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РОЗДІЛ 5

ТЕХНОЛОГІЧНІ АСПЕКТИ ВИРОБНИЦТВА ХАРЧОВИХ ПРОДУКТІВ ЛІКУВАЛЬНО-ОЗДОРОВЧОГО НАПРЯМКУ

3. Common European Area.

In conclusion, it would be good to consider in ONAFT the experience of the ANDU and to develop the corresponding programs in the framework of the mobility projects and individual grants.

The supervisor of studies is Dr. Kateryna Fedosova, PhD, Associate Professor

Literature

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THE PROSPECTS OF EGGSHELL POWDER USING

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Over the past decades the population of Ukraine is quite experiencing shortage of calcium deficiency. Calcium is responsible for the integrity of the skeletal system, where 99 % of all calcium is located in the body. The percentage that remains plays an important role in the coagulation of blood, generation and transmission of nerve impulses, the contraction of muscle fibers, activation of certain enzyme systems and the allocation of certain hormones [1].

Foods are the sources of calcium in the human body. It's mainly are the dairy products, where calcium is in natural balance with phosphorus and has a good absorption. However, it is frequently observed the unacceptability of milk products by some population groups. Due to this problem, there is a need to search for alternative source of calcium for the human body. One of them is the shell of chicken eggs [1, 2]. The growth of production also leads to in an increasing of waste during the use of eggs as a raw material component [3].

Challenges associated with disposal of eggshells include cost, availability of disposal sites, odor, flies and abrasiveness [4].

Numerous researches point the possibility of waste application from eggs processing. Due to processing minimizes the negative impact on the environment [5].

Eggshell contains 9-12 % of the total egg weight. It consists largely of calcium carbonate (94 %) with some magnesium carbonate and calcium phosphate deposited on the organic matrix [2, 5]. Despite of the natural origin, these compounds have a higher absorption than other calcium sources, including synthetic origin (calcium chloride, calcium gluconate, calcium lactate etc) [6].

Scientists [7] have denoted the bioavailability of eggshell calcium and that a trace concentration of other minerals (magnesium, phosphorus) has also a positively affect on bones health and increase the bones density.

The eggshell can be a cheap and available source of calcium. It is a byproduct of catering enterprises and food industries (confectioneries, bakeries, poultry farms, etc.).

The researches cause an interest in the use of powdered eggshell in the technology of flour confectionery products. The research was conducted by the using of powdered eggshell during the dough production. The aim of this research was the increasing of nutritional value of the finished food product. The eggshell powder was introduced into the dough formulation in an amount up to 5 % by weight of flour. The rest of the components were put according to the recipe. It has allowed to obtain the samples with high sensorial properties and high nutritional value.

Thus, the use of eggshell powder allows to obtain good quality products in the technology of flour confectionery products. The use of eggshell deserves further study.

Scientific supervisor – senior lecturer Stepanova T.

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COMPARISON OF NUTRITION OF UKRAINIANS WITH THE SCIENTIFIC RECOMMENDATIONS

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The United Nations annually publishes a report on the level of development of the countries of the world. According to 2016 data [1], the highest Human Development Index (HDI) is Norway (0.949) with a life expectancy of 81.7 years. Ukraine ranks 84th place with an HDI of 0.743 and it is behind Belarus (52), Russia (49), Kazakhstan (56) and Armenia (83). Life expectancy in Ukraine is about 70 years for those who was born in 2016. The main factor that determines Ukraine as a poor country is the low income level of the population. 44.5% of Ukrainians live in poverty, having income of less than $ 4 per day. The low life expectancy is due to an improper diet, a monotonous set of products in the daily ration, a deficit of fresh vegetables and fruits.

One of the poverty indicators is the high proportion of food costs in the total expenditure. The average Ukrainian family spends more than 70 % of its income on food. In this connection, the question arises: how optimal is the diet of Ukrainians at such expenses for food?

In the European Union, the relationship between nutrition and health is given great attention, and huge funds are allocated to the relevant projects. Unfortunately, there is nothing like this exists in Ukraine. There is no national program for healthy eating. There are no clear,

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