

CZECH REPUBLIC

Agri-food chain integration & quality

Location
Podivín

Programming period
2014 – 2020

Priority
P3 – Food chain & risk
management

Measure
M16 - Cooperation

Funding (CZK)
Total budget 46 000 000
RDP contr. 23 000 000
Private 23 000 000

Project duration
2016 – 2017

Project promoter
FRUTA Podivín, a.s.

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Brand new manufacturing and packaging procedures were developed in order to produce healthy nutritional products for children from fruit and vegetables.

Summary

The aim of this project was to expand the company's range by developing new, healthy, fruit and drink products designed for children. New technology had to be purchased and construction work had to be undertaken in order to successfully manufacture the product.



The company collaborated with the University of Chemistry and Technology in Prague to develop brand new technological procedures and product formulations which modified the process and enabled the product to be packed in modified atmosphere packaging in order to extend shelf life.

Results

The project helped extend the company's product range and improved its competitiveness by providing a wider, healthier and more attractive offer for consumers.

The new production and packaging process extends the shelf life of the products, preserves the nutritional aspects of the fruit and vegetables, while ensuring a very high level of food safety.

The products are sold in supermarkets, pharmacies, drugstores and specialised bio shops. The range of products is to be further extended by combining fruit and vegetables with cereals.

The products are more environmentally friendly and the process does not require the use of chemicals. The packing is completely recyclable.

Context

Fruit and vegetables are a good source of fibre and an important part of a healthy diet. Fruit and vegetables can even be introduced to infants as a complementary source of nutrition while they are still being breast or bottle fed.

The company (Fruta Podivín) wanted to expand their range by creating a product targeted at children that was healthy, attractive and easy to consume.

Objectives

The objectives of this project included:

- Producing new fruit and vegetable product variants, with high nutritional value, without the use of preservatives.
- Developing new, recyclable packaging materials, which do not require the chemical stabilisation of products.

Activities

During the project, the following activities were carried out by the company:

- The company collaborated with the University of Chemistry and Technology in Prague. The University worked on how to use fewer chemical preservatives, while not decreasing product quality and how to use new modern processes, which are more effective and healthier.
- In collaboration with the University, they selected the new technology to be used for the production of their fruit and vegetable products to be packed in modified atmosphere packaging to extend shelf life.
- They invested in this technology and adapted it for the production of the new range of products.
- New formulas were developed; the whole manufacturing process was designed and optimised,

starting from the receipt of raw materials up to the final packing of the products.

- Measures were taken to optimise quality control and verification of safety standards in the production process of the new range of products.
- A new production line was built using packaging technology that omits the requirement for preservatives and chemical additives.
- The new process focusses on the removal of pathogens. The fruit and vegetable products are placed into foil trays in an aseptic process which inhibits new pathogens. The removal of existing pathogens takes place through the introduction of heat very quickly and then a rapid chilling of the products (similar to pasteurisation). The process extends the shelf life of the products without chemicals. It also preserves the nutritional aspects of the fruit and vegetables, while ensuring a very high level of food safety.
- The final product is packaged in a box which is easy for young children to grip.

Main Results

The project helped extend the range of the company's products and improved its competitiveness through a larger, healthier and more attractive offer for consumers.

The products are sold in supermarkets, pharmacies, drugstores and specialised bio shops. The range of products will be extended in future by combining fruit and vegetables with cereals.

The products are more environmentally friendly as the process does not require the use of chemicals. The packing is completely recyclable. Local fruit and vegetables are used to produce the product. The project supports Czech farmers and uses their services.

