The use of wild raw materials in the production of vitamin products. Visnyk of the Kharkiv State. technical University of Agriculture. - Kharkiv, 2002. - Vol. 9. – pp. 210-215.