Identifying obesity

Dottie Laflamme: Our topic today is obesity. In 1995, the largest study to date revealed that about one in three dogs and cats seen by practitioners was overweight or obese. Twelve years later, we believe that percentage is even greater. Why do you think we are struggling with obesity in our veterinary patients?

Lynn Buzhardt: We see more obese pets because we have a society of sedentary owners and sedentary pets. The concept of what a healthy animal looks like is different than it was 30 years ago. Our ability to judge an overweight animal has improved tremendously. Veterinarians are diagnosing obesity more because we now have the proper parameters for scoring body condition.

Laflamme: Heather, how do you determine if a dog is overweight?

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Obesity is a risk factor for disease. Not only does it increase the stress on the joints and heart, but excess weight increases hormone and inflammatory mediator release, creating chronic low-level inflammation. Educating clients about the importance of weight management is key to improving the health of at-risk dogs. Incorporating a high-protein, high-fiber, and low-calorie diet aids in designing a realistic weight-loss program.
Laflamme: Are there any other risk factors?

Julie Churchill: I break it down to pet factors (age, breed, neuter status, health), owner factors (weight, activity level, work vs. stay-at home), diet factors (palatability and nutrient density of food), and veterinarian factors (comfort and competence in discussing and managing obesity). We recommend early spaying and neutering, which affects the metabolic rate and reduces the pet’s energy requirement, yet we forget to make a nutrition recommendation, which increases the risk for obesity. Also, I don’t think my clients understand a dog’s natural feeding behavior. Repeatedly, clients say their pets act hungry or beg for more food. They equate that behavior with their not getting enough nutrition, when it often is just a pet begging for attention. These are two great opportunities to educate clients.

Laflamme: How do you respond to clients who say their dogs are always begging for more food?

Churchill: I describe the natural feeding behavior of the dog: The wild dog is an opportunist and a gluttonous feeder. If food is there, dogs will almost always consume it because in their wild evolutionary state, they never knew when the next meal would come.

Rebecca Remillard: I think we’re learning—15 years ago a medical record would say, “Healthy but obese.” Until recently, obesity wasn’t recognized as a disease. As educators, we have to convince our clients that obesity is not healthy.

Obesity-associated disease

Laflamme: That is a great segue into the topic of obesity as a risk factor for disease. What problems are associated with obesity?

Buzhardt: An obvious symptom is the inability to move without pain. We see a lot of bone and joint problems and osteoarthritis in overweight dogs.

Prendergast: With osteoarthritis comes exercise intolerance. When owners see the animal having trouble getting around, they think the pet can’t go for a walk, which compounds the problem.

Remillard: Most of my canine patients are consults from the orthopedist. They highly prefer the dogs to be on a weight-loss program or demonstrate weight loss prior to surgery.

Purina’s 14-year Life Span study concluded that overweight dogs actually had a shorter life span. Not only did they live about two years less, they were grayer and moved more slowly.

Buzhardt: That study was probably the most dramatic influence in the veterinary field for practitioners because it confirmed facts about nutrition that we always assumed were true. Keep the dog lean, and it may have a two-year increase in life span or a three-year delay in the onset of osteoarthritis. Common sense assumptions were finally validated by a scientific study.

Churchill: In that study, the control dogs had a BCS between 6 and 7 (of 9), vs. a 4 to 5 in the lean dogs. This apparently small difference between healthy lean and slightly overweight has a big impact on potential quantity and quality of life. After pet owners learn about BCS, they need constant reinforcement because peer pressure is so powerful. When the neighbor is saying, “Your pet is too thin,” it hurts because nutrition is a primary way we care for our pets. Veterinarians need to reinforce our message on every visit.

Laflamme: Many researchers have documented increased inflammatory mediators in obesity. How can an increase in inflammatory mediators or oxidative stress actually contribute to the diseases linked with obesity?

Churchill: Traditionally we thought carrying excess weight was just carrying around a lump of lard. Now data indicate that the effects are not only mechanical, but also hormonal. People can understand the increased mechanical stress on the
joints and the heavier load for the heart. What they may not know is that the adipose tissue is an incredibly active organ creating and releasing hormones as well as inflammatory mediators, such as cytokines or adipokines. Obesity is like having chronic low-level inflammation, which may contribute to many of the chronic diseases we see in overweight or obese dogs.

**Prendergast:** I think people generally understand weight-related problems. Overweight clients will say they feel better when they lose 5 to 10 lbs. We try to emphasize BCS rather than pounds. If you have a 7-lb Yorkie that should weigh 6 lbs, 1 lb of weight loss may not sound like much. But if they go from a BCS of 7 to 5, that’s a big improvement. So the focus shifts from pounds to BCS.

**Designing a weight-loss program**

**Laflamme:** Let’s talk about an ideal weight-loss program. What would you like to see in terms of type of diet, specific nutritional characteristics, client protocols, and so on?

**Prendergast:** Our staff is very involved with each weight-loss patient. We recommend they come in every two weeks or at least every month for a weight check, and we celebrate every pound of weight loss.

We also follow up. One staff member calls every client and asks how they are doing. This builds a relationship with the family and motivates the client to stay the course.

We encourage and facilitate exercise. We meet three times a week at a park to walk our pets—starting out slowly and gradually increasing the distance. It’s fun for the owners and great socialization for the pets.

**Buzhardt:** That’s an excellent idea. An organized walk is great motivation because if owners feel that misery loves company, they are in good company. They think, “Here are other people with obese pets just like mine.”

We are careful to determine how much exercise a dog can tolerate prior to instituting an exercise regimen. After a physical exam and laboratory workup, we suggest how much exercise we think their pet can tolerate. If necessary we prescribe nonsteroidal anti-inflammatory drugs (NSAIDs) to facilitate comfortable exercise programs. Over time we can reduce the need for NSAIDs as weight reduces. Some of our elderly clients who can’t exercise hire other people to exercise their pets.

**Laflamme:** Let me ask a nutritionist in the group about the ideal nutritional profile. What are you looking for in a canine weight-loss diet?

**Remillard:** Low calorie and a lot of bulk to reach that satiety level. Most weight-loss diets are formulated to create a caloric deficiency—while meeting other nutritional requirements—in the volume the animal consumes in a day.

**Laflamme:** So you are looking for an increased nutrient-to-calorie ratio?

**Remillard:** Yes. For example, protein percentage will be much higher than a maintenance diet, while the total energy is lower. In addition, there should be an increase in the ratio between the other non-energy nutrients and the dietary energy. Diets are available that use air, water, or fiber as a bulk fill. I prefer to use the fiber ones over diets that use water or air—meaning puffed or big kibble size. Water and air are easily eliminated from the gastrointestinal tract whereas the fiber remains and has a bulk effect throughout.

**Laflamme:** So fiber has a greater satiety effect?

**Remillard:** A longer lasting one. But I still see dogs that are very hungry on the highest fiber diets. It’s not the answer in all cases.

**Churchill:** I agree that fiber gives the longest lasting satiety, but it might not be my best option if the owner is debilitated and can’t cope with

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**Two ideas to get clients more involved in the weight-loss process**

1. Make it fun for them. Facilitate group exercise for clients and patients. Meeting at a local park regularly for a walk can be enjoyable for clients and pets. Start out with a short walk, then gradually increase the distance.
2. Give them a reference point. Weight gain and weight loss can be subtle, making it difficult for clients to know if a diet is working. Taking a picture of a patient at a healthy weight will remind the clients what their pet should look like.
I also use water as a diluent on top of the high fiber. For dogs that eat their meal in 30 seconds, the water slows them down, and they experience a transient satiety effect. As a rule of thumb, our nutritional goal would be to provide one gram of protein per pound of body weight per day. For extremely obese patients, it can be impossible to meet this protein level using the patient’s current “overweight” status. Therefore the minimum amount of protein the diet should provide is 1 g/lb body weight using the estimated healthy lean weight, or target body weight. This would probably mean 35% or more of the calories are from dietary protein, or about 30% protein in a low calorie food.

Laflamme: Why is protein so critical? All essential nutrients are important. Is protein more important in weight-management diets than other nutrients?

Remillard: If you restrict intake of a maintenance diet based on calories, the first nutrient deficiency you would see is protein according to the Association of American Feed Control Officials and the National Research Council.

Laflamme: So calorie restriction with a standard maintenance diet might not be appropriate for weight loss because it offers insufficient protein?

Remillard: Oh, definitely.

Churchill: You see it as lean muscle wasting. In addition to body condition scoring, I am starting to use muscle condition scoring. We do it intuitively, but you can see the temporal muscles start to atrophy if protein needs aren’t met. The fat mass is maintained and lean muscle underneath depletes.

Laflamme: If the diet for weight loss has insufficient protein, can you physically see the loss of muscle without a comparable loss of body fat?

Churchill: Yes, we call it “overcoat syndrome,” a loss of lean mass with excess body fat.

Remillard: They may weigh less on the scale, but the wrong tissue (i.e., muscle mass) is being lost.

Buzhardt: We tell clients that we want the pets to lose fat, not muscle.

Churchill: Especially orthopedic cases.

Laflamme: What about carbohydrate restriction? Is there a benefit when we are talking about weight management for dogs?

Remillard: The carbohydrate can be broken down into two categories. One is fiber, which we prefer to see increased. The other is the more digestible carbohydrate. But, the only way to effectively reduce the caloric density of a food is to decrease fat, so carbohydrate has to increase as a percentage.

Laflamme: So if I can summarize, an ideal weight-loss diet for most animals is low in fat and high in protein and fiber. If an animal cannot tolerate a high-fiber diet then using water to dilute calories is another alternative.

New weight-management drugs

Laflamme: Let’s shift gears and talk about the new drugs coming on the market. One is approved, but others are in development. These are the first weight management drugs for use in dogs. Their main effect is a satiety effect. They decrease food intake. Under what conditions would you use one of these drugs?

Buzhardt: I would change the diet and increase exercise before I’d recommend using the drug. I’d depend on the diligent efforts of the client to reduce the dog’s weight through conventional means first. But if those efforts weren’t successful in an obese animal, I’d consider using the drug. I think it is an excellent jump start to a weight-loss program for a frustrated owner and an animal that is in dire need of weight loss.

Laflamme: Why wouldn’t you start treatment with the drug?
Buzhardt: I want to change behavior first. We’re looking for a lifetime commitment to health. We don’t want people to use the drug as a crutch. Rebounds in weight, which occur when behavior hasn’t changed, are not healthy for the pet.

Remillard: I agree the drug would not be a first-line attack. I think that behavior modification is the underlying goal. But in our practice, because some of my owners have given weight loss a reasonable try, we might use it sooner than a primary care clinician. My preference is to use it with patients that have already tried diet change. The exception would be the more serious cases of morbid obesity or dogs that can’t exercise because of surgery. They would get more immediate help.

Churchill: We would probably start these dogs on the medication before the orthopedic procedure. We like to reduce weight before we repair that anterior cruciate ligament or replace that hip. It has a definite medical benefit.

Laflamme: Would you change the diet then?

Buzhardt: I would be reluctant to change the food at the same time because if the dog doesn’t eat the new diet, then the owner really doesn’t know if it’s due to the medication or the diet. I would let the dog acclimate to the medication first so that any vomiting is attributed to the drug and not the diet. Certainly we want to make sure that they’re being fed a good weight management diet before we stop the drug because rebound appetite and weight gain may occur.

Laflamme: If the drug is working, food intake is going to be quite restricted in these dogs, which is what induces the weight loss. Dr. Churchill, with food restriction, what are your concerns about nutrient deficiencies? What kind of diet would you like to feed while this drug is being used?

Churchill: When a patient is significantly overweight, I have concerns that an over-the-counter complete and balanced diet may not optimally meet the pet’s nutritional needs when the amount is reduced to achieve weight loss. For example there is quite a range in protein content of complete and balanced “light” foods, with some being quite low in protein. Feeding these may lead to protein malnutrition. Although we need to assess these patients’ health and nutritional needs on an individual basis, I anticipate they will need a therapeutic weight-loss diet in addition to drug therapy. It may be a fine balance between the food and the medication to find the best balance for successful weight loss in challenging cases.

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Developing feeding plans and weight-loss goals

Laflamme: How do you set up a feeding protocol for an individual patient?

Prendergast: We utilize the Purina software because it creates a detailed plan for the client, including how much to feed, how to use treats, and how many kilocalories to feed. If we don’t see the weight loss that we expect, it will recalculate and tailor the plan for us. It has our clinic name and our patient’s name on it, so it’s very client-oriented.

Buzhardt: We specify what to feed, write it on the sheet, and ask that they bring it back every month.

Laflamme: Are you targeting a particular rate of weight loss?

Buzhardt: Yes. Our goal is about 3% body weight a month. That’s a healthy goal, and clients can actually see the benefits.

Prendergast: We also hope for 2% to 3% body weight per month.

Churchill: I think 1% per week or 4% per month is realistic.
Running a program

Laflamme: Can you describe how your weight-management program works and what role each team member plays?

Prendergast: We have one assistant who oversees our nutritional program. Once the veterinarian identifies the pet as overweight, the assistant meets with the client and develops that relationship through education. She helps the client choose the diet and outlines the amount of food, treats, and exercise. She will then follow up.

Although she has the most client contact, the whole staff remains engaged in the weight-loss program. When the pets come in for weight checks, the front office staff is the welcoming committee. “Fluffy, you look so good. Look at those inches coming off.” They often escort the pets to the scale until the assistant can take them into a room and evaluate their progress.

Laflamme: Lynn, how does that differ from what you do?

Buzhardt: We practice the rule of three: Clients need to hear a message three times before it sinks in. The scale is their first stop. The receptionist may approach the client right there and say, “Fluffy lost 2 lbs in the last six months.” Or, “Oh my, we gained a few pounds. Expect a longer office visit today.” Then the technician takes the client to the exam room to review the pet’s status again. She may also do some of the reassessments, such as making follow-up phone calls and reweighing the pet.

Our program is more doctor-centered, but the receptionists and technicians are also integral parts of a successful program.

Remillard: Weight-loss programs can be a terrific practice builder. Just think, 30% of your patients have a disease that you can often cure. The more often clients walk into your clinic, the more they will spend with you. When you give them a reason to come back, the quality of care increases and they dedicate more dollars to taking care of their pet.

Buzhardt: Exactly. We want the long-term relationship. And if a dog lives two years longer because you have kept it lean, that means you’ve given the client two more years with the pet. You’ll also have two more years to provide medical care, which increases your income.

Churchill: You also build trust with your clientele because you are sending the message you care about prevention and wellness, rather than just treatment.

Buzhardt: And let’s not forget that these obese animals are at risk for other diseases. Managing obesity means evaluating these pets through laboratory workups periodically and diagnosing medical problems earlier. That way we can do the most good.

Educating clients about obesity

Laflamme: How do you explain the dangers of obesity to clients?

Buzhardt: I don’t get extremely technical. We talk about the inflammatory responses of adipose tissue, and I normally explain that an overweight or obese pet may not feel as well, won’t heal as quickly, and will be more prone to develop other diseases like respiratory and cardiac disease and diabetes. Those are words clients can recognize, relate to, and fear.

Regulating treats

The frequency and type of treats clients give their dogs can increase the risk of obesity or compound an existing obesity condition. Clients should consider these treat ideas and alternatives to help their obese dog shed pounds and improve overall health:

- Keep a container of green beans in the freezer: If it comes from the hand, the dog will consider it a treat, and it has fewer calories than a cookie. Popcorn and kibble also are good low-calorie treat alternatives.
- Cook vegetables in a low-calorie, low-sodium butter substitute or bouillon for an attractive aroma and taste.
- Break biscuits and treats down and give a piece at a time: The timing of the treat and positive reinforcement is what’s most important to a dog, not the size.
- Limit treats to 10% of the dog’s daily caloric intake: If a treat is given for going outside, eliminate the cookie the dog gets at the bank’s drive-up window.
- Offer a bowl of dog food from the table: The dog will still see it as table scraps—and it won’t have the fat and cholesterol of steak.
- Keep a treat diary or daily treat checklist so family members don’t give multiple treats.
Laflamme: What do you do when the overweight pet has an overweight owner? Do you address that situation differently?

Prendergast: That can be a touchy subject. One of our veterinarians is slightly overweight, and she has a great approach. She says, “You know, I am not one to talk about my weight, and I can’t always control what goes in my mouth, but I can control what goes in my pet’s mouth.”

Buzhardt: Sometimes I start with humor and try to establish a rapport, but then you have to address the seriousness of the situation. The problem is within owners’ control. The dog does not open the refrigerator door. The owner controls what the pet consumes and has the ability to help the pet lead a healthier life.

Churchill: I’m a big believer in assessing the client’s readiness for change. Through questioning, we can glean a lot about what the pet eats, about the owner’s lifestyle, and their bond with their pet. I tell them I am partnering with them and offer them a number of strategies they can pick from. I also give clients permission to fail. We know we might slip or stumble, but that’s okay because it takes many small steps to achieve success.

Laflamme: Do you start with a discussion about nutritional management or helping the client understand their pet is overweight?

Prendergast: During a pet’s annual exam, we say, “I see Fluffy has gained 5 lbs this year, so let’s look at her BCS. Where do you think Fluffy is on our chart?” That opens the door to discussing obesity.

Buzhardt: Clients have to admit that there is a problem, and a picture is worth a thousand words. The obesity chart comes in handy for us and clearly illustrates the comparison between pets of acceptable body condition and those that are overweight.

Laflamme: So you use an illustrated BCS chart and teach them how to score their pet?

Buzhardt: Yes. We have a laminated copy in the exam room. We show them the dog’s actual BCS and compare it to what they think the dog’s score is. Then we show them how to score the dog so they can track progress at home. We take their hands and say, “Feel these ribs.” We put the dog on the floor and say, “Do you see a waistline?” We will raise the table and ask, “Do you see a tummy tuck?” Once they admit there is a problem, then we start talking about the solution. We are looking for lifetime commitment to the dog’s health.

Prendergast: We also track the pet’s weight in our veterinary software and print a graph at the bottom of their invoice.

Laflamme: Once we’ve made it clear that the patient is overweight, what is the next step?

Prendergast: Our first questions are: What do you feed? How much do you feed? Do you have a specific cup that you use? Most of the responses are, “Yes, two cups a day.” Well, is it exactly two cups or is it two oversized coffee mugs? We explain what a “cup” really is and how important it is to measure the food.

Buzhardt: We go one step further: We give them a cup and tell them to use that cup exclusively to feed their pet. We also tell them to feed based on their dog’s healthy weight, not its current weight. We emphasize that. We give them a sheet with

“If you restrict intake of a maintenance diet based on calories, the first nutrient deficiency is protein ... they may weigh less on the scale, but the wrong tissue (i.e., muscle mass) is being lost.”

Remillard: It helps them understand that fat between the ribs and fingers can translate into excess fat around the heart, liver, or kidneys.
feeding instructions that they bring in for their rechecks. Weight and BCS are recorded at each visit so that they can track progress.

Laflamme: Do you ask all owners, regardless of their pet’s weight, to measure the food?

Buzhardt: Yes. We want control over what’s going in every pet’s mouth. We also ask them to monitor the rest of the family so the pet doesn’t get fed twice.

Laflamme: At what point do you move beyond the feeding protocol and recommend diet change?

Buzhardt: We try to intervene early, and call it weight management, not weight reduction. If the pet has a BCS of 6 moving toward 7, we’ll discuss it. We don’t wait until the pet is a 7. Early intervention is key, not only to stop the progression of weight gain but also to change the lifestyle pattern before it becomes ingrained.

Prendergast: We start a serious conversation about changing diet when the pet hits a BCS of 7.

Buzhardt: Owners are afraid of diet changes. I tell them, “I am asking you to do something that is challenging, but if we work together, your dog is going to benefit.” We often do a gradual diet change, and we celebrate even the smallest weight loss. When they don’t see progress it is frustrating and decreases compliance. We are motivators for owners dealing with a difficult situation.

Overfeeding and weight gain also occur when owners love their dogs to death. They think they are neglecting their pets if they don’t give them treats. We explain that treats don’t have to come in a box named “Treat.” Put some kibble in a zip-top bag and feed that as a treat. The dog really doesn’t care what comes out of your hand. It just wants the attention (See Regulating treats, page 6).

Laflamme: Any final words of advice?

Prendergast: The keys to success are listening to your clients, understanding their lifestyle and household, developing a tailored weight-loss plan, getting the whole family educated and on board, and having an effective follow-up system. If you don’t follow up, everyone will lose interest and your program will falter.

Reference

Achieve client compliance by:
- focusing on follow-ups
- giving them permission to fail
- celebrating small accomplishments
- recognizing accomplishments with awards (Pet of the Month)
- creating client account incentives (discount if they reach their weight goal).

Prendergast

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To view a video demonstrating Nestlé Purina’s Body Condition Score (BCS) system and how to use the BCS chart, visit www.vetmedpub.com/bs.
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