

Obesity, your dog and you



CANINE

WEIGHT MANAGEMENT HANDBOOK

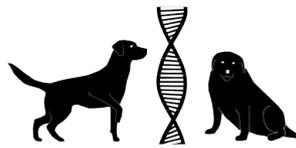
University of Cambridge



GOdogs Project
Investigating Genetics of Obesity
www.godogs.org.uk

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DOG OBESITY IS A BIG PROBLEM!

Obesity is one of the major diseases affecting pets' health and welfare in the UK. Almost two-thirds of pets are overweight or obese and vets report the problem is getting worse.

Obesity is a problem for affected dogs because it is associated with a lower quality of life and reduced lifespan. Overweight dogs are more likely to suffer from mobility problems, hormonal diseases, breathing difficulties, cancer, and heart disease, amongst other problems.

Animals gain weight because they get more energy from food than they burn off as they go about their daily lives. However, the factors that affect both food intake and energy output are complicated, meaning that controlling or reducing weight can be very challenging for some dogs, their carers, and even their vets.

Fortunately, there are ways to help all dogs.

GOdogs Project

We are a group of researchers and veterinarians at the University of Cambridge studying the Genetics of Obesity in Dogs. We want to find out which genes make some dogs put more weight than others and why. Some breeds, like Labradors, are predisposed to obesity.

By studying obesity in dogs we hope to improve understanding of both dog and human obesity. For further information on the GOdogs studies and results, including how to volunteer to help our work, visit:
<http://www.godogs.org.uk>

This Handbook

You will find information on diets, a guide to improving the amount and quality of exercise your dog gets, and practical tips on how you might alter feeding practices to improve your dog's response to treatment. There are also record sheets for your dog's measurements, diet plans, exercise, and feeding records so you can remain up to date throughout the process!

WHY DO ANIMALS GET FAT?

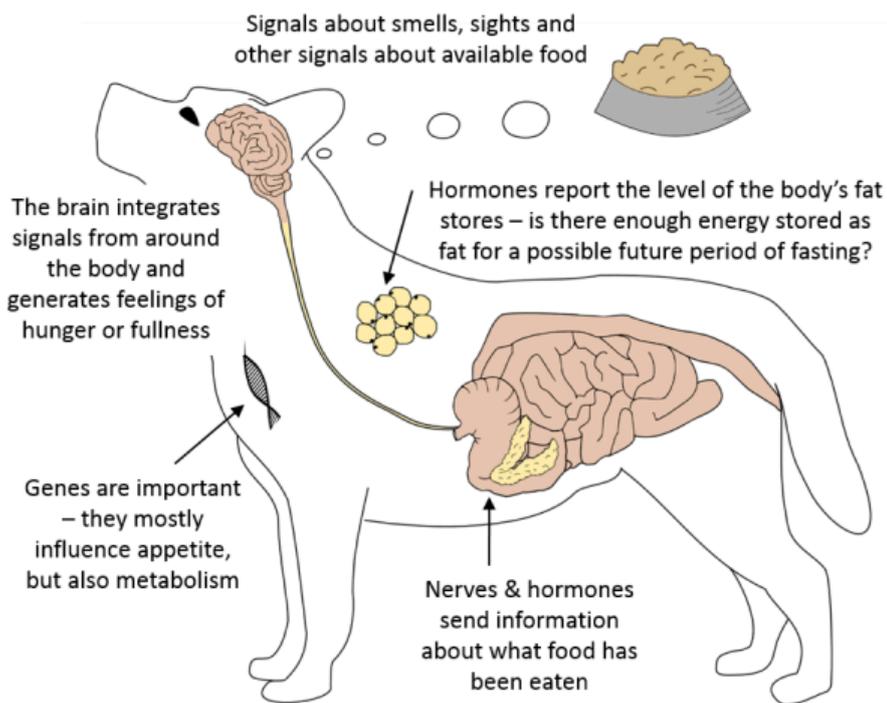
Obesity develops when, over a prolonged period, the amount of energy an animal takes on board as food exceeds what they use up in daily life and exercise. But why does the body allow itself to get fat, which is unhealthy?

Animals evolved in conditions where it made sense to store a bit of excess energy as fat when food was plentiful (e.g. in summer) so that they could use it to stay alive when food became scarce (e.g. in winter).

The body systems involved haven't yet adapted to the modern world and its ready availability of food.

The diagram shows how the brain integrates information about food intake, energy reserves, and food availability and produces sensations of fullness (satiety) or hunger.

We know genes can influence the system at many levels meaning that some dogs tend to eat more and more frequently than others.



Genetic variation means some owners have to deal with food-obsessed dogs which overeat given the chance, whilst other dogs self-regulate at a healthy weight.



GOdogs research shows that, in general, food-obsessed dogs are more likely to become overweight and that owners of such dogs have to work much harder to keep their dogs slim. You can read more at www.GOdogs.org.uk.



Other factors that predispose some dogs to weight gain are age, neutering, and medical or orthopaedic conditions that reduce the amount of exercise dogs can do. If you are planning to neuter your dog, you should discuss risks and benefits with your vet first.

Food restriction is key to successful weight loss.



To lose weight successfully, your dog will need to eat less, even if you think they don't get much at the moment.

Exercise is important, but limiting food intake in a healthy way is the most important part of the plan.

These pages some important aspects of successfully feeding dogs during weight loss:

Choosing a weight loss diet.

Practicalities of feeding as part of a weight loss plan.

Common pitfalls.

- How to give treats without spoiling the diet
- Some ideas to manage a food-obsessed dog while they are on a diet.

FOR WEIGHT LOSS WE RECOMMEND A SPECIAL DIET, WHY?

We could get them to lose weight by giving them less regular dog food, but we usually advise a specialist weight management food because they have special properties that can aid weight loss:

- They are balanced to ensure that even on a reduced-calorie diet, dogs get the essential nutrients, vitamins, and minerals they need for health.
- They have been shown to encourage the loss of (unhealthy) fat mass but not (healthy) muscle tissue.
- They have been shown to make dogs feel more full (less hungry) for longer after eating. High fibre and protein promote feelings of satiety by several mechanisms.
- Clinical trials have shown that weight loss is faster and more dogs reach their target weight if they are fed specialist diets.
- Specialised diets also have a role to play in maintaining dogs' target weight in the medium-long term after reaching their target weight.
- Non-prescription foods often purport to be "light" or an equivalent to weight management food, however, they might not contain the right combination of high protein and high fibre that has been proven to be useful for weight loss.

GETTING THE BASICS RIGHT

Measure the food accurately, ideally using scales.

Measuring cups and scoops are notoriously inaccurate and can lead to dogs getting much more than their recommended allowance.

Some people find it easiest to weigh out meals for 1-2 weeks in batches, storing portions in plastic bags.

If your dog is a scavenger, stop them getting illicit food.

- Can you keep them on a lead in high risk areas (like the bin by the fast food restaurant)? We don't recommend keeping them on leads all the time because exercise is an important part of weight loss.
- Can you avoid walks in areas with lots of discarded human food?
- Could they wear a muzzle when off lead to stop them eating things they find?

Avoid extras, or take from the daily calorie allowance.

There is more on treats on the following pages.



Can you cut out treats altogether? First consider why you give treats. Often people say treats are an essential part of bonding with their dog. Animal behaviour studies have shown that often when owners perceive their dogs are 'asking' for a treat, dogs are actually equally satisfied with extra attention. Try it! You might be surprised by how your dog responds to a cuddle, stroke, play or tummy rub instead of a snack. Similarly, where treats are used as rewards in training, many dogs learn to respond equally well to an alternative 'thank you'. Our best advice is to stop all treats, but if you feel they are essential, read on.

ONE RULE, LOTS OF TIPS FOR STICKING TO IT

You can give treats, but you must reduce your dog's main ration to compensate. That rule isn't always easy to follow. Think about your dog's life and feeding regime and mix and match from the following advice to give treats without ruining the weight loss plan:

Use your dog's main diet for treats. Simply measure out their daily allowance and take any treats from that food. This is easy and our best advice to allow you to give your dog treats. It means they don't get the 'different and delicious' aspect of their usual treats though.

Use ultra-low calorie treats. Carrot chunks, broccoli trees, cucumber slices and even ice cubes may be enough to convince your foodie dog they are getting a tidbit, but have negligible calories.

Plan regular treats and factor that in to your daily diet plan. If, for instance, your dog gets a Dentistix in the morning and a Bonio at night but no other extras, we can just reduce their main diet allowance accordingly.

Do daily calculations to keep the calorie count in budget. This is the most challenging option but can work, particularly if you are willing to put in some effort. Make a table of all the foods your dog might get as extras, their calorie content and the equivalent weight of dog food for the same calories. Then each day, remove food from their daily allowance to ensure they stay within their daily calorie 'budget'. This is not recommended because it is error-prone, takes a lot of effort and could lead to diets deficient in essential nutrients. However, it can be a pragmatic option where there is someone in the house who insists on giving treats, or for dogs which scavenge food.

Why do you give tidbits and treats to your dog?

Treats are bad news when it comes to managing dogs' weight but it can be a difficult habit to break. We encourage you to think about why they give treats.

Sometimes it is to do with training:
"It's an important part of our training sessions and I'm not sure if he'd come back if there wasn't a biscuit in it."

Sometimes it is part of the daily routine:
"He gets a biscuit before bed to tell him it's time to settle down"

And often it is about building a relationship with our pets:
*"It makes my dog so happy when I give him some food."
"I've always done it and when I tried to stop she just looked so forlorn."
"We always give her some roast dinner on Sunday because she's part of the family."
"He absolutely loves the rind of the bacon so he gets it when we have it."*

Have previous diets been ruined by these common mistakes?



Is someone in your house not cooperating?

Small children, regular visitors, or a family member with a soft spot can ruin a diet by giving your dog extra food, sometimes without you knowing!

If you have a culprit in your house, try explaining why it is important your dog doesn't get extras. Or show them how to modify their behaviour to stick to the plan (see our Treats section).



Is your dog getting other animals' food?

Food-motivated dogs may get regular extra portions by helping themselves to food left out for cats, other dogs, wild birds, horses, or farm animals. If this is a possibility, think about how you can change things to avoid it happening.

Remember! Even small treats or extra snacks have a big effect over time.



MEET BUDDY, THE 15KG COCKER SPANIEL

Buddy's needs ~780kcal a day to maintain a healthy weight. He gets that from 235g of his usual dog food (Chappie dry).

How much extra exercise would he have to do to burn off each treat? What would be an equivalent 'sin' for his hypothetical owner, who needs 2000kcal a day?

- **A Schmacko gives 28kcal or 3% of his daily requirement.** It would take 1.5 hours of vigorous play to burn off those calories. This is the equivalent of his owner eating 2 Oreo Biscuits.
- **A Medium Dentastix OR one Bonio gives 75kcal or 8% of his daily requirement.** It would take 10 hours of on-lead walking to burn off those calories. This is the equivalent of his owner eating a bag of Maltesers.
- **A single Digestive biscuit gives 70kcal or 7% of his daily requirement.** It would take 6 hours of swimming to burn off those calories. This is the equivalent of his owner drinking a can of Coke.
- **A rasher of bacon gives 80kcal or 8% of his daily requirement.** It would take 12 hours of lead walking to burn off those calories. This is the equivalent of his owner eating 5 Oreo Biscuits.
- **A piece of buttered toast gives 150kcal or 15% of his daily requirement.** It would take 8 hours of frisbee play to burn off those calories. This is the equivalent of his owner eating an egg mayonnaise sandwich.
- **3oz of chips scavenged in the park gives 250kcal or 25% of his daily requirement.** It would take 14 hours of off-lead walking to burn off those calories. This is the equivalent of his owner eating a large portion of chips.

You can see that this means dog treats can make up a sizeable fraction of a dog's daily calorie allowance, and that titbits of human food are usually even worse.

RESTRICTING FOOD KINDLY

Some dogs experience hunger more acutely than others. (See the GOdogs website for more about the retriever POMC mutation). Even without that mutation, many highly food-motivated dogs seem to think about food all day long and the calorie restriction that is necessary for weight loss really does make hunger worse. We think dogs on a diet should be managed to minimise their hunger:

Feed for Fullness.

Some diets generate a greater feeling of fullness (satiety) for longer after a meal—commercially prepared ‘diet foods’ have been shown to do this successfully. Using a satiety-promoting diet is simple and we recommend it.

Provide an Outlet for Food-seeking Behaviour.

Food-obsessed dogs can be kept entertained during food restriction using puzzle toys, offering food stuffed into toys, or more complex dog toys that get them to ‘work’ for food. You can even feed their entire diet like this.

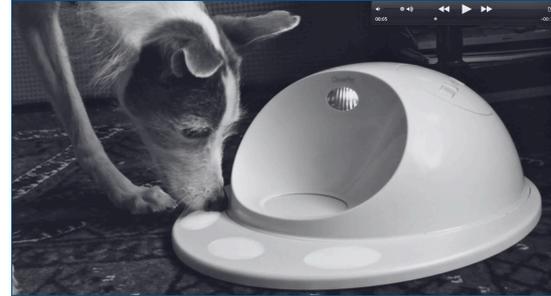
Distract your dog from thoughts of food.

We know pets have to fit in with busy human lives. But think creatively about how you can keep your dog busy so her thoughts don’t turn to food. When you are out of the house, what is your dog doing? Can you increase their activity and interest levels by providing toys, puzzle feeders, or even a dog flap? There are lots of useful ideas out there on the internet to inspire you.

Make your relationship with your dog about play, not food.

In our busy lives, it’s often easiest to fob off an attention-seeking dog with a tasty treat. Food-obsessed dogs will always be food-obsessed, but avoid reinforcing that. Remember that dogs can often be satisfied with a fuss or a game as with a biscuit. Try it next time your dog comes ‘begging’.

Getting your dog to work for food can be a good way to provide an outlet for food-seeking behaviours.



“We stuff a Kong with wet food (canned meat or soaked biscuits) and freeze it. Then we get one out at every meal time – it keeps her entertained for hours”



“I don’t feed him in a bowl any more – we just scatter the food around the garden and he spends all day looking for it”.



There are lots of inexpensive puzzle toys out there, and you could also try one of the electronic gadgets like the ‘Clever Pet hub (picture above)’. Working’ for food also increases activity to help with weight loss.

All of those approaches must keep within the daily calorie budget. It means you need some up front effort to measure how much of the ration is being fed outside normal meal times.





Can exercise be a bad idea?

Arthritis or other orthopaedic problems may make dogs painful during or after exercise. Talk to a vet about how to manage their **pain** and get them mobile again.

Physiotherapy and hydrotherapy can help build strength and combined with weight loss can get dogs moving well again.

Breathing problems such as bronchitis, collapsing trachea, or brachycephalic obstructive airway syndrome may improve with weight loss. However, getting affected dogs to exercise safely can be hard. Take it steady and increase exercise gradually.

Heart, hormonal, and other health problems or just being severely overweight can also mean it's important to start slowly with improving exercise.

In general, though, it is possible to increase the quality and quantity of exercise for most dogs, and it does them a lot of good.

EXERCISING YOUR DOG

Exercise is a great way to keep your dog healthy and help with weight loss. But we've already said exercise alone is not enough to slim down overweight dogs, so why bother? Well...

1. Exercise encourages the loss of fat over muscle.
2. Exercise, particularly play, helps us bond with our dogs.
3. Exercise and play distract from hunger.

You can increase dogs' activity in two main ways—more time, and better quality.

Consider the points below and develop a plan for how you can improve your dog's exercise quality and quantity:

Can you give your dog more time out and about?

All dogs should get at least 30 minutes of exercise a day, but many breeds require more—working breeds should have 2 hours daily. We, humans, lead busy lives and may need to think creatively to ensure our dogs get enough active time. Can you take them along on the school run? Perhaps by committing to longer dog walks several times a week, you can commit to improving your own fitness too.

Can you improve the intensity of your dog's exercise?

Ball launchers or frisbees increase your dog's mileage and the intensity of her exercise. Could you arrange regular meet-ups with dogs that might encourage your couch potato to play? Can your dog join a sporty family member on runs? Would he follow you on a bike?



Does your dog spend most of the time on a lead?

Why?

Lead exercise is only as good as the speed of the attached human—dogs walked on leads do much less mileage than when allowed to explore.

- If you are worried about the recall, consider some dog training classes.
- If you are worried your dog will scavenge, consider muzzle training so they can explore safely without being able to eat.

Could your dog spend more of the day outside?

Even just pottering around investigating smells is exercise and better than lounging inside on the sofa.

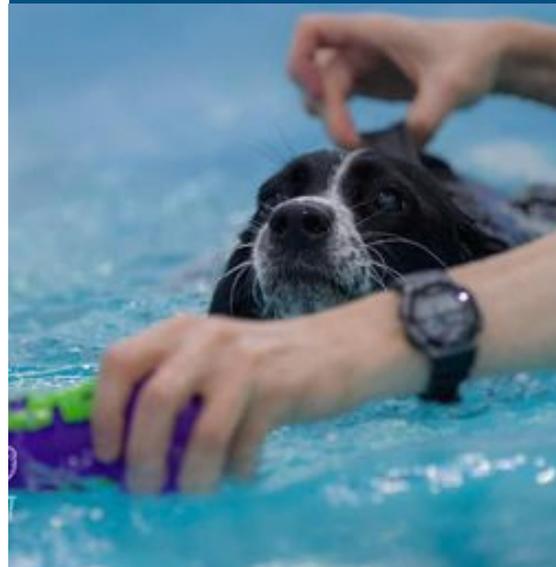
- Consider getting a dog flap so your dog can use the garden if you are away from the house. Might your dog enjoy spending all day outside with a cozy kennel for shelter? Even in cold weather, some dogs are very happy outside, is yours one of them?

Can you keep your dog busy in the house?

We've talked about using puzzle-feeding toys to give dogs an outlet for food-seeking behaviour. They're also great at keeping dogs moving.

- Will your dog play with other toys? Rotating toys can help keep their interest. Nylon chew bones have no calories but can keep dogs busy for hours.

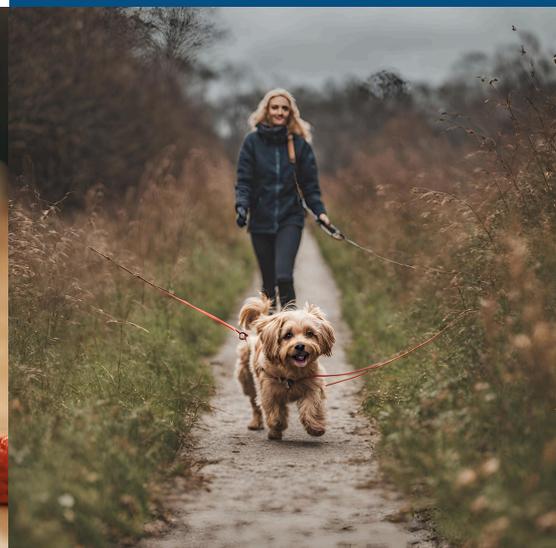
Might your dog benefit from hydrotherapy?



Hydrotherapy is usually best viewed as a form of physiotherapy for dogs, and regular sessions can help build strength and mobility. In tandem with physiotherapy and medical pain relief it can really help dogs with orthopaedic disease in particular.

It can be a useful addition to care for dogs who've got out of the habit of exercise having gained weight, and help them regain the spring in their step along with weight loss.

Your regular vet can arrange a referral to hydrotherapy or physiotherapy for you.





What are the barriers to balancing your dog's food and exercise correctly for weight loss? What can you do to overcome them?



Family not supportive? Can you share this information booklet with them to explain why dieting your dog is important?



Short on time? Perhaps make the most of your visit today to plan easy and efficient changes you can make at home.



Worried about your dog's welfare during dieting? Make sure you build exercise and food toys into your plan to keep them busy and distracted from hunger.



Good intentions get forgotten during busy times? Can you put up sticky notes to remind yourself of key actions? Set a phone alarm weekly to remind you to weigh out food.



TURNING IDEAS INTO ACTION

The key to weight loss is food restriction combined with encouraging exercise. We have offered multiple ideas about how you can do this.

The next step is to consider which changes you will make at home to achieve those aims. Use the questions below to prompt your thoughts and the next pages to write down which commitments you think are right for you.

Which diet would you like for your dog?

Specialist weight loss diets improve satiety and maintain vital nutrient concentrations.

How can you improve the accuracy of your feeding?

Can you use scales to weigh food? Batch weigh into bags to improve efficiency?

Will you stop giving treats, or find a way to compensate for treat-giving in the main ration?

What tactic will you use to reduce titbits?

Can you give low-calorie titbits? Which ones?

Should you compensate by reducing the main ratio? How will you achieve that accurately?

Can you increase the time your dog gets exercising?

Can you commit to longer walks? More frequent walks? More time outside? Toys in the home?

Can you improve the intensity of your dog's exercise?

Will your dog play? Retrieve? Swim? Can you run or cycle with her?

More time off the lead—do you need to sign up for dog training classes? Should you try a basket muzzle to reduce scavenging?

Can you distract your dog from hunger?

By offering distractions like toys or time outside?

Will you try out a puzzle feeder?

Perhaps kongs stuffed with frozen food, or food hidden outside? Will you give all or part of the ration like this? How will you organize it?

What else can you do to make good intentions a reality?

HELPING YOUR DOG LOSE WEIGHT

We would like you to make a plan to help your dog lose weight in the next three months.

Like people, dogs generally become overweight because they get more energy from their food than they expend (e.g. through exercise). Therefore, you can help your dog to lose weight by making sure either that they get enough exercise or that they get the right amount of food, or both.

We have prepared two help sheets:

- **Sheet A** (page 11) is designed to help you to provide the right amount of food for your dog.
- **Sheet B** (page 15) is designed to help you to provide enough exercise for your dog.

We would like you to decide which of these things you find most difficult or would like some help with and then look at either Sheet A or Sheet B. Alternatively, you might decide that you want some help with both exercise and feeding, in which case you can look at both sheets.

Below, please indicate which sheet(s) you will look at:

- I would like some help making sure my dog gets enough exercise, so I'll look at Sheet A.
- I would like some help making sure my dog gets the right amount of food, so I'll look at Sheet B.
- I would like some help making sure my dog gets enough exercise and the right amount of food, so I'll look at Sheets A and B.

Remind yourself why are you doing this when things get tough...

Write down 5 reasons why your dog is so special and he/she deserves to be fit and healthy:

What is your dog's Body Condition Score (BCS)?

Now that you have looked at the **Body Condition Score** chart on page 10 you can keep track of your dog's progress with objective measurements. Use page 12 to keep a record of your dog's progression.



Is your dog's BCS changing? What does your vet say about your dog's BCS? It can be a bit difficult to get it right at first and will take a while until you see changes, so it may help you get it checked by your vet or vet nurse.



What are the scales saying? use the scales regularly to monitor weight change. You can use your local vet's once a week or once a month.



Do you have to change your dog's portion size? Remember to adjust periodically according to his/he new weight. Likewise, if your dog is not losing weight, is it because there is too much food in that bowl?

We appreciate that making sure that your dog gets enough exercise can be difficult.

For example, it can be difficult to know how much exercise your dog needs and to find the time to take them for a walk. Therefore, we would like you to make a plan specifying how you will deal with these situations.

The left side of the table below provides a list of common situations that can lead to dogs not getting enough exercise. The right side of the table provides a list of possible solutions or strategies that you might employ in these situations. It may be helpful to pick some of the situations that most affect you and your dog first, then pick solutions you feel will be useful to mitigate the risk of your dog putting on weight from the right column.

1. Situations

Please pick up 3 situations

- I attempted not to walk my dog because it is dark outside ...
- If I am tempted not to walk my dog when the weather is bad...
- If I don't know how much exercise my dog should get...
- If I am tempted not to walk my dog because there aren't any good places in my area...
- If I am tempted not to walk my dog because he/she does not seem to want to go for a walk...
- If I am tempted not to walk my dog because I think that he/she gets enough exercise by playing in the garden...
- If I am tempted not to walk my dog because I am worried that my dog is not good around other people or dogs...
- If I am tempted not to walk my dog because I am worried other dogs or people might react negatively to him/her...
- If I am tempted not to walk my dog because I am worried that he/she will run off and not come back when I call him/her...
- If I am not physically able to walk my dog...

2. Solutions

Please pick up 3 situations

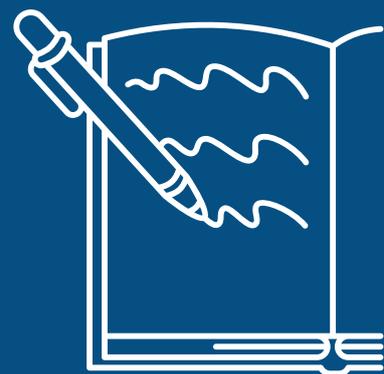
- ...then I will wear a head torch to light the road!
- ...then I will play games with my dog indoors!
- ...then I will ask my vet how much exercise my dog needs!
- ...then I will look on the Internet to find out how much exercise my dog needs!
- ...then I will remind myself that walking and playing with my dog strengthens our bond!
-then I will remind myself that walking and playing with my dog is a way of expressing my love and affection for them!
- ...then I will remind myself that it is my responsibility as a caregiver to provide enough exercise for my dog!
- ...then I will try to walk my dog for an extra 10 minutes a day!
- ...then I will ensure that my dog is always on the lead!
- ...then I will hire a professional dog walker to walk my dog!

YOUR COMMITMENT TO YOUR DOG'S WEIGHT LOSS PLAN

Use the space below to write down three or more commitments you will make about your dog "asking" for food. Satiety diet? Fuss not food? Trickle feeding?

What barriers can you identify that might stop you from successfully following your plan? How can you address each of them? Write your barriers and solutions below.

Print this page and stick it next to your dog's food!



To make sure that you don't lose track, write down your aims below:

Do you have a plan to prevent your dog from begging at dinner time? do you need to sort out something to keep her distracted?

Have you listed all the alternatives you can use when you think that she is expecting food? make sure you have got that in place!

Do you need to check the practicalities of the plan with someone else? Make sure you have social support (this can get difficult sometimes)

Please write out each of your plans below using the format If [situation], then I will [response]... and commit yourself to carrying them out. Don't forget that you can make up to three plans.

PLANNING

1

2

3

It is expected that you and your dog will suffer setbacks during this weight-loss journey. Diet adjustment may be necessary if your dog doesn't lose weight at the expected rate or stops losing weight altogether. Is for that reason that it is important to set up reasonable goals with the help of your vet/vet nurse and objectively monitor your dog. Use the following table to set and monitor a diet plan:

- **Goal:** write down what is your goal in terms of diet by the end of the week. For example, to accustom my dog to eat from interactive toys only, so he is busy for longer while eating.
- **Kcal:** the total amount of kcal per day.
- **Mains:** number of main meals and amount (g, oz) to be given. For example, 3 x 50g of Weight Loss kibble.
- **Extras:** write down the total amount of extras he/she can have each day so you can make sure that you stay within the kcal budget.

WEEK	GOAL	Kcal	Mains	Extras
1				
2				
3				
4				
5				
6				

1. Situations

- If I am tempted not to walk my dog because it is difficult to find somewhere where I can walk her or let her off the lead...
- If I am tempted not to exercise my dog because I am afraid that he will damage his joints or health if he does more exercise...
- If I am tempted not to play with my dog indoors because I am afraid that he will damage my furniture...
- If I am tempted not to play with my dog because I am afraid that she will make a mess I play with her in the garden.
- If I am tempted to put off walking my dog until tomorrow...
- If I am tempted not to walk my dog because I feel too tired to take her out...
- If I am tempted not to walk my dog because I get back late and do not feel like taking him out...
- If I am tempted not to walk my dog because I am too busy...

2. Solutions

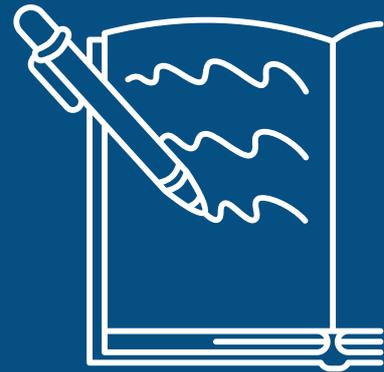
- ...then I will take her for a walk when there are few other people and dogs around!
- ...then I will take him to agility or obedience training or look for dog's swimming classes!
- ...then I will ask someone else in my family to walk and play with my dog!
- ...then I will organise weekend trips where my dog can go for long walks and run around freely!
- ...then I will increase the amount of exercise that my dog gets in small steps!
- ...then I will think about the financial consequences of my dog becoming overweight!
- ...then I will remember that exercise makes my dog happy!
- ...then I will remind myself that walking the dog is a good way for me to exercise too!
- ...then I will remind myself that walking the dog is a good possibility for socialising and meeting new people!
- ...then I will take my dog for a short walk!
- ...then I will take my dog for a walk as soon as I get back from work!
- ...then I will remind myself that by not exercising my dog I am putting her health at risk!

YOUR COMMITMENT TO YOUR DOG'S DIET AND EXERCISE

Use the space below to write down three or more commitments you will make about feeding your dog. What? When? How will you be accurate? Puzzle feeders?

Use the space below to write down three or more commitments you will make about exercising your dog. More time? More intensity?

Print this page and stick it next to your dog's food!



To make sure that you don't lose track, write down your aims below:

Have you figured out how much weight your dog needs to lose? check if with your vet if you are not sure!

Do you know how much food will he need? how will you split it?

What type of exercise can your dog do or don't do? Do you need to check with your vet?

Please write out each of your plans below using the format If [situation], then I will [response]... and commit yourself to carrying them out. Don't forget that you can make up to three plans.

PLANNING

1

2

3

It is surprisingly easy to overestimate the amount of exercise a dog does, but there are ways to measure it objectively. For example, there are many wearable GPS devices that you can attach to your dog's collar to track the distance or steps s/he does every day. If your dog walks on the lead you can also use a step count app from your mobile phone and track how many steps you do when you walk your dog. If you are unsure of the amount and type of exercise that suits your dog, make sure to discuss it with your vet, vet nurse, or vet physiotherapist.

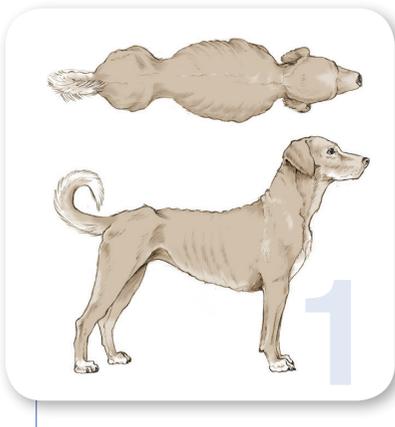
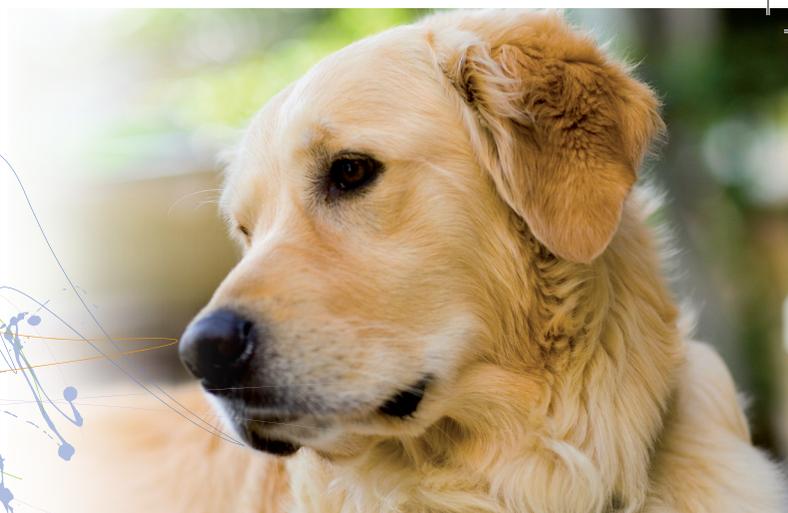
use the following table to set and measure objectively your dog's daily exercise.

- **Goal:** write down your daily goal to achieve by the end of the week. For example number of steps or km to cover every day, and the time spent off the lead in every walk. If your weekdays and weekend days are going to be different, you may want to write down the weekly total (e.i. total km to walk by the end of the week).
- **Weekdays:** number of walks a day and distance or duration per walk. For example, 1x1km + 2x5km walked on the lead.
- **Weekend days:** number of walks a day and distance/duration per walk during the weekends. For example, 2x30min + 1x 2h off the lead.

WEEK	GOAL	Weekdays	Weekend days
1			
2			
3			
4			
5			
6			



Body Condition Score



UNDER IDEAL

- 1 Ribs, lumbar vertebrae, pelvic bones and all bony prominences evident from a distance. No discernible body fat. Obvious loss of muscle mass.
- 2 Ribs, lumbar vertebrae and pelvic bones easily visible. No palpable fat. Some evidence of other bony prominences. Minimal loss of muscle mass.
- 3 Ribs easily palpated and may be visible with no palpable fat. Tops of lumbar vertebrae visible. Pelvic bones becoming prominent. Obvious waist and abdominal tuck.

IDEAL

- 4 Ribs easily palpable, with minimal fat covering. Waist easily noted, viewed from above. Abdominal tuck evident.
- 5 Ribs palpable without excess fat covering. Waist observed behind ribs when viewed from above. Abdomen tucked up when viewed from side.

OVER IDEAL

- 6 Ribs palpable with slight excess fat covering. Waist is discernible viewed from above but is not prominent. Abdominal tuck apparent.
- 7 Ribs palpable with difficulty; heavy fat cover. Noticeable fat deposits over lumbar area and base of tail. Waist absent or barely visible. Abdominal tuck may be present.
- 8 Ribs not palpable under very heavy fat cover, or palpable only with significant pressure. Heavy fat deposits over lumbar area and base of tail. Waist absent. No abdominal tuck. Obvious abdominal distention may be present.
- 9 Massive fat deposits over thorax, spine and base of tail. Waist and abdominal tuck absent. Fat deposits on neck and limbs. Obvious abdominal distention.

German A, et al. Comparison of a bioimpedance monitor with dual-energy x-ray absorptiometry for noninvasive estimation of percentage body fat in dogs. *AJVR* 2010;71:393-398.
 Jeusette I, et al. Effect of breed on body composition and comparison between various methods to estimate body composition in dogs. *Res Vet Sci* 2010;88:227-232.
 Kealy RD, et al. Effects of diet restriction on life span and age-related changes in dogs. *JAVMA* 2002;220:1315-1320.
 Laflamme DP. Development and validation of a body condition score system for dogs. *Canine Pract* 1997;22:10-15.



You are about to embark on an exciting journey to get your dog fit and healthy. We won't lie, it will be hard and you will be tempted to give up... always remember why you are doing it, your dog deserves it! So, for the next three months, use this page to keep track of his/her progression by taking **objective** measurements once a week and adding any comments that will help your future self manage your dog's weight:

- **Goals:** write your goal for the week. Ensure that you have discussed this plan with your vet or vet nurse!
- **Body Condition Score (BCS):** follow the instructions on page 19 to determine your dog's BCS. We suggest that the first time you do that you show it to your vet or vet nurse... most people tend to be a bit generous scoring their pet!
- **Body weight:** always use the same measurement unit (kg, pounds), use the same scales, and preferably do it at the same time of the day (for example, always when your dog is fasting) to avoid variations.
- **Waist measurements:** use always the same metrics and, again, do it at the same time of the day to avoid daily variations (e.g. waist will be bigger after eating). See picture to the right.



WEEK	GOAL	BCS	WEIGHT	WAIST	COMMENTS
1					
2					
3					
4					
5					
6					