

## Fluor and Iodine Commission: Annual Report 2017

### Mission

Initially founded to accompany the developments in connection with the usage of iodized salt in Switzerland, the commission nowadays engages in scientific and technical questions concerning iodine and fluoride intake, monitors intake of these nutrients and concerns itself with political issues in this field.

### Members

Prof. Michael Bruce Zimmermann, Zürich, Präsident  
Dr. Maria Andersson, Zürich  
Dr. Michael Beer, BAG representative, Bern  
Prof. Hans Gerber, Bern  
Prof. Christoph A. Meier, Basel  
Dr. Giorgio Menghini, Zürich  
Dr. Katharina Quack Lötscher, Zürich  
Prof. Sabine Rohrmann, Zürich  
Stefan Trachsel, Pratteln  
Prof. Tuomas Waltimo, Basel

### Activities 2017

The annual commission meeting took place at the ETH Zurich, on April 3, 2017. The commission members shared updates and several issues were discussed.

The Schweizer Salinen AG (ST) shared the latest sales figures as well as salt sale statistics from 1990 to 2016 for iodized, iodized and fluoridated and non-fortified salt: including sales in packages and tins, sales in bags and buckets, and total salt sales. The salt sales stabilized and the data presented for 2016 is comparable to the two previous years. Close to 99% of the salt sold in packages and tins is now iodized: 89.2% F/I salt, 9.2% I salt and only 1.6% of the sold salt is non-iodized. Salt sold in bags (25 kg) and buckets (12.5 kg) is produced and sold as iodized salt only. In 2016, for 'Standard-Speisesalz', roughly 38% of a total produced salt was non-iodized (39% I salt, 23% I/F salt, 38% no I). The proportion of iodized to non-iodized salt delivered to the food industry has not changed appreciably over the past 3 years.

ETH Zurich (MA) presented final results from the 2015 national iodine survey, conducted by ETH Zurich with support of the BAG/BLV.

Target groups were schoolchildren, non-pregnant women of reproductive age and pregnant women. The median UIC in school children was 137 µg/L (n=725), a significant increase compared to 2009 (mUIC 120 µg/L, n=916, P<0.001). The iodine status in Swiss school children remains sufficient. The median UIC was 88 µg/L (n=345) in women of reproductive age and 140 µg/L (n=359) in pregnant women.

The results of the 4th Swiss national iodine status study indicate that the Swiss salt fortification strategy continues to supply enough iodine to meet the dietary iodine requirements of school age children, but not for women of reproductive age and pregnant women. The data imply a slight increase in thyroid activity as indicated by elevated Tg concentrations. The implications of this finding require further investigations.

The overall iodine status improved in school children since the last survey in 2009. This may, in part, be attributed to the increased level of iodine fortification in salt from 20 to 25 mg/kg, implemented in January 2014. However, the impact of the adjusted iodine level was not reflected in the median UIC of pregnant women and the increase of 5 mg iodine per kg salt was not sufficient to ensure iodine sufficiency in all population groups.

The commission discussed strategies to ensure adequate intakes among pregnant women and women of reproductive age and agreed that multiple strategies will be required: a) further encouragement to the Swiss food industry to use iodized salt whenever possible; b) potential recommendations for iodine supplementation to pregnant women and c) a potential increase in the iodine concentration in the Swiss salt from 25 to 30 mg/kg.

The Commission aims to encourage use of iodized salt by the Swiss food industry, but predicts the progress to be slow. Despite recent initiatives to promote iodized salt in the Swiss salt production the salt sale figures indicates no improvement. The Commission will follow up with the Swiss Society of Obstetrics and Gynecology (SSOG) on possibilities to write an Expert Brief on prenatal iodine supplementation. A potential increase of the iodine content in the iodized salt from 25 to 30 mg/kg was extensively discussed and the commission will be following up on the possibility to make this happen in the summer 2018.

## **Outlook**

1. The commission will meet for their annual meeting at ETH Zurich on April 12, 2018.
2. The major activities for 2018 will be the publication of the national iodine survey, a chapter on Iodine Nutrition in the Swiss Nutrition Report, final decision on a potential increase of the iodine content in iodized salt from 25 ppm to 30 ppm, and, if positive, implementation of this decision.



*Maria Andersson for Michael Bruce Zimmermann, Zürich, February 28, 2018*