

State of U.S. Pet Obesity

2022



**Moving from Awareness
to Treatment**

Association for Pet Obesity Prevention



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President's Comments



Ernie Ward, DVM, CVFT
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Obesity Prevention

Pet obesity rates in the United States have been steadily increasing for decades, reaching 59% of dogs and 61% of cats classified as overweight or having obesity in 2022.

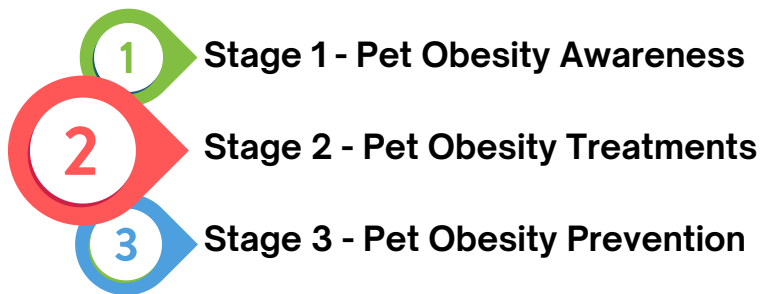
Obesity is clinically defined as a multifactorial disease caused by excessive adiposity sufficient to contribute to disease. (1,2) There is growing evidence that obesity in dogs and cats increases the risk of many non-communicable diseases (NCDs), including skin and respiratory disorders, and renal dysfunction. It increases the risk of metabolic and endocrine disorders (e.g., diabetes), orthopedic diseases (e.g., osteoarthritis, cranial cruciate ligament disease), some types of cancer, and decreased life expectancy. (3-14, 26, 27) Pet obesity results in reduced quality of life (15,16, 26), significant pain and suffering, and increased economic costs for owners, accounting for an estimated twenty percent of all pet insurance claims. (17)

While we have witnessed an increase in obesity awareness by veterinary professionals and pet owners over the past two decades, we need continued innovations in diagnostic tests and tools, interventional therapeutics and diets, and resources to encourage compliance and adherence to weight loss programs.

It is time to shift our efforts from raising awareness to treating pet obesity.

Moving from Awareness to Treatment

The Association for Pet Obesity Prevention (APOP) was founded in 2005 based on three organizational stages:



Over the past 18 years, APOP has succeeded in bringing the topic of pet obesity to the forefront of the veterinary profession, pet industry, and pet-owning public. Pet obesity is considered one of the most significant health threats dogs and cats face in the United States and worldwide.

During this period, many advances in pet nutrition and therapeutic diets have occurred. Unfortunately, many pet owners remain uninformed of these evidence-based dietary strategies due to multiple factors, including a lack of awareness of trustworthy resources and an abundance of confusing or misleading pet health information.

APOP is shifting its primary organizational focus from Pet Obesity Awareness to Treatment.

To accomplish this, APOP is collaborating with academic, research, industry, and governmental agencies.

Four Pillars of Pet Obesity Care

APOP has defined Four Pillars of Pet Obesity Care as a template for clinical practice and a call to action for the veterinary profession, pet food manufacturers, and the pet care industry.

1 Education and Awareness

2 Diagnostics

3 Treatments

4 Monitoring and Support

Four Pillars of Pet Obesity Care

1 Education and Awareness

- APOP will continue to raise awareness of pet obesity and its negative health consequences among veterinary professionals and pet owners using various communication strategies.
- APOP will expand its outreach globally due to an increased demand for a unifying international organization and resources. In 2023, World Pet Obesity Day will be held on October 11, coinciding with APOP's National Pet Obesity Day, recognized each year on the second Wednesday in October.
- Educational campaigns highlighting pet obesity for the broader pet care industry and human health organizations and companies are essential to APOP Stage 2. We are pursuing partnerships with adjacent and complementary companies and organizations to promote a healthy lifestyle and body condition in animals and humans.
- APOP is embarking on research into pet obesity bias and stigma among veterinary professionals and pet owners. Weight stigma and associated negative stereotypes and attitudes have been shown to be a barrier to education, awareness, and care of obesity. (26)
- APOP is expanding its partnerships within the human obesity community in Stage 2 to emphasize obesity's importance as a One Health issue.
- We continue to educate the veterinary and pet-owning communities on compassionate and effective weight loss terminology and communication strategies.

Four Pillars of Pet Obesity Care

2 Diagnostics

- Diagnosing obesity in animals lags behind testing available for humans. APOP is seeking partnerships with laboratory, technology, and computing companies and organizations to identify excess adiposity earlier.
- Assessing an animal's body condition is predominantly based on a subjective interpretation of body morphology using weight, visual, and tactile information. The Body Condition Score (BCS) and Muscle Condition Score (MCS) have significant limitations and inconsistencies among users. (19,20) APOP is working to establish collaborations with academic, technological, and laboratory companies to develop tools for precisely estimating an animal's body fat percentage (adiposity) and creating improved body composition comparison tools and resources.
- Identifying health risk factors for animals with obesity through laboratory biomarkers and technological methods is a priority for APOP Stage 2. We will continue to advocate for the commercialization and clinical usage of several well-established adiposity-related biomarkers to assess an animal's adipose tissue, glucose-insulin homeostasis, and inflammatory state.
- APOP is committed to developing practical, inexpensive, and non-invasive resources to estimate an animal's body condition. By partnering with international organizations and corporate practices, we plan to analyze large datasets to create more precise body composition charts and scoring metrics.

Four Pillars of Pet Obesity Care

3 Treatments

- The primary focus for APOP at this time is to promote the treatment of pet obesity. There are currently no FDA-approved medical treatments for obesity in animals. In contrast, at least six drugs are approved for human obesity and a variety of authorized surgical, behavioral, and dietary interventions. (21) APOP is working with nutritional, pharmaceutical, and technological companies and organizations to accelerate the innovation and commercialization of a variety of pet obesity treatments.
- Lifestyle modifications play an essential role in treating dogs and cats with obesity. (22) APOP is seeking collaboration with providers of pet care services and products to improve treatment outcomes and enhance the quality of life for animals.

4 Monitoring and Support

- Monitoring weight and body condition and providing technical and emotional support are critical to treating pet obesity. APOP is establishing partnerships with technology, software, behavioral, psychological, and medical companies and organizations to create improved solutions for maintaining and supporting pet obesity treatments.
- APOP will collaborate with human obesity organizations to share learnings and integrate human and animal obesity support utilizing a One Health framework.

State of U.S. Pet Obesity 2022: Summary of Findings

In 2022, the Association for Pet Obesity Prevention (APOP) conducted its nineteenth National Pet Obesity Prevalence Survey. This U.S.-based in-clinic survey measures weight, age, body condition score (BCS), co-morbidities, and pet owner assessment of body condition. The survey was performed annually from 2007 until 2018 when the Executive Board decided to run the Prevalence Survey on a biennial basis. In 2020, the Biennial Survey was suspended due to COVID-19. APOP's Pet Obesity Prevalence findings are considered the most widely used data among U.S. veterinary and pet care professionals.

In 2022, we had lower U.S. veterinary clinic participation in our Pet Obesity Prevalence Survey than in previous years. This decline was attributed to veterinary workforce shortages, increased demand for veterinary services, and consolidation of practices by corporate entities. For the 2024 Biennial Survey and future reports, APOP seeks to partner with several large U.S. and international veterinary corporations, organizations, and independent veterinary clinics to expand our data analysis.

Our Pet Weight, Nutrition, and Pet Food Survey has been performed since 2016. This online survey assesses and analyzes opinions and trends in pet obesity and nutrition among pet owners and veterinary professionals. Topics such as best strategies for pet weight loss, favorability of protein sources and grains, whether pet obesity is a disease, and causes and contributors for pet weight gain have been tracked in previous surveys. These findings are used by various veterinary and pet care companies and organizations to develop numerous resources and tools.

2022 participant numbers

Total pets evaluated in the prevalence survey: 1152

Dogs in prevalence survey: 880

Cats in prevalence survey: 272

Pet weight, nutrition, and pet food survey: 403



2022 U.S. Pet Overweight or Obesity Survey Methodology

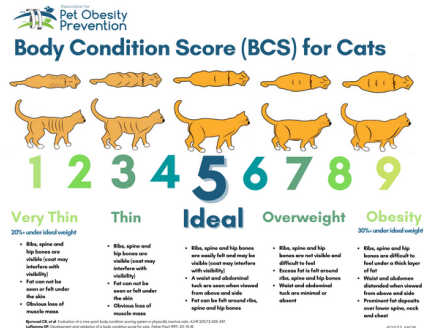
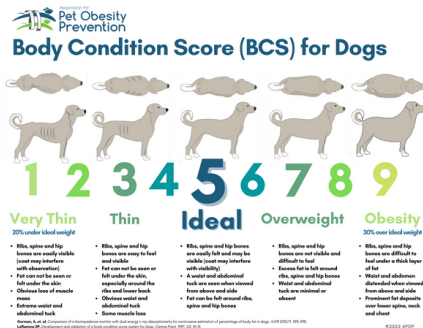
The Association for Pet Obesity Prevention (APOP) established standardized definitions and classifications for dog and cat body condition scoring in its 2017 “Global Pet Obesity Initiative Position Statement.” (2) Twenty-five of the world’s leading veterinary organizations have accepted and approved that document as of December 2022.

Our Prevalence Survey uses a whole-integer 1 to 9 Body Condition Score (BCS) to assess overweight and obesity. In addition, APOP defines “obesity” “as 30% above ideal body weight.”

Body Condition Score (BCS)

- 1-2: Very Thin (20% below Ideal Weight)
- 3-4: Thin
- 5: Ideal
- 6-7: Overweight
- 8-9: Obesity (30% above Ideal Weight)

In reality, ideal weight, adiposity, body condition, and BCS represent a continuum, and any specific cutoff for disease onset is somewhat arbitrary and subjective. APOP recognizes the limitations and inconsistencies of BCS and works hard to ensure that our participating veterinary clinicians are using proper methodology and definitions. APOP also filters the prevalence data for obvious reporting errors in our dataset. For example, if a pet is classified as BCS 5 and the reported ideal weight, age, and breed are consistent with an overweight or obese animal, that figure is adjusted accordingly. In our 19 prevalence surveys, this figure can vary between 8 and 12% of all entries. The 2022 survey showed approximately 10% obvious reporting errors, with feline BCS 8-9 (obesity) being the most frequently underreported value as a BCS of 7 to 8 (overweight).



2022 U.S. Pet Overweight or Obesity Survey Results

Dogs

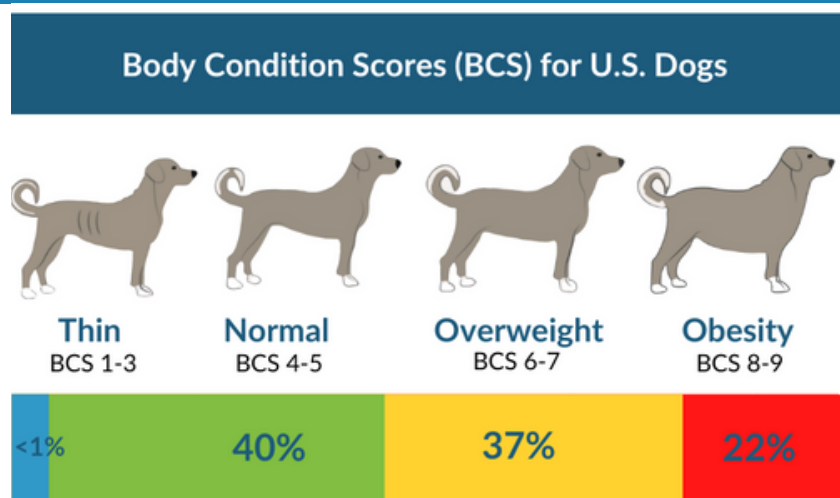
59% of evaluated dogs were classified as Overweight or Obese by their veterinary professional. This percentage has increased from 56% in 2018 and 2017.

37% of dogs were classified as Overweight in 2022, the same as in 2018.

22% of dogs were classified as Obesity, an increase from 19% in 2018.

The increase in pet dogs (dogs owned as opposed to feral or free-roaming) classified as overweight or with obesity may be attributed to improved clinical assessments, results of pandemic-related inactivity or overfeeding, aging dog populations, variations in sample size and distribution, or other unknown influences. Because the relative changes were consistent, and the distribution of pet dogs with obesity increased, we have high confidence in these results.

Canine body mass spans nearly 40-fold from largest to smallest breeds (23), making consistent BCS assessments challenging. Further compounding accurate BCS assessment is varying canine coat types, making BCS in dogs with long or thick fur less precise than desired. There are promising technological and laboratory solutions to measure body fat percentages in companion animals, and we are working to bring these developments to veterinary professionals.



2022 U.S. Pet Overweight or Obesity Survey Results

Cats

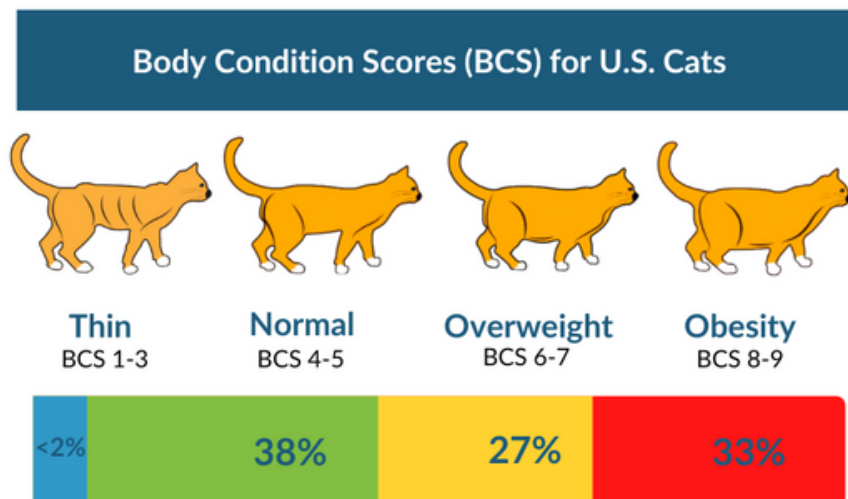
61% of evaluated cats were classified as Overweight or Obese by their veterinary professional. This percentage has increased from 60% in 2018 and 2017.

28% of cats were classified as Overweight in 2022, up from 26% in 2018 and 27% in 2017.

33% of cats were classified as Obesity, similar to the 2018 and 2017 survey results.

The prevalence of pet cats (cats owned as opposed to feral or free-roaming) classified as overweight or with obesity is relatively unchanged from 2018 and 2017. The slight increase in pet cats classified as overweight suggests more precise clinical BCS assessments, particularly in cats exceeding ideal weight or body condition by one to two pounds.

Accurately assessing feline BCS can be difficult, especially in cats with prominent primordial pouches (“belly flaps”) or long hair. Because the subjective BCS difference between “overweight” and “obesity” can be minimal, APOP is working to create improved methods for measuring body condition and body fat in pet cats.



2022 U.S. Pet Overweight or Obesity Survey Results

Pet Owners Underestimate Pet Obesity

Consistent with our previous surveys, many dog and cat owners fail to recognize excess weight or overweight body conditions in their pets. Nearly one-third (32%) of owners of overweight or obese pets (BCS 6-9) classified their pet as “normal,” “ideal,” or “thin” body condition when asked by their veterinary professional. The question was presented before their pet’s current weight or BCS was told to the pet owner.

36% of dog owners considered their pet’s body condition “normal” when their veterinary professional classified it as BCS 6-9 (overweight to obesity).

9% of owners of dogs with obesity (BCS 8-9) classified them as having “normal body condition.”

28% of cat owners considered their pet’s body condition “normal” when their veterinary professional classified it as BCS 6-9 (overweight to obesity).

7% of owners of cats with obesity (BCS 8-9) classified them as having “normal body condition.”

Do vets discuss healthy weight?

We ask pet owners if their veterinarian discussed their pet’s ideal or healthy weight or body condition each year. In 2022, 49% of respondents reported that their veterinary professionals discussed their pet’s ideal or healthy weight yearly, compared to 46% in 2021. This figure has consistently been 46% to 53% during our survey periods.

2022 U.S. Pet Weight, Nutrition, and Pet Food Survey Results

Have you ever felt uncomfortable or embarrassed about a veterinarian or veterinary team member saying your pet needs to lose weight?

Two-thirds (67%) of pet owners surveyed said they “have not felt embarrassment or uncomfortable after being told their pet needed to lose weight.”

Only 17% reported “feeling uncomfortable or embarrassed when told their pet needed to lose weight.”

15% of respondents said their pet has never needed to lose weight.

While these results may be biased toward pet owners interested in pet nutrition and obesity, our results indicate they are interested in being told about their pet’s body condition and need for weight loss. Veterinarians often remark that pet owners will be embarrassed or even angry if told their pet has obesity or needs to lose weight. Further research is required to determine if this is true. Until then, veterinary professionals should ask clients for permission and interest in discussing their pet’s body condition or weight loss and proceed accordingly.

Have you ever felt uncomfortable or embarrassed about a veterinarian or veterinary team member saying your pet needs to lose weight?



Pet owners report feeling uncomfortable or embarrassed when told their pet needed to lose weight

17%



Pet owners have not felt embarrassment or uncomfortable after being told their pet needed to lose weight

67%

- 15% of pet owners said their pet has never needed to lose weight
- 1% of survey respondents report never having taken their dog or cat to the veterinarian

2022 U.S. Pet Weight, Nutrition, and Pet Food Survey Results

Have you ever tried to help your pet lose weight?

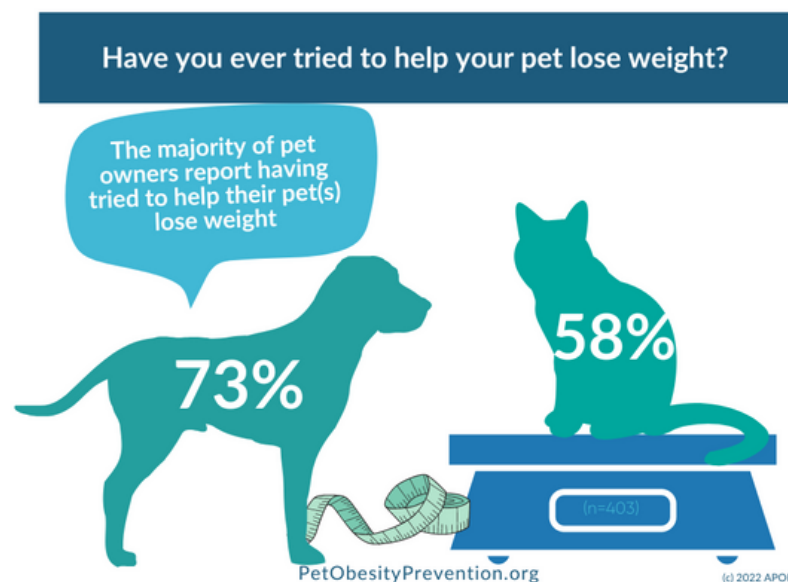
Most surveyed pet owners reported they had tried to help their pets lose weight.

73% of dog owners and 58% of cat owners stated they had tried some form of pet weight loss.

The difference between cat and dog weight loss efforts may be attributable to factors such as being able to exercise a dog through walks or outdoor physical activities, the ability to perceive weight gain more easily on a canine, or familiarity with breed standards and morphology.

In addition, there may be more confident communication from veterinary professionals on canine body composition and weight loss strategies due to more precise educational resources such as body condition charts and diet choices.

There may also be unique communication barriers between veterinary professionals and feline owners associated with weight bias and stigma. Finally, it can be difficult to determine feline body fat percentages based on visual and tactile information.



2022 U.S. Pet Weight, Nutrition, and Pet Food Survey Results

Pet Weight Loss Success Rates

We asked pet owners who tried to help their pets lose weight to rate their success. Dog owners reported higher “success” or “some success” rates than cat owners.

“Success” in helping their pet lose weight was reported by 34% of dog owners and 19% of cat owners.

“Some success” was noted by 26% of dog and 34% of cat owners.

“Gained back the weight” was said by 12% of dog and 5% of cat owners.

“No success” or “My pet did not lose weight despite my best effort.” was reported by 23% of dog and 29% of cat owners.

Nearly half of the surveyed pet owners declared some weight loss for their dog or cat when they tried. While this figure is encouraging, it must be noted that this is a self-reported finding and does not indicate a permanent, meaningful, or actual weight loss was achieved. More importantly, it may suggest that pet owners believe they can successfully help their pets lose weight.

 **Pet Weight, Nutrition & Pet Food Survey 2022**

Pet Weight Loss Success		
Pet owner experience for dogs and cats who needed to lose weight 		
	Dogs	Cats
Success <small>My pet lost weight and is now at a healthy weight.</small>	35%	20%
Some success <small>My pet lost some weight but needs to lose more.</small>	25%	33%
Gained back weight <small>My pet lost weight but gained it all back.</small>	12%	4%
Mixed success multi-pet household <small>I've tried helping more than one pet lose weight with mixed results.</small>	22%	14%
No success <small>My pet did not lose weight despite my best effort.</small>	6%	29%

PetObesityPrevention.org

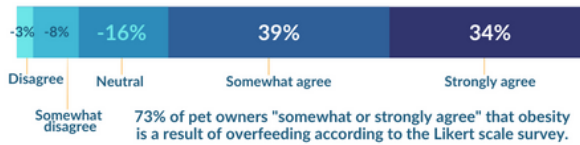

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2022 U.S. Pet Weight, Nutrition, and Pet Food Survey Results

What Causes Pet Obesity?

This year we asked a series of questions to help determine pet owners' opinions on the causes of pet obesity.

Is obesity a result of overfeeding?



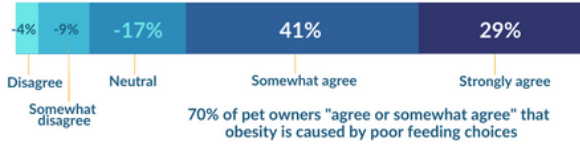
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The first question we investigated was whether or not pet owners thought obesity was a result of overfeeding.

Using a Likert scale analysis, 73% of pet owners somewhat or strongly agreed that pet obesity resulted from overfeeding. 34% reported "strongly agree," and 39% "somewhat agree."

Is obesity caused by poor feeding choices?



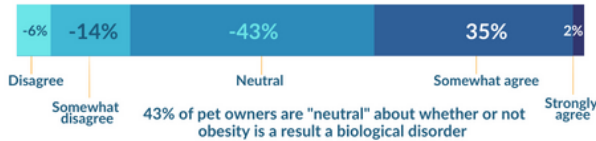
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Do poor feeding choices cause pet obesity?

70% of survey respondents "somewhat agreed" (41%) or "strongly agreed" (29%) that poor feeding choices cause pet obesity. 17% answered "neutral," and 13% "somewhat disagreed" or "disagreed."

Is obesity a result of a biological disorder?



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We asked if pet owners agreed that obesity is a biological disorder.

43% were neutral, with 35% answering "somewhat agree," and only 25 "strongly agree." 14% answered "somewhat disagree," and 6% "disagree."

2022 U.S. Pet Weight, Nutrition, and Pet Food Survey Results

Exercise and Willpower

Do pet owners believe obesity is caused by inadequate exercise? 68% of our respondents “agreed” or “somewhat agreed” that obesity is caused by “not enough exercise.” 20% were “neutral,” and 12% “somewhat disagreed” or “disagreed.”

Finally, we explored the concept of willpower in causing pet obesity. Lack of willpower is cited as a cause or contributor to human weight gain. (25) While we disagree with this rationale, veterinary clients often mention a lack or loss of willpower when asked why they discontinued a pet weight loss program.

This year, we asked if they thought overfeeding or giving excess treats was caused by a lack of a pet owner’s willpower. 32% “strongly agreed,” 30% “somewhat agreed,” 23% were “neutral,” and 15% “somewhat disagreed” or “disagreed.”

While feeding excess calories and inadequate physical activity are undoubtedly causative factors of pet obesity, obesity is a multifactorial disorder caused by genetics, lifestyle and environment, and other physiological and medical conditions. (18)

Complicating matters is that veterinarians typically only have diet and physical activity available as therapeutic interventions, likely leading to a potential overemphasis on food and exercise as primary causes and treatments for pet obesity. The fact that most pet owners reported that overfeeding was a fundamental reason for pet obesity indicates a need for better education on proper feeding and obesity's etiologies, treatments, and consequences.

Obesity is a physiological disorder affecting numerous body systems. Pet obesity often causes secondary, preventable diseases, including diabetes, osteoarthritis, and many forms of cancer. (3-14) Veterinary professionals and the pet care industry need to educate the pet-owning public better that pet obesity is a disease with significant harmful impacts on both quality of life and life expectancy.

2022 U.S. Pet Weight, Nutrition, and Pet Food Survey Results

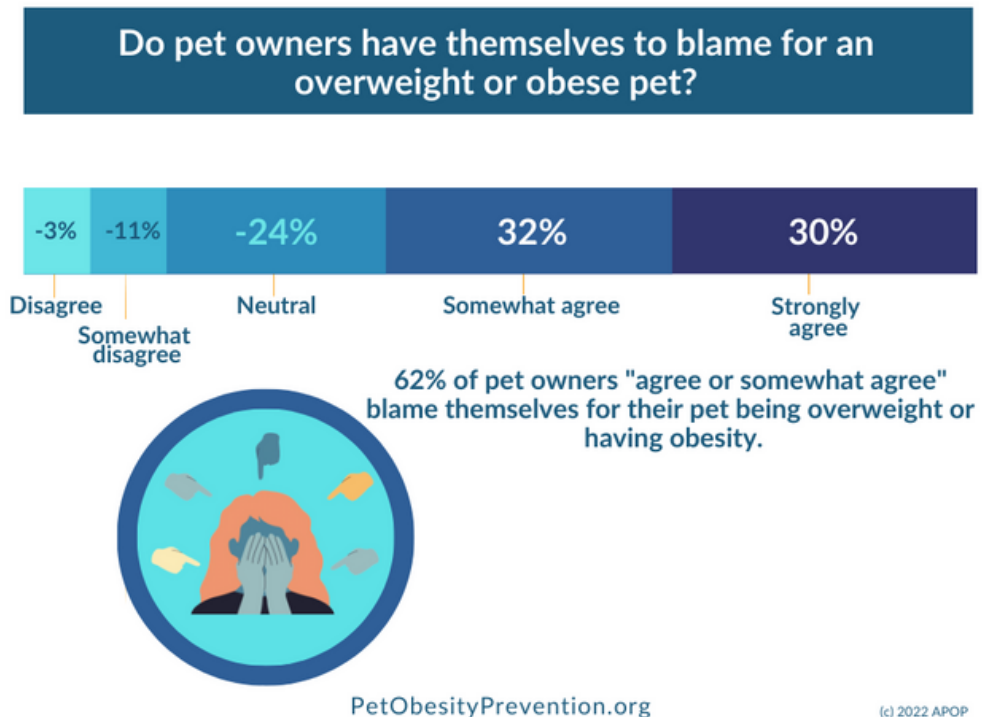
Who is to blame for an overweight pet?

In 2022, we asked, “Do pet owners have themselves to blame for an overweight or obese pet?”

32% of pet owners surveyed reported they “strongly agree” that pet owners are to blame for an overweight or obese pet.

30% “somewhat agreed,” 23% were “neutral,” 8% “somewhat disagreed,” and 7% “disagreed.”

APOP has worked hard to train veterinary professionals on more compassionate and effective communication techniques to discuss pet obesity. Because 52% of pet owners reported they were to blame for a pet’s body condition, professional communication needs to be empathetic, sensitive, and nonjudgemental. There is considerable work to be done, including assuring pet owners that their actions are not solely responsible for their pet’s body condition.



2022 U.S. Pet Weight, Nutrition, and Pet Food Survey Results

Therapeutic Weight Loss Diet Usage

Therapeutic pet weight loss diet (“prescription diets”) usage remains at the bottom of our pet owner rankings in both pet loss methods and perceived efficacy. These findings are consistent with our findings in 2018, when 19% of pet owners stated they had tried a therapeutic weight loss diet to help their pets lose weight.

Therapeutic weight loss diets are the primary evidence-based treatment veterinary professionals have to help an overweight pet attain a healthy body composition. (24) The fact that only about one in five owners of overweight pets in our survey reported they have tried a therapeutic weight loss diet indicates a gap in education and compliance.

Additional barriers to treatment may include perceived higher costs associated with some therapeutic diets, lack of easy access to specific brands or formulations, changes in fecal output or other physical factors during diet transition, and lack of significant or timely improvement.

Low therapeutic weight loss diet use may also result from a lack of veterinary healthcare recommendations for overweight dogs and cats (BCS 6-7). Veterinary professionals may be hesitant to advise changing diets for a variety of reasons, including cost, incapacity to support or monitor a weight loss plan, lack of understanding of the health risks of being overweight, widespread nutritional misinformation and confusion, or negative client perception of “vets selling food.”



2022 U.S. Pet Weight, Nutrition, and Pet Food Survey Results

The Importance of Intervention

Failing to take action when a pet is overweight places the dog or cat at increased risk of developing obesity and numerous co-morbidities.

Veterinary professionals must identify excess body fat and overweight body conditions as early as possible to achieve optimal health outcomes and reduce the risk of permanent physiological damage. Excess fat accumulation and weight gain left untreated ultimately lead to systemic disease, pain, behavioral changes, poor quality of life, and often euthanasia.

Early recognition and intervention of unhealthy body conditions and overweight pets are critical in breeds at-risk for weight-related disorders or conditions compounded by excess weight. Pets with brachycephaly, genetic predispositions for osteoarthritis or thyroid disease, increased risk for heart and kidney diseases, and animals with a breed or family history of cancer and other illnesses should be evaluated yearly for weight gain, BCS trends, and nutritional history.

Changes in diet and lifestyle are much more likely to be effective in achieving healthy body conditions in overweight pets than those that have progressed to obesity.

APOP seeks to partner with therapeutic diet manufacturers to promote science-backed weight loss formulations and with laboratory and technology companies to develop and refine educational tools to increase adherence to dietary treatment.

Pet Obesity Goals for the Next 15 Years



As APOP shifts its primary focus to Pet Obesity Treatment, we have established several objectives for the next fifteen years:

- Continue to raise awareness of the causes and effects of excess body fat and obesity in animals among the veterinary profession, pet care industry, and the pet-owning public.
- Conduct Biennial Pet Obesity Prevalence Surveys in the U.S. and around the world.
- Expand international acceptance of our Global Pet Obesity Initiative (GPOI) Position Statement, standardizing the definition of obesity in animals, a universal metric for reporting Body Condition Score (BCS), and recognizing obesity in animals as a disease.

Pet Obesity Goals for the Next 15 Years

- Collaborate and partner with international public and private organizations and companies to develop and facilitate:
 - Pet obesity educational campaigns
 - Promote obesity as a One Health disease in humans and animals
 - Expand assistance in raising awareness of obesity in horses, rabbits, small mammals, and other species
 - Research the causes and risk factors of obesity in animals
 - Enhanced understanding of weight stigma and bias in the veterinary and pet-owning communities and how it may influence diagnosis and treatment
 - Innovations in diagnosing, treating, and monitoring adiposity in animals
 - Create support networks for veterinary professionals and pet owners
 - Develop technological solutions for personalized pet nutrition and counseling
 - Identify and promote innovations in the diagnosis, treatment, monitoring, and prevention of obesity in animals
 - A better understanding of behavioral changes and impacts on the human-animal bond associated with obesity
- Provide research grants for scientists investigating pet obesity.
- Organize Student Chapters of the Association for Pet Obesity Prevention at veterinary schools worldwide.
- Conduct an annual Pet Obesity Conference to highlight developments in research and therapeutics.

Closing Comments

The State of U.S. Pet Obesity in 2022 remains alarming.

Obesity in animals causes immeasurable pain, suffering, and economic costs. Based on our findings, many veterinarians remain skeptical about their ability to help achieve a healthy body condition in affected animals.

There needs to be more evidence-based information and clarity about nutrition among veterinary professionals, members of the pet care industry, and pet owners.

Veterinarians need accurate and accessible methods for determining excess body fat in animals and early identification of co-morbidities and risk factors. We need additional pet obesity prevention and treatment options, including nutritional and pet food innovations, appropriate evidence-based pharmaceutical interventions, and improved means of educating, supporting, and monitoring patients on dietary and lifestyle interventions and weight management plans.

The Association for Pet Obesity Prevention (APOP) remains confident that the worldwide state of pet obesity will improve through persistent efforts and collaborations between veterinary professionals and the pet care industry.

Through partnerships and alliances, APOP will continue expanding its efforts to achieve a world where all animals enjoy a long and healthy life.

Ernie Ward, DVM, CVFT
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Association for Pet Obesity Prevention

Get in touch

Join us in solving the complex challenges of pet obesity and weight-related disorders.



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