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Levothyroxine

National Cancer Institute

Source

National Cancer Institute. *Levothyroxine*. NCI Thesaurus. Code C62080.

A synthetic levoisomer of thyroxine (T4), similar to the endogenous hormone produced by the thyroid gland. Thyroxine is de-iodinated to form triiodothyronine (T3) in the peripheral tissues. T3 enters the cell and binds to nuclear thyroid hormone receptors, and the hormone-receptor complex in turn triggers gene expression and produces proteins required in the regulation of cellular respiration, thermogenesis, cellular growth and differentiation, and metabolism of proteins, carbohydrates and lipids. T4 and T3 also possess cardiac stimulatory effect.