Outline

- Working Group on Prevention of Iodine Deficiency Disorders
- Iodine Survey 2019
- Joint Recommendation on Iodine Intake for Members of Public

Working Group on Prevention of Iodine Deficiency Disorders

- Jointly set up by the Department of Health and the Centre for Food Safety of the Food and Environmental Hygiene Department
- With representatives from
  - the Hospital Authority,
  - the Hong Kong College of Community Medicine,
  - the Hong Kong College of Family Physicians,
  - the Hong Kong College of Obstetricians and Gynaecologists,
  - the Hong Kong College of Paediatricians,
  - the Hong Kong College of Physicians

Working Group on Prevention of Iodine Deficiency Disorders

- Reviewed
  - key findings
    - Iodine Survey 2019
    - PHS 2020-22: Thematic report of iodine status
  - latest scientific evidence
- Made the joint recommendations

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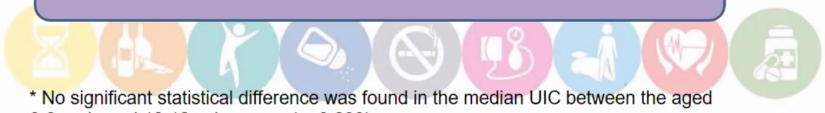
Iodine Survey 2019
Student: median Urinary Iodine Content

School-aged children		No. of subjects	Median UIC (ug/L)
Aged 6-9*	Male	273	116
	Female	248	106
	Subtotal	521	110
Aged 10-12*	Male	271	128
	Female	231	112
	Subtotal	502	120
All school-aged children		1,023	115

WHO epidemiological criteria **"adequate"** iodine intake: mUIC 100-199 ug/L



* No significant statistical difference was found in the median UIC between the aged 6-9 and aged 10-12 subgroups. (p=0.238)

Iodine Survey 2019
Student: Goitre Rate

Ultrasound examination

- **Number of school-aged children with thyroid volume (ml) greater than 97th percentile** against body surface area (BSA)-specific and age-specific reference values, with reference to category of "none" for iodine deficiency disorder by **WHO's epidemiological criteria.**

	Overall number of goitre		
	M	F	Total (goitre rate %)
By BSA reference	6	11	17 (1.7%)
By Age reference	9	13	22 (2.2%)

WHO epidemiological criteria as "None" for severity of IDD (Total goitre rate [TGR] 0.0-4.9% as "none")

For Hong Kong school-age children six to twelve years old, our results confirm that they have adequate iodine nutrition as a group.

Definition of iodine status In pregnant and lactating women (WHO)

Micronutrients Indicators	Urinary iodine concentrations for determining iodine status in populations

Median urinary iodine (µg/L)	Iodine intake	Iodine status
Pregnant women		
<150	Insufficient	
150–249	Adequate	
250–499	Above requirements	
≥500	Excessive[c]	
Lactating women[d] and children aged less than 2 years		
<100	Insufficient	
≥100	Adequate	

[c] The term "excessive" means in excess of the amount required to prevent and control iodine deficiency.
[d] Although lactating women have the same requirement as pregnant women, the median urinary iodine is lower because iodine is excreted in breast milk (6).

Iodine Survey 2019
(Pregnant women)
median Urinary Iodine Content

	Number	Median UIC (μg/L)	
All pregnant women	1,509	134	Insufficient
Women taking iodine supplementation at average daily intake of ≥ 150 μg	892	156	Sufficient
Women taking iodine supplementation at average daily intake of < 150 μg	195	132	Insufficient
Women did not take any supplement or took supplement without iodine	421	97	Insufficient

Iodine Survey 2019
(Lactating mothers)
median Urinary Iodine Content

	number	Median UIC (μg/L)
All lactating mothers	479	65
Mothers taking iodine supplementation at average daily intake of ≥ 150 μg	136	84
Mothers taking iodine supplementation at average daily intake of < 150 μg	59	71
Mothers did not take any supplement or took supplement without iodine	284	58

Insufficient

maternal median UIC may not be a good indicator of iodine content in breast milk, due to preferential excretion of iodine into the breast milk

Iodine Survey 2019 Conclusion

Survey findings :

- Iodine intake of school-aged children was considered adequate
- that of pregnant and lactating women was insufficient
  - except **pregnant women taking iodine-containing supplements** at an average daily intake of equal to or above 150 ug/day

Latest Scientific Evidence and Overseas' relevant Recommendation

WHO and Overseas' recommendation:

- Consuming iodine rich food as part of balanced diet;
- Use of iodised salt as an effective and affordable mean of iodine intake;

Oveseas' health professional guidelines advise to 'taking iodine-containing supplement for pregnant and lactating women':

- Due to higher demand of iodine for pregnant and lactating women, dietary iodine intake is unlikely to be sufficient.

Joint Recommendation on Iodine Intake for Members of the Public

1. **Consume iodine-rich foods**
2. **Use iodised salt**
3. **Additional measures for pregnant and lactating women**

Joint Recommendation on Iodine Intake for Members of the Public (1)

1. Consume iodine-rich foods

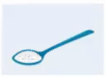
Consume food with more iodine as part of a healthy balanced diet. Seaweed, kelp, seafood, marine fish, eggs, milk, dairy products are food rich in iodine.

When choosing iodine-rich snacks, avoid those which are high in salt or fat content.

Joint Recommendation on Iodine Intake for Members of the Public (2)

2. Use iodised salt

Use iodised salt instead of ordinary table salt, keeping total salt intake below 5 g (1 teaspoon) per day to lower the risk of raised blood pressure.



As iodine content in iodised salt may be affected by humidity, heat and sunlight, iodised salt should be stored in a tight and coloured container and kept in a cool dry place.

To minimise loss of iodine through the cooking process, in particular from prolonged boiling and pressure cooking, add iodised salt to food as close to the time of serving as possible.

Persons with thyroid problems should seek medical advice regarding use of iodised salt.

有關市民攝取碘質的聯合建議 (3)
Joint Recommendation on Iodine Intake for Members of the Public (3)

3. Additional measures for pregnant and lactating women

- Take iodine-containing supplements containing at least 150 µg iodine per day.

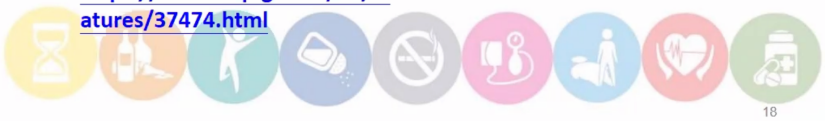
- Seek medical advice if in doubt.
- Persons with existing medical conditions or thyroid problems should consult healthcare professionals and take supplements as instructed.

呼籲市民共同參與防控非傳染病!

Call for actions to participate in the prevention and control of non-communicable diseases!

- 碘質水平主題性報告
- (2020-22 年度人口健康調查)
- https://www.chp.gov.hk/tc/features/37474.html
- Thematic Report on Iodine Status (Population Health Survey 2020-22)
- https://www.chp.gov.hk/en/features/37474.html

- 碘質水平調查報告書(2019)
- https://www.chp.gov.hk/files/pdf/iodine_survey_report_tc.pdf
- Iodine Survey Report 2019
- https://www.chp.gov.hk/files/pdf/iodine_survey_report_en.pdf



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