

trimming the fat



Weight management formulations and pet owner education can tip the scale away from pet obesity.

By Jordan Tyler | jtyler@sosland.com

The percentage of dogs and cats considered overweight or obese in the United States has been rising steadily since 2010, according to the Association for Pet Obesity Prevention (APOP). In 2018, APOP shared 60% of cats and 56% of dogs across the country were deemed overweight or obese by a veterinary professional. This amounts to roughly 50 million dogs and 56 million cats.

Banfield Pet Hospital went so far as to classify pet obesity as an epidemic in its 2020 Veterinary Emerging Topics (VET) Report and, considering the serious health risks associated with sustained obesity, the severity of that statement is no exaggeration.

Weight-related health risks

Pet obesity can have serious health repercussions, including a shortened lifespan and contributing to other conditions, many of which stem from low-grade chronic inflammation caused by excess body fat, according to Jason Gagné, DVM, DACVIM (nutrition), Director of Veterinary Technical Communications, Nestlé Purina PetCare, St. Louis.

“Obese dogs have an increased incidence of traumatic or degenerative orthopedic disorders, neoplasia, cardiovascu-

lar and respiratory disease, hypertension, diabetes mellitus and skin disorders,” said Mark Brinkmann, vice president of operations, Diamond Pet Foods, Meta, Mo. “Obese cats are nearly four times more likely to develop diabetes mellitus than lean cats and three times more likely to develop lameness.”

Renee Streeter, DVM, DACVIM (Nutrition), nutrition practice principal, BSM Partners, Bentonville, Ark., backed this up by noting an estimated 31% of diabetes mellitus and 34% of lameness cases in cats are attributed to body weight issues. Juan Javierre, nutrition scientist, Layn Natural Ingredients, Irvine, Calif., shared obesity can indicate a more complex disease — obesity-related metabolic dysfunction (ORMD) — which leads to dyslipidemia, high blood pressure and low adiponectin levels.

“Health risks include increased risk for heart and respiratory disease, exercise intolerance, joint and mobility problems, increased cancer risk, and glucose intolerance (diabetes),” said Karen Shenoy, DVM, chief veterinary officer, Hill’s Pet Nutrition US, Topeka, Kan. “Studies have also demonstrated reduced quality of life and shorter lifespan in obese pets.”



Hill's Pet Nutrition's Science Diet Perfect Weight line offers dry and wet diets formulated with high levels of fiber and protein, L-carnitine and coconut oil to support health metabolism and body weight in dogs and cats.

Hill's Pet Nutrition

According to Dana Brooks, president and chief executive officer, Pet Food Institute, Washington, DC, studies have shown dogs that maintain an ideal weight may live up to two and a half years longer than overweight dogs.

"The good news is that obesity is a preventable disease," said Theresa Lantz, MSC, companion animal nutritionist, Petcurean, Chilliwack, British Columbia.

Counting calories

Pet treats are a key culprit for pet obesity. According to Streeter, treats should make up only 10% of a pet's caloric intake per day, but this guideline is often exceeded through dental treats, biscuits, jerky treats, chews, and even functional treats or supplements.

"Even treats that can offer huge benefits like dental treats or functional treats that have beneficial supplements can cause more harm than good if they are not fed properly,"

she said. "In order for dental treats to be safe and effective, the pet must chew, but not swallow, large pieces of the treat. Due to these chews needing to be large enough to accommodate this purpose, this larger size naturally comes with a larger calorie count. Because of the increased size and calories, if a dental treat is given each day, there is likely no room for other treats in the diet.

"Treat manufacturers can do a service to pets by always including appropriate feeding guidelines for their products and having an accurate assessment of the calories per

treat in order to help prevent not only obesity, but an unbalanced diet," she added.

Treating less frequently is one solution. However, when it comes to weight management pet food formulations, simply feeding less won't do the trick.

"A therapeutic diet is the appropriate option since we want to increase, decrease and add certain nutrients to help pets achieve an ideal body weight and condition," Gagné said. "It is not recommended to simply feed less, since you will be lowering all nutrients in addition to the fat content."

Therapeutic approaches

In a weight management pet food formula, higher protein levels can support fat loss while preserving lean body mass, and lower fat levels can cut calories and reduce the energy density of a diet, Gagné said. Fiber can also play a crucial role in satiety, or how full a pet feels between mealtimes.

"Weight loss formulations focus on high protein and

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high fiber to help dogs and cats feel more full,” Streeter said. “In addition, this high fiber inclusion can help to reduce calorie density of the diet, which means dogs and cats can eat more food while still having a reduced calorie intake. Having a diet which is low in fat also helps with this, as low-fat foods are known to help improve weight loss overall.”

Lantz noted psyllium husk, which is rich in soluble fiber, can help keep pets feeling full. Ingredients that are rich in insoluble fiber, such as peas and pea fiber, can be included in a diet to deliver extra bulk and allow increased total intake without adding on the calories, she said.

“For dogs, low-fat and high-fiber diets can lead not only to weight loss but also to a decrease in body fat percentage and an increase in lean body mass,” Brinkmann said. “For cats, diets featuring high-quality protein and Omega 3 fatty acids are important for safe weight loss. These formulas also contain the supplement L-Carnitine, a nutrient that helps the body convert fat to energy and supports a lean body condition, and insoluble fiber, which helps pets feel full.”

According to Streeter, supplemental L-carnitine can sup-

SUPPLEMENTAL CHOLINE FOR CATS

Choline could play an important role in reducing obesity in spayed and neutered cats, according to a 2022 study by researchers at the University of Guelph.

According to the research, about 79% of cats are spayed or neutered. While the operation can be beneficial for health, it is one of the highest factors of obesity in cats. The absence of sex hormones in a neutered or spayed cat makes them less active, impacts their appetites and alters their metabolisms.

“The goal of this research is really to do a call on the pet food industry to change the diets that are currently available and include higher levels of choline — not just the minimum needed to prevent deficiencies, but an additional volume that would support optimal growth and benefit fat metabolism,” said Adriane Verbrugge, Ph.D., DVM, professor at the University of Guelph’s Ontario Veterinary College and veterinary diets endowed chair in canine and feline clinical nutrition for Royal Canin.

The study was completed on a small sample of male domestic kittens neutered at six months old. The kittens were then divided into two groups — one received a choline supplement provided by Balchem Corporation, in addition to their food, and the other group did not. Researchers found that the group of kittens that consumed additional choline voluntarily ate less and gained less weight compared to the kittens who consumed industry-standard amounts of choline and gained more weight.

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port fat metabolism and muscle mass maintenance. This amino acid can be leveraged to help pets burn fat more efficiently, Gagné added.

Petcurean's GO! SOLUTIONS WEIGHT MANAGEMENT + JOINT CARE formulas for dogs and cats are formulated with L-carnitine to support fat burning and heart health. Other ingredients include a fiber-rich psyllium husk and flaxseed to help with satiety, as well as supplemental glucosamine and chondroitin in the dog recipe to support mobility, Lantz shared. The cat food recipe specifically includes increased levels of dietary choline, which has been shown to support fat metabolism in cats and has been the focus of recent research by Alex Rankovic, Ph.D., at the University of Guelph on nutritional weight management strategies.

Because obesity can cause stress to a pet's joints, ingredients that address mobility — such as glucosamine and chondroitin — can also benefit a weight management formulation. The inclusion of fish oils, which are touted as good sources of Omega fatty acids EPA and DHA, can help

relieve joint inflammation and increase insulin sensitivity.

Diamond Pet Foods' CARE Weight Management diets for dogs and cats combine supplemental L-carnitine, Omega 3 fatty acids, antioxidants and probiotics in low-fat, high-fiber formulas to support weight management and aid symptoms of pet obesity, Brinkmann shared.

"Fish oils contain EPA and DHA, and higher concentrations of EPA in the blood have been associated with an increased concentration of adiponectin, an insulin sensitizing hormone, in dogs and cats," Streeter explained. "Future prospective studies could investigate the potential to utilize fish oils which are high in EPA in the diet to understand if it has any potential effect on insulin sensitization and body condition, as well as body composition in dogs."

Isoflavones also offer antioxidant and anti-inflammatory properties. When included in a weight management diet, these compounds can increase daily energy expenditure, reduce oxidative stress and weight gain, and decrease fat accumulation, according to Gagné.

"Purina recently completed a six-month clinical study that compared a metabolic test diet with those of a control

Polyphenol-rich botanical extracts, such as green tea extract, can address the root causes of oxidative stress and inflammation that occur with obesity-related metabolic dysfunction.

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