FUNCTIONAL BALM "STEVIA PLUS" ENRICHED EXTRACT OF STEVIA

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Now a large number of researches on designing, development and introduction of the functional dietary food enriched with biologically active agents of a natural origin is carried out. In production of products of functional food the important place is taken by a Stevia Rebaudiana Bertoni which application in the food industry will allow to replace partially sugar that is especially important for a solution of the problem of healthy food of patients with diabetes /1-3/.

Purpose of our research: Create the technology of preparation of medical - preventive balm. For preparation of a product used a stevia of a local origin (Kazakhstan). Technology of preparation of balm: powder from leaves of a stevia was extracted 70% ethyl alcohol in the ratio 1:5, then mixed ready extract from 2-3% the crushed nutmed (Myristica Gronov), 2-3% the crushed root of ginger (Zingiber), 2-3% the crushed root of a horseradish (Armoracia rusticana) and 1% chili powder (Capsicum) to balm lump. Stood mix within 1 month in the dark room at a temperature of 18-20 of ⁰C, then filtered and spilled in dark bottles. It is shown that use of cold technology allows to keep the increased nutritional value of vegetable raw materials of the balm which is a part. For identification of a nutrition value of a product the chemical composition of a product was investigated: Se -16,5 mkg/l, Fe -9,0 mg/l, P- 410 mg/l, Zn - 7,5 mg/l, Mn - 180 mkg/l, protein - 0.09 g/l, carbohydrates - 0.85 g/l, fats - aren't found, vitamins: (A) - 720 mkg, tocopherol (E) – 10 mg/l, calciferol (D) - 9,5 mkg/l, thiamin (B1) – 820 mkg/l, riboflavin (B2) – 980 mkg/l, a pyridoxine (B6) - 860 mkg/l, Folic acid (Bc) - 120 mkg/l, niacin (PP) - 8 mg/l, ascorbic acid (C) – 95 mg/l, mass fraction of calcium potassium oxide - 730 mg/l, mass fraction of calcium calcium - 650 mg/l). Identified microbiological safety balm: QMAFAnM, CFU/g - 1×10^2 (normalized parameters - 5×10^3); pathogens, including Salmonella, E.coly, coliforms, yeast and mildew not detected. Balm of "Stevia Plus" enriched vegetable raw materials and stevia extract refers to the product's functionality preventative and can be used as a dietary product, and the product in the diets of people with diabetes.

Tags: stevia, balm, functional food, technology, diabet

References

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Asrandina S., Vitavskaya A., Kenzhebaeva Sh., Ayazbaeva G., Atabaeva S., Kudarov B.R.Kenzhebaeva S.S. Functional Balm "Stevia Plus" enriched extract of stevia 7th Asia Pacific Biotech Congress, Beijing, China, July 13-15, 2015.