Prevention of iodine deficiency
in the Czech Republic

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Madonna from Zbraslav, one of the Czech famous gothic pictures
14th century
National gallery Prague
Intersectoral Committee on Iodine Deficiency Prevention,
ICID Czech Republic, Prague

Objectives of Committee

Collection and assessment of knowledge on ID, regulation of the offer of iodine, suggestion of preventive actions, support surveys of iodine status of population, media communications.

Committee members (voluntary membership) come from

- public health and medicine
- ministries
- governmental institutions
- NGOs
- food and pharmaceutical industry
- clinical laboratories
Restoration of iodine deficiency prevention in the Czech Republic
1995 - 2000

- Increase of iodine content in iodized salt to 27 mg/kg
- Assignation of iodine reference dose to 150 µg/d
- Potassium iodate instead natrium iodide in iodized salt
- Iodine enrichment of breast milk substitutes
- Considerable increase of iodized salt use in food mass production
- Iodide on prescription, paid from health insurance
- Annual Iodine Days, Diplomas for activity in IDD prevention
- Population surveys
- National conferences on IDD
Prevalency (%) of iodine levels in urine in women below 100 µg/L and below 50 µg/L
According to Zamrazil and Čeřovská, 2014

- Below 100 – Mild deficiency
- Below 50 – Moderate and severe deficiency
Median urine levels of iodine

Czech Republic

Excerpted from L. Ryšavá, surveys 1995 - 2015

Adequate saturation. In pregnant’s 250 µg/L
Urinary iodine levels in pregnant women
Czech Republic and Austria
According to Bílek (CR) a Lindorfer (A) (2011, 2015)

< 150 µg/L
Czech women 85 %
Austrian women 81 %
Recommended dose 250µg/d
Current objectives in iodine deficiency prevention in the CR

Maintenance of level achieved in deficiency prevention

Assessment and solution of new problems:
- restraint of support of supplements with iodine
- deal with increase of iodine in dairy cow’s milk
- eliminate iodine deficiency in pregnant women

Enforce periodic population surveys and sustainable funding of them
Iodine in raw cow’s milk CR 1998 – 2015
According to Trávníček et al. 2011 a 2016

- 1988
- 2005
- 2010
- 2015

Year

50
100
200
300
400

milk µg l/L
Conclusions

Long term Iodine status in population of the Czech Republic is in the range of optimum with mild tolerable increase of iodine saturation.

In recent years a slight decrease of ioduria levels in population was observed.

Unsufficient saturation persists in significant number of pregnant women.

Iodine deficiency prevention is never-ending process.
"The challenge of harmonizing the iodine supply across Europe". IDD Newsletter, Vol 45, No 1 February 2017, p.10
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Thank you for your attention

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