

CONFORMITY OF VEGETABLE-FRUIT RAW MATERIALS USED IN THE MANUFACTURE OF PRODUCTS FOR CHILDREN AND REQUIREMENTS TO SAFETY INDICATORS

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There are given the results of the investigations of toxicants content of different chemical nature in vegetables and fruits cultivated in Western and Southern regions.

Vegetables, fruits, infant food, nitrates, micotoxins, radionuclides, pesticides, toxic elements.

Vegetable and fruit raw material grown in Volyn and Odessa does not exceed the permissible levels of nitrates, toxic elements, mycotoxins, pesticides, radionuclides regulated in force in Ukraine sanitary norms and rules. This raw material can be used in the production of food for children.

It should be noted that the maximum nitrate levels in carrots 2011 harvest was within the allowable concentration (200 mg/kg), and in 2012 it exceeded the permissible level almost five times. However, of the 42 samples submitted for the determination of nitrate for the year 2012, more than 50% did not exceed the level permissible in the manufacture of products for babies.

Content of radionuclides ^{137}Cs and ^{90}Sr in carrots is 4 Bq/kg to 11 Bq/kg at an acceptable level when using them in products for children 40 Bq/kg.

Thus, Volyn region is favorable for a valid content of radionuclides ^{137}Cs and ^{90}Sr in such widespread in the region vegetables like carrots, as evidenced by the data in 2011. The level of nitrate content in samples of carrot, studied from different farms in different periods of collection, marked substantial fluctuations in the indicator - 100 mg/kg to 980 mg/kg of the product, although almost half of it does not exceed farms 200 mg/kg.

Due to the fact that the finished products for baby food mycotoxin patulin content is normalized, a study on its value you as a fruit pulp, and in the skin. It was found that in both components of the fruit (fruit and vegetables) mycotoxin patulin content does not exceed 0.01 mg/kg.

In the vegetable raw materials and finished products is normalized as pesticides, especially organochlorine whose composition include DDT and its metabolites and the amount of hexachlorocyclohexane isomers.

References

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