



# ODESSA NATIONAL ACADEMY OF FOOD TECHNOLOGIES

## DEVELOPMENT OF TECHNOLOGY OF CULINARY PRODUCTS BASED ON THE INNOVATION OF MASS FROM GRAINS LENTILS

### Purpose and scope

The use of innovative approaches such as germination and extrusion of grains allows to adjust the chemical composition of the lentils to intensify the process of cooking, give her a high organoleptic properties and improve the absorption of the product in the human body. Expansion of the range of first courses for healthy nutrition and give them the desired properties.

### Important indicators that characterize the level of scientific output

The regularities of changes in the chemical composition of lentil with the application of pre-treatment (germination and extrusion), which improves its absorption in the human body. The most significant changes of biopolymers and monomers of the raw materials in the process of sprouting lentils as factors of influence on its absorption and the production of biologically active compounds in the process buprenophine. Investigated the possibility of using high temperature heat treatment to change the properties of lentils and obtain a dry mix, which has a high recoverability and sedimentation resistance. It is shown that the best organoleptic properties and nutritional value has purebaby products are manufactured using the combined processing of raw materials and the ratio chosen components prepared by different techniques.

### Intellectual Property Protection Status

We received 2 patents of Ukraine for utility model

### Key Features

Developed the recipe and technology of the soup, has a balanced chemical composition in the ratio of proteins, fats and carbohydrates (2,8 : 1 : 4,5), moderate energy value kJ 239,2, increased mass fraction of vitamins: B1 , PP, folic acid, vitamin C, which is absent in a dry and ekstrudirovannogo grain, big (7 times) mass fraction of vitamin E.

### Market demand

It can be implemented in all public catering establishments, especially people who do not consume animal products.

### The state of work

A study of the physico-chemical, organoleptic and economic indicators of all developed food samples. Decorated with regulatory documentation and specifications, and the temporary routing. Conducted industrial testing of products by 4 companies.

