



**Jerry Green
DOG RESCUE**

Charity No.1155042

**The Good
Nutrition
Guide**

by Jerry Green Dog Rescue

Thank you

for downloading our Good Nutrition Guide! In this pack we will briefly cover some topics surrounding canine nutrition with the aim to give you a better understanding of what your dog needs and how you can meet these needs. At the end of this pack you will find our Paw Pledge where you can promise to provide your dog with the best nutrition you can. We have also included a 25% off voucher for Vitalin dog food which they have kindly provided, with the promise that for every voucher redeemed, they will donate a meal to a Jerry Green rescue dog.

What is nutrition and why is it Important?

Nutrition relates to anything your dog consumes and how those nutrients are broken down and used by the body. It plays a huge role in the health and wellbeing of an animal and as a dog owner it is your responsibility to provide your dog with a good standard of nutrition to prevent health problems. Both obesity and malnutrition are issues which can arise from poor nutrition, both are preventable but can seriously compromise a dog's health and welfare and greatly reduce their life expectancy. The need for a suitable diet is one of the 'Five Needs' of animal welfare, set out in the Animal Welfare Act (2006). This means owners legally have a duty of care to provide a suitable diet for their dog and an intentional failure to provide this is actually a criminal offence.

Key Stones of good nutrition

The two main pillars of weight management are diet and exercise, the amount of energy consumed must match the energy used by your dog. However, this is not as simple as it seems, as every dog uses a different amount of energy. There are a number of factors that need to be considered when tailoring a diet to your dog.

Factors such as age, activity level, breed and reproductive state (neutered or not, pregnant or lactating) can all affect the energy and nutrient levels a dog will need. Some dogs also have food allergies and sensitivities, meaning they may have to avoid certain ingredients, potentially limiting their options.

Now there are so many different kinds of food on the market, it can be difficult to decide which is right for your dog. Is biscuit best or wet food? What about raw? A lot of this can come down to you and your dog's personal preference but the most important thing to be aware of is that you are feeding a complete, nutritionally balanced diet to your dog in an amount that will maintain their ideal weight.

How do you know if your dog is the right weight?

There are a number of different physical characteristics which act as indicators of your dogs general nutrition, the most important being weight. Weight is a very important indicator of your dogs standard of nutrition. Being aware if your dog is over or under weight will let you know if you are over or under feeding your dog but how do you tell? When you take your dog for their health check and vaccinations, your vet will weigh them and let you know if they weigh too much or too little. If you have access to scales at home you can weigh your dog and look up the healthy weight range for your dogs breed, sex and age.

Body Condition Scoring

What is it?

If you don't have access to scales to keep a record of weights then taking a body condition score is a good alternative, and it doesn't require any extra equipment! When body condition scoring, your dog will be assigned a number between 1 and 5, with 1 being under weight, 5 being over weight an 3 being an ideal weight. This isn't as reliable as a weight because it is a matter of opinion but our guide below can help you with what to look and feel for on your dog.

How do you do it?

Body condition scoring can be done visually and by palpation (feeling). To get the most true number you should use a combination of both visual assessment and palpation. You can score your dog while it is sitting or laying down but it is best if your dog is standing. Make sure your dog is relaxed and comfortable while you carry out the assessment. Whilst you are palpating be careful not to apply too much pressure, this shouldn't be uncomfortable for your dog and as long as they enjoy touch, they should find it quite enjoyable.

Considerations

There is no one-size fits all where dog breeds are concerned. Breeds come in a wide variety of body shapes and therefore, some do not quite match with some of the descriptions on our scoring sheet below so will require some adjustment. For example, ideal for a sighthound (such as greyhounds) is usually on the thinner side than a Labrador as they are bred to have a leaner physique. Other breeds, such as Huskies, have a very dense coat which makes seeing and feeling bone structures more difficult.

1

Very Thin



Hips, ribs, shoulders and spine very visible.
Stomach extremely tucked and concave from above.
No fat can be felt and there is obvious muscle loss.

2

Thin



Hips, ribs and spine visible.
Stomach noticeably tucked.
Very little fat can be felt.

3

Ideal



Hips, ribs and spine can be easily felt.
Waist is visible and stomach is slightly tucked.
Some fat can be felt under skin.

4

Overweight



Hips, ribs and spine can barely be felt.
No waist or tuck visible.
Hips are rounded from above.
Layer of fat on stomach and at base of tail.

5

Obese



Hips, ribs and spine cannot be felt.
Stomach may sag with no waist or tuck.
Fat layer on stomach, shoulders, hips and base of tail.

Food Sensitivities

Allergy or intolerance?

There are two kinds of negative reaction dogs can have to food, an allergy or an intolerance, but they are both very different. Allergies happen when the immune system sees an ingredient of the food as a threat to the body and launches a defensive response. Though food allergies can develop at any point in a dog's life they are actually quite rare, only affecting between 1-2% of dogs and accounting for only 10% of the allergies dogs experience. The most common food allergens dogs react to are proteins, such as chicken and beef, with allergies to wheat and corn less common.

Intolerances are not linked to the immune system, in these cases, your dog's digestive system may simply not be equipped to break the food down correctly. While they tend to be less serious, intolerances are much more common and less understood. Dogs can be intolerant to a host of different ingredients, however meat proteins, dairy, wheat, chemical preservatives and colourings are the most often seen. The good news is, dogs with allergies and intolerances can live a normal, happy life with the right dietary management.

Symptoms and diagnosis

As intolerances are very much digestive based the symptoms centre around the digestive system. You may see symptoms such as bloating, flatulence, stomach pain, vomiting and diarrhoea.

Allergies are caused by an immune reaction and so usually show in the form of skin irritation, ear inflammation or hair loss. You may see your dog scratching, licking and chewing specific areas or their whole body. This behaviour can lead to infections of the skin due to the damage caused. It is important to note that this is a symptom of many allergies, such as pollen and dust, and may not be related to diet, particularly if you are seeing a seasonal increase. Occasionally, digestive upset is also seen with allergies including diarrhoea.

If you notice any of these symptoms in your dog you should contact your vet for diagnosis. As the symptoms seen could be due to a variety of different conditions your vet will need to rule these out, so blood may be taken for testing to determine the cause. If it is found to be a food allergy or intolerance, the most reliable way to distinguish which ingredient or ingredients are triggering the response is to run an elimination trial. This involves feeding your dog only a specially formulated feed, recommended by your vet, and nothing else for 8-12 weeks. If your dog doesn't react during the trial, it will confirm they are reacting to something in their usual food. It is important not to feed your dog treats or table scraps during an elimination trial as these could cause your dog to have a reaction. After this period your vet may suggest you slowly introduce ingredients back into your dog's diet to determine which they react to.

Treatment

Long-term management of allergies and intolerances will be through a strict diet. Your dog may have to have a prescription, 'hypoallergenic' food containing hydrolysed proteins. These proteins have been chemically pre-broken down which prevents the immune system reacting and makes the proteins easier to digest for dogs with digestive intolerances. A limited ingredient or novel protein food may be suitable for some dogs. Limited ingredient foods have a very simple ingredient list making it easier to avoid your dogs triggers. As common triggers tend to be the proteins used in widely available foods, such as chicken and beef, novel protein foods contain protein sources which are not commonly used in the pet food industry such as venison or whitebait.

Decoding Dog Food

There is a vast array of commercial dog foods on the market all vying for your custom. To grab attention they may make claims using buzz words like 'organic' or 'fresh' to convince you that their food will be the best for your dog. Pet food formulations and labelling are governed by a number of laws and regulations but some of these terms may be a little confusing, while some buzz words have no legal definition so may not mean what you think. In this basic guide we will explain some terms used on pet food labelling to help you make a more informed choice for your dog.

Legally defined terms

Complete - legally defined as a nutritionally balanced feed that will provide your dog with all the nutrient they need and does not require extra supplementation with other dietary items, other than water.

Complementary - the opposite to complete, feeds which do not provide a full, nutritionally balanced diet and will require other items for example a mixer dry biscuit paired with a complementary wet food, to provide the full range and level of nutrient required by your dog.

Animal derivatives - animal matter, deemed fit for human consumption but often surplus to the food industry such as lungs, liver and tripe. If attention is drawn to a particular animal protein, its content will be listed as a percentage, for example 4% chicken, but this does not mean the food only contains 4% meat, just that the rest of the animal protein is from other sources.

Meat meal - The above animal by-products which have been dried, removing most of the moisture and fat.

Composition/ constituent terms

- **Crude ash/ Inorganic matter/ Incinerated residue** - One of these terms is legally required and refers to the minerals content of the feed.
- **Various sugars** - A group containing natural sugars found in fruits, vegetables and cereals such as sucrose, fructose and glucose.
- **Additives** - The ingredient group containing preservatives, flavourings, vitamins, colours and antioxidants. It is usually expressed as additives per kg and most additives in pet food are passed for use in human food.

Accepted but not legally defined terms

Reduced fat/ increased protein - If a constituent, such as protein or fat, is claimed to be increased or reduced then these constituents should be 15% more or less than the level in a standard product of the same range by the same brand.

Light - The energy content is 15% lower than a standard, similar food within the brand.

Fresh - The ingredient has not been subjected to freezing, drying, curing, hydrolysis or use of preservatives.

Organic - 95% of the ingredients, including flavourings, are non-GMO, organic, meaning cleaning and pest control methods are restricted.

Natural - If referring to the food as a whole, it must not contain any chemically synthesised ingredients, only naturally produced ingredients. If only specific ingredients are highlighted, these ingredients have not had anything added and have only been subjected to processes which maintain the natural composition of the ingredient, such as freezing, drying, pasteurising and smoking.

Which Type Is Best?

Unlike cats, dogs are omnivores, meaning they need more than just meat in their diet to provide all their essential nutrients. Carbohydrates are also important in their diet, these may be from vegetable or grain sources and are a great source of energy. There are so many foods on the market now that it can be quite overwhelming when trying to choose the best product for your dog. Here we will explore a few different food types, what they mean and their pros and cons.

Is There Really A Difference Between Puppy, Adult And Senior Foods?

Many foods are targeted at specific life stages or breed sizes but what's the difference? Lottie O'Rourke, RVN from South Lincs Vet Group has explained some of the differences for us here.

'Life stage nutrition means ensuring animals get the nutrition they need at every stage of their life. Puppies need more calories than adults, as well as higher vitamins, minerals, proteins and fats to ensure their bones develop properly, and they gain weight safely to grow well. Some puppies, such as Great Danes and other large breeds, need a large breed specific puppy food until they reach their adult body size. For comparison, a small dog may reach this between 9 and 12 months, whereas large breeds may not reach in until 18 to 24 months old!

Once they reach adulthood, dogs and cats move onto an adult diet. This has the correct maintenance balance of nutrients for their needs. Neutered adult diets are also available; neutered animals are more prone to weight gain, so neutered food has more fibre in it to keep pets feeling full, rather than a high fat content. Senior life stage food tends also to have lower fat content, due to older animals being less active.'

Wet or Dry?

The majority of commercially available dog foods are either dry, in the form of small biscuits, or wet, such as meaty chunks in jelly or trays of blended paste. The ingredients in both of these types of food are mechanically processed with the main difference usually the higher water content in wet food. If you are concerned about your dog's water intake, wet food can be a good option, however a similar effect can be achieved by soaking their dry food with a little water. Dental health should also be considered when choosing between wet and dry foods. Crunchy biscuits can be good for removing plaque from your dogs teeth, equally, if your dog is older and has dental issues a wet food is nice and soft to chew.

What About Raw?

Raw feeding is becoming increasingly popular, particularly for dogs with food sensitivities. When done correctly, raw diets are able to provide a complete, balanced diet however, it is much more difficult to do so, especially if you are feeding a homemade raw diet. Here are a few factors to consider when raw feeding, written by Michaela Armstrong of Vitalin Pet Food.

'Raw feeding is another option that is growing in popularity. A few things to note if you are considering raw feeding is storage and preparation. Do you have a lot of freezer space to store the meat correctly? Do you have a separate area for preparing the meals away from your own kitchen and food? Cross contamination is easily done with raw feeding so keep areas clean and sanitary. Always choose a reputable raw feed supplier or butcher and check with your vet on what else your dog may need eg Vegetables, pulses, carbohydrates to keep its diet well balanced.'

Tip: Any changes to your dogs diet should be done gradually to avoid stomach upset.

Feeding Your Dog The Right Amount

Most commercial dog foods have a feeding guide included in the labelling as it is a legal requirement to provide directions for use. It is however, important to remember that these are guidelines based on an average, a lot of dogs may not fall within this average as they are of differing ages, reproductive statuses and activity levels. The best way to work out the amount to feed your dog is to start by giving the guide amount, carefully monitor your dog's body condition and or weight and adjust the amount of food fed accordingly.

Dog Weight	Amount (Grams)
5-10kg	A grams - B grams
10-20kg	C grams - D grams
20-40kg	E grams - F grams

Feeding guidelines are usually given by weight groups so if your dog is over or under weight, ensure you are feeding them to their ideal weight, not what they currently are. Your vet can let you know what your dog's ideal weight should be. This amount is the suggested **daily** amount. If you are feeding multiple meals to your dog, be sure you are splitting this daily amount between the feeds and not feeding the recommended amount for each meal. Bear in mind that due to the higher moisture content in wet foods (80%) compared to dry biscuits (10%), a larger amount of wet food will be required to provide the right nutrition as the majority of the product weight is water.

You can check the feeding guidelines in relation to your dog by carrying out your own calculations using the nutritional information on the label of your dog food. By calculating your dogs daily energy requirement (DER) and the metabolizable energy (ME) content of the food kcal/kg you can then work out the amount of that food your dog will require to meet its daily energy requirement.

To work out your dogs DER you will need their weight (or goal weight) and an estimate of how much energy they burn daily. Below you can find the Pet Food Manufacturing Association's (PFMA) estimates of energy used by adult dogs at different activity level.

Activity Level	Kcal ME/kg ^{0.75}
Low activity < 1 hrs/ day (e.g. walking on a lead)	95
Moderate activity 1-3 hrs/ day low impact activity	110
Moderate activity 1-3 hrs/ day high impact activity	125
High activity 3-6 hrs/ day (working dogs e.g. sheep dogs)	150-175
High activity under extreme conditions racing sled dogs 168km in extreme cold	860-1240

Using the above table you can follow this equation to calculate your dog's DER:

$$\text{Chosen average DER for activity level} \times \text{Body weight}^{0.75} = \text{Individual dogs DER}$$

Feeding Your Dog The Right Amount

E.g If an adult dog weighed 12kg and was doing 1-3 hrs of moderate activity a day the calculation would be:

$$125 \times 12^{0.75} = 806 \text{ Kcal ME per day}$$

To work out the ME content of your dogs food you will need to check the composition information on the label it will look similar to the one shown below.

Analytical constituents:

Crude protein 25%, crude fats and oils 12%, crude fibre 3%, crude ash 9%

From this information you will need the % protein, % fats and as it is not given will need to work out the % carbohydrate (NFE). To work this out you will need to use this calculation.

$$100 - (\% \text{ protein} + \% \text{ fat} + \% \text{ fibre} + \% \text{ moisture} + \% \text{ ash}) = \% \text{ Carbohydrate}$$

When % moisture isn't given, it is usually 10% for dry food and 85% for wet food. So for the example above, the % carbohydrate would be:

$$100 - (25 + 12 + 3 + 10 + 9) = 41$$

Then you will need to calculate the ME for each of these percentages by multiplying them by the estimated ME given by the PFMA as below.

$$\text{Fat} - 8.5, \text{Protein} - 3.5, \text{Carbohydrate} - 3.5$$

In our example this would mean our ME values would be:

$$\text{ME Fat} - 8.5 \times 12 = 102, \text{ME Protein} - 3.5 \times 25 = 87.5, \text{ME Carbohydrates} - 41 \times 3.5 = 143.5$$

Using these ME values, you can work out the ME of the food with the equation below.

$$(\text{ME Fat} + \text{ME Protein} + \text{ME Carbohydrate}) \times 10 = \text{Food ME Kcal/kg}$$

Using our example this would be:

$$(102 + 87.5 + 143.5) \times 10 = 3330 \text{ Kcal/kg}$$

Now use the energy content of your dog's food you can calculate your dog's suggested daily amount using this formula:

$$\frac{(\text{DER of individual dog} \times 1000)}{\text{ME content of food (Kcal/kg)}} = \text{Suggested daily amount (g)}$$

Continuing with our example this would be:

$$\frac{(806 \times 1000)}{3330} = 242\text{g}$$

So the estimated amount for our dog would be 242g

You can check this against the feeding guidelines on the dog food labelling to see if this amount fits in the expected weight range for your dog, e.g. 242g should fit in the 10-20kg body weight range for our dog as it is 12kg. This amount would still need to be trialled to ensure it is having the desired effect on your dog, working towards or maintaining their ideal weight. It can be useful to keep a food diary of everything you feed your dog for a few days. This might reveal that their weight is because of the extra treats or table scraps your dog is getting.

How Many Treats Is Too Many?

The 10% Rule

We all love to spoil our dogs and we give them treats for many reasons. It may be to help them learn, because they've done as we asked, to keep them occupied and simply, because we love them. But as unused energy is turned into fat, too many treats can leave your dog carrying a little more timber than is good for them. Filling them up with lots of treats may also make your dog less interested in their normal, complete food, meaning they may lose out on essential nutrients which aren't provided in those treats. As we know, a healthy life is all about balance! We suggest following the 10% rule; treats should not make up more than 10% of your dogs daily food intake and should be compensated for by reducing their main meal by 10%. That's not to say you should only praise your dog 10% of the time. Try switching up how you reward your dog, praise them with cuddles or play and save the treats for training sessions and special occasions.

Table Scraps And Tid-Bits

Many people show their love by sharing their meal with their dogs. Giving dogs table scraps and tid-bits can be very dangerous for a number of reasons. Many human foods are poisonous to dogs and can land them in the vet! Chocolate contains theobromine which dogs are unable to break down well and the tartaric acid in grapes can lead to kidney damage. Even if the foods are not directly poisonous, our foods contain much higher levels of some nutrients than dog foods. For example, food made for humans either contains a lot of salt or we like to add our own. While dogs do need sodium in their diet, the amount they need is miniscule, so avoid sharing your salty snacks with them. Even if the scraps are dog safe, if they are not part of the normal diet they can easily upset your dog's stomach because they are not used to it.

You may be making your dog a fussy eater. If they have learnt to expect table scraps on their dinner, they may refuse to eat it without as it is not as appealing. You will need to gradually reduce the amount of scraps on their dinner until they are eating it without. Feeding from the table may also encourage begging or food stealing behaviours.

Tasty Treats

Each dog will have its own preferences for treats. Most dogs will happily eat a wide range of commercially produced treats but you will have to work out if they have a treat they find particularly high value. Some may even prefer their normal dog food as a reward. In that case you can simply withhold 10% of your dogs daily food amount to use as treats throughout the day. You can use treats which are not commercially produced dog treats, such as cheese or hotdogs, but make sure you use these in small portions! You could even use fruit and vegetables like carrot, blueberries or broccoli, but be sure to check it is safe for dogs before feeding and introduce it slowly to your dog's diet to avoid stomach upset.

Tip: Using food enrichment, such as snuffle mats or puzzle feeders, is a great way to make your dog work for their treats, keeping them occupied and making the treats last longer.

Best Ways To Burn Energy

A key factor in weight management is exercise and there are many different ways to exercise your dog. The best option for your dog may be one or a combination of physical activities depending on your dog's age, size and breed. Exercising your dog is also a great way to increase your activity level and spend time in nature; both of which can improve your mental and physical wellbeing! But try not to exercise your dog too soon before or after eating, we suggest giving an hour, and make sure your dog is up to date with its vaccinations when taking them out and about.

Types of Exercise

When we think about exercising our dogs, most of us will think of taking them for a walk. Walking is a nice, gentle form of exercise, you can build your dog's fitness level by gradually increasing the length of the walks however, if it is a choice between a single hour long walk or two half hour walks, shorter more regular walks are a better option. Dogs should ideally have a minimum of two walks a day. These walks also provide mental stimulation by exposing your dog to new sights, sounds and smells while they are out and about.

Play is likely a well established part of your dog's day, but it is also a great way to keep them active. This may be playing catch, tug or anything that gets your dog moving and using their muscles. Short, frequent bursts of play can be really effective in improving your dog's fitness.

If you find a suitable beach, river or lake, swimming is a good, low impact, form of exercise for your dog. Make sure you are aware of currents, algal blooms and be sure never to force your dog to swim or you could be putting them at risk.

There are many classes and clubs you and your dog can join to increase their activity. Agility classes are widely available and an excellent way to improve your dog's (and your) fitness. For the ball obsessed pooches, flyball clubs are also common place. Canicross, trail running with your dog, is becoming increasingly popular amongst owners. Your local group can help you and your canine companion get started, it's a great way for you both to work on your fitness together.

Breeds

Although any dog's fitness can be built up, some breeds have a higher baseline energy level because of the job they were bred to do. For example, sled dog breeds such as Huskies and Malamutes are bred to have the stamina to pull weights over long distances so they require more exercise. While dogs with smaller legs or shorter noses may tire more easily so adjust the length and intensity of exercise to suit.

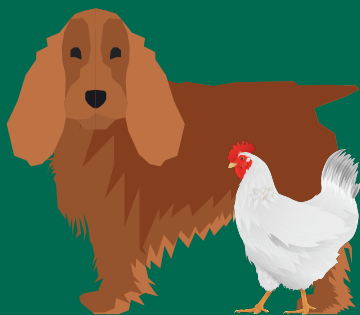
Puppies

Puppies are full of energy and mischief but they tire out quickly; short bursts of gentle play are best to keep your pup occupied and strong. Once fully vaccinated, walks are a great way to exercise your youngster, along with slowly introducing them to the sights and sounds of the wider world. As most puppies are still growing until the age of 12-18 months (depending on breed) it is important to not over exercise your puppy. Exercise which is intense or high impact, like running and jumping, can cause damage to joint as their bones are still growing.

Senior Dogs

Care should be taken with older dogs too as they may be suffering with arthritis, impaired vision or other issues which could impact their mobility. But this doesn't mean you shouldn't exercise your senior dog! Keeping them active will maintain their strength and keep them a healthy weight which will relieve pressure on aching joints. Gentle exercise is best for older dogs, steady walks (in familiar places if they have sensory issues), gentle play and low impact activity such as swimming will keep them in top condition to make sure they remain healthy for as long as possible. Think short, steady and frequent!

ENRICHMENT RECIPE



"Cocker" Doodle Doo



YOU WILL NEED

1 or 2 medium eggs

A small handful of grated
cheese (optional)

Cooked boneless, skinless
chicken breast

A bowl and spoon

INSTRUCTIONS

Make scrambled eggs by your preferred method, we would suggest avoiding too much milk if you usually add this!

Mix a handful of grated cheese in with the cooked scrambled egg.

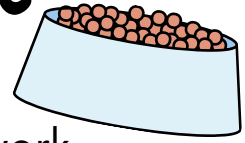
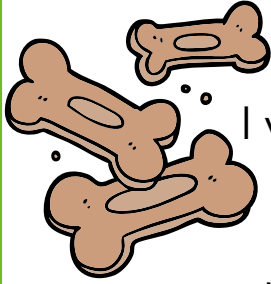
Cut the chicken breast into chunks suitable for your size dog, then mix in with the other ingredients.

Spoon the mix into a fillable toy until it is full then chill and serve!

We recommend to always consult your vet before introducing your dog to new foods. All dogs are individuals and some may be more sensitive to certain foods than others. The portions suggested for each recipe are loose guidelines. It is important to consider the size of the dog and their current weight compared to their ideal weight when portioning their enrichment. Always reduce their meals when they have had extra treats and enrichment throughout the day.

You can find more enrichment recipes in our Enrichment Cookbook which can be bought on our website!

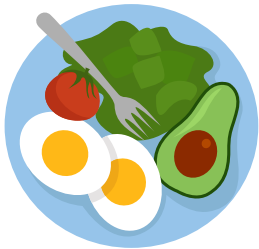
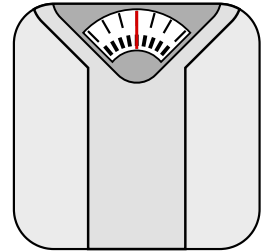
Pawsitive Nutrition Pledge



I will monitor my dogs weight and try to work towards or maintain an ideal weight.

I will feed a diet suited to my dog's needs.

I will make sure treats are less than 10% of my dog's daily intake.



I will not feed my dog from my plate.

I will give my dog a suitable amount of exercise.

I pledge to use these resources to ensure has the best nutrition to allow us to live a long, happy life together.



Supporters



Jerry Green Dog Rescue has worked together with Vitalin Pet Food and South Lincs Vet Group to bring you this campaign, with the aim to educate dog owners on the importance of providing their dog a suitable diet.

Vitalin voucher