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COMMON PROBLEMS WITH FRUIT DRYING INCLUDE THE FOLLOWING

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Abstract
Product quality: Improper drying techniques can cause loss of product quality such as loss of taste, aroma and color.
Yes, this is one of the main problems with drying fruits and vegetables. Improper drying techniques can lose the taste, aroma and color of the product, which reduces its quality and popularity among consumers. For example, drying at very high temperatures can cause the loss of vitamins and minerals, while drying in the sun causes the product to lose color and taste.

Keywords: Vacuum freeze-drying, vacuum sublimation method, optimal temperature.

Introduction

Proper drying technology, including optimal temperature and humidity, helps maintain product quality and meet consumer needs. Non-compliance with hygiene standards and rules can lead to contamination of the product and violate its safety. In addition, non-compliance with hygiene standards and rules can affect both consumers of products and workers involved in the production and processing of food products. can lead to the spread of infectious diseases and other diseases related to digestion. Violation of hygiene rules can also lead to deterioration of product quality and loss of its presentation, which can negatively affect the image and profitability of the enterprise. Therefore, compliance with hygienic norms and rules is an important condition for ensuring product safety and protecting the health of consumers. Energy efficiency: product drying can consume a lot of energy, which can increase production costs and worsen environmental performance. Indeed, product drying requires a large amount of energy, especially if outdated technologies and equipment are used. can do. This can increase production costs and worsen environmental performance, as more energy is produced from

sources that pollute the environment. At the same time, there are various ways to increase the energy efficiency of the product drying process, such as using modern technology and equipment, optimizing the process, using renewable energy sources, and other measures. This can reduce production costs and improve environmental performance, which can benefit businesses, consumers and the environment. Therefore, energy efficiency is an important factor in the selection and application of food drying technologies.

Processing large quantities of products: Drying large quantities of products can be difficult, especially in areas with limited resources and space.Yes, processing large volumes of products can be difficult, especially if the facility has limited resources and space. Drying large quantities of products requires high power and high-capacity equipment, which can be expensive and space-consuming. In addition, effective ventilation and temperature control system should be provided to ensure uniform drying of the product.However, there are different ways to solve this problem. For example, you can use modern equipment with high performance and small dimensions. In addition, automated control systems can be used to optimize the drying process and increase the efficiency and accuracy of the process. In addition, different product pre-treatments such as cutting, shredding and separation can be used to reduce drying time and increase productivity.In general, processing large volumes of products can be difficult.It is important to choose the most appropriate technology and equipment for efficient and cost-effective drying of products. Nutrient preservation: improper drying techniques can lead to the loss of nutrients in the product, which can compromise its nutritional value. Technology of drying fruits, berries and vegetables by vacuum sublimation method.Vacuum freeze-drying (hereinafter referred to as VSS) or lyophilization is based on a technology that has been successfully used for many years in the food and pharmaceutical industry for the production of heat-sensitive products: vaccines, pharmaceuticals, biotechnological products, food products. and drinks.BSS technology is characterized by high speed, oxygen deficiency and low drying temperature, which ensures the preservation of many unique properties of raw materials - shape, aroma, color, taste, structure, biological activity, nutritional value, vitamins . and minerals. One of the many scientific studies on this topic analyzed the effect of BCC treatment on a number of fruits and vegetables (strawberries, limes, oranges, black currants, broccoli, and red peppers) on their nutritional properties. The results showed that the processed strawberries retained 100% of their vitamin C and phenolic content and lost only 8% of their "total antioxidant capacity". For comparison, after 7 days of storage, the loss of vitamin C in only chilled strawberries was about 19%, and the "total antioxidant capacity" was 23%, in addition, studies revealed a significant loss in phenolic components - 82%.

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