

A BIG PROBLEM FOR SMALL DOGS

Obesity is one of the most prevalent nutritional disorders in dogs. It is a complex multifactorial condition where excess body fat accumulation negatively affects a pet's health and reduces lifespan.^{1,2}

CONSEQUENCES ASSOCIATED WITH OBESITY¹⁻³

- Upper respiratory tract problems
- Surgical risks
- Cardiopulmonary conditions (aggravation)
- Osteoarticular problems
- Metabolic disorders
- Decreased lifespan



Small and miniature dogs are just as prone to being overweight or obese as larger dogs

A PROBLEM IN CLINICAL PRACTICE

It can be a challenge to examine obese dogs, and less information can be obtained from a physical examination, abdominal palpation, or heart and lung auscultation because of the presence of a great quantity of adipose tissue.

FOR SMALL DOGS, A LITTLE CAN MEAN A LOT

For small dogs, the difference between an ideal weight and being overweight can be often minimal. Even a slight excess in food can lead to a significantly higher caloric intake proportionally to their size. Therefore, weight management in small dogs requires careful monitoring and precision.

Using Body Condition Score (BCS) to estimate overweight in small dogs⁴:

	5	6	7	8	9
Body Condition Score	 Ideal weight	 10% overweight	 20% overweight	 30% overweight	 40% overweight
kg	3	3.3	3.6	3.9	4.2
kg	4	4.4	4.8	5.2	5.6
kg	5	5.5	6	6.5	7
kg	6	6.6	7.2	7.8	8.4
kg	7	7.7	8.4	9.1	9.8
kg	8	8.8	9.6	10.4	11.2
kg	9	9.9	10.8	11.7	12.6
kg	10	11	12	13	14

For a 5 kg dog, an increase of only 2 kg means that they can have a BCS of 9!

¹ Laflamme D. Understanding and managing obesity in dogs and cats. *Vet Clin Small Anim.* 2006; **36**: 1283-95.

² Salt C, Morris PJ, Wilson D, Lund EM, German AJ. Association between life span and body condition in neutered client-owned dogs. *J Vet Intern Med.* 2019 Jan;**33**(1):89-99.

³ Kil DY, Swanson KS. Endocrinology of obesity. *Vet Clin North Am Small Anim Pract.* 2010 Mar;**40**(2):205-19.

⁴ Laflamme D. Development and validation of a body condition system for dogs. *Canine Practice.* 1997;**22**(4):10-15.

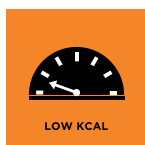
Complete dietetic dry pet food for adult small dogs (< 10kg) to support the reduction of excessive body weight and for the regulation of glucose supply (diabetes mellitus).

KEY BENEFITS



HIGH PROTEIN

High protein level to help promote loss of fat while maintaining muscle mass



LOW CALORIE

Low calorie diet proven to promote effective and steady weight loss¹



REBOUND WEIGHT CONTROL

Helps reduce the risk of rebound weight gain



1.3 kg

St/Ox: formulated to help reduce mineral concentration in the urinary environment.

PURINA® PRO PLAN® VETERINARY DIETS **CANINE OM St/Ox Obesity Management™ Small & Mini** is formulated with an increased nutrient-to-calorie ratio, ensuring that the patient receives adequate nutrients even while caloric intake is reduced to support a healthy weight loss.

ADDITIONAL BENEFITS

- **High nutrient: energy ratio** to compensate for the reduced calorie intake
- **Increased protein level** and a higher protein to calorie ratio, proven to preserve lean body mass during weight loss^{1,2}
- **Increased fibre** to help contribute to satiety and reduce overall caloric intake⁶
- **Glucoregulation** through a combination of high levels of complex carbohydrates and mixed fibre sources, combined with low levels of simple sugars^{3,4,7}
- **A low fat level**, which supports lipid metabolism in the case of hyperlipidemia⁵

COMPOSITION

Corn*, dried poultry protein, soya meal*, wheat gluten, pea hulls*, barley*, cellulose, digest, glycerol, animal fats, minerals.
*Carbohydrate sources.

KEY NUTRIENT VALUES*

	DRY
Moisture	7.5%
Protein	31%
Fat	6.3%
- Linoleic Acid	1.5%
Carbohydrate	39.2%
- Starch	24.5%
- Total Sugars	2.1%
Crude fibre	10%
Vitamin E	260 IU/kg
Metabolisable energy (ME)**	2992 kcal/kg

*Typical analysis in the final product as fed.
**Calculated following NRC 2006 equations.



www.vetcentre.purina.co.uk

¹Clinical trial on 42 dogs, using a high protein formula, Nestlé PURINA, 1999.

²Hannah SS, Laflamme DP. Increased Dietary Protein Sparing Lean Body Mass during Weight Loss in Dogs. *J Vet Int Med.* 1998; 12: 224

³Atkinson FS et al. 2021. International tables of glycemic index and glycemic load values 2021: a systematic review. *Am J Clin Nutr.* 114:1625-32.

⁴Nelson, R. W., Duesberg, C. A., Ford, S. L., Feldman, E. C., Davenport, D. J., Kiernan, C., & Neal, L. (1998). Effect of dietary insoluble fiber on control of glycemia in dogs with naturally acquired diabetes mellitus. *J Am Vet Med Assoc.* 212(3), 380-386.

⁵Ford RB, Lodlow CL. Disorders of Lipid Metabolism. Small Animal Clinical Nutrition. Ed. by Michael S. Hand et al. 5th edition. Topeka, Kan: Mark Morris Institute, 2010.

⁶Jackson JR, Laflamme DP, Owens SF. Effects of dietary fiber content on satiety in dogs. *Vet Clin Nutr* 1997;4:130-134.

⁷Flickinger EA and Sunvold GD. 2005. Early nutritional management to reduce the risks of diabetes and obesity. Proceedings from a Symposium at the 30th World Congress of the World Small Animal Veterinary Association. Mexico City, Mexico.