Куликов Даниил М03-903

**Rus-Eng 7**

**The wild raw materials use in the yogurt drinks technology**

The most relevant direction in the food industry development at present is the creation of products with therapeutic and prophylactic effects. For this purpose, it is possible to develop technologies for combined food products with medicinal wild and cultural raw materials.

In the dairy industry, food additives are most frequently used in fermented milk technology. It is possible to use rowan (*sorbus aucuparia*), redhaw hawthorn (*crataegus sanguinea*), serviceberry (*amelanchier*), meadowsweet (*filipendula ulmaria*), field mint (*mentha arvensis*), honeysuckle (*lonicera caprifolium*), bog blueberry (*vaccinium uliginosum*), cranberry (*oxycoccus*), actinidia, stevia, etc to enrich yoghurts with biologically active substances.

The fruits or juice of actinidia increase non-essential and essential amino acids, including the mass fraction of lysine and methionine [1, p.94].

Thanks to its vitamins, *amelanchier* helps to fight against cancer, and also strengthens blood vessels, thereby preventing a heart attack. It is recommended for use in case of nervous disorders, insomnia and liver diseases [1, p.30].

Leaves and young shoots of meadowsweet (*filipendula ulmaria*) are used in medical practice. The basic therapeutic effect of meadowsweet is connected with the presence of salicylic acid and salicylates [2, p.169].

We have developed a prescription-component solution for a yogurt drink with sea buckthorn (*hippophae*) and rose hips (*rosa majalis*), which are able to exert a physiological effect on the human body due to biologically and pharmacologically active components (micronutrients). It is difficult to create such substances artificially; they are well tolerated by the human body and characterized by therapeutic and/or prophylactic action. At the same time, they are environmentally more favorable sources of plant materials than traditionally used plants cultivated using fertilizers and pesticides [3, p.72].

The use of sea buckthorn and rose hips is the most effective and economically affordable way for improving the provision of micronutrients to the population on national scale. The result is an additional enrichment of mass consumption foodstuffs corresponding to the physiological needs of a person.

The sea buckthorn fruits belong to polyvitamins. They contain 𝐴 provitamins (under 10,9mg%) and vitamins (𝐵1, 𝐵2, 𝐶, 𝐵3, 𝐵6, 𝐸, 𝐾, etc.). They contain folic and nicotinic acid and xanthophyll. Due to high vitamin content, sea buckthorn is the perfect antiscorbutic and anti-inflammatory drug, and it is used in colitis, endocervicitis, peptic ulcer disease and enterocolitis treatment, and also accelerates wounds healing [2, p.199].

Rose hips fruits contain much more vitamins than oranges and lemons have. In addition, the pulp of fruits has kempferol and quercetin flavonol glycosides, sugars, pectins, tannins, organic acids, carotene, lycopene and rubixanthin. Rosehip syrup is used for the vitamin deficiencies prevention, as well as for acute and chronic diseases of the liver, intestines, peptic ulcer, diathesis, bleeding, hemophilia and thyroid disease [2, p.320].

The technological scheme of the reservoir yogurt drink production using sea buckthorn and rosehip syrups differs from the traditional operations in the plant materials preparation and the fillers introduction after ripening. The technological process involves the use of serial equipment and allows to enrich the finished product with physiologically functional ingredients, as well as to expand the range of fermented milk drinks.