

Iodine deficiency

Worldwide, iodine deficiency is **the most important preventable cause of brain damage**. People living in areas with severe iodine deficiency may have an IQ up to 13.5 points lower than in areas without iodine deficiency. This mental deficit has a drastic effect on children's ability to learn, women's health, the quality of life of the community, economic productivity, and animal agriculture (even livestock are iodine deficient).

Until the 1990s, **goiter prevalence** was used as the primary indicator of the occurrence of iodine deficiency in the population – it usually occurred in mountainous areas and in areas far from the coast. **Urinary iodine excretion** and other methods, however, have shown in later years that insufficient iodine intake is very extensive and occurs not only in areas where goiter is endemic, but also in industrialized countries.



Since 1991, the World Assembly adopted the goal of eliminating iodine deficiency worldwide. In 1993, the WHO and UNICEF, recommended universal salt iodination (for both humans and livestock) as the main strategy for eliminating iodine deficiency.^[1] The number of countries where iodine deficiency is a problem has decreased, but still **2 billion people in 47 countries suffer from iodine deficiency** in the world: most often in Europe (52% of the population) and in the eastern Mediterranean (47% of the population). The largest number of affected individuals is in Southeast Asia and Europe. The smallest percentage and number of people with insufficient iodine intake is on the American continent.^[2]

In the Czech Republic, salt has been iodized since 1947 and the Czech Republic is one of 19 out of 40 European countries with a sufficient iodine intake and 9 countries where $\geq 90\%$ of households use iodized salt.^[3]

 For more information see *Trace Elements in Human Nutrition*.

References

Related Articles

- Diseases resulting from nutrient deficiencies
- Diseases resulting from nutrient excesses

Citations

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Literature

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