

TECHNOLOGY OF OBTAINING JUICE FROM LOCAL APPLE VARIETIES

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Annotation. The technology recommended in this article for the design and storage of apple juice and juice is based on experience in producing quality products that can compete in world markets.

Key words. Juice, apple, fruit, berry, variety, concentrate, tincture, transparent.

It is known that the current natural and climatic conditions in our country allow for the sustainable development of agricultural products, especially fruits and vegetables. The President and the Government of the Republic of Uzbekistan pay great attention to the development of fruit and vegetable growing as a priority in the transition to market relations. The fact that a significant part of the country's foreign exchange earnings is formed through the sale of fruits and vegetables in foreign markets also indicates the priority of radical reform and rapid development of the industry.

Processing fruits and vegetables without destroying them and prolonging their seasonality is also one of the untapped opportunities. The abundance of freshly preserved fresh fruits prevents the artificial increase in the cost of such products in the markets every year during the winter and spring seasons, and has a positive impact on social protection, eliminating the need to import similar products in the winter.

Concentrated, infused, Concentrated juices

Concentrated juices are obtained from natural juices by evaporation, freezing and reverse osmosis. The concentration of the product depends on the type of raw material, the transparency of the juice and the method of dehydration.

The evaporated apple juice is concentrated by evaporation to 70% dry matter and 54% to cranberry juice. Unrefined apple juice is high in pectin, easily evaporates to form jelly, the concentration of the product does not exceed 55%. The dry matter content of distilled juices reaches 50-55% after double freezing. When the mixture is evaporated and frozen, the concentration of the product reaches 65-67%.

Apple juice production technology.

Apple juice is produced naturally in the form of meatless, refined and unsalted.

When using highly acidic raw materials (Baltic, Belarusian apples), 5% sugar is added to the juice. Apples are used to make natural meat juices with added sugar or sugar syrup. Mixing apple juice with other juices, especially berry juice, is widely used.

The content of dry matter in natural apple juice (depending on the brand) is 9.0–11.0%, in juice with added sugar or syrup - 13–16%, in wild apple products - not less than 8%. The total acidity of the juice is 0.2-1.2%, in the juice of wild apples - 1.1-1.6%. Meat content is up to 30%, and in syrup - up to 40% by weight.

Apple juice Antonovka, ranet, Titovka, Beliy naliv, Winter golden parmeni, Korichnoye, Saffron-colored Pepin, Autumn polosatoye, Mekintosh, Suyslepskoye, Belfler, White Rosemary, Djirgarji, Sari-Tursh, Kend-Olma, SH. Along the way used anise, Calvil, Vagnera prizovoye, Yellow-mercury and other varieties.

To get the meatless juice, the apples are washed, inspected, and ground in a grinding mill until they reach a porridge. The juice is squeezed in a hydraulic or belt press, separated and filtered through a cloth filter. The quality of unrefined juice is improved by performing a rapid heating-cooling process before filtration.

It is soaked to get a very (crystalline) transparent juice. Mixing apple juice with fermentation and gelatin treatment gives good results. The distilled juice is separated and filtered.

Air occupies 20% of the intercellular space of the apple. When the fruit is crushed, air oxidizes to the rapidly oxidizing substances in the fruit. Apples are rich in enzymes, which oxidize the polyphenolic compounds in the juice and form brown substances. Therefore, it is important to prevent air from entering the juice during processing. The product must be deaerated before packaging.

The main goal of all the work carried out in the development of the agro-industrial complex of Uzbekistan is to bring the country to the level of the most developed countries in terms of production and consumption of food per capita. One of the most important strategic issues of the domestic policy of the Republic is to stop the Uzbek economy from becoming a one-sided raw material base.

The technology, which is mainly recommended in the design of technology for the preparation and storage of apple juice and jam, is designed to produce quality products that can compete in world markets. Based on the study of juice production and storage technologies, the following conclusions can be drawn: The application of new techniques and technologies in the preparation of apple juice and juice increases its purchasing power. The processing of apple juice and cider vinegar does not change its quality if it is organized knowing the local conditions, and allows workers to be employed after the season. 50% profitability was achieved in the production of apple peel. In the production of apple juice, a profitability of 25% was achieved. It is obvious that the production of apple cider vinegar is more cost-effective than the production of juice. This is because the kale is easy to store in aseptic containers and can be used to make juice at any time of the year. Therefore, we think that the production of apple cider vinegar is expedient.

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