

Hill's™ Prescription Diet™ y/d™ Feline proven in multiple clinical research

The first nutrition for feline hyperthyroidism

Hill's scientists have spent a decade researching how nutrition affects feline hyperthyroidism. Below are three key studies which indicate how effective restricted-iodine food can be in managing thyroid conditions.

Key points to studies

- Limiting dietary iodine (≤ 0.32 ppm) effectively lowered serum total thyroxine (T4) concentrations and returned hyperthyroid cats to a euthyroid state.
- Serum total T4 concentrations decreased significantly 3 weeks after feeding a restricted-iodine food to hyperthyroid cats.

Controlled level of dietary iodine normalizes serum total thyroxine in cats with naturally occurring hyperthyroidism *Yu S, Wedekind KJ, Burris PA, et al. J Vet Intern Med 2011;25:683-684 (abstract).*

Purpose To determine if a test food with 0.32 ppm iodine would induce euthyroidism in cats with naturally occurring hyperthyroidism.

Design Prior to beginning the study, 14 hyperthyroid cats were equally divided into 2 groups and fed either a commercial food with 1.9 ppm iodine or a positive control food with 0.17 ppm iodine for 6 weeks. Cats in the commercial food group were then fed a test food with 0.32 ppm iodine for 12 weeks while the positive control group continued eating the same food for 12 weeks.

Results Mean serum total T4 concentrations decreased significantly in the test food group by week 3 and remained within the reference range through the end of the study (Figure 1). Cats in the positive control group remained euthyroid during the study (Figure 2).

Conclusion Feeding a restricted-iodine food (≤ 0.32 ppm iodine) maintained normal T4 concentrations in hyperthyroid cats.

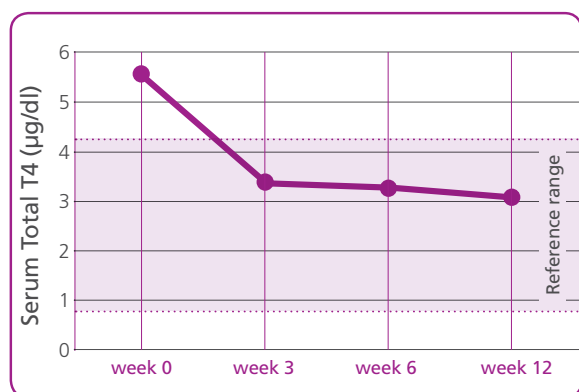


Figure 1. Mean T4 concentrations decreased significantly ($P < 0.01$) after feeding restricted-iodine food (0.32 ppm) to 7 hyperthyroid cats.

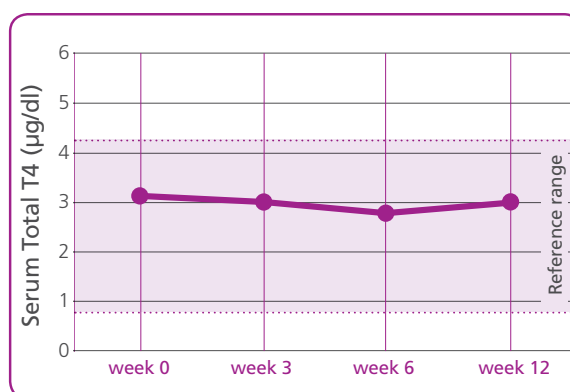


Figure 2. Mean T4 concentrations remained normal during feeding of restricted-iodine food (0.17 ppm) to 7 hyperthyroid cats.



EVIDENCE-BASED CLINICAL
NUTRITION 



Titration of dietary iodine for reducing serum thyroxine concentrations in newly diagnosed hyperthyroid cats *Melendez LD, Yamka RM, Forrester SD, et al. J Vet Intern Med 2011;25:683 (abstract).*

- Purpose** To evaluate the effects of feeding restricted-iodine foods to cats with naturally occurring hyperthyroidism.
- Design** Ten hyperthyroid cats with serum total T4 concentrations ranging from 4.3 to 11.4 µg/dl were included.
- Initially, 5 cats were fed a food with 0.47 ppm iodine for 9 weeks. These cats along with 4 additional cats were then fed a food with 0.28 ppm iodine for 18 weeks. Finally, 8 of these cats and one newly diagnosed cat were fed a food with 0.17 ppm iodine for 4 weeks.
- Serum total T4 concentrations, complete blood counts, and serum chemistries were measured approximately every 3-4 weeks throughout the 31-week study.
- Results** Eight of 9 cats (89%) became euthyroid while eating foods with 0.47 or 0.28 ppm iodine and all cats were euthyroid while eating the food with 0.17 ppm iodine.
- No adverse effects were observed with feeding any of the restricted-iodine foods.
- Conclusion** Limiting dietary iodine was a safe and effective method for lowering serum total T4 concentrations and returning hyperthyroid cats to a euthyroid state.

Titration of dietary iodine for maintaining normal serum thyroxine concentrations in hyperthyroid cats *Melendez LD, Yamka RM, Burris PA. J Vet Intern Med 2011;25:683 (abstract).*

- Purpose** To determine the maximal amount of dietary iodine that maintains normal serum total T4 concentrations in hyperthyroid cats previously managed with a restricted-iodine food.
- Design** Eighteen hyperthyroid cats were maintained in a euthyroid state by feeding 0.15 ppm iodine for 10 months to 3 years prior to beginning the study.
- Cats were then equally divided into 2 groups and were fed either 0.39 ppm iodine or 0.47 ppm iodine for 9 weeks.
- All cats were subsequently fed 0.28 ppm iodine for 15 weeks and then 0.17 ppm iodine for 4 weeks.
- Serum total T4 concentrations, complete blood counts, and serum chemistries were measured throughout the study.
- Results** Serum total T4 concentrations increased in all previously controlled hyperthyroid cats when fed ≤ 0.39 ppm iodine.
- After eating the food with 0.28 ppm iodine, serum total T4 concentrations decreased in all cats and were within the reference range for most cats, and all cats were euthyroid after eating the food with 0.17 ppm iodine.
- Conclusion** Serum total T4 concentrations were not well controlled in hyperthyroid cats eating foods with ≤ 0.39 ppm iodine.

Summary

In the studies described above, researchers determined that feeding a restricted-iodine food effectively reduced serum total T4 concentrations in hyperthyroid cats without negatively affecting other measures of health.

Nutritional recommendation

Now you can manage your feline hyperthyroid patients with the nutrition of Hill's™ Prescription Diet™ y/d™ Feline brand pet food. The first and only pet food formulated with limited iodine makes managing feline hyperthyroidism as safe and easy as feeding a cat.

