Goitrogens

What are Goitrogens?

Goitrogens are plants that contain high amounts of compounds known as glucosinolates, which can break down into another category of compound, known as the isothiocyanates. Isothiocyanates have the ability to decrease the uptake of iodine into the thyroid gland, and induce goiter. This is particularly evident in areas of the world where severe iodine insufficiency exists.

Should I worry about consuming goitrogenic foods?

For the most part, no.

Cooking helps. Isothiocyanates are broken down by cooking, and as such goitrogenic foods that are cooked are of no real concern when it comes to thyroid health (McMillan, Spinks, & Fenwick, 1986).

Excessive amounts of goitrogens (especially raw), may have an inhibitory effect on thyroid metabolism (Lakshmy, Rao, Sesikeran, & Suryaprakash, 1995), particularly if someone is significantly deficient in iodine.

That said, for most healthy individuals with sufficient iodine, the consumption of goitrogenic foods does not interfere with thyroid function (Messina & Redmond, 2006).

Common dietary goitrogens include:

- Broccoli
- Cabbage
- Kale
- Cauliflower
- Brussels Sprouts
- Bok C hoy
- Millet
- Soy
- Maca Root
- Cassava

References

