

## THE FERMENTED BEVERAGES BASED ON HONEY

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Nowadays, the consumption of fermented drinks from unconventional raw materials is gaining popularity among the population. A special place is drinking honey – fermented beverage based on honey, which positively affect the health of the human organism through biological active substances. The main ingredient, honey, contains the following useful ingredients: invert sugar (fructose up to 54%, glucose - to 44%); organic acids (formic, malic, grape, pyruvic); proteins; enzymes; mineral substances; vitamins (group B, ascorbic, pantothenic, folic acid). Chemical composition of honey depends on its origin (floral, mixed or honeydew), plant raw materials (lime, eucalyptus, coriander) and the climatic conditions of cultivation of melliferous plants. Also drinking honeys include aromatic raw materials: ginger (vitamins A, C, choline, gingerol); peppermint (essential oils, tannins); sage (alkaloids, camphor, flavonoids); galangal (gum, catechin) etc. For the preparation of liquid honey it is important the quantitative ratio of vegetable raw materials and water, which affects not only the sensory characteristics of the beverage, but also on the completeness of the fermentation of sugars, and the qualitative chemical composition of the finished product. "Poltorak" (the ratio of water and honey 1:2), "dvoynyak" (1:1), "troynyak" (2:1) and "quarter" (3:1) are distinguished among drinking honey. With the increase in the number of sugar-containing raw materials decreases the completeness of the digestion, and the duration of the process increases, which significantly increases the cost of the technology makes it economically advantageous. Thus, the most promising for the development of a new fermented beverage based on honey are patterns of production "troynyak" and "quarter", which include the preparation of water (heated to 40°C), weighing honey in an appropriate concentration, boiling (temperature of 80°C), making seed yeast, fermentation in anaerobic conditions, clarification, bottling and ripening in sealed containers within 3 months. This technology allows to obtain a fermented beverage, rich in bioactive ingredients and contains 12% to 14% ethanol. Important technological aspect is the choice of the type and quantity of seed. Traditionally, for the manufacture of drinking honeys used baking yeast *Saccharomyces cerevisiae*, however, today in the market there are preparations of active dry wine and cider yeast, which are interested for exploring the possibility of obtaining on their basis of drinking honey. Therefore, at the Department of Biotechnology of NUPh the influence of inoculum on the qualitative characteristics of drinking honey is conducted.