

Meat products for people with intensive physical activity on example of climbers

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Introduction. Products based on back fat of pigs are characterized by high energy value and are perfect for nutrition in extreme conditions. But the problem of low biological value of these products appear as well.

Materials and methods. The material for the research was protein aceous raw materials of animal origin such as meat of broilers and turkey meat. For determination of indexes of finished products we use physical and chemical methods and organoleptic evaluation methods.

And also a number of methods of studying of structural and mechanical properties, particularly toughness, ductility and chewiness of finished product. Guaranteed expiration date of our product was also investigated.

Results. As a result of researches and experiments two recipes of meat product in a paste form with using protein aceous raw material was developed and patented: in one we used chicken meat, in the other - meat of turkey.

We have also used antioxidants like parsley leaves, rosemary extract and chopped dogrose.

When using these ingredients a significant increase in digestibility and organoleptic characteristics of the product was achieved by reducing the proportion of fat and increasing the share of raw meat in the recipe .

It was experimentally determined that the optimum ratio between the components of the recipe as follows:

- 1) pork fat - 70-75%, chicken meat - 22-27,5% + other remaining ingredients;
- 2) pork fat - 60-63%, meat turkey - 35-38% + other remaining ingredients;

These formulations can increase the plasticity of the finished product by 7 and 10%, respectively, and the expiration date by 15 and 30% respectively.

The consistency of the product became more dense.

It is important to note that the introduction in recipes of products with pork fat 25% of chicken meat or turkey meat allowed to meet the daily adult requirement of protein by 20 % when consuming 100g of the product. Also the digestibility of the product increases by reducing the proportion of fat and increasing the proportion of protein in turn.

Conclusions. Thus the products for nutrition of people with increased physical activity, such as climbers , were developed. They have high biological value and extended expiration date.

The developments are recommended for the production on industrial enterprises and catering for a wide range of consumers.

References

1. Putro L.M. (2010), Features feeds of sportsmen, which are specialized in the cyclic types of sport, Sport medicine, 1-2, pp. 101-106.