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STUDY OF COMMODITY AND TECHNOLOGICAL INDICATORS OF SWEET POTATO POWDER

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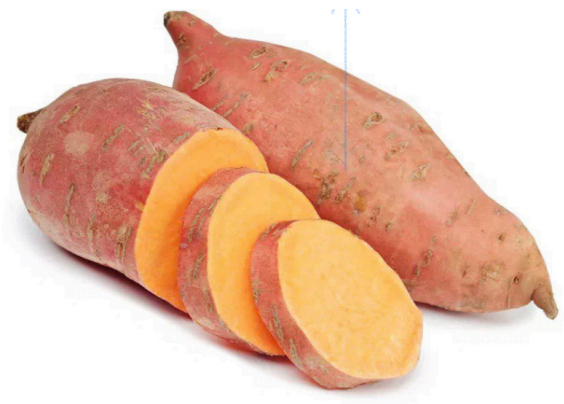
Introduction: Currently, there is a significant increase in scientific research aimed at developing functional food products for use in diet therapy. The results of numerous studies in the field of nutritionology prove that it is problematic to ensure adequate needs of the body when using traditional nutrition, especially fast food, due to the low content or even absence of the most important micronutrients in the products used in such nutrition.

Подпись

THE OBJECT OF THE STUDY

the object of our research was sweet potato root tubers purchased in Moscow stores and meeting the requirements of GOST R 51808-2013



Ipomea batatos L.)

Подпись

Materials and methods. The object of the study were sweet potato tubers purchased in retail chains in Moscow. The tubers were crushed by rubbing on a grater, followed by drying the resulting mass in a drying cabinet at a temperature of 60 ° C.

Подпись

The name of the indicator	Limits of the received values	Recommended value of the indicator	Regulatory document
Humidity	9,1-9,4%	No more10	GPA.1.5.3.0007.15 Determinatio moisture content of medicinal pl materials
General ash	3,8-4,1%	No more5	GPA.1.2.2.2.0013.15 Total a
Ash, soluble in 10% HCl	0,11-0,12%	No more1	GPA.1.5.3.0005.15 Ash insolu hydrochloric acid.
The total content of tannins	2,7 – 3,1 %	No less 2	GPA. 1.5.3.0008.15 Determination content in medicinal plant raw mat medicinal plant preparatio
Extractive substances extracted by water	20,4 – 27, 6 %	No less 20	GPA. 1.5.3.0006.15 Determinatio content of extractive substances in plant raw materials and medicin preparations

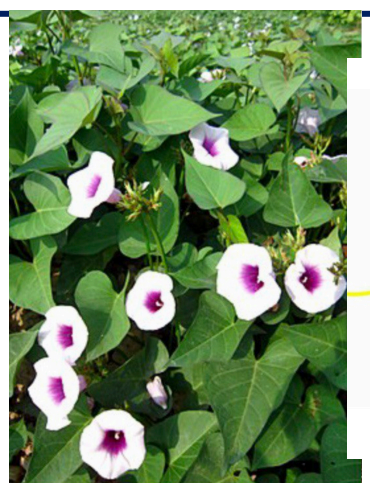
Determination of numerical indicators

	The ratio of the mass of the powdered material to the occupied volume	0,57	
ml/g	The ability of the powder to increase the volume in the process of interaction with water or aqueous solutions	7,8	GC
olding , %	The amount of water that the powder can retain due to various forms of moisture bonding, expressed as a percentage of the initial powder weight	86	GC

Technological characteristics

Подпись

Results. the humidity (mass fraction of moisture, %) was determined, amounting to 9.1-9.4%, the content of total ash and insoluble ash in 10% hydrochloric acid, amounting to 3.8-4.1% and 0.11-0.12%, respectively. The indicator of the bulk density of sweet potato powder was 0.57 g / cm3, the swelling was very



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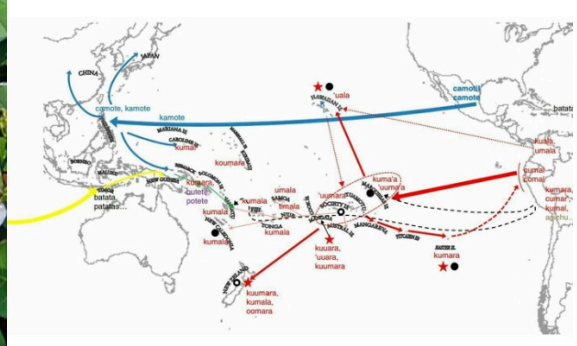

Подпись

Conclusion. In the course of the study, the authors have established the prospects of using raw sweet potatoes as part of functional nutrition products, which is due to high swelling and moisture-retaining