

Iodine is often taken for granted, but the optimum level is important to avoid some ailments.

Acknowledged copying is allowed & quoting is encouraged.

Iodine is a mineral that is critical to our health and is not normally in today's foods because New Zealand and many other countries' soils are deficient in it.

Iodine was found to be essential for human health here when Europeans settled here and died, so it was added to table salt. Unfortunately some minerals were removed, so more of us are buying Himalayan salt, which doesn't contain iodine.

A deficiency of iodine can accentuate the bad effects of some diseases. Iodine is a rare mineral, 47th in abundance, so low in most diets due to low levels in soils and foods, except in seafoods. Maori were OK because they ate so much fish and shell fish.

Iodine is anti-bacterial, anti-fungal, anti-viral and anti-cancer.

We now take the New Zealand government sponsored NeuroKare iodine tablets, a prescription item so costing only \$5. People also need iodide, so I'm checking to see if it is in NeuroKare - obviously a 'spin' name, which would be easier to remember if called 'Iodcare'.

Iodine – mobilises (helps remove) bromine and fluoride, and chlorine to some extent too. Iodoral contains both iodine and iodide, recently discovered to also be necessary for thyroids and against breast and prostate cancers. Take on alternate days (or less often if small) as it takes two days for kidneys to get rid of bromine and fluoride, once mobilised by iodine. Larger doses less often is better than smaller doses every day.

The clear iodine made by Clinician's is a very low dose (made after the dark coloured one was taken off the market).

Kelp is not recommended. One study tried to get patients' iodine levels up by taking Kelp (thinking that the natural way might be best), but every single person's thyroid crashed (due to the heavy metals in Kelp products). Kelp gave me an itchy sore back caused by excess heavy metals in it.

A normal 70 kg person will take Iodoral 12.5 mg on a Monday, Wednesday and Friday, but should take it once a week to start out with.

As with all supplements, for iodine to work effectively, it should be part of a complete nutritional program of vegetables, fruit, magnesium, selenium and Omega-3. The iodine content of vegetables, fruits and grains generally reflect the iodine level of the soil in which they were grown. Fertilising with iodine is not practical because it costs too much and it leaches rapidly.

As iodine is essential for normal brain development, it is particularly important that the unborn baby (foetus) and young children have adequate intakes.

Recent evidence from a number of studies has indicated that the iodine status of New Zealanders is declining to the point where intervention is again required to ensure that iodine deficiency disorders do not again widely affect the New Zealand population. These studies have provided the evidence for the decision to add iodised salt to commercially prepared bread from September 2009. For example, a study by Skeaff (2005) of breast-fed infants showed that iodine levels were less than half of that of formula-fed infants, reflecting the low iodine concentration of breast milk due to the poor iodine status of breast feeding mothers. The 2002 National Children's Nutrition Survey found that New Zealand children (aged 5 to 14 years) had mild iodine deficiency. In 2005, a nationwide survey of the iodine status of 170 pregnant women was undertaken by the University of Otago. The results showed moderate iodine deficiency and goitre were found in 7 percent of the women.

Severe deficiencies cause goitre which is a large lump in front of neck, deformities and protruding eyes. To check if your thyroid is swollen, get a glass of water and a handheld mirror. Hold the mirror, focusing on your neck just below the Adam's apple and immediately above the collarbone, which is where the thyroid gland is. While focusing on it, tilt your head back and swallow some water. As you swallow, watch for any bulges or protrusions in this area, which should not occur.

From the 27 September 2009 the mandatory replacement of non-iodised salt with iodised salt in all New Zealand bread stipulated that iodised salt must contain 25 to 65 mg/kg.

The fortification of bread was seen to be inadequate to supply enough iodine so consumers are encouraged to get other food sources that include iodine.

About half of the iodine consumption in the UK comes from dairy products. In the USA, iodised

salt is widely used and some other foods are fortified with iodine. In Canada and New Zealand, all table salt is iodised. The UK has no iodine fortification.

If you suspect low iodine levels, apply a weak (2%) solution of brown iodine to a 5 cm by 5 cm hairless area of skin. If it all disappears within 12 hours, you can be low in iodine so should keep applying it to your skin. Some people obviously question this practise.

There is a urine test whereby a doctor gets you to take Lugols iodine solution, after which urine levels are measured. If the level is 45 then you have no deficiency; if 35 or lower, you are deficient.

Australians at risk of iodine deficiency

“The absence of iodine in diets is a very real concern,” according to Professor Cres Eastman, Director of the Institute of Clinical Pathology and Medical Research (ICPMR) at Westmead Hospital, Sydney, Australia in 2004. He finds Australians are facing serious health problems with the re-emergence of iodine deficiency in their diets.

“Iodine deficiency is the single most important cause of preventable intellectual deficit in the world.

“Iodine Deficiency Disorder (IDD) in children can mean lower intelligence levels with long-term learning and physical development difficulties,” said Prof Eastman. “Over 80 per cent of our salt intake comes from processed foods, which don’t use iodised salt. Iodine is essential to a healthy thyroid, which produces the thyroid chemical or ‘brain juice’ for developing babies and children.” According to Professor Eastman, “Through the consumption of seafood and iodised salt, we can maintain a healthy thyroid and easily prevent IDD.

“School children affected by IDD have a lower intelligence level and can experience learning disabilities and exhibit Attention Deficit Hyperactivity Disorder.”

“Iodine deficiency is the single most important cause of preventable intellectual deficit in the world.

Other causes of school children suffering attention deficit are poor eyesight, deafness, low zinc, which also causes bad behaviour in boys in particular. Males need more zinc than females.

Iodine supplementation is especially important during pregnancy and breastfeeding for normal foetal development and infant health. Pregnant women who have enough iodine are less likely to have miscarriages and more likely to give birth to healthy babies.

Iodine is necessary for the absorption of selenium, an essential and often deficient trace element which is also low in most foods in New Zealand and in high rainfall acid areas. It is usually high in low rainfall, alkaline areas such as the alkali areas of USA.

End

Deficiencies include-

- Abortions
- Acne
- Anaemia
- Bones
- Cancers
- Child’s brain and intellectual prowess
- Cold hands and feet
- Constipation
- Deafness
- Depression
- Drowsiness and requiring more sleep
- Dry, brittle hair and nails
- Dry skin and acne
- Goitre
- Headaches
- Inability to concentrate and poor memory
- Infertility
- Lack of energy
- Lethargy and general tiredness
- Memory problems

Mental apathy
Mental retardation
Muscle weakness and cramps
Proneness to weight gain
Puffiness of the feet, hands and face
Pins and needles
Runny nose
Squinting of the eyes
Slow speech
Stillbirths
Tongue enlarged
Thyroid enlarged

It is likely that everyone, especially children, need to take an iodine supplement. Doctors insisted on governments ensuring iodine supplementation over 100 years ago for every member of the public, which is why potassium iodide was added to table salt. Now some doctors are aware of just how bad mineral depleted table salt is, including the junk salt added to processed foods, because some table salts have important minerals removed and are made from today's heavily polluted sea water. Some are recommending salt from old salt mines in Himalaya, California and South Africa, however these don't always have enough iodine so people to need take it.

Some people are taking kelp (seaweed) grown in seas of countries, which today are mostly polluted, except for perhaps the very south of South America. One I got tested was 55 which is incompatible for me. It should be 80 or higher. Mercury was 4, cadmium 2, manganese 5 and iodine 80, which is very high, as was another kelp, which caused me to suffer pins and needles on my back, especially when sun shone on it. All the tests of kelp that I have done or seen, are high in heavy metals, so kelp should not be consumed.

Fonterra asking for more trouble

In 2012 some Chinese mothers complained about New Zealand Baby Formula being low in iodine. I checked and found they were right. I researched and found solutions by applying LimeMagPlus if Ca is low or Phosphorus Nutrient Planner if P is low, and in both cases, with Solminix in the drinking water. It has optimum iodine levels which helps animal health and milk levels, causing the iodine level to rise to 80 ppm. Read 'Milk Profit & Quality' in Dairying. I've emailed Fonterra about this and how easy it is to fix it at no cost to farmers, but with many advantages, but got no response.

Excess Symptoms

Too much iodine produces some symptoms a bit similar to those of deficiencies, especially skin itches, rashes and/or acne, and pins and needles on many parts of the body.

Do not over-consume iodine, as it has a narrow safety range. 100 to 300 mg per day is all that is needed.

More than 300 mg a day risks a thyroid excess disorder.

Two kelp tablets a day caused the iodine in one person I know to go to three times higher than it should be.

It is highly likely that those taking an iodine supplement, or eating high levels of certain seafoods, may need to lower the use of any thyroid drugs. They therefore need to seek advice on how to measure the suitability of the drugs.

Sources

Avoid deep sea and old fish, because of their high mercury levels.

Read the chapter on Human Health Elements > Salt, to see how bad iodised table salt is reported to be, so is called Poison by many. Google for "salt poison" and you'll see.

Vaughan Jones
Agricultural consultant & journalist
GrazingInfo Ltd