

PRODUCTS OF PROCESSING OF SUNFLOWER SEEDS IN MEAT PRODUCTS

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Increasing the production of protein to meet the needs of the population of Ukraine and the world is one of the most difficult problems of our time and is of paramount practical importance. Despite the achievements of the agro-industrial complex and the achievements of food science, the problem of protein deficiency in the diet still remains unresolved.

One of the directions of increasing the raw material base is the search for new plant sources of dietary protein and the development of ways to use them in the technology of meat products [1].

One of the ways to increase the raw material base is to find new plant sources of dietary protein and develop ways to use them in meat technology.

As a source of dietary protein attracts the attention of sunflower, which has a fairly large raw material base. Sunflower is the fourth largest oil crop in the world after palm, soybean and rapeseed oil. Sunflower flour is the main by-product of sunflower oil production, accounting for up to 36% of the weight of processed seeds. The protein content in sunflower seeds is about 20%, while the protein content in sunflower meal ranges from 30% to 50% [2]. Sunflower protein has good fractional and amino acid composition, in particular, high methionine content, high functional properties, is the cheapest type of protein raw material. In addition to protein, sunflower meal contains other valuable nutrients such as vitamins, minerals and polyphenols. For this reason, although sunflower meal is mainly used as animal feed, it has the potential for human consumption.

Among the factors that limit the use of sunflower meal (or cake), we can name chlorogenic and quinic acids, the level of which is 1.56 and 0.48%, respectively, and fiber. The negative effect of high doses of chlorogenic acid is manifested in the inhibition of trypsin and lipase, so its level should not exceed 1%.

In the literature, there is information about the total content of phenols and the antioxidant capacity and improvement of nutrients with the use of sunflower seeds in cookies and rolls. However, the use of soy products and their processed products in animal products has yet to be studied.

References.

1. Analysis of integrated useage of sunflower seeds Igor Strashynskyi, Vasil Pasichnyi, Anton Karapalov. 87 International scientific conference of young scientist and students "Youth scientific achievements to the 21st century nutrition problem solution", April 15–16, 2021. – P. 267. Book of abstract. Part 1. NUFT, Kyiv. – 422 p.
2. Raw materials and food products. Methods for the determination of toxic elements. Collection: State standards. – M .: IPK Publishing house of standards, 2017. – 83 p.