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**NEW RUSSIAN FOOD ADDITIVE IODCASEIN CAN HELP THE HUMANKIND TO WIN
THE BATTLE AGAINST THE IODINE DEFICIENCY DISORDERS**

A.F.Tsyb, R.A. Roziev, A.Y.Goncharova, A.N.Grigoriev, L.L.Bozadjiev, A.N.Klepov,
V.G.Skvortsov, V.K.Podgorodnichenko, O.V.Tomchani
Scientific Productive Enterprise "Medbiopharm"
249020, 5, Jolio-Curie street, Obninsk, Kaluga region

Iodine is a chemical element that is essential for the synthesis of the thyroid hormones which enable normal function a human body. Environmental iodine deficiency and, consequently, restricted delivery of iodine to a body with food leads to various thyroid disorders abnormal functioning other organs, in some cases abnormal course of pregnancy, cause weakness, tiredness, irritability, weakening memory and attention. Deficient delivery of iodine to a body of children and adolescents with cause physical and mental retardation.

Regulation of iodine metabolism is a complex biochemical process and simple supplementation of salt and other foods with inorganic compounds containing iodine (potassium iodide and potassium iodate) does not enable complete elimination of iodine deficiency.

Scientific Productive Enterprise "Medbiopharm" developed new remedy for prophylactics of host iodine deficiency, it is "IODCASEIN". Casein is a protein rich with the aminoacids, such as tyrosine, histidine, etc., which form firm bond with iodine. The delivery of iodinated aminoacids from gastro-intestinal tract to the liver is accompanied by deiodination by deiodinase. The amount and the activity of the enzyme depend on the extent of the host iodine deficiency. A human body has well adjusted mechanism for the assimilation of appropriate amount of iodinated protein. The excess of tyrosines bound to iodine having transformed to glucouronides eliminate a body.

Animal experiments carried out by researchers of the "Medbiopharm" say that IODCASEIN is completely applicable to elimination of host iodine deficiency. The extent of the assimilation of iodinated casein depends on individual iodine status. There is much accumulation of the additive in the case of host iodine deficiency, the accumulation is lower if the iodine status is normal.

Results of the studies show that IODCASEIN is practically safe and physiologically appropriate. Due to calculated amount of the bound iodine in the additive it is possible to dose precisely its content delivered to the food. The chemical stability of the compound does not change the taste and the odor of the final product. The properties of the IODCASEIN can be added to vitamin and mineral complexes, bread and bakeries, diary and children nutrition.

The food enriched with the IODCASEIN can be broadly and safely consumed by the population regardless the age of a consumer.

Inferences of experts of the Research Institute of Nutrition of the Russian Academy of Medical Sciences, Endocrinological Center of Russian Academy of Medical Sciences are positive, they say that the developed approach to the elimination of host iodine deficiency is valid. All necessary documents which permit the use of the additive in bread making, diary, etc. are available.

The practical realization of the program on elimination of the host iodine deficiency has been commenced. A number of bread-making companies in the Kaluga, Obninsk, Barnaul cities have already made bread and bakery with iodine supplementation. Cities of Moscow, St.Peterbourg, Oriol plan to commence making "iodinated" bread in the nearest future.