



NUTRITION CONVERSATIONS

Nutrition Conversations With Clients Following a Pet's Cancer Diagnosis

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Abstract

A cancer diagnosis can be a stressful time for patients and clients. The clients have received a devastating, potentially life-threatening diagnosis, and they want to do what is best for their pet. At the time of the cancer diagnosis, the veterinary nurse and other members of the healthcare team should proactively engage in a nutrition conversation with the client, discussing and understanding their goals, answering their questions, and making a nutritional recommendation specific to their pet. The patient's food must be complete, balanced, energy dense, and formulated to meet the patient's nutritional needs. The food should contain highly digestible protein with adequate essential amino acids, high levels of fat and omega-3 fatty acids, and added prebiotics to help with the gastrointestinal consequences of cancer and its treatment. The veterinary nurse should follow up with the client to ensure compliance in addition to supporting them and letting them know someone is there for them to help with questions or concerns after the initial visit. Communicating with clients and establishing a nutritional protocol will help support the patient's quality of life through the cancer diagnosis.



Take-Home Points

- Cancer is common among dogs and cats.
- Cancer and its treatment increase the risk for inadequate nutrition in pets.
- Clients whose pets have cancer are often engaged and motivated to do the best for their pet.
- Understanding the client involves taking a proper and complete diet history and asking why they chose their current feeding regimen.
- Changing the patient's diet requires a conversation with the client that includes information about the new food and feeding amounts.
- When the patient's diet is changed to a new food, a transition period is recommended, as is follow-up, especially when the client is facing a life-threatening cancer diagnosis in their pet.

Cancer is common among dogs and cats, especially as pets age, and is a leading cause of pet death globally. Cancer will affect an estimated 1 of 4 dogs and 1 of 5 cats.¹ In addition to the effects of the neoplasia itself, cancer and its treatment increase the risk for inadequate nutrition, which may lead to clinical signs such as decreased appetite, nausea, or altered taste perception and resultant decreased calorie intake, weight loss, and decreased muscle mass. Some treatments may impair intestinal absorption of vital nutrients (e.g., protein). In addition, diarrhea or constipation can be associated with the underlying cancer, its treatment, or pain management.²

For cancer patients, malnutrition has negative consequences, including decreased response to treatment, shorter remission times, and decreased quality of life.³ Thus, preventing malnutrition is an integral part of support for cancer patients, which often involves changing the patient's diet and obtaining client compliance with the change. Clients whose pet has cancer are usually engaged and motivated to do what is best for their pet. Although they may consult many other resources to try and understand the options for their pet, they still highly value advice and guidance from their veterinary healthcare team. One survey of cancer patient owners indicated that 79% trust their veterinarian regarding nutritional advice and anticipate the need to change their pets' food, 100% believe that nutrition plays an important role in their pet's health, and 93% are open to trying a new food.⁴

In the past, low-carbohydrate foods were recommended to starve cancer cells, on the basis of limited research. More recent studies have shown that not all cancer cells are affected by dietary carbohydrates and can even adapt as needed depending on nutrient availability.

However, the ideal amount of dietary carbohydrates needed by cancer patients remains unknown. Thus, it is vital to offer a complete and balanced food that provides key nutrients to support the patient from diagnosis through treatment, which offers clients confidence that they are feeding the correct amount of necessary nutrients to their pet (**BOX 1**).⁵

BOX 1

Recommended Nutrition for Cancer Patients

- A complete and balanced diet that meets the nutritional needs of the patient and is appropriate for long-term maintenance
- A diet that is highly palatable and calorically and nutrient dense, thus allowing the patient to eat smaller amounts of food while still meeting their nutritional requirements
- Food that is easy to eat and digest as pets may have difficulty chewing and/or digesting food due to the cancer or its treatments
- A diet that is nourishing to the gastrointestinal (GI) tract as GI signs (e.g., decreased appetite, nausea, diarrhea) are common and because chemotherapy targets cells with rapid turnover, such as those in the GI tract
- Prebiotics that nourish and balance the gut microbiome, support gut health and immune function, and aid digestion
- Feeding tube, if the patient is unable or willing to eat
- Appetite stimulants, if appetite is decreased and the patient is able to eat



This article describes the process of communicating with clients about their pet's nutrition plan, assessing clients' ability/willingness to adhere to the plan, and following up on a plan that is tailored.

NUTRITION ASSESSMENT

At the time of the initial cancer diagnosis and at each clinic visit, a thorough nutrition assessment should be performed to establish a baseline by which to compare future changes in the patient's condition and any need to adjust the nutrition plan. The nutrition assessment includes the patient's diet history, current body weight, and body condition and muscle condition scores. Diet history is a valuable part of the nutrition assessment. Asking open-ended questions helps ensure that team members will receive as much information as possible and garners information without making the healthcare team seem judgmental. Start by asking about the current diet and the reasons for that diet.

- What are you currently feeding your pet (include pet food, treats, table food, and supplements)?
- Why have you chosen this diet?

Follow-up questions include:

- How are you feeding?
- How often are you feeding?
- How much are you feeding?
- Are there other pets in the house?

Based on the client's answers, the veterinary nurse may recommend modifications to the patient's nutrition plan and help the client understand the reasons behind the modifications and assess their ability/willingness to comply. The discussion should include topics such as how much to feed, how many treats to allow, how to transition the patient to a new diet, and how to increase palatability of any diet.

DISCUSSION POINTS

Feeding Amounts

The amount fed is important for any pet but especially one that is diagnosed with cancer. Patients living with and/or being treated for cancer should be in a good plane of nutrition or positive energy balance. According to the client's answers to the initial questions and what the veterinarian has recommended, the veterinary nurse will know if the pet will be getting canned food, dry food, or both, as well as treats. The veterinary nurse can use this information to help formulate a plan that

closely matches the client's preferences while also providing the appropriate nutrition and calories. The feeding amount calculation in **BOX 2** applies to cancer patients that are doing well, are between treatments, or are tolerating the treatments well. For a critical cancer patient or a patient with cancer that is not feeling well, feed to the patient's resting energy requirement (RER). The initial calculation is a starting point; each patient is unique and the feeding amount may need to be adjusted to maintain weight.

Communication Tips

- Explain to the client the value of feeding the specific amount calculated, and let them know that adjustments to the amount fed may be needed over time.
- Send the client home with a measuring cup with a fill line marked to indicate how much to feed.
- Record the discussion and the amount to feed in the patient's medical record.

Giving Treats

Giving treats can be a very emotional experience for clients, and is often one of the ways they bond with their pet and show love. If their pet has a diagnosis of cancer, treats can be especially valuable to help encourage appetite and provide emotional support for the patient and the client. If the client wants to give

BOX 2

Calculating Feeding Amounts

1. Calculate RER.

A. $RER = (70 \times \text{kg BW})^{0.75}$

or

B. $RER = 70 + (30 \times \text{kg BW})$ (considered not to be as accurate for very small or very large pets)

2. Calculate the DER, also called the MER, accounting for the patient's life stage (age), activity level, or physiologic condition (weight).^{6,7}

3. Multiply the RER by the appropriate adjustment factor.

BW = body weight; DER = daily energy requirement; MER = maintenance energy requirement; RER = resting energy requirement



treats, try to incorporate treats into the nutrition plan. Treats should never be more than 10% of the total calories.⁸

Communication Tip

- Advise clients that giving more than 10% of calories as treats may lead to an imbalance of the proportions of nutrients in the diet. This may lead to deficiencies of nutrients needed for the increased metabolic and other needs associated with cancer and its treatment.⁸

Transitioning to a New Diet

Introducing a new food is best accomplished by gradual transition. Some pets are particular about the texture of their food and may take longer to accept the new food.

Communication Tips

- Explain that gradual transition to a new food decreases the chances of gastrointestinal (GI) upset.
- Explain that their pet is more likely to accept the new food better with a gradual transition that enables them to get used to the new texture and flavor.

Increasing Food Palatability

Often, pets that are undergoing cancer treatment, such as chemotherapy and radiation, become disinterested in their food because they do not feel well or their sense of taste has been affected.

Communication Tips

- Warm the food (make sure the food is not so hot as to burn the mouth).
- Feed different foods in separate bowls (some pets do not like different foods in the same bowl).
- Try foods of different textures (if the pet does not like the dry form, try the canned form and vice versa).
- Add a low-sodium flavored broth (but no onions or garlic!). Food additives should be included in the 10% treat calorie count; the total must not exceed 10% of the daily calories so that the complete and balanced diet comprises 90% of the calories.

MESSAGE REINFORCEMENT

Many owners of pets with a cancer diagnosis are overwhelmed and may not truly comprehend what the

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veterinary team is instructing them to do. Thus, handouts and additional take-home resources are paramount to aid in the understanding and to share with family members.

Communication Tips

- If available, give clients a brochure that discusses the new food (provided by the pet food company or that your clinic has created), including general information as to how the food will benefit the pet and how much the pet should eat.
- Give clients written information about the diagnosis and treatment recommendations for the cancer.
- Offer text or email as alternative forms of written communication.

FOLLOW-UP

After the client has been informed of the nutrition plan for their pet, follow up after they have gone home to make sure everything is going well and to answer any questions that may have come up after the visit. Clients with cancer patients are dealing with the emotional toll of a cancer diagnosis, and knowing the veterinary team is there for them and their pet is extremely reassuring. Veterinary nurses are instrumental in helping clients when a new food is being recommended as part of the treatment plan.

Communication Tips

- Be sure that clients have proper clinic contact information (e.g., phone number and email).
- Call the client in 2 to 3 days, 2 weeks, and again 1 to 2 months after the first visit to see how their pet is doing.
- Call as deemed necessary after 1 to 2 months.



Adequan® Canine polysulfated glycosaminoglycan (PSGAG) solution 100 mg/mL in a 5 mL preserved Multiple dose vial for intramuscular use in dogs.

Brief Summary: Prior to use please consult the product insert. **Caution:** Federal law restricts this drug to use by or on the order of a licensed veterinarian. **Indications and Usage:** Adequan Canine is recommended for intramuscular injection for the control of signs associated with non-infectious degenerative and/or traumatic arthritis of canine synovial joints. **Efficacy:** Efficacy of Adequan Canine was demonstrated in two studies, a laboratory study and a clinical field trial. **Contraindications:** PSGAG is a synthetic heparinoid; do not use in dogs with known or suspected bleeding disorders or in dogs showing hypersensitivity to PSGAG. **Precautions:** The safe use of Adequan Canine used in breeding, pregnant, or lactating dogs has not been evaluated. Use with caution in dogs with renal or hepatic impairment.

Adverse Reactions: In the clinical efficacy trial, 24 dogs were treated with Adequan Canine twice weekly for 4 weeks. Possible adverse reactions were reported after 2.1% of the injections. These included transient pain at the injection site (1 incident), transient diarrhea (1 incident each in 2 dogs), and abnormal bleeding (1 incident). These effects were mild and self-limiting and did not require interruption of therapy.

Post Approval Experience (2014): The following adverse events are based on voluntary, post-approval reporting. The signs reported are listed in decreasing order of reporting frequency: vomiting, anorexia, depression/lethargy, and diarrhea. In some cases, death has been reported. **Warnings:** Not for use in humans. Keep this and all medications out of reach of children. **Dosage and Administration:** Adequately clean and disinfect the stopper prior to entry with a sterile needle and syringe to decrease the possibility of post-injection bacterial infections. **Use only sterile needles, and use each needle only once.** **Use in 28 days of first puncture and puncture a maximum of 10 times.** This risk information is not comprehensive, visit adequancanine.com to obtain the FDA-approved product labeling. To report suspected adverse drug events, contact American Regent, Inc. at 1-888-354-4857.



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SUMMARY

Cancer is associated with metabolic alterations and can cause clinical signs that indicate malnutrition (e.g., decreased appetite, weight loss). Cancer treatments also may negatively affect appetite and cause GI signs. Clients whose pets have cancer are very motivated to do whatever is best for their pet, and they highly value nutritional advice from the veterinary healthcare team (even as they also consult online resources). At the initial cancer diagnosis, a nutrition assessment should be performed and repeated at each visit to determine the need to adjust the nutrition plan. Maintaining a positive energy balance to sustain proper weight via adequate food intake is critical for patients with cancer and can be facilitated by offering a highly palatable, complete and balanced food that meets the patient's nutritional needs. Veterinary nurses are instrumental in explaining to clients the value of proper nutrition at such a critical point in the pet's life, working with clients to arrive at a plan with which they can comply, and offering tips for success (e.g., feeding amounts, transitioning to new foods, improving food palatability). If the patient's diet will be transitioned to a new food, follow-up will help ensure success. Regardless of selected treatment options for cancer (including none), clients and the veterinary healthcare team share a common goal—ensuring the best quality of life possible for the patient—and nutrition helps with that goal. **TVN**

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Vicky received her veterinary technician degree from Los Angeles Pierce College in 1983. She later attained a bachelor of science degree in 2007 and a master's degree in 2008, both in business administration. Vicky then obtained her VTS in nutrition credential in June 2013. After several years in private practice, she began her current 23-year career with Hill's Pet Nutrition, where she is a senior scientific communication specialist in the U.S. professional veterinary affairs department. She focuses on education for veterinary nurses and the healthcare team as well as strategies for veterinary nurses in tech schools and graduates, speaking nationally and internationally and publishing articles.