

Iodine!

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WHAT DOES IT DO? ¹

Iodine is essential for normal growth and brain development. It is required for the production of thyroid hormones known as triiodothyronine (T3) and thyroxine (T4).

As well as growth and development, these hormones are important for regulating metabolic rate, carbohydrate and lipid metabolism, energy production, protein synthesis, heart rate and blood flow, kidney function, nervous system function, fertility, the reproductive system and calcium metabolism for bone structure. Iodine deficiency is the most common cause of thyroid disorders.

DEFICIENCY MAY BE FOUND IN PEOPLE WHO...

- Have increased requirements; pregnant/lactating women and children ^{2, 3}
- Have a low dietary intake
- Are on medications that inhibit absorption such as diuretics, beta blockers and sulfonylureas ⁴
- Are consuming large quantities of goitrogen containing foods that limit iodine absorption (e.g. soy products, brassica vegetables including cabbage, broccoli, brussels sprout) ⁵

CLINICAL SIGNS AND SYMPTOMS OF DEFICIENCY ^{6, 7, 8}

- Goitre or enlarged thyroid gland
- Mental retardation
- Slow growth in children
- Hypothyroidism
- Weight gain
- Cold intolerance
- Fatigue
- Constipation
- Depression
- Low heart rate
- Menstrual irregularities

RECOMMENDED DAILY INTAKE

CHILDREN

0-6 MONTHS – 90µg/day

6-12 MONTHS – 110µg/day

1-8 YEARS – 90µg/day

9-13 YEARS – 120µg/day

ADOLESCENTS AND ADULTS

>14 YEARS – 150µg/day

PREGNANCY – 220µg/day

LACTATING – 270µg/day

Common food sources

MILK

15 μ g per 100ml
cup



IODISED SALT

150 μ g per 1/3 tsp



FORTIFIED BREAD

15 μ g per slice



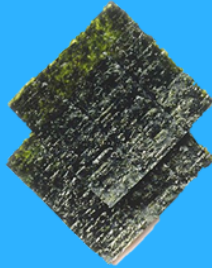
OYSTERS

140 μ g per 1/2
dozen



SEAWEED

90 μ g per 1 sushi
roll



CANNED TUNA

10 μ g per 100g
tin



SALMON

60 μ g per 100g
tin



EGG

20 μ g per egg



YOGHURT

25 μ g per 150g



CHEESE (SWISS)

15 μ g per
25g/slice



Useful Resources:

1. https://www.researchgate.net/publication/5261933_Iodine_Deficiency_and_therapeutic_considerations
2. <https://pdfs.semanticscholar.org/04fb/06132b81ced28615aed4794236e3716eb545.pdf>
3. <https://www.ncbi.nlm.nih.gov/pubmed/16803441>
4. http://www.scielo.org.ar/scielo.php?script=sci_arttext&pid=S0025-76802017000500008
5. https://www.jemds.com/data_pdf/B%20V%20Sreedevi,,AP,,GU.pdf
6. <http://apjcn.nhri.org.tw/server/APJCN/14/1/32.pdf>
7. <https://academic.oup.com/jn/article/142/4/744/4630929>
8. <https://www.ncbi.nlm.nih.gov/books/NBK285556/>

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