Three Important Guidelines for Management of Feline Hyperthyroidism

Based on feedback received from your colleagues and specialists, we would like to share best practices and reinforce important guidelines for managing feline hyperthyroidism.

1 Perform a baseline diagnostic evaluation immediately prior to beginning nutritional management of hyperthyroidism in order to:

- Obtain baseline data, including total thyroxine (T_4) concentration
- Confirm hyperthyroidism
- Identify concurrent disorders (e.g., kidney disease, cardiac disease, hypertension)

2 Call Hill's Veterinary Consultation Service at 1-800-548-VETS (8387) for recommendations:

- Before using nutritional management in a hyperthyroid cat that is critically ill or has concurrent conditions (e.g., kidney disease, cardiac disease, hypertension)
- Before using nutritional management in a hyperthyroid cat that is receiving anti-thyroid medication or nutritional supplements
  - *To prevent T_4 concentrations from dropping below normal, specialists advise against concurrent use of y/d with anti-thyroid medication*
- When you have any questions or need guidance regarding nutritional management of feline hyperthyroidism

3 Monitor patients carefully after beginning nutritional management

- Stable patients should be evaluated at least every 4 weeks until T_4 is normal and every 6 months thereafter
- Hyperthyroid cats with concurrent conditions need more frequent monitoring (every 1–2 weeks) until stable and as appropriate thereafter

Algorithms are provided as suggested guidelines; you should always use your clinical judgment when making decisions for individual patients. You are encouraged to call the Hill's Veterinary Consultation Service for additional guidance.

Diagnosing Hyperthyroidism in Cats

Clinical Findings

- Weight loss
- Polyphagia
- Hyperactivity
- Palpable goiter
- Polyuria/polydipsia
- Cardiac murmur
- Tachycardia
- Vomiting
- Diarrhea

Initial Evaluation

- History
- Physical examination
  - body weight
  - palpate for goiter
  - ophthalmic evaluation
  - blood pressure
- Complete blood count
- Serum chemistries
- Urinalysis ± culture
- Serum thyroxine (T_4)
- Cardiac diagnostics

No Clinical Signs

All cats ≥ 7 years old

Low T_4

→ **Euthyroid sick or iatrogenic**

T_4 in lower half of reference range

→ **Hyperthyroidism unlikely**

T_4 in upper half of reference range*

→ **Measure free T_4**

- → **Normal or low free T_4** → **Hyperthyroidism unlikely**
- → **High free T_4** → **Hyperthyroidism**

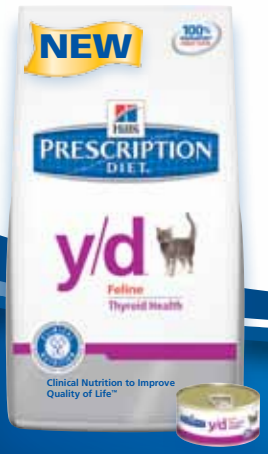
High T_4 with clinical suspicion

→ **Hyperthyroidism**

Hyperthyroidism

Discuss Management Options

- Nutritional management
- Anti-thyroid medication
- Thyroidectomy
- Radioactive iodine



*One option is to repeat T_4 measurement in 2–4 weeks

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Nutritional Management of Feline Hyperthyroidism

Call Hill's Veterinary Consultation Service (VCS) 1-800-548-VETS (8387) before using y/d Feline for hyperthyroid cats:

- With concurrent disorders
- Receiving medications

To prevent T_4 concentrations from dropping below normal, specialists advise against concurrent use of y/d with anti-thyroid medication.

Baseline Evaluation

- History, physical examination
- CBC, serum chemistries, urinalysis
- Serum thyroxine (T_4)

Physical examination includes body weight, ophthalmic evaluation, and blood pressure measurement

Begin transition to Hill's® Prescription Diet® y/d™ Feline Thyroid Health*

If you choose to change your patient from anti-thyroid medication to nutritional management, specialists recommend discontinuing the medication prior to beginning y/d Feline**

*Most cats transition to the food over 7 days; some may need longer (several weeks)

**Some cats may experience a transient increase in T_4 (rarely associated with recurrence of clinical signs), which usually resolves once the cat has been eating y/d Feline as the sole source of nutrition for 1–2 months.

Initial rechecks†
physical exam, T_4, BUN, serum creatinine, urine specific gravity

†Recheck 4 and 8 weeks after transition to y/d Feline is complete. Serum T_4 should be decreased at first recheck and within reference range in most cats by 4–12 weeks. If not, see *"Managing Persistent Hyperthyroidism."*

Long-term rechecks§
physical exam, T_4, CBC, serum chemistries, urinalysis

§Recheck every 6 months indefinitely

This algorithm is provided as a suggested guideline; always use your clinical judgment to make recommendations for individual patients.

†§Hyperthyroid cats with concurrent diseases (e.g., kidney disease, cardiac disease, diabetes mellitus) or who are unstable should be monitored more frequently (every 1–2 weeks) until euthyroid and then at least every 3–4 months.

Guidelines for Managing Cats with Persistent Hyperthyroidism

Question	Rationale	Action
Describe how your cat spends his or her day.	Evaluate access to outside and other sources of food. Cats with unsupervised access outdoors may be ingesting other foods.	Consider confining cats indoors for 1 month and then assess effectiveness of nutritional management.
How many other pets are in your house?	Evaluate access to other pets' food (dogs, cats, birds, 'pocket pets', etc).	Remove all food after feeding or confine the hyperthyroid cat to areas without access to other pets' food and reassess after 1 month.
What is your cat's favorite food or treat?	This is a nonthreatening way of determining if the cat is being offered treats or other food. Many owners don't consider people food or treats as part of the 'diet' or they may not mention them.	Reinforce that Hill's® Prescription Diet® y/d™ Feline must be the sole source of nutrition. Some high-iodine foods include dairy products, egg yolks, seafood, dried fruit, canned vegetables, cured meats, fresh chicken or turkey (with broth or additives injected), soy products, seaweed products (carrageen, alginate), and red dye #3 or E 127 erythrosine (found in many foods/pills that are red or brown color). Additional dietary iodine information is available on websites about human thyroid health.
What are you feeding your cat?	Evaluate what foods are being offered and ask questions to determine what other foods are accessible to the patient.	Reinforce that y/d Feline must be the sole source of nutrition. See above for a list of common foods and ingredients that may be high in iodine.
How are you feeding your cat?	Allow owners to describe how they store, prepare and serve the food. Contamination with iodine can occur if y/d Feline is decanted and stored in containers or is served in bowls not thoroughly cleaned that have previously been used for other foods.	Recommend storing y/d Feline in the original bag or can. If food is decanted into a storage container, it should be new or thoroughly cleaned (dishwasher). Likewise, the bowl/serving dish should be new or thoroughly cleaned and used exclusively for y/d Feline.
What medications or supplements are you giving your cat?	Allow owners to describe all medications and supplements.	Flavored or artificially colored medications or supplements, supplements with fish or shell fish ingredients, and liquids used by compounding pharmacies can be sources of iodine.
Who feeds your cat?	Evaluate the possibility that other members of the family are inadvertently contaminating the feeding dish or giving other foods.	Designate one person in the household to be responsible for feeding the hyperthyroid cat and cleaning the feeding dishes.
Do you have children living at home?	It's possible for cats to consume foods dropped on the floor, left on counters or offered as treats (when parents aren't watching).	Reinforce that y/d Feline must be the sole source of nutrition. See above for a list of common foods and ingredients that are high in iodine.
What is the cat's water source?	Most municipal water sources contain minute amounts of iodine; however, other sources (e.g., well water, ponds) may contain more.	Consider switching to distilled water for 1 month and then re-evaluate effectiveness of nutritional management.

Clinical Research Experience

To date, 90% of hyperthyroid cats managed exclusively with Hill's® Prescription Diet® y/d™ as the sole source of nutrition have become and remained euthyroid as long as the cat did not have access to other sources of dietary iodine. Serum total thyroxine concentrations returned to the normal range within 4 to 12 weeks of initiating nutritional management.