**Dogs on a Diet - Not Something to Take Lightly**

**PetPlate: A Veterinary-Partnered Program to Slim Down Our Overweight Pets**

**Tag Words:** Overweight Pets; Dogs, Pet Diets; Dog Food; Pet Meals, Dog Nutrition

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**Video Link:** [https://www.youtube.com/watch?v=pZzUd44gMU8](https://www.youtube.com/watch?v=pZzUd44gMU8)

**WebSite Link:** [http://mypetplate.wordpress.com/](http://mypetplate.wordpress.com/)

**Summary:** Our goal is to educate dog owners of the grave importance of maintaining their dogs’ weight in order to ensure a happy and healthy life for their favorite companion animal. There are multiple steps that go into making this program possible. To begin, an owner must take the crucial step of bringing their dog into their local veterinarian clinic for what should be a semi-annual check-up. During this check-up the veterinarian will give the dog a full body examination and determine whether the dog is within its ideal weight. If the dog happens to be overweight or underweight, that vet will supply the owner with the appropriate program in which the owner should be able to follow in order to help their dog achieve that healthy ideal weight.

**Obesity Epidemic in People and their Companion Animals**

The human diet has been paid attention to with much detail as the obesity epidemic spreads across the United States. With this growing issue we have linked the diet to many chronic diseases and health issues including cancers. Yet we fail to recognize our companion animals and the diet and lifestyle in which they lead. The obesity epidemic is also a problem in the canine world and it is important as owners to feed our dogs appropriately to ensure their health.

Within the past couple of years the obesity epidemic in all companion animals, with an important stress on our canine companions, has reached an all-time high. Many veterinarians claim that there is a connection between the nutritional habits of owner and dog. These habits include overfeeding, choosing the cheapest food as opposed to the most nutritional, laziness, and most importantly table scraps.

With overfeeding being the main cause of animal obesity, those who have the tendency to overeat themselves, are usually among the same people who have a tendency to overfeed their animals. Overfeeding can include the presentation of more food in the dog’s food bowl then is necessary for that sized animal. Another cause includes the failure to regulate a time limit in which the animal can feed. There is a certain amount of food that should be laid out each night for a calculated amount of time depending on the weight, size, breed, age, and condition of the dog. With the help of a veterinarian, owners will eliminate the hassle of having to work out these several equations on their own. This will be discussed later in the paper. Some owners also have a tendency to lean toward the cheapest or most easily accessible food, however, that choice is not always what is best for the health of the dog. Just as a “Big Mac” has the tendency to be a
quicker and cheaper lunch than a home prepared salad, the type of food your dog ingests requires as much time and effort as your own diet. It is important to take time to research what ingredients are used to make your dogs’ daily meals and should be carefully chosen according to your dog’s nutritional needs. The laziness of the owner can also be relayed into their dog, leading to obesity and causing other health problems in your dog. Owners who wouldn’t normally go out for a run on their own free time, don’t tend to find or make the time to give their dog the daily exercise it requires, however, it is very important for an owner to make this time! Our program will work with certified veterinarians to calculate a customized exercise plan for each owner’s dog specifically. This will eliminate any concerns that an owner may be experiencing in under-exercising or maybe even over-exercising their pet. Lastly, there is the problem of table scraps given from owner to pet. When considering table scraps although there can be a happy balance of reward, “No” is always the more appropriate answer.

Obesity Can Lead to Other Health Problems- Dogs
Obesity in dogs has been linked to many secondary conditions including type-two diabetes, respiratory and heart disease, osteoarthritis, high blood pressure, skin disease, and multiple forms of cancer (11). Many of these health issues caused by obesity are overlooked and perceived as laziness. If your dog is lying around the house all day, your dog may be experiencing health issues. This can be a very serious issue considering any one of these major illnesses can lead to overall diminishing health of your companion animal.

Factors Which Lead to Obesity
There are multiple factors that cause obesity such as: breed, age, sex, and most importantly the owner. The lifestyle and diet led by the owner directly affects the canine. Many overlook the fact that table scraps from the owner’s diet are having the same effects on the dog’s body. Many owners who tend to spoil their dog with treats add significant amount of calories to the dog’s daily diet, and if an indoor lifestyle is being led, those excess calories are not being burnt off.

Age
Nutritional needs change with age, as serving size, carbohydrate levels, fatty acid levels, and protein levels increase. With growth, energy requirements increase while immune and digestive development becomes vital to ensuring a healthy companion. Once a dog reaches their maturity and senior periods of their life we want to ensure the diet can help to maintain that youthful vitality. By doing this it is crucial for an increase in the intake of omega-3 fatty acids, antioxidants and glucosamine (7). While protecting the immune system an increase in natural immune defenses such as: vitamins E and C, along with taurine, lutein, and beta-carotenes are essential (7). These micronutrients will aid your canine through a healthy aging process.

Height, Weight, Sex & Breed
All of these factors are considered in configuring your dog’s ideal or optimum weight. By maintaining an optimum weight you can add 1.8 years to your companion’s life (15). Dogs that are kept at their optimum weight also have more energy and vitality, as well as less health problems. Putting your dog in a category of its breed is simply not enough, as many ideal weight charts for specific breeds show up to a 23% range of weight (15). These charts also do not consider mixed breeds or the sex of the breeds. Your dog has a personalized ideal weight that can be determined by your veterinarian that is specific to your dog’s body. This is crucial to seek the
expertise of your veterinarian before taking any steps in a weight loss program. Tampering with your companion’s diet without the recommendation can lead to greater health issues.

**Breed**
Each breed is unique, as the canine species is the most diverse of all species, and each breed carries certain characteristics and are prone to specific health problems. Therefore each breed needs particular nutrients to aid in the prevention of prone chronic diseases. It’s clear to see a Yorkshire terrier differs from a Mastiff, and their diets should differ as well. One example is that hair types require different fatty acids. On the lines of health problems terriers are more prone to joint problems needing more protein, while Labrador Retrievers are prone to obesity and should be given a diet lower in carbohydrates.

Another example would be that the German shepherd breed has tendencies to develop hip dysplasia as they approach adulthood. This hip dysplasia occurs when the “Ball and Socket” joint between the pelvic and femoral bones are abnormally structured, and as a result the ligaments, connective tissue and muscles are loose altogether rather than taut, forcing the surfaces of those pelvic and femoral bones apart (6). Over time this subluxation will cause the bones to change size and shape (6). This will result in the German shepherd breed to experience slow degeneration of their walking ability, which inevitably leads to this specific breed gaining more weight as they increase in age and the dysplasia takes its toll. By adjusting the certain food fed to these specific canines to contain more calcium than the rest, we would hope to establish stronger pelvic or hip bones in their breed throughout its life (6). With any hope this would work to limit the chances of your German shepherd from developing this same genetic issue that haunts so many other dogs of its kind.

These types of breed specific issues, inform us that it is important to educate yourself as a dog owner on the health problems your canine may be more prone to. When ensuring a healthy diet for your companion, there are many other factors that should be considered when purchasing the right food for your dog. By inputting the time and effort to research your dog’s food along with a veterinarian recommended weight loss goal, you can help your canine to live a healthy life.

**Activity level**
After recording the weight and breed of your companion it is important to factor in the average daily activity level your canine receives. Just like humans, active dogs need a greater level of daily caloric intake opposed to dogs that lounge around all day long.

It is very important that along with the adjustment to the dog’s caloric intake, in order to modify the animal’s diet, the dog be exercised accordingly. Whether it be a walk around the block, or a scheduled three trips to the local dog park a week, these actions must be performed in order to insure the continued decrease in your dog’s weight to a healthier amount. You also have the option of performing exercises in the convenience of your home. Exercises for dogs created by Cesar Millan (10) present a healthy exercise program for your dog that remains completely indoors. Some of these exercises include running your dog up and down the stairs, making your dog run after the light of a laser pointer, setting up obstacle courses, making your dog work for its treats, playing keep away and fetch, getting your dog on the treadmill, and of course a classic game of tug-of-war (10). Exercise comes in several different forms, however it may occur for your companion animal, the basic amount of time your dog should be exercising daily is about
30 minutes (1). Again, the importance of this step cannot be stressed enough! If exercise is not included in the dietary process of helping your dog lose weight and become a healthier animal, then the ideal resulting weight will not be achieved and your dog will continue along the same path it is a part of today.

Owners can make all the difference by not only devoting their dogs to this type of exercise, but themselves as well. By sticking to an exercise course that will benefit both dog and owner, owners can ensure that their dog stays on track by simply making sure that they themselves stay on track (two birds with one stone type of deal). This course of action will work to create an environment that establishes a healthier household.

You're Not Alone
It’s important, as an owner, to be aware that you are not the only person in this country with an overweight animal. With the possibility of a dog only 5 pounds over their ideal weight having the potential to be considered an overweight animal, there are thousands of dog owners all across the country dealing with the same exact issue. Many are naive that their dogs may be overweight, but for those who have chosen to seek help, there is a solution for you. We would like to create group meetings through our “petplate” website in order to help overweight pet owners establish a place they can take their dogs to and meet other people just like them. Each pet owner will eventually feel comfortable enough to hold the others accountable for exercising their dogs every day and making sure their animal is maintaining the appropriate amount of daily caloric intake necessary to achieve their specific ideal weight target. By sharing your stories on the “Your Stories” page of the petplate website, you can relate to and connect with other dog owners sharing your same struggles.

How Much is Too Much - Pounds that is
Many studies have shown that an excess of only 5 pounds to a dog’s ideal weight can create health issues, cause chronic diseases, and add immense stress to the joints (15).

Studies have shown that 1 in 4 pets in our country are overweight due to the owner’s lack of knowledge that only a small amount of excess weight can potentially be detrimental to their companion (11). A dog is considered to be overweight in the veterinary field if that dog is even 10%-20% above their ideal weight target, so it is very important that owners monitor the eating and exercising of their furry friends (11). We give great warning when it comes to this serious topic of obesity among companion animals. Dogs with as little as 5 pounds of excess weight, have a tendency to live a shorter lifespan than a dog that maintains their ideal weight. With our program you should be able to establish an exercise and eating schedule that works best for your pet individually, hence making this problem diminished overall.

Food Labels- Know What you're Feeding your Dog
Do you really know what you're feeding your dog anyway? Dog food labels are not only difficult to read, they are usually completely disregarded by owners. Many pet owners feed their companions high priced food without knowing if it is meeting the nutritional needs of their canine. Dogs need the essential proteins, fats, carbohydrates, vitamins, minerals and of course water. When finding these essential macronutrients and micronutrients in your dog food it is important to know what to look for on a dog food label. First ensure your dog food is approved
the Association of American Feed Control Officials (AAFCO) and contains a Nutritional Adequacy Statement indicating the food is nutritionally complete. Nutritional dog food should contain a high amount of protein. Dogs are genetically made to eat meat. Their teeth and instinctive gnawing behavior shows their need for meat or protein. Dogs possess short digestive tracts, a quality of carnivores, with strong digestive acids and bile allowing for meat, bones, and fat to be effectively digested (2). A diet that contains a higher level of carbohydrates or grain based food can slow the digestive process, create high levels of gas released by your dog, or could result in the buildup of tartar on your dogs’ teeth (2). When reading food labels ingredients are listed by weight, meaning the first ingredient listed is greatest in quantity (13) in that product. What many owners fall victim of is being misled by what is called “splitting.” This “splitting,” is when pet food manufacturers split the amount of a carbohydrate product to make it seem present in a smaller quantity. For example corn products can be split into “ground corn” and “corn gluten meal” allowing for the corn product quantity to not surpass the quantity of meat making owners believe they are feeding their dogs a meaty and hearty meal (13).

Other than a high quantity of proteins, a moderate quantity of fats, and a low quantity of carbohydrates, dogs also need vitamins and minerals. Although many of these needed vitamins and minerals are within the meat and bone matter already found in most dog foods. Some general tips for dog food label readers are, avoid animal by-products, artificial colors, artificial flavors, growth hormones, rendered meat, and meat from animals treated with antibiotics; for these factors could be harmful to the health of your dog.

**Pet Foods Currently on the Market**
Many pet foods on the market contain a harmfully high level of carbohydrates. This is a cheaper way to ensure the needed nutrients to be approved by the Association of American Feed Control Officials. Many dog foods advertise as calorie “light” or “low,” these products are supposed to ensure a lower daily caloric intake for your overweight canine. These products have a set calorie allowance at a maximum of 3100 kcals/kg approved by the AAFCO (12). When comparing these “low” calorie diets we find that the majority of dog food manufacturers exceed this maximum limit. Brands like Purina ProPlan, Iams ProActive, Eukanuba, and EVO weight management, along with many other dog food manufacturers greatly exceed this limitation (12). These results can be viewed in a chart provided by the Hills Pet calorie comparison: [http://www.hillspet.com/weight-management/calorie-comparison-chart.html](http://www.hillspet.com/weight-management/calorie-comparison-chart.html). This information simply goes to show that without proper research; even “low” calorie dog food cannot be enough to help your dog maintain a ideal weight. True restrictions on the quantity of food consumed along with an active lifestyle and meeting with your local veterinarian are the only sure way to help your canine with weight loss.

**The Pet Food Industry - Lucrative**
Dog owners first handedly have knowledge that their companion can be a great expense. Depending on the size of the dog, the average amount spent on dog food alone per year can range anywhere from $55-$235. Unfortunately these prices contribute to the poor nourishment of our canines. Premium dog food that is higher in nutritional value is also higher in cost straying owners away with elevated prices. Not to mention most of the time these foods that are higher in nutritional value are usually less convenient to find and can only be found in pet stores. Many brands can be found at your local food market and are purchased while owners pick up groceries for themselves. Ensure you are getting the best food for your dog by taking the time and effort.
Many dog food companies target sympathetic dog lovers in their advertisements and many owners fall victim to believing advertisement without doing personal research. Ask your veterinarian recommended food for your specific breed and always research what you are feeding your dog.

The Healthful Way to Lose Weight - Visit Your Veterinarian
As a pet owner, it’s really hard to tell how many pounds your dog should lose, over what time frame and how to accomplish that. This is where the professional help of your local veterinarian is required. One of the most crucial steps of our program that works to help your dog lose that excess weight it needs to live a long and healthy life is the initial first visit you make to your local veterinary clinic. During this very crucial visit, your veterinarian should inform you not only of how overweight, underweight, or right on track your dog is; but also the ideal weight that vet feels may be healthiest for your dog. This number will play a very crucial role in the specific exercise and dietary steps taken in order to insure your dog a healthy weight loss. The veterinarian will determine this number after completing a routine check-up examination of your pet. During this checkup the vet will perform tasks very similar to those performed at a human doctor’s office. The vet will take the dog’s temperature, listen to the dog’s heart and lungs, look in the dog’s ears, eyes and genitals, feel underneath the dog’s belly and fur, check the dog’s anal glands, and finally end the exam by checking throughout the dog’s entire body feeling for any types of bumps or possible tumors (9). This process may sound a little extensive, however it really shouldn’t take any longer than 30 minutes out of your day, and it is completely necessary for the maintenance of your dog’s health. PLEASE DO NOT OVERLOOK THIS STEP!

Sometimes it is difficult to perceive if your dog is over its ideal weight with the human eye, and your dog may look perfectly healthy. However, the human eye can be deceiving, and taking the crucial step to the veterinarian should not be surpassed. By making the right decision in taking your dog to the veterinarian and having these check-ups semiannually, you are allowing the veterinarian to pick up on any early warning signs of a serious problem that may affect your dog in the future, including the gradual growth of obesity (9). In turn, by detecting the symptoms of a possible early illness that may be developing in your dog, the veterinarian will be able to correct or at least slow down the progression of that illness. In terms of obesity, the veterinarian will be able to lay out an eating and exercise program that best fits your dog personally.

Creation of a Pet Plate Web Space
We have created a web space for pet owners to interact with that provides information on proper nutrition and feeding of their companion animals. mypetplate.wordpress.com. This site acts as an educating source to better understand the health problems caused by your canines’ nutritional intake. An easy to read site that can provide the knowledge needed to potentially save your dog from chronic health disease. The petplate website also allows for dog owners who have questions or stories of their personal journey to a healthier weight and lifestyle with their canine to share with others and connect with those who are making strides for themselves and their companion.

Future Personalization of the Web Space
To enable the pet owner to help their companion animal achieve their weight loss goal, they would register their dog online onto the petplate web space. This web space would need to be reconfigured from the current wordpress site to enable a more interactive experience. When the
companion animal is registered for our program, the pet owner would be able to view their pet’s profile that could be continually updated as progress (hopefully) would be made.

Essential Involvement of the Veterinarian
The interactive web space would take into account the multiple factors that led to the obesity problem for that particular animal. The pet, as a result of the obesity, may suffer from other health problems that may need to be considered in the diet and exercise plan. They may be arthritic and experience pain and may be on pain medication. As a result of the weight loss, the dog may experience less pain and be able to move better and enjoy more physical activity. This might also change the dosage needed of whatever drug was prescribed, and require input from the veterinarian on the proper prescription. Same is true for diabetes, high cholesterol, etc. The web space would alert the pet owner when it would be appropriate to visit the veterinarian to reevaluate the animal’s health condition and subsequent medicines if prescribed.

Every dog is different. The idea would be for the pet owner to plug in the dog’s breed and height, age, activity level, neuter status, height and weight, to eventually be able to determine a plan of action - how many calories are needed per day to lose the desired amount of weight in a reasonable time span. Our web space will make it easy to track progress and ensure that the companion is getting the appropriate nutrition while on a weight loss program.

By considering the activity level, we will calculate the correct serving size to ensure the companion animal has the right amount of energy to carry on its daily activity and lead its life to the fullest.

Future Business Model - Pet Meals Delivered to the Home
Connecting the Web Space with the Pet Meal Program
The pet owner, now having a good understanding of how many calories they should be feeding their dog, could purchase food that would be pre portioned to enable them to help their pet achieve their weight loss goal. After entering the age, height, weight, breed, sex, and average daily activity, our new company could suggest and hopefully sell meals personalized for their dog. A delicious blend of foods with the appropriate nutrients could be ordered and shipped to the pet owner customer. The personalization of their pet’s food is a healthful decision on the pet owner’s part. Their pet is special to them and should be treated as such. No longer will their dog be categorized as a large breed, senior, small breed, or puppy as described on current dog food choices. We would discuss (online or over the phone) their goals, then ship meals to the home that would be prepackaged with the correct caloric and nutrient proportions to ensure your dog reaches its optimum weight.

Why Pet Owners Would Purchase This Product
We understand that many pet owners are extremely busy. Our business will aim to make life simpler for them. Basing caloric intake on a chart and having to figure the right number of scoops for your canine can be a hassle, and we understand that. Our prepackaged meals for dogs will ensure the right amount of calories and nutrients in the daily diet and take the hassle of scooping and measuring away. Simply open our products airtight packaging and, plus/minus microwaving, pour right into the dog bowl. No longer will you be asking family members if the dog was fed.
One of the leading causes of animal obesity is over feeding and the confusion of, “who fed the dog today” could lead to serious health issues for your canine if is a repeated trend. Each day’s food is labeled and easy to keep track of, so your canine is not overfed or underfed. This system is designed for the convenience of all dog owners, especially those who are maintaining a crazy family life.

Constantly on the go?
If you keep your dog active as an adventure companion, these prepackaged meals are easy to grab and pack for any occasion. No longer will you be throwing dog food in a bag and hoping it is enough. For those dogs that take on treks with owners who backpack these airtight packed meals are lightweight and take up minimum space.

Delivered Meals to the Home
Food is sent on a two week basis, each box is labeled by day and date. Each daily box is filled with the pre-planned meals for that day. Each bag labeled for morning or evening, indicating when the meal should be given. Meal plans can be purchased quarterly (four times a year). Shipments of personalized meals will be made every 2 weeks. This will ensure that the companion will never go hungry and at the same time, not being overburdened with having to store so much food. At the end of each quarter, the pet owner will be sent a notification to renew the meal plan subscription. The mail delivery creates a convenience for dog owners and eliminates frequent trips to the pet store.

References


**Letter to the Editor**

Striving to educate on canine obesity
By Nicole Bayer
Sent to: The Daily Targum

Dear Editor of The Daily Targum,

I am a Junior studying Nutritional Science at Rutgers School of Environmental and Biological Sciences. I have paired up with my peer Megan Stephenson who is studying Animal Science under the same school and together we set out to find a solution for the spreading problem of canine obesity. For the last semester, under the guidance of Dr. Julie Fagan, we have been researching the importance of educating the public on the effects of canine obesity.

Obesity is an epidemic sweeping the nation and has struck our companion animals with grave effects. Canine obesity has been linked to many secondary conditions including type-two
diabetes, respiratory and heart disease, osteoarthritis, high blood pressure, skin disease, and multiple forms of cancer.

These very serious health issues can be caused by as little as five pounds of excess weight and in most cases dog owners do not realize the harm they are causing their beloved pets but failing to ensure healthy nutrition and an active lifestyle. There are many misleading advertisements and conceptions being relayed by our dog food manufacturer companies and we would like to educate the public of these fallacies.

Perhaps with the help of your well known newspaper, you can help with spreading this knowledge and save suffering companions across the nation. Visit our website at http://mypetplate.wordpress.com/ for more information of what we are about. Helping owners understand the importance of visiting their local veterinarian and reaching their dog’s weight loss target is truly the only way to decreasing the canine obesity problem and we need your help.

Sincerely,
Nicole Bayer

**Letter to a Veterinarian**

Striving to Educate on Canine Obesity
By Megan Stephenson
Sent to: Local Veterinarian

Dear Dr. (Local Veterinarian),

I am a sophomore studying animal science in the School of Environment and Biological Sciences division of Rutgers University. I have partnered with Nicole Bayer and worked under the guidance of Dr. Julie Fagan this summer, researching in importance of educating the public on the effects of canine obesity.

Canine obesity seems to have reached an all-time high within the past couple years. This can be extremely detrimental to a dog’s health because certain cases of obesity can lead to more dangerous illnesses including type-two diabetes, respiratory and heart disease, osteoarthritis, high blood pressure, skin disease, and multiple forms of cancer as I’m sure you are well aware.

It has been said that the obesity epidemic in our canine companions can be linked to the owner’s own life tendencies. Little habits like overfeeding, choosing the cheapest food as opposed to the most nutritional, laziness, and even table scraps have all been connected to an owner’s tendency to pursue that same quality of life, but NO MORE.

I’m here to inform you of a new program Dr. Julie Fagan, Nicole Bayer and myself have developed that educates dog owners about just how easy it can be to keep their dog happy and healthy for life. We are informing dog owners everywhere across the country over our website mypetplate.com to take the right precautionary or post cautionary steps to get there dog on the right track. In short our program informs dog owner’s to visit veterinarians like yourself for a
semi annual check-up exam in order to determine how many pounds overweight their dog may be as well as their dog’s ideal weight target. Once receiving your predicted ideal weight target for their dog, owners will log back into our website where we will continue to help them by creating an exercise and eating plan specifically designed for their dog depending on it’s breed, size, age, sex and condition.

Together I hope we can work to make this obesity epidemic a thing of the past, and a healthier happier canine a fact of the future.

To learn more about this please contact me.

Sincerely,
Megan Stephenson