



Pet News

Psychotropics Animal Health Division Publication



pil

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From the Editor's Desk.....

Dear Veterinarians,

At PIL, we have always believed in providing very high quality products, because of which our products are appreciated and sold in more than 24 countries of the world. Recently, past president of India, Mr. Abdul Kalam honored our company for exceptional achievement in exports.



Many prestigious pharmaceutical companies from countries like Netherlands, Denmark etc. have outsourced their manufacturing activities to PIL because of high quality standards maintained at PIL throughout all processes, from procurement of raw material to manufacturing, packaging and storage.

We rigorously test every product for stability, efficacy and many other factors in our laboratories. End result is that our products always deliver as promised.

We will continue to provide you with great products and informative Pet News, always!

Regards

Geetika Rao

Business Development Executive
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- Treating Pet Obesity
- Designing Pet Weight Loss Program



"Apparently, you're not the only one who needs to take more walks in the park"

Pet Obesity - The New Epidemic

Canine obesity is a fast growing health problem in dogs today. Busy lifestyle of pet parents may not allow pet owners to take pets for regular physical activity or monitor the right caloric intake. Being overweight can cause a number of health issues in pets like:

- > **Diabetes Mellitus:** Obesity increases the secretion of insulin in response to increased blood glucose levels in an overweight dog. When requirements of insulin exceed ability to produce insulin, diabetes develops.
- > **Damage to joints, bones and ligaments:** If the joints, bones and ligaments are required to carry excess weight, they can become damaged. Arthritis, hip dysplasia may also develop
- > **Heart Disease & Increased Blood Pressure:** The heart has increased load as it has to pump excess blood to excess tissues.
- > **Difficulty Breathing:** Additional fat on the chest restricts expansion of lungs. Extra fat in the abdomen also pushes against the diaphragm.
- > **Decreased Liver Function:** The liver stores fat and the liver of an overweight dog has fat build up. This can lead to decreased function of the liver.

The health risks of overweight dogs are serious. As responsible professionals, we must educate the owners of obese pets and help them design a weight loss program for their pet. In the matter that follows, Animal Healthcare by PIL has tried to help veterinarians design an effective weight loss program for their pet patients.



To get updates on pet issues, follow us at <https://www.facebook.com/pilanimalhealthcare>



BODY CONDITION SCORE

BODY CONDITION SCORE	CHARACTERISTICS
Very thin 1 	<ul style="list-style-type: none"> > Ribs, spine and pelvic bones are easily visible (in short haired pets) > Obvious loss of muscle mass > No palpable fat on chest
Thin 2 	<ul style="list-style-type: none"> > Ribs, spine and pelvic bones are visible > Obvious waist > Minimal abdominal fat
Ideal weight 3 	<ul style="list-style-type: none"> > Ribs, spine and pelvic bones not visible but easily palpable > Obvious waist > Little abdominal fat
Overweight 4 	<ul style="list-style-type: none"> > Ribs, spine and pelvic are hardly palpable > No obvious waist > Heavy abdominal fat deposits over the spine and the base of the tail
Markedly obese 5 	<ul style="list-style-type: none"> > Massive fat deposits on chest, spine > Obviously distended abdomen

OBESITY DEFINITIONS FOR DOGS

METHOD	OVERWEIGHT	OBESE
Percentage	All body weights between "obese" and "ideal" weights	Weight exceeds 120% to 130% of ideal body weight
BCS 5-Point Scale	4/5	5/5

Treating Obesity

Obesity is defined as pathology characterized by an excessive deposition of fat, or excessive white adipose tissue. Quantitatively, dogs are overweight if their weight is at least 15% more than ideal weight and are considered obese if the weight is at least 30% more than the ideal weight. However, limited data exists on an optimal body weight of a dog. Descriptively or pictorially, we can evaluate if a dog is obese using the Body Condition Score Chart as shown on the side.

An ideal weighing dog's ribs, backbone and hipbone can be felt, but are not easily prominent. Such a dog will also have a smooth, curved and a tucked in waist. When used appropriately, BCS permits calculation of ideal body weight which is necessary to be determined in order to determine an overweight animal's caloric intake for weight loss.

Calculating Ideal Body Weight of a Dog

In order to manage the weight of an obese dog, it is necessary to identify the dog's ideal weight, vis-à-vis his actual weight. The ideal body weight can be calculated with the help of the Body Score Chart and the table (Table 2).

Step 1: Assigning Score as per Body Condition Score Chart: According to the appearance of your pet, assign him a body condition score (BCS). For example, the following figures show different dogs and their scores as per the body condition score chart.

Step 2: Determine X factor and the ideal body weight as per table 2: In the illustrations taken by us, Dog 1 would get an X factor of approximately 1.39, Dog 2 will get an X factor of 1.3 and Dog 3 will get the factor 1.6. Now we simply divide their actual weight with the X factor, to arrive at the ideal weight.

Table 2: Calculating Ideal Body Weight of a Dog

5-Point Scale	% Overweight	Measured BW / X = Ideal BW
3	0%	Ideal
3.5	15%	x=1.15
4	30%	x=1.3
4.5	45%	x=1.45
5	60%	x=1.6 (or greater)



Abdomen is more swollen

Body Condition Score: 4.4



No obvious waist exists but no than an overweight dog distended abdomen but less than an obese dog

Body Condition Score: 4



Massive fat deposits on chest, spine and tail

Body Condition Score: 5





Designing A Weight Loss Program

Step 1 : Calculate the Body Condition Score and Ideal Body Weight

Calculate the BCS and Ideal Body Weight using Table 1 & Table 2. Determine if the dog is overweight. If he is, then monitor the dog's caloric intake.

Step 2 : Calculating Resting Energy Requirement

Resting Energy Requirement (RER) is the basic amount of energy that a dog will need while remaining at rest. The National Research Council, USA has prescribed the following equation for calculating the RER of dogs:

$$\text{RER in Kcal/Day for a Dog of any weight} = 70 \times (\text{Body Weight in Kgs})^{3/4}$$

The exponential formula above can be used to calculate RER for dogs with any body weight, while for dogs weighing between 2 Kg and 45 Kg, we can also use the following formula:

$$\text{RER in Kcal/ Day for Dog weighing 2kg - 45Kg} = 30 \times (\text{Body Weight in Kgs}) + 70$$

Step 3 : Estimating Ideal Caloric Intake

As a thumb rule, ideally an amount equivalent to 80% of current caloric intake should be fed to the dog. This approach is effective with overweight dogs, but having a stable weight. However, if the dog is actively gaining, a greater reduction might be required. Use Table 3 to determine required caloric intake for a dog.

Table 3

Activity	Daily Energy Requirements
Weight loss	1.0 x RER
Neutered adult normal activity	1.6 x RER
Intact adult normal activity	1.8 x RER
Light work	2.0 x RER
Moderate work	3.0 x RER
Heavy work	4-8 x RER
Pregnant dog (first 42 days)	1.8 x RER
Pregnant dog (last 21 days)	3.0 x RER
Lactating female	4-8 x RER
Puppy - weaning to 4 months	3.0 x RER
Puppy - 4 months to adult size	2.0 x RER

Step 4: Selecting a Diet

- Diet should be selected on the basis of ideal caloric intake. Ensure that the dog gets the minimum protein requirement, i.e. at least 2.5g/Kg Body Weight.
- Essential nutrients in pet foods are balanced according to calories. So, if the caloric intake is reduced, so are the essential nutrients. Hence, multivitamins may be prescribed to the pet.
- Therapeutic Weight Loss foods contain more vitamins and minerals which ensures ideal nutrient intake with reduced caloric intake.
- To increase owner compliance, treats may be included, but reduce the food intake simultaneously. Treats should provide upto 10% of daily caloric intake only. If the caloric content of treat is not known, a value of 4Kcal/g can be assigned.

Step 5: Frequent Observation & Weight Loss Plan Adjustments

- Caloric intake may need weekly adjustments depending upon weight loss
- Recommended target of weight loss are 0.5% to 2% of BW weekly
- Weight loss rate may be higher for first month, however, do not increase caloric intake as the rate slows as weight loss progresses.
- Provide BCS assessments to pet parents on regular visits
- Rebound weight gain is common. Counsel owners that long term dietary modification is required.

Anti-infective Topical Powder

Rx **Myconorm Pet** Powder

Clotrimazole 1% w/w + Chlorhexidine HCl 0.5% w/w

Treats Unpleasant Skin Infections

Clotrimazole

Antifungal

Chlorhexidine

Antimicrobial

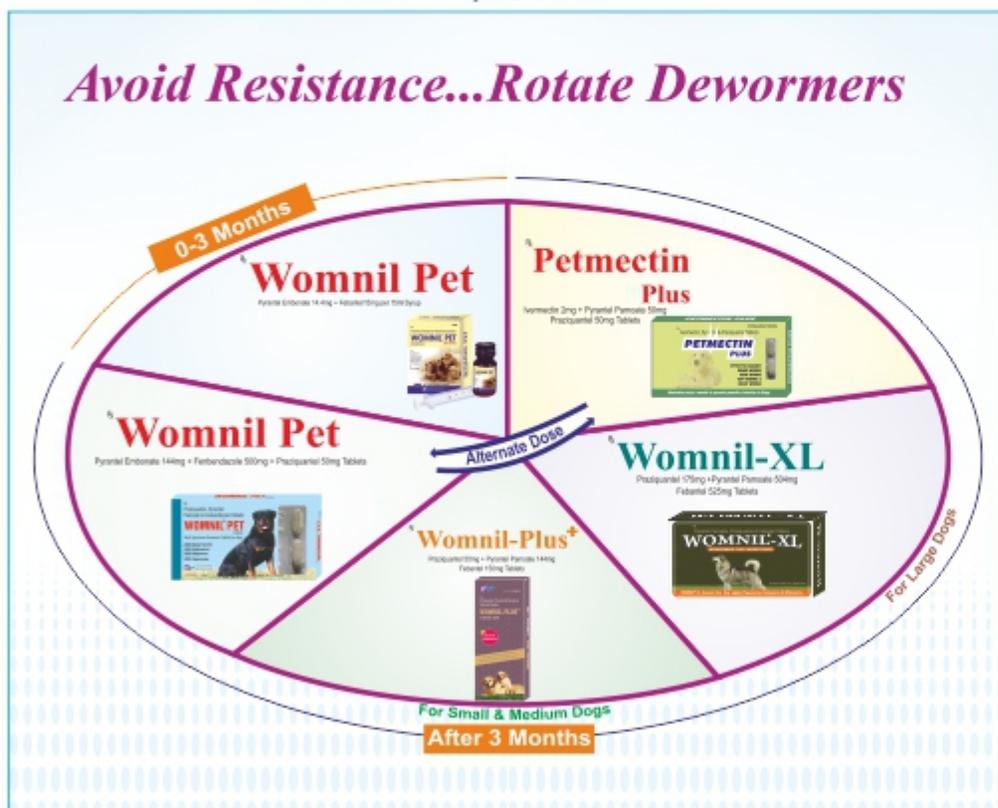


Ideal Weight in Kgs		
Breed	Dogs	Bitches
Beagle	13-16	11-13
Boxer	30-32	25-27
British Bulldog	25	22.7
Bullmastiff	50-59	41-50
King Charles Spaniel	5.4-8.1	5.4-8.1
Chihuahua	2.7	2.7
Daschund	9-12	9-12
Doberman	34-41	29.5-36
German Shephard	34-38.5	27-32
Great Dane	Min.54	Min.46
Pug	6.3-8.1	6.3-8.1
Retriever (Golden)	31.7-36.3	27.2-31.7
Retriever (Labrador)	35	30
Rottweiler	45.5-54.5	36-41

Source: Adelaide Animal Hospital, Australia

Risk Factors For Obesity	
Age	Incidence increases with age. Most dogs become overweight around year 6. A dog becoming overweight under 2 years of age will likely remain overweight throughout his life.
Genetics & Breed	Breeds with lower energy needs tend to be overweight like Labradors, Daschunds, Beagles, Cocker Spaniel
Neutering	Neutering lowers the metabolic rate of dogs and the caloric intake of a dog must be decreased post neutering
Medications	Certain medications influence metabolism & appetite. E.g. glucocorticoids like prednisone, dexamethasone; barbiturates like phenobarbital; benzodiazepines
Hypothyroidism	Lowers the metabolic rate
Cushing's Disease	The adrenal gland produces high levels of glucocorticoids, which may increase appetite and increase deposition of fat
Insulinoma	A tumor, which occurs in the pancreas, consisting of cells that produce insulin. Hence food intake increases and so does the deposition of fat

Source: Peteducation.com



? DID YOU KNOW

- ▶ Dogs are Omnivores. Thus they can not survive if fed 100% meat for extended periods.
- ▶ Dogs and cats need 22 amino acids out of which their body can synthesize only 12. The other 11, i.e. Arginine, Histidine, Isoleucine, Methionine, Phenylalanine, Tryptophan, Valine, Threonine, Leucine, Lysine and Taurine come only from the diet.
- ▶ Too much iodine in commercial pet food has been linked to hyperthyroidism in pets.
- ▶ Pets can smell nutrient content in food and can reject food with lesser amino acids and proteins.

Source:
1. www.petsbest.pt - canine obesity
2. 2014 AAHA Weight Management Guidelines for Dogs & Cats
3. Today's Veterinary Practice Journal



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