What is T2?

T2, or 3, 5-diiodo-L-thyronine, is a thyroid hormone within the class of iodothyronines. T2 has 2 iodine molecules compared to the more commonly known T3, which has 3 iodine molecules. T2 behaves differently in the body than does T3, having been shown to successfully stimulate metabolism and fat breakdown without causing the cardiac side effects that are seen with larger doses of T3 (i.e., racing heart beat, shortness of breath, chest tightness, etc.).

T2 has been shown to have significant stimulatory effects on cellular and mitochondrial metabolism (1-15). The ability of T2 to stimulate cellular function at the mitochondrial level is among its unique and beneficial effects.

T2 for fatigue and metabolic conditions:

The connection between T2 and increased mitochondrial function makes this hormone an ideal treatment option for patients suffering from fatiguing conditions and/or those which make weight management difficult. Thus, T2 may be prescribed as part of a treatment plan addressing chronic fatigue syndrome, fibromyalgia, Lyme disease, or hypothyroidism, among others.

T2 has been shown to stimulate the oxidation, or “burning”, of fatty acids in skeletal muscle, thereby increasing metabolic rate (1-3). This effect has been found to be especially prominent in individuals with hypothyroidism, making T2 a promising addition to thyroid supplementation (2).

Beneficial effects on body weight and lipid profile:

Administration of T2 has been shown to produce the following:

- Decreased serum triglycerides
- Decreased cholesterol levels
- Decreased liver fat content
- Decreased body fat
- Decreased body weight without a reduction in intake of calories or fat (1).

Is T2 safe?

T2 has been shown to be safe, even in even large doses (up to 900 mcg/day) and was available for many years as an over-the-counter supplement. There are no known or serious side effects associated with T2 administration (2).
References


