



**FACTORS AFFECTING THE QUALITY OF VEGETABLE
PRODUCTS AND CANNED VEGETABLES**

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Abstract

This article deals with the factors affecting the quality of vegetable products and canned vegetables, as well as the factors affecting the preservation of fruits and vegetables, methods of preservation.

Keywords: vegetables, products, canned food, impact, factors, industry, production.

Introduction

Canned fruits and vegetables are prepared by various methods. Canned fruits: canned fresh berries with sugar or compotes made from them, purees, juices (fruit juice), jams, etc. Frozen fruits and berries are also included in canned fruits. Canned vegetables: sliced or canned vegetables (carrots, beets, cauliflower, green peas, tomatoes, cucumbers, etc.); juices (carrot, tomato, beet juice), condensed tomato products - paste, sauces; snacks made of eggplant, carrots, zucchini, onions fried in vegetable oil; marinated, pickled, vegetables. Canned food for children is pureed and finely chopped, while dietary canned food is prepared according to a special recipe for people with any disease. Canned mushrooms are also included in canned vegetables [1-7]. The canning industry in Uzbekistan mainly produces canned fruits and vegetables. In 2002, 48.4 mln conditional cans are produced [8-17].

The Main Part

The range of canned vegetables is diverse. They vary depending on the type of vegetable and the method of processing. The choice of processing method



depending on the type of product affects the quality of canned food, its nutritional value and shelf life.

Depending on the method of canning, it is possible to obtain products from different raw materials that differ in biological properties, shelf life and other properties. For example, from tomatoes, you can make tomato puree, tomato paste, tomato sauces, tomato juice, marinated tomatoes [14-21].

Canned natural vegetables. These cans are made from fresh vegetables (green peas, beans, cauliflower, oats, tomatoes, etc.). In this case, the raw material is thoroughly washed, sorted, calibrated according to size and blanched. In some cases, it is broken. The raw material thus prepared is placed in jars. In addition to water, salt or salt and sugar are added to make them taste good. In such cans, the composition of the raw material is almost unchanged. This type of canning is therefore called natural vegetable canning.

Natural canned vegetables preserve the taste and aroma of vegetables, especially vitamins. These cans (in liquid form) contain 10-20 mg% of vitamin C, especially in green peas and 25-30 mg% in cauliflower [19-26].

Preparation of canned food. To consider the technology of canning natural vegetables, we will focus on the technology of canning tomatoes.

For canning, relatively small-sized tomatoes are selected from thick-skinned varieties. Tomatoes should be yellowish-red in colour and should not be crushed during sterilization. Tomatoes can be peeled or peeled. To remove the skin of the tomato, it is steamed for 10-20 seconds and then cooled. The tomatoes are peeled and partially peeled by hand. Tomatoes prepared in this way are placed in jars and poured with a 2% solution of salt. The jars are tightly closed and sterilized at 100 °C.

On top of peeled tomatoes pour only tomato mass. Several canned vegetables - cucumbers, cauliflower, vegetable beans, peppers and others are prepared in the same way.

Canned vegetables for snacks. Canned vegetables for snacks are made from eggplant, zucchini, sweet peppers, as well as tomatoes with carrots, onions, parsley, celery and parsley. These canned vegetables are cooked with tomato sauce. They are canned to be eaten.

There are several requirements for the quality of raw materials from the definition of the processing industry.



The quality of vegetable products depends on many factors, the main of which are: adherence to technological work in the preparation of raw materials for processing: the composition of spices added to the product: the order and mode of transition of technological processes compliance: the type of container in which the finished product is placed, its condition and the quality of preparation. Also, in order to obtain a high-quality processed product, the raw materials must have the same degree of maturity, colour and size. According to these indicators, the variety is divided into large and small. The raw material prepared in this way is well processed, various processes such as physical, chemical, biochemical and microbiological are carried out in the same way, the product has a good appearance and the fruit is of high quality. The dishes are usually neatly placed. One of the main factors in the processing of all raw materials is to bring them to a proper sanitary condition. Potatoes, vegetables and fruits are contaminated to one degree or another with soil residues and are exposed to large amounts of epiphytes and soil microorganisms (rot-B sticks, coli or stomach sticks, mold fungi and various yeast offspring).) will have. It is washed in special washing machines or in sloping ditches. The final cleaning of the raw material is washing under the shower. Must meet the specified quantity in terms of product quality produced by different enterprises. It is necessary to follow all the rules of technological processes and microbiological control in the processing of all types of raw materials. Technological work in the preparation of raw materials includes stripping and cutting into pieces. First of all, mechanical, thermal and chemical methods of cleaning are used.

Cutting tools with various tools and knives are used to cut the roots into pieces. Potatoes and tubers are cut into circles or cubes and elongated, cabbage into slices, apples into rings or slices. Some fruits (pear, apricot, peach) are divided into two.

The main way to prepare raw materials in the schemes of various technological processes is short-term thermal processing-balancing using heat or steam. As a result of blanching, the permeability of the tissues increases, and when boiling the jam, the sugar syrup is easily absorbed into the tissues of fruits or berries. Blanshirovka prevents the darkening of vegetables and fruits during technological processes. In some raw materials, the bitterness disappears after blanching, which improves the taste and aroma, reduces the volume, makes it flexible and easily fits into containers.



The quality of other ingredients added to the can is also important for the quality of the future can. For example, the quality of table salt is important for all salted products and sugar for sweet products.

Conclusion

The quality of a vegetable product largely depends on the type of dish, its preparation and its condition. The most commonly used containers for these products are wooden barrels, glass bottles, cans and bottles. In some industries (canning) are used iron vessels of different sizes or special wooden volumes: large barrel idols and chans (in musulism).

References

1. Nabievna, S. B., & Adxamjonovich, A. A. (2021). The chemical composition and properties of chicken meat. *Innovative Technologica: Methodical Research Journal*, 2(10), 25-28.
2. Саттарова, Б. Н., Аскарлов, И. Р., & Джураев, А. М. (2018). Некоторые вопросы классификации куриного мяса. *Universum: химия и биология*, (11 (53)), 36-38.
3. Саттарова, Б. Н., Аскарлов, И. Р., Хакимов, М. У., & Мадалиев, Т. А. (2019). Влияние полученных биостимуляторов на повышение живой массы цыплят. *Universum: химия и биология*, (12 (66)).
4. Саттарова, Б. Н., Омонов, Н. О. Ё., & Уринов, Х. К. У. (2021). Определение антиоксидантов в местном курином мясе на хромато-масс-спектрометре. *Universum: технические науки*, (5-5 (86)), 6-8.
5. Намозов, А. А., Аскарлов, И. Р., & Саттарова, Б. Н. (2011). Анализ синтетических красителей в безалкогольных напитках методом капиллярного электрофореза. *Вестник Белгородского государственного технологического университета им. ВГ Шухова*, (3), 120-123.
6. Sattarova, B., Shodiev, D., & Naqiqatkxon, D. (2021). The determination of the composition and structure of ferrocenyl benzoic acids by mass spectrometric and potentiometric methods. *Innovative Technologica: Methodical Research Journal*, 2(11), 56-58.
7. Саттарова, Б. Н., Аскарлов, И. Р., & Джураев, А. М. (2018). Товук гўштининг кимёвий таркибини ўрганиш орқали инсон саломатлигини муҳофаза қилиш. *АндУ Илмий хабарномаси*, (3), 31-33.



8. Sattarova, B., & Xurshid, A. (2022). Importance of missella refining technology for vegetable oils. *Innovative Technologica: Methodical Research Journal*, 3(01), 42-46.
9. Sattarova, B., & Alieva, F. (2022). Equipment for capillary electrophoresis (cef) for the production of soft drinks in the food industry control method using. *Innovative Technologica: Methodical Research Journal*, 3(01), 47-51.
10. Sattarova, B., & Farangiz, I. (2022). Effects of ice cream concentration with cocoa on human health. *Innovative Technologica: Methodical Research Journal*, 3(01), 86-91.
11. Sattarova, B. N., & Maxmudova, A. A. (2022). Meva-rezavor qandolat mahsulotlari. *Innovative Society: Problems, Analysis and Development Prospects*, 112-116.
12. Sattarova, B., & Mokhlaroyim, K. (2022). Extraction of oil by pressing. *Innovative Technologica: Methodical Research Journal*, 3(02), 8-13.
13. Алиева, Ф. А. К., Шодиев, Д. А. У., & Далимова, Х. Х. К. (2021). УФ-видимый записывающий спектрофотометр уф-2201 спектрофотометр исследование синтетических красителей в безалкогольных напитках. *Universum: технические науки*, (11-3 (92)), 66-69.
14. Холдаров, Д. М., Шодиев, Д. А., & Райимбердиева, Г. Г. (2018). Геохимия микроэлементов в элементарных ландшафтах пустынной зоны. *Актуальные проблемы современной науки*, (3), 77-81.
15. Шодиев, Д. А. У. (2021). Нажмитдинова ГККА Специфические аспекты производства продуктов питания. *Universum: технические науки*, (3-2), 84.
16. Шодиев, Д. А., & Нажмитдинова, Г. К. (2021). Пищевые добавки и их значение. *Universum: технические науки*, (10-3 (91)), 30-32.
17. Shodiev, D., Haqiqatkxon, D., & Zulaykho, A. (2021). Useful properties of the amaranth plant. *ResearchJet Journal of Analysis and Inventions*, 2(11), 55-58.
18. Kholdarov, D., Sobirov, A., Shodieva, G., Sobirova, A., Abaralieva, S., Ibragimova, S., & Yakubova, N. (2021, July). On general characteristics and mechanical composition of saline meadow saz soils. In Конференции.



19. Юлдашева, Ш. К. (2016). Значение насекомых в биологической защите растений. *Актуальные научные исследования в современном мире*, (5-2), 29-33.
20. Абдукаримова, Н. У., & Юлдашева, Ш. К. (2016). Роль насекомых паразитов в борьбе с вредителями агроцезонов ферганской долины. *Актуальные научные исследования в современном мире*, (5-2), 10-13.
21. Yuldasheva, S. K. (2020). Seasonal quantity dynamics of leaf top nut aphids. *Scientific Bulletin of Namangan State University*, 2(4), 85-92.
22. Yuldasheva, S. K., Azamov, O. S., Gulomov, S. Y., & Mukhammedov, M. M. (2021). The function of regulations quantity nuts afids with entomofags. *Asian Journal of Multidimensional Research (AJMR)*, 10(3), 393-397.
23. Yuldasheva, S. K. (2020). Characteristics of vertical regional distribution of sap in nature. *ACADEMICIA: An International Multidisciplinary Research Journal*, 10(11), 2135-2139.
24. Yuldasheva, S. Q. (2021). The development cycles of nut aphid generation upper leaves in the central and mountain surrounding plains of Fergana valley. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(3), 1582-1586.
25. Farxodovna, S. S. (2020, August). Improvement of methodical communication system. In *Archive of Conferences (Vol. 4, No. 4, pp. 77-78)*.
26. Alieva, F., & Namunakhon, A. (2022). Current issues of product certification at the international level. *Innovative Society: Problems, Analysis and Development Prospects*, 86-90.