Treating and Preventing Pet Obesity
By Craig Kohn, WUHS. Based on “Pet Obesity is a Growing Concern” by Ann Falk, U. of Illinois, and “Nutritional Management of Weight”, Veterinary Teaching Hospital, Virginia Tech and U. of Maryland

According to studies reported by the Virginia-Maryland Regional College of Veterinary Medicine, pet obesity may affect as many as 40% of dogs. While pet obesity may seem like a minor problem, it can result in serious health implications for pets. Overweight pets are at greater risk for developing diabetes (the reduced or lost ability to regulate blood sugar levels), heart disease, respiratory disorders, and arthritis. An overweight pet is prone to hip disorders, back problems, and hormonal disorders. On the contrary, a lean pet is expected to live up to 2 years longer on average than an obese pet, and a pet with a healthy weight will be likely to have fewer expenses for their owner. Simply put, an animal at a healthy weight will be happier, stronger, and cheaper to care for.

So why are so many pets obese? The answer is simple, at least on its surface. Obesity occurs only when the consumption of calories exceeds the use of calories. In other words, when a pet eats more than they burn off, the excess calories will be stored as fat. This does not require an excessive amount of calories to cause obesity. An extra small treat or a bowl filled a little too full each day will have consequences that will accumulate over time.

So why are so many animals receiving excess calories in their diet? "The most common reason for overfeeding is that owners want to show their pet they care and one way is to give a treat. One extra treat can turn into 5 and then 10. Be aware exactly how much you are feeding your pets," reports Dr. Merle, a veterinarian formerly with the University of Illinois College of Veterinary Medicine.

Over-caring owners, in combination with an inactive lifestyle, have resulted in a huge problem. Pets on average are simply receiving more calories than in previous years while getting fewer opportunities to burn off the same amount of weight. The end result is a deadly twofer combination of unnecessarily high calories and reduced activity.

So how do you know if your pet is overweight? One method is to simply weigh your animal. However, this number will provide you with relatively little information as dogs can be so variable. There is no single healthy weight for dogs or even for a breed of dog in the same way there is no single healthy weight for humans.

A more thorough approach to determining whether your animal is at a healthy weight is to determine the dog’s Body Condition Score.

Is Your Dog Too Fat?

**OBSE**

- Ribs: Difficult to feel under moderate fat cover.
- Tail Base: Some thickening, bones palpable under moderate fat cover.
- Side View: No abdominal tuck
- Overhead View: Back is slightly broadened at base

**IDEAL**

- Ribs: Easily felt with slight fat cover
- Tail Base: Smooth contour with slight fat cover
- Side View: Abdominal tuck
- Overhead View: Well-proportioned waist

Figure 1 Source: http://www.healthdome.net/images/WeightComparison.gif
There are a number of methods to determine the Body Condition Score (BCS) of your pet. A pet with ideal conditioning (body weight) will have ribs that can be felt easily without pressing but that do not show through their coat. If you cannot easily palpate, or physically examine and feel a dog’s ribs, they are most likely obese.

The second check for determining the BCS is the waistline of a pet. An obese pet will have a waistline that is indistinguishable from their thorax (chest). A healthy dog will have a “tuck” in its stomach that clearly separates it from the chest, and this tuck is visible both from the side as well as from above. The “tuck” of the abdominal area creates a sort of hourglass shape when viewed from above, with the chest and hips forming the widest part of the hourglass and the abdomen forming the narrow “neck” of the hourglass. If the chest flows smoothly into the abdomen with no distinguishable separation, the dog is most likely obese.

Final areas to check are the tail head (base of the tail) and spinal vertebrae along the back. A dog at an optimal BCS will have a smooth tail base that doesn’t feel bony to the touch. Their vertebrae will be easily detectable with a slight covering of fat.

While it can be hard to be objective when checking your own animal, the signs of obesity can usually be detected with a careful eye. Err on the side of obesity if you are unsure – a consultation with a veterinarian cannot hurt the animal.

Texas A & M College of Veterinary Medicine has published a BCS Guide to assist in determining what a dog’s BCS would be on a 5 point scale. The optimal ideal score is a 3. Each point above or below a score of 3 indicates an animal that is 20% under- or overweight. Occasionally a BCS scale will run from 1-9, with 5 as the optimal score and each point 10% from optimum. Consult the chart in this reading for more descriptions about each BCS score. Images by Ralston Purina Comp., and text by Texas A&M College of Veterinary Medicine.

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<td>Ribs and lumbar vertebrae obvious, pelvic bones and all other bony structures obvious and prominent. Tail base prominent and bony. Accentuated concave abdominal tuck. Accentuated, severe hourglass shape to waist. No discernable body fat. Obvious loss of muscle mass.</td>
<td>Ribs and lumbar vertebrae easily seen with no fat cover. Pelvic bones obvious. Tail base bony with little soft tissue. Marked concave abdominal tuck. Marked hourglass shape to waist.</td>
<td>Ribs, lumbar vertebrae, pelvic bones and other bony structures easily palpable with slight fat cover. Tail base smooth with thin, soft tissue cover. Concave abdominal tuck. Smooth hourglass shape to waist.</td>
<td>Ribs and lumbar vertebrae are difficult to palpate. Pelvic bones are palpable with moderate tissue cover. Tail base has fat deposition with moderate soft tissue cover. Concave tuck is decreased to absent. Loss of hourglass shape to waist with back slightly broadened.</td>
<td>Ribs and lumbar vertebrae are very difficult to impossible to palpate. Pelvic bones are difficult to palpate with thick tissue cover. Tail base is thickened from fat deposition with thick soft tissue cover. Abdomen is convex with or without a pendulous ventral bulge. Back is markedly broadened.</td>
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So what do you do if your dog is obese or overweight? The first step is to contact your veterinarian. A weight-loss program should never be started without the approval of a medical professional, particularly in dogs. A weight-loss plan should accomplish two goals: 1) steady, weight loss until a healthy weight is reached, and 2) sustained pet comfort and satisfaction. In other words, while a pet should lose weight on a well-managed plan, they should also remain comfortable throughout the process.

The Virginia-Maryland College of Veterinary Medicine recommends that pets lose no more than 2% of their body weight per week. Rates above 2% can cause hunger, a slowed metabolism (making it harder to shed weight pound for pound), and lost muscle tissue.

Because dogs are so variable, the best evidence for veterinarian to use in this process is the current caloric intake of the animal. A diet history consisting of an accurate list and amount of all types of food and treats a dog consumes is necessary for a veterinarian to make educated decisions that are in the best interests of the animal. Regular weight-checks during the weight-loss period will be necessary to ensure a consistent result.

Because obesity is caused primarily by excess calories and not necessarily by the actual volume of the food consumed, veterinarians who place dogs on diets will often recommend a change in the dog’s food. Our goal is for the dog to lose weight without feeling hunger. This may mean switching to a less nutrient-dense food so that the dog can consume the same amount as prior to the diet without the same number of calories. Most veterinarians will chose a special low-calorie dog food specifically designed for weight loss. Switching to this kind of low-calorie dog food will enable the animal to consume the same volume with fewer calories.

It is key that the low-calorie dog food have the same amount of essential amino acids, fats, vitamins, and minerals so that the dog does not experience a deficiency that could threaten their health. Simply reducing a pet’s caloric intake without any special modifications or changes can put the animal at risk. Reducing an animal’s intake by 30% can also reduce their nutrient intake by 30% - we want to avoid this to steer clear of health issues, making specially designed dog foods a necessity, even if it may come at a greater cost.

While it may come at a surprise, treats should not be eliminated from a dog’s diet. Treats provide a pet with feedback and positive reinforcement, allowing them to feel as if they are an important part of your family. That said, treats should never account for more than 10% of a dog’s daily caloric intake. Talk with a veterinarian to determine exactly what kinds of treats should be used for positive reinforcement in dogs on a diet. For example, 1 tablespoon of peanut butter has the same number of calories as 3 cups of air-popped popcorn without butter. Treats should be carefully selected and given only to reinforce correct behavior in a dog.

Of course, modifying a dog’s diet is only half the battle in managing their weight or returning it to a proper level. Exercise is the other half of this approach and is equally important. The best overall exercise for your dog is having them walk by your side at a moderate pace. This is also great exercise for you! Regular exercise in both dogs and people stimulates tissue and increases circulation. The additional flow of oxygen through a body removes additional toxins. A
dog’s digestive tract will benefit from increased secretion of fluids, enabling better bowel movements. Finally, it can increase the bond between you and your pet, reducing their anxiety and increasing your enjoyment together.

If you are just starting an exercise program with a pet who has not recently exercised, you will want to start with short frequent walks and gradually increase their length. Research has indicated that two 20-minute walks per day can help maintain a healthy weight in dogs. You will need to make decisions on what is appropriate for your animal based on your pet’s abilities, a veterinarian’s advice, and your own personal schedule.

It is important that you make your walks with your dog a pleasant experience for both you and the animal. These walks are as necessary for their physical health as well as their mental health. Dogs have adapted a keen ability to sense human emotion due to 10,000 years of domesticated breeding. A dog will be able to sense if you are rushing to finish, or if you dread this time as just another chore. It is important for both the health of the dog as well as your relationship that you find ways to enjoy your time together and build your bond with your animal. Walking through new neighborhoods, adding a ball or Frisbee to the routine, or simply exploring a park or woods will improve your dog’s physical wellbeing as well as their emotional and mental health. Celebrate your animal’s improved BCS; they will be able to detect your enthusiasm and will respond accordingly.

In the end, prevention is the best way to address pet obesity. An animal that develops arthritis due to obesity will struggle much more to reach a healthy weight. Keeping animals at a healthy weight is a much easier and much cheaper alternative. Regardless of the condition of your animal, you should monitor their BCS routinely, adjust their food accordingly, and regularly consult your vet with checkups and examinations. Always remember that obesity can be a sign of problems other than excessive caloric intake, and regular checks of an animal’s BCS can help catch problems that are unrelated to digestion, including glandular disorders and injuries.

An animal that is kept at a healthy weight will enjoy a longer life with fewer problems. The owners of pets at a healthy weight will face fewer expenses and constraints on their time. Ultimately, these benefits pale in comparison to the improved relationship you will have with your pet when you work together to maintain optimal health.

Cold Weather Tips for Your Pets – Univ. of Minnesota Extension

OUTERWEAR
Dogs with very short coats have the least tolerance for cold. Extremely short-coated breeds include Greyhounds, Dobermans, Boxers, Boston Terriers and Chihuahuas. These breeds shouldn't go outside without a sweater or a coat except for short times to relieve themselves. Small dogs with short coats (such as Chihuahuas, miniature Pinschers, and miniature Dachshunds) are especially vulnerable to cold. They may not tolerate any outdoor exercise in extremely cold weather.

FOOT (PAW) CARE
Many dogs need boots in cold weather, regardless of coat length. If your dog frequently lifts up his paws, whines or stops on his walks, his feet are uncomfortably cold. Be sure to get your dog used to wearing boots before cold weather sets in. Another frequently seen foot problem is the formation of iceballs between the pads and toes of the feet, especially in dogs with long fur. Once iceballs form, they are very painful, much like walking on rocks. When dogs get these, they often whine, stop walking and start chewing at the bottoms of their feet to remove the painful iceballs. To help prevent iceballs, trim hair around your dog’s feet. Apply a small amount of Vaseline, cooking oil, or PAM spray to your dog’s feet before taking him for a walk. Make sure you use oil that can be eaten; most dogs lick at their paws. If your pet walks on salted sidewalks or streets, be sure to wash his paws after your walk. Salt is very irritating to footpads. Many dogs will quickly start whining and biting at their feet after just a few steps on salted roads. Gently rub the bottom of the feet to remove the salt as soon as your dog is off the road.

http://www.extension.umn.edu/info-u/pets/BB496.html
A dog is brought to your veterinary clinic. It has recently exhibited trouble getting up and laying down. A quick look at the animal causes you to suspect arthritis due to obesity. Answer the following questions based on the reading you have just completed. You may detach this sheet from the original reading.

1. What percentage of dogs are obese?

2. What ultimately caused this animal to become obese?

3. The owner asks what the ideal weight is for this dog. How would you respond?

4. What is the best indicator of if a dog is obese or overweight?

5. What would you check on this dog to determine its BCS?

6. If this particular dog is overweight or obese, how would it score on a BCS scale? Provide a score and add descriptions for each item below.
   a. What score would an obese dog have?
   b. If you palpated the dog’s ribs, what would you feel?
   c. Below is the outline of a dog. Show the abdomen of a healthy dog and an obese or overweight dog.
   d. You palpate (physically feel and examine) the base of the tail. For the BCS score you gave, what would you feel as you palpate this area?
   e. You run you hands along the vertebrae of the dog. Describe what you feel as you palpate the spine of a dog with this BCS Score:
7. You determine that this dog needs to be put on a weight-loss plan. What are the two primary goals of any weight-loss plan for a pet?
   i. Goal 1:
   ii. Goal 2:

8. If your pet weighs 100 lbs, how many pounds at a maximum should you expect the dog to lose per week?
   a. If this animal exceeds this amount in lost weight per week, what negative impacts could this diet have on their health?

9. What key piece of information would you need from the owner to make an educated decision as to how to best get the dog to a healthy weight?

10. After deliberation with the owners, you decide that the best course of action is to place the dog on a low-calorie dog food. The owners become upset when they see the cost of the dog food and ask why they can’t just feed the same dog food but provide less of it to the dog each day. How can you justify the additional cost of this dog food?

11. The owners suggest it might be cheaper just to eliminate treats from the dog’s diet. Is this a good idea? Explain:

12. After recommending a particular brand of low-calorie dog food, you also prescribe increased exercise for the dog. You recommend 20 minutes of moderate exercise twice a day. Based on the dog’s current condition, should the dog immediately start at 40 minutes of exercise total each day? Why or why not?

13. In winter months, what sorts of precautions should the owners take during this time of the year when exercising outside?

14. In the space below, 1) draw this dog before and after the exercise-diet program. 2) Provide a BCS score for each drawing and explain what that BCS score indicates (ribs, waist, tailhead, vertebrae).

   Before
   After

   BCS:
   Description: