

## **LIPIDE FORTIFICATION – A WAY OF DECREASING THE RISK OF IODINE DEFICIENCY DISEASES**

**Svetlana Haritonov, Rodica Sturza**

*Technical University of Moldova, Chisinau*

The deficit of iodine is established in conditions of diminishment of the contribution of this mineral both with food factor, and with drinking water. The deficit of food contribution in iodine has as consequence the deregulation of thyroid function, restraints in physical and psychical development of individual.

The objectives of this work are researches for obtaining iodized oil that would satisfy the requirements of body in iodine. The sunflower seed oil is a product with the most important value, thus the production of oil fortified with iodine would be a cheap and accessible variant.

For researches it was used refined oil in one liter of which 1g of crystalline iodine was administrated. The analysis of iodine was accomplished by titration with sodium thyo-sulfate, after the extraction in ethanol by indirect method. The ulterior analysis has demonstrated that the contents of free iodine in oil constituted 0,38 mg/ml, and the contents of iodine tired chemically 0,50-0,51 mg/ml. The oil had an intense-brown color, caused by the presence of free iodine. The obtained oil (A) was diluted (1:100, 1:500) obtaining the products (B) in which total iodine contents constituted 8-9mg/ml. From the oil (B) by dilution (1:1) the oil (C) was prepared, in which the iodine contents does not surpass 4-4,5mg/ml that is much more under the level of recommended daily contribution.

Production of oil fortified with iodine constitutes a considerable iodine supplement, which, associated to iodine contribution from kitchen salt, would contribute to the eradication of deficiency in iodine.