

The invention is directed to prevent iodine deficiency and optimize iodine metabolism in a human organism. A biologically active food additive (BAA) and food products comprise synthetic organic compound containing covalently linked iodine selected from the following group: carboxylic acids, unsaturated fat acids, lipids, terpenes, alkanes, terpenoids, isoprenes, peptides, polypeptides, amino acids, protein hydrolisates, polypeptide hydrolisates, vegetable, animal and microbiological proteins, mixture of lipids and unsaturated fat acids, mixture of isoprenes and terpenes, mixture of isoprenes and protein hydrolisates, mixture of isoprenes and unsaturated fat acids, mixture of vegetable, animal and microbiological proteins, mixture of vegetable and animal proteins, mixture of animal and microbiological proteins, mixture of vegetable and microbiological proteins. Iodine is also covalently linked in the 5th and 3d or in the 3d position of the phenolic cycle in proteins, peptides, polypeptides, aminoacids and in polypeptide and protein hydrolisates. The aminoacids and proteins are selected from a group of aminoacids and proteins devoid of hormonal and thyroid activity and produced in conditions which exclude the condensation of tyrosine nucleus.