The Food, thyroid, iodine link

by Tessa Jupp RN

I am seeing and speaking to a lot of people having problems with low thyroid function lately and as well as needing iodine, some of the foods we think are "healthy" may actually be contributing to these problems.

Kale has become very popular, particularly **in smoothies** of late, **but raw Kale can depress thyroid function.** Cooking kale can de-activate the *isothyocyanates* that are in all cruciferous vegetables **ie cabbage family,** that prevent the thyroid taking in iodine. These foods are better cooked if you are going to eat them - and **DON'T USE THE WATER** they are cooked in (grandma knew!)

FOODS that DEPRESS THYROID FUNCTION

Cruciferous veg - include cabbages, Brussels sprout, broccoli, cauliflower, bok choy, rocket, spinach, kale, watercress, canola, horseradish, turnips, radish, swede, mustard greens, maca, asparagus, sweet potatoes

Nuts - soy, peanuts, walnuts, almonds, cashews, pine nuts, pumpkin seeds

Fruits - grapes, grapefruit, nectarines, peaches, pears, strawberries, wine

Gluten Grains - wheat, barley, rye, millet, spelt

Dairy - milk, cheese, ice-cream, yoghurt

Low Thyroid Checklist:

...____ Mind-numbing fatigue
____ Weight gain, puffy face
____ Loss or thinning of eyebrows
____ Cold intolerance, low body temperature
____ Cold hands and/or feet
____ Depression and anxiety
____ Abdominal bloating, constipation
____ Insomnia, sleep problems
____ Dry or thinning hair, hair loss
____ Joint or muscle pain
____ Dry, thickening skin and brittle nails
____ Allergies and asthma

OTHER THYROID FOOD NOTES I FOUND

Boiling Cruciferous veg for 30 mins, reduces the goitrogen effect if you must eat. Other vegetables are OK.

Refined unsaturated **vegetable oils suppress thyroid** function and can cause weight gain. But Coconut oil has a naturally stimulating effect on the thyroid gland. **Coconut oil, olive oil and butter are OK.**

Other items that may contain gluten - cereals, pasta, bread, processed baked goods, soup mixes, salad dressings and condiments. Even toothpaste and lipstick!
NB Goitrogenic compounds are activated in cooked **millet**

New evidence has shown a **link between thyroid autoimmune disease and gluten intolerance** and coeliac disease. Your body recognizes gluten as a foreign invader, sending antibodies to attack, subsequently attacking your thyroid gland as well. Gluten can cause a reaction for up to 6 months from ingestion,

OK Grains are rice, corn, quinoa, arrowroot, buckwheat. **Oats are fine** as long as they are labelled gluten-free.

Brazil nuts are very **high in selenium,** which is needed to convert the thyroid hormone T4 to T3. Only a little selenium is needed for the thyroid to function properly.

Proteins - without adequate protein the thyroid can't function properly, even if you are taking thyroid meds. **Red meats,** chicken, eggs **contain tyrosine,** an important amino acid that **combines with iodine** to make the thyroid gland function properly. Buy organic or free range where possible to avoid antibiotic-fed, which is disruptive to the thyroid gland. **Limit your fish dishes** to a maximum of one serving a week due to ocean pollution of mercury and PCBs that depress thyroid. **Try taking an Omega-3** supplement instead, as deficiencies of this fatty acid have been linked to lower thyroid hormone levels.

Important Point: A low thyroid condition is a serious risk factor for heart disease.

BLOOD TESTS for THYROID

Your GP tests for TSH (thyroid stimulating hormone). This measures how strongly the brain is telling your thyroid to make more thyroxine. There are reasons why this may be less even though you are not making enough thyroxine. **So even a normal TSH does not mean your thyroid is OK.** As well, if your **magnesium** is **low** then this can affect your heart. If your thyroid is low then your cholesterol will go up. **Cholesterol drugs** can affect your liver as well as your muscles. If your liver is not working well **(Taurine needed for liver)** then you can't change the thyroxine tablets your GP prescribes ie (T4) to the (T3) form that your body needs to be able to use it. **Selenium** is needed for the liver to do this. Other nutrients needed for normal thyroid function are zinc, tyrosine, Vitamin A, C, B3, manganese, potassium, iron. **Just taking thyroxine may not be the whole answer.**

See My booklet "Thyroid and Liver Made Easy" ($4) for more in greater detail. Do ring me for more info.

IODINE for THYROID

Iodine is essential for thyroid function. The easy way to see if low iodine levels are causing your thyroid to malfunction is to **paint Iodine tincture** (about the size of a $20 note) **onto your skin** and note how long it takes for the strong yellow colour to fade. Your body can absorb the iodine it needs safely through the skin. Paint it where you have good circulation ie arms, chest, tummy, thigh.
It should stay for more than 24 hours. The quicker it disappears the lower you are. Some people are finding it goes in 2 hours! If it **disappears within 8 hours** I would advise taking oral iodine. **So ring me at the Polio Clinic.**

Make an appointment to **come in and see me** to discuss it. Chemists usually only have Betadine which is a weak water-based iodine. Iodine tincture is alcohol-based, dries instantly on the skin and won't come off on your clothes.

Iodine tincture and Lugol's Iodine are available at the **Polio Office** but you do need to know how to take it safely.

Iodine needed for Breast and Prostate cancers by Tessa Jupp RN

I have spoken to a few people recently dealing with cancers, breast and prostate in particular but also iodine with other cancers including thyroid, ovarian, uterine, kidney, bladder & bowel. I have written about the value of iodine before in this newsletter but maybe we need to look at this again. There is a lot more info around on it now.

Here are comments by 2 doctors who have worked with this. Look up the internet references or I can send you the whole article if you can't access or find it.

Dr Jeffrey Dach MD

As an interventional radiologist for 30 years, my job was to read the mammograms and perform the procedures, the breast biopsies and needle aspirations. Some women had multiple cysts and nodules and returned to the department every year for repeat aspirations and biopsy procedures. They would always corner me in the reading room and ask, ***"Doctor, what can I do to make these cysts and nodules in my breast go away"?*** And for 30 years I would throw up my hands and say ***"We just don't know".***

After I retired from radiology and returned to clinical medicine in 2004, I attended medical meetings and listened to David Brownstein MD and George Flechas MD speaking about the health benefits of Iodine supplementation.

Iodine is the answer to fibrocystic breast disease. Iodine is the answer for breast cancer prevention. Iodine is the answer I should have been giving to all the women over all the years I worked in the hospital X-ray department. But didn't. So I am making up for it now. We routinely test for Iodine level, and give Iodine supplements to every woman in my clinic. I consider this extremely important.

I have been using iodine in clinical practice and find it both safe and beneficial. We have used iodine supplementation routinely in our practice for the past five years primarily as a safe and effective agent for prevention of breast cancer. And, in fact we have had virtually no breast cancer in our patient population on bioidentical hormones using iodine supplementation.

Jeffrey Dach, MD.is Board Certified in Diagnostic and Interventional Radiology. He retired in 2004 after 25 years as a hospital-based physician with Radiology Associates of Hollywood USA.

http://www.drdach.com/Iodine_and_Breast_Cancer.html

Dr David DERRY MD PhD on CANCERS
http://www.thyroid.about.com/library/derry/bl1a.htm

Breast cancer takes around 20-30 years to develop. The discovered lump represents the end stage of slow cancer progression over decades. The longest period is the first phase of cancer development. This phase which is often called pre-cancerous, happens as a normal cell is gradually turned into a cancer cell. These pre-cancerous lesions are known as **fibrocystic disease (lumpy, tender breasts)** of the breast. Most fibrocystic disease is benign, harmless and has no consequences.

On the other hand, some more advanced forms of fibrocystic disease have clearly defined tendencies towards breast cancer. So there are grades of fibrocystic disease with some of the cells looking more abnormal than in the benign forms. The greater the difference in the cells from normal (abnormal), the greater chance of these cells converting to a cancer cell over 10-20 years. There maybe then a significant chance the cells may change into a cancer cell. The good news is that it can be cleared up completely with a daily intake of iodine.

Iodine in adequate doses stops and reverses this stage of the cancer process by causing the natural death of abnormal cells (apoptosis). Iodine circulates throughout the body in the extracellular fluids found between the cells of the body. If cell surface proteins have the amino acid tyrosine on the outside, the passing iodine reacts with this tyrosine. This little reaction denatures the protein and thus kills the cell. It is implied all vertebrate cell membranes do not have tyrosine on the portion of the protein sticking out into the extracellular fluid.

However, the intra-membrane proteins may have tyrosine which is only exposed when the membrane is distorted by abnormal cell development such as we see in the pre-cancerous forms of fibrocystic disease. This would then expose the tyrosine to the iodine passing in the extracellular fluid. Again the iodine would denature the protein by reacting with the tyrosine and thus kill off the cell. So thus we have surveillance system for removing abnormal cells from our bodies. On the other hand low iodine intake allows cells to proceed and develop towards cancer. This is more indirect because the gradual increase in abnormal cells are just not being eliminated from the body because there is inadequate iodine to carry this out.

Once the cell has become a cancer cell then it can take two different turns. It can multiply and just stay where it is or it can multiply and spread. The first phase is called carcinoma in situ (cancer at the site). The second phase (cancer multiplying and spreading) is the part we are all familiar with.

Since on average breast cancer cells double every 100 days, it takes 9 years before mammograms can pick it up and around 11 years before we find it with self-examination. This second clinical part of the cancer phase (the spreading) seems to be arrested by adequate levels of thyroid hormone in all tissues. Thyroid hormone completely controls the connective tissue which forms a strong sieve-like barrier to the passage of cancer cells trying to spread. Low levels of thyroid hormone in the tissues (especially connective tissues) promotes the spread of cancer cells. So the body cancer defence system has two parts; iodine for the first pre-cancer phase, and thyroid hormone and iodine together for the second clinical phase. There is some overlapping of these two defence systems. The excess iodine flows out in the urine. Of course, because the iodine flows out in the urine it is preventing the development of abnormal cells in the bladder and kidney system at the same time. This then prevents cancers developing there.

It also will kill abnormal cells floating around in the body at remote sites from the original cancer. Of course this approach appears to **work for prostate cancer as well** as prostate cancer is similar to breast cancer in many respects. Indeed, it likely will help with most cancers.