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# Efficiency Indicators of the Drying Process of Agricultural Products

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**Annotation:** The article shows the selection of the most effective modes used in the efficiency indicators of the drying process of agricultural products. In the world practice, scientific researches on drying of various agricultural products, fruits and vegetables and other products, results of theoretical studies, proposals for improving the efficiency of technology and devices used in drying are given.

**Key words:** agriculture, farm, product, drying, process, mode, fruit, vegetable, technology, device.

In the world, the demand for dried fruits and vegetables rich in natural vitamins, micro- and macroelements is increasing year by year. At the same time, the reforms carried out to shorten the period of high-quality, low-temperature and deep vacuum drying, to evaporate the initial moisture by freezing, to simplify the continuous sublimation drying technology, and to increase its productivity are of urgent importance.

Certain scientific and practical results are being achieved in our republic on improving and simplifying the drying of fruits and vegetables based on high-quality and energy-saving technology. In the Action Strategy of the Republic of Uzbekistan for 2017-2021, important tasks for "further modernization and diversification of the industry by moving to a qualitatively new stage aimed at the rapid development of the production of finished products with high added value" are defined. In this regard, production of dried vegetables rich in micro- and macroelements, increasing the efficiency of the sublimation drying process, shortening the drying period, use of freezing in initial moisture evaporation, energy and low-level, which allows to reduce the cost of capital expenditure and Optimizing technologies with the introduction of continuous drying is of great importance.

PF of the President of the Republic of Uzbekistan on February 7, 2017 №4947 "On further development of the Republic of Uzbekistan Decree No. PQ-4406 dated July 29, 2019 "On additional measures for deep processing of agricultural products and further development of the food industry" This dissertation research serves to a certain extent the implementation of the tasks defined in the decrees and decisions of this activity and other regulatory legal documents.

Many scientists on the improvement of drying technologies, including D. Melor, I. Shlink, A.V. Likov, A.A. Guxman, A.S. Ginzburg, B.M. Smolsky, Ye.A. Yermakova, M.I. Verba, A.A. Gryaznov, K.P. Shuisky, V.G. Popov, N.K. Zhuravskaya, D.P. Lebedev, S.T. Antipov, S.V. Shakhov, V.V. Kasatkin, I.G. Pospelova, Z.S. Salimov, N.R. Yusupbekov, A.A. Artikov, O.F. Safarov, H.S. Nurmuhamedov, J.M. Kurbanov, H.F. Jorayev, Q.O. Dodayev and others conducted research work.

They improved the production technology of high-quality dried products under a deep vacuum and developed optimal modes of the drying process of agricultural products, mathematical models of the drying process, methods of accelerating the drying process. At the same time, research work

is being carried out on improving the efficiency of the drying process of agricultural products, evaporating initial moisture with preliminary treatment in the ultra-high frequency electromagnetic range, and optimizing low-stage and continuous drying technologies.

The previous years of the development of food preservation were the period of introduction of progressive drying technologies that ensure obtaining high-quality products. At the same time, this period was a period of high energy consumption in production, and new equipment was not used consistently and efficiently.

The advantages of heating in the ultra-high frequency electromagnetic range over traditional methods can be seen in the following:

- to speed up drying and ensure regularity by providing a large amount of heat;
- preservation of vitamins and other important nutritional elements of food products;
- a convenient mode of heat treatment, the use of pulsed energy, that is, the possibility of step-by-step heating;
- by choosing the shape of the working organs of the microwave generator, creating a given temperature unevenness during the heat treatment of food products or using screens that regulate the transmission of microwaves to the product;
- high efficiency of the process.

Enterprises or entrepreneurs who plan to start processing should first of all ensure that there is a sufficient base of raw materials around them and correctly select the capacity of the processing equipment to be purchased and installed based on the volume of available raw materials. will have to pay attention.

Today, the issue of food production and its supply is one of the global problems. This problem is equally important for developed countries as well as for developing countries. One of the most important tasks of the socio-economic development of our country is the renewal of the material and technical base of local food processing enterprises and the development of new types of activities.

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