

## **TSH is Not the Answer: Rationale for a New Paradigm to Evaluate and Treat Hypothyroidism, Particularly Associated with Weight Loss**

Carol N. Rowsemitt, PhD, RN, FNP and Thomas Najarian, MD

*Correspondence:* Dr. Carol Rowsemitt, San Luis Obispo, CA, [rose805@gmail.com](mailto:rose805@gmail.com)  
*Correspondence:* Dr. Thomas Najarian, Incline Village, NV, [tnajarianmd@hotmail.com](mailto:tnajarianmd@hotmail.com)

Received: December 15, 2010  
Accepted: December 20, 2010

**Abstract.** While many endocrinologists continue to debate the appropriate levels of TSH to use as boundaries for normal limits, we believe using TSH to assess thyroid function is counterproductive, particularly in those patients attempting to lose weight. From the published literature and our own clinical experience, we have come to understand that the set point for metabolism is adjusted downward in the hypocaloric state. The decrease in metabolism is often referred to as part of the “famine response.” This metabolic response has been documented in several major vertebrate classes demonstrating its widespread importance in nature. In our current environment, the famine response limits the patient’s ability to lose weight while consuming a hypocaloric diet and performing modest levels of exercise. Our own experience with the famine response is consistent with that found in the literature. Treating to normalize thyroid hormone levels and eliminate hypothyroid symptoms results in the suppression of TSH. This is understood as a normal part of treatment once we accept that the thyroid set point has been lowered. This is not an argument to use thyroid hormones to increase metabolism above normal to achieve weight loss. Our goal is to correct the hypothyroid response in a weight loss patient and return him/her to normal metabolism so that the patient feels normal and is better able to lose weight and maintain that loss.

**Keywords** Famine response • Hypocaloric state • Hypothyroidism • Reverse triiodothyronine •  $rT_3$  •  $T_3$  • TSH • Triiodothyronine

### **Introduction**

Major controversies regarding appropriate thyroid treatments are ongoing and are affecting the morbidity and most likely mortality in many populations. In his 2008 paper, Dommissie has extensively covered the disagreements in this area and presented arguments which challenge the views of the

treatment that long. Other benefits that we have observed with this treatment are improved blood pressure using fewer antihypertensive medications, improved glycemia, again with fewer anti-diabetic medications, improved lipids, and improved quality of life.

When using these highly effective appetite suppressants on our obese and overweight patients, we