

A pumpkin as „a fruit” – an attempt at developing a recipe of pumpkin–fruit jams

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Introduction

Vegetables play an important role in human nutrition. They are a main source of nutrients. They make dishes more attractive thanks to their desirable flavour, aroma, colour and consistency. Nonetheless, vegetables are strongly connoted savoury snacks by consumers. They are underestimated by adults as well as they are a bane for a great number of children. However, the analysis of world food producers' catalogues shows that vegetables can be an interesting alternative for fruits as preserves.

The world market of conserves

Jams are one of the most popular conserves among all the spreads in the world. Strawberry flavour is widespread not only in Europe but also other continents and seems to be the preferred consumers' choice. Nevertheless, apart from fruit jams on the market there are also vegetable jams among which carrot, yam or eggplant jams sound very exotic.

Taking into account all the advantages of vegetables, an attempt to make them more attractive and desirable by people was made. The aim of the project was to develop a recipe of pumpkin-fruit jams.



„Your food will be your medicine”

Hippocrates

A pumpkin

Pumpkin fruit is one of the widely grown vegetables that is incredibly rich in vital antioxidants and vitamins. This humble backyard low calorie vegetable contains vitamins A, C and E, minerals such as magnesium, calcium, potassium and phosphorus as well as carotenoids especially β -carotene, lutein and zeaxanthin in abundance.

Eating the pumpkin flesh prevents the formation of free radicals as well as protects against atherosclerosis, some cancers and heart attack. It plays an important role in the diet of people who suffer from kidney failure, obesity and metabolic disorders.

Why not only a pumpkin?

The purpose of the addition of fruits and spices were:

- to impart vivid, intense flavour and aroma,
- to change colour,
- to increase nutritional value,
- to enrich the product in health-promoting substances,
- to refine the product.

An attractive pumpkin jam, but what flavour?

During the project six different kinds of pumpkin jams were produced:

- pumpkin-pineapple,
- pumpkin-orange-lemon,
- pumpkin-orange-lemon with ginger,
- pumpkin-apple-lemon with clove,
- pumpkin-apple-orange with cinnamon,
- pumpkin-peach-orange.

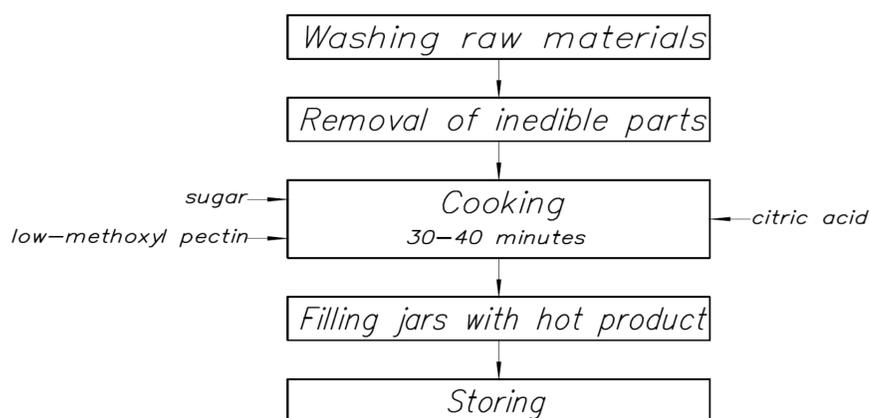
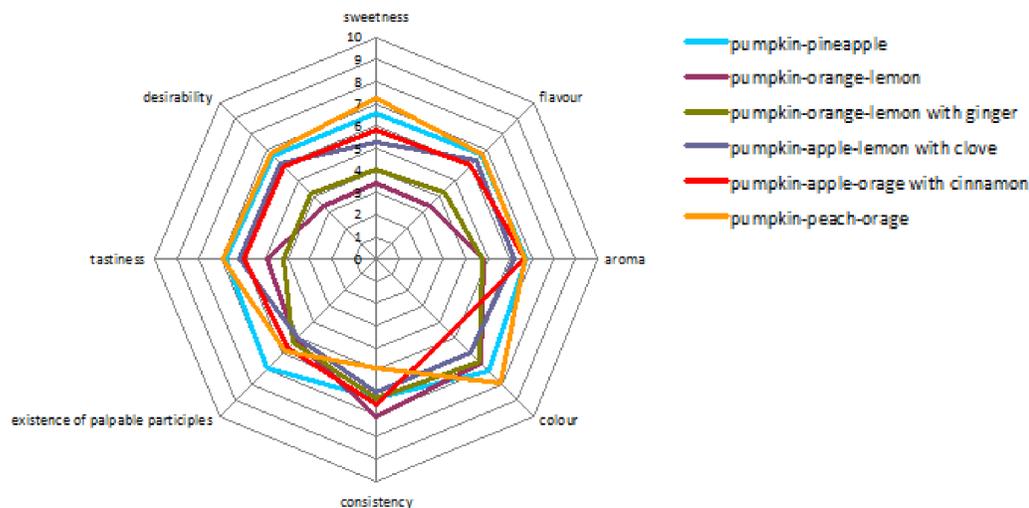


Fig. 1. The technology of producing jams

Semi-consumer assessment

Semi-consumer assessment using a 10-point scale with edge definitions was conducted on a group of thirty potential consumers at the age between 19 and 25.

There were eight indices of sensory quality of pumpkin-fruit jams: sweetness, flavour, aroma, consistency, the existence of palpable fruit and vegetable particles, tastiness and desirability.



Conclusion

The research was preliminary. Due to good consumers' reaction concluded necessity for further research which should be focused on improving the recipes, investigating colour and stability during storage and a better understanding of consumers' preferences.

The consumer evaluation of jams showed that the most desirable flavours of jams were: pumpkin-peach-orange, pumpkin-pineapple and pumpkin-apple-orange with cinnamon. When choosing the most desirable types of jams consumers guided mainly consistency, level of sweetness, flavour and colour.

Therefore, it is worth searching for new ways of the usage of some vegetables such as courgette, carrots or tomatoes and offering them in the form they are unknown.

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