

Nutrition in Diabetic Pets

Adapted from <http://www.mypet.com/pet-diabetes.aspx>

Dietary control

Insulin is only one component for good diabetes control. Diet is also very important. A diet must provide for all of your dog's or cat's nutritional needs and should minimize fluctuations in glucose concentrations.

There are a number of prescription diets that have been specially formulated for the management of diabetic dogs and cats. These can be particularly useful for achieving weight loss in obese pets. However, many diabetic dogs and cats can be managed on a carefully controlled program using their normal diet. Diabetes control with a nonprescription diet is much easier if a complete, moist (canned) food is being fed to diabetic cats.

Clean drinking water should be available at all times. A reduction in excessive water consumption may indicate successful management of diabetes mellitus.

Importance of an ideal body weight

In pets that are underweight or overweight, pursue respective weight gain or loss to help your pet achieve its ideal weight. In underweight animals, diets high in carbohydrates should be avoided.

Obesity contributes to insulin resistance. Overweight pets should lose weight in a gradual, controlled fashion. Weight loss in obese animals decreases the insulin requirement.

Prescription diets

Complete prescription diets for diabetic pets are available from your veterinarian. Your veterinarian or veterinary technician will advise you on the correct type of diet to meet your pet's specific needs.

For information about complete diets available for pets with diabetes mellitus, check out the following pet food companies: Hill's Prescription Diets, Purina, Royal Canin.

Essential features of a diet

FOR DOGS

The essential features of the diet should be:

- Consistent from day to day (to prevent alterations in insulin requirement).
- High in complex carbohydrates and fiber so that glucose is released in a steady fashion from the gut.
- Given so that glucose absorption from the gut coincides with peak action of administered insulin.
- Of the correct caloric value to help the dog achieve optimal weight.
- Fat-restricted.

FOR CATS

The essential features of the diet should be:

- Consistent from day to day (to prevent alterations in insulin requirement).
- Fat-restricted.
- Contain a high-quality, highly digestible protein source (eg, eggs or meat, not soy or corn gluten meal).
- Of the correct caloric value to help the cat achieve optimal weight.
- Low in carbohydrates. Canned food is generally lower in carbohydrates and a better choice for cats than dry food.

Additional considerations about nutrition in dogs

Will your dog eat the food?

Some dogs can be fussy eaters. You may have difficulty trying to convince your dog to eat a low-fat, high-fiber diet. Don't worry—your dog can also be stabilized on its usual food, although it will need the same food every day and the insulin dose may be slightly higher.

Is your dog underweight?

If so, a diet high in fiber is not suitable, as it may cause further weight loss. Fiber may have to be restricted and additional supplements given until the ideal body weight is reached. If your dog is underweight, your veterinarian will advise you on a diet to help your dog regain its normal weight.

Timing of meals

Your veterinarian will advise you on the proper feeding of your dog. In general, meals should be timed so that the presence of food in the gastrointestinal tract coincides with the peak action of the administered insulin. This will minimize fluctuations in blood glucose concentrations and, thus, episodes of hyperglycemia and hypoglycemia.

FOR DOGS

If administered insulin ONCE DAILY:

- The first meal (two-thirds of the daily amount) is given prior to the morning insulin injection. This allows you to see that your dog is feeling well and eating normally before the insulin is administered.
- The second meal (the remainder of the daily amount) is usually given about 6–8 hours later.

FOR DOGS

If administered insulin TWICE DAILY:

- Ensure that a hypoglycemic episode did not occur during the night.
- Ideally, the daily ration should be divided into 4 small meals, but this is usually not feasible. Therefore, feed 2 meals of approximately equal size, spaced evenly during the day.
 - The first meal (eg, 1/2 of the daily ration) is given just before the morning insulin injection. This allows you to see that the dog is feeling well and eating normally before the insulin is given.
 - The second meal (the remainder of the daily ration) is usually given about 10–12 hours later, prior to the second insulin injection.

Obesity in diabetic dogs

Diabetic dogs are most effectively controlled when they are at their ideal body weight. Dogs that are very overweight (obese) may have insulin resistance, meaning that insulin therapy is less effective and higher doses are required.

Weight loss should be gradual. Overweight dogs should be fed two-thirds of the recommended daily allowance of a suitable diet until they have reached their ideal body weight. Your veterinarian or veterinary technician will help you calculate the ideal body weight and food requirements for your diabetic dog and monitor its weight loss.