

# Factors that Affect Thyroid Function



Factors that contribute to proper production of thyroid hormones

- **Nutrients:** iodine, tyrosine, zinc, vitamins: E, B2, B3, B6, C
- **Antioxidants**

Factors that inhibit proper production of thyroid hormones

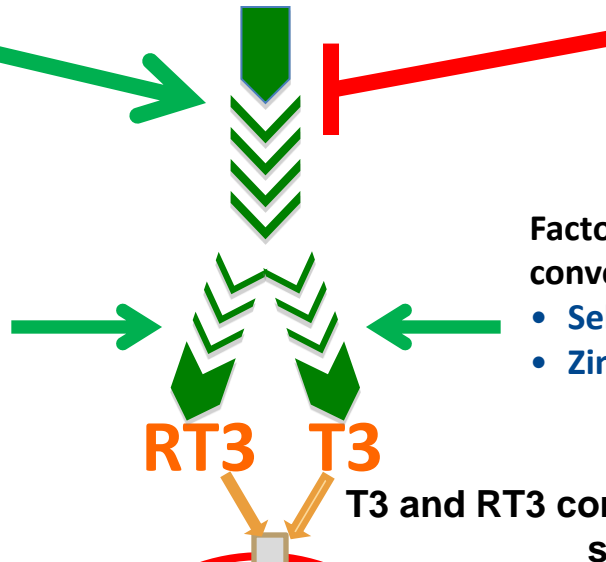
- **Stress**
- **Infection, trauma, radiation, medications**
- **Fluoride (antagonist to iodine)**
- **Toxins:** pesticides, mercury, cadmium, lead
- **Autoimmune disease: Celiac**

Factors that increase conversion of T4 to RT3

- **Stress**
- **Trauma**
- **Low-calorie diet**
- **Inflammation (cytokines, etc.)**
- **Toxins**
- **Infections**
- **Liver/kidney dysfunction**
- **Certain medications**

Factors that increase conversion of T4 to T3

- **Selenium**
- **Zinc**



T3 and RT3 compete for binding sites

Factors that improve cellular sensitivity to thyroid hormones

- **Vitamin A**
- **Exercise**
- **Zinc**