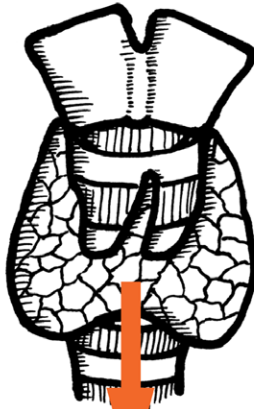


Factors that Affect Thyroid Function



Factors that contribute to proper production of thyroid hormones

Nutrients: iron, iodine, tyrosine, zinc, selenium, vitamins E, B2, B3, B6, C, D

Factors that inhibit proper production of thyroid hormones

Stress
Infection, trauma, radiation
Certain medications
Autoimmune disease
Fluoride (antagonist to iodine)
Toxins: pesticides, mercury, cadmium, lead

Factors that increase conversion of T4 to RT3

Stress
Trauma
Low-calorie diet
Inflammation
Toxins
Infections
Liver/kidney dysfunction
Certain medications

T4

Factors that increase conversion of T4 to T3

Selenium
Zinc

RT3

T3

Factors that improve cellular sensitivity to thyroid hormones

Vitamin A
Exercise
Zinc

RT3 and T3 competing for binding sites

Cell

Adapted from materials from The Institute for Functional Medicine



KEY NUTRIENTS FOR THYROID FUNCTION

nutrient	food sources	how it helps your thyroid
Iron	<i>red meat, particularly organ meats, nutritional yeast, dark leafy greens, lentils, pumpkin seeds</i>	contributes to proper production of thyroid hormones
Iodine	<i>sea vegetables (nori, kelp and dulse), shrimp, milk, eggs, seafood, navy beans, strawberries</i>	contributes to proper production of thyroid hormones
Tyrosine	<i>meat, fish, shellfish, and poultry, egg whites, yogurt, tofu (non GMO), pumpkin seeds, avocados</i>	contributes to proper production of thyroid hormones
Zinc	<i>oysters, red meat, particularly organ meats, pumpkin seeds</i>	contributes to proper production of thyroid hormones; increases conversion of T4 to T3; improves cellular sensitivity to thyroid hormones
Selenium	<i>Brazil nuts, meat, fish, shellfish, and poultry</i>	contributes to proper production of thyroid hormones; increases conversion of T4 to T3
Vitamin E	<i>sunflower seeds, almonds, dark leafy greens, avocados</i>	contributes to proper production of thyroid hormones
Vitamin B2	<i>soybeans (non GMO), dark leafy greens, yogurt, crimini mushrooms, asparagus</i>	contributes to proper production of thyroid hormones
Vitamin B3	<i>tuna, chicken, turkey, nutritional yeast</i>	contributes to proper production of thyroid hormones
Vitamin B6	<i>tuna, poultry, red meat, particularly organ meats, nutritional yeast</i>	contributes to proper production of thyroid hormones
Vitamin C	<i>papaya, bell peppers, broccoli, brussel sprouts, oranges, pineapple</i>	contributes to proper production of thyroid hormones
Vitamin D	<i>salmon, milk, egg yolks, mushrooms... THE SUN!</i>	contributes to proper production of thyroid hormones
Vitamin A (as beta carotene)	<i>sweet potatoes, carrots, dark leafy greens, squash, red peppers</i>	improves cellular sensitivity to thyroid hormones
Vitamin A (as retinol)	<i>liver, cod liver oil (fermented is better), egg yolks, butter</i>	improves cellular sensitivity to thyroid hormones

Get out your highlighter! Go through the list of food sources and see which ones you can include more of in your diet. Tack the list up and be sure to incorporate more of the ingredients you've identified in your weekly (or daily!) meals.

Don't forget to spend some time recognizing what those foods are doing for you. (This is the 'how it helps your thyroid' column.) Really receive the powers they bring to your thyroid care. Let's not overlook the many good steps we take each and every day. We call this *nourishment*.