

Why do I need to body condition score my rabbit?

By vet, **Brigitte Reusch**

Body condition scoring is a technique used in many animals and humans to assess if they are in good body condition, too thin or obese. Obesity is a common problem in all companion animals and unfortunately it is also seen in rabbits - one in four rabbits seen at the Rabbit Clinic, Royal (Dick) School of Veterinary Studies, University of Edinburgh, are obese.

The theme for 2010 National Rabbit Awareness Week on the 26th April - 2nd May is obesity. Many vet practices around the UK will be offering free health checks and carrying out body condition scoring. Owners can also learn how to do this technique.

It's difficult to visually assess the body condition of a rabbit, particularly when the coat hair is long (most breeds). A long coat can disguise the actual appearance of the pelvis, ribs and spine while a short coat (eg. Rex breeds) can make a rabbit's appearance more irregular and highlight these areas. The only reliable method of assessing body condition is by palpation (feeling) of the ribs, pelvis and spine. Body weight should also be recorded, as body weight should be monitored to assess its overall trend, to see if the rabbit is gaining or losing weight.



Sore hocks may occur in overweight rabbits

There is a wide variation in the body weight of the different rabbits breeds commonly kept as pets, from the average 1kg Netherland dwarf to the 8kg Continental Giant rabbit. Then there are the large group of cross breed rabbits which represent the majority of the pet population. Body weight tables are therefore only a guide, and will not help to assess if the individual is obese. And often a rabbit is not necessarily the breed it is supposed to be!

Body condition scoring is used to assess if an individual is obese and the author has devised a technique for rabbits, adapted from the method used in cats, dogs and farm animals. In these animals the ribs, hips and spine are palpated and scored. However, the author has conducted a trial to find which area of the body shows changes associated with fat deposition in rabbits - the area found to be the easiest and most reliable to assess was the ribs. The spine and hips only changed with extremely thin or extremely fat rabbits.

The person examining the rabbit should feel its ribs at the area just behind its elbows. The amount of pressure required to feel the ribs will be increased if the rabbit is fat. Also, the ribs' edges will feel sharp and pointed in a thin or emaciated rabbit. In comparison it may be difficult to feel the rib edges in a fat rabbit. Their ribs are easy to assess for small changes in subcutaneous body fat. The table (below) shows the grades that are given to describe the rabbit's body condition.

Body condition scoring for rabbits

Score 1 - Emaciated	Score 2 - Lean	Score 3 - Ideal	Score 4 - Fat	Score 5 - Obese
<ul style="list-style-type: none"> • Pelvis and ribs are very easily palpated and very sharp • Ribs feel like a pocket full of rulers! • Concave rump area 	<ul style="list-style-type: none"> • Pelvis and ribs easily palpated and feel sharp • Rump area is flat 	<ul style="list-style-type: none"> • Pelvis and ribs easily palpated but rounded edges • Ribs feel like a pocket full of pens! • Rump area is flat 	<ul style="list-style-type: none"> • Firm palpation required to palpate ribs. • Rump round 	<ul style="list-style-type: none"> • Hard to palpate ribs. • Ribs can't be felt! • Rump very convex



Brigitte Reusch weighing a rabbit using accurate scales (above)

Take your rabbit to weight clinics at your vets'

Every month, owners should check their rabbit's body condition score. If it is too high or too low the rabbit should be taken to the vet for a physical examination to check that there is no medical problem. If the rabbit is otherwise found to be healthy it should start to attend regular weight clinics. Many vet practices are happy to offer this service free of charge. The rabbit's body condition score and body weight should also be measured and recorded, to allow goals to be set and worked towards. The rabbit should then be brought to the weight clinic every two to four weeks, with the aim of a weight loss of 0.5 to 1.5% of initial body weight per week. Obese rabbits are at risk of fatty liver disease so gradual weight loss is essential.

What else should be checked at the weight clinic?

The rabbit's feet from toe to hock or wrist must be checked thoroughly, as severe pododermatitis (pressure sores) can easily be hidden under the fur. The perineum region (near the anus) should be clean in a normal rabbit. The fur should also be checked for signs of urine or faecal staining.

How to put a rabbit on a diet

The rabbit's current diet should be recorded in detail, including all rabbit and human treats. The daily routine and amount of exercise should also be recorded. All rabbits should be fed a mainly hay diet (at least 70 - 80% of their diet), which means the rabbit should eat a pile of hay equal to the body size as a minimum a day. Other forms of grass products including dried grass may also be fed. Grass or hay is naturally low in sugar and starch and high in fibre which is essential for the digestive system and teeth. As hay is the main dietary item, only good quality hay that is sweet-smelling, not dusty or mouldy, should be offered. A small amount of commercial rabbit food may also be fed - a maximum of one tablespoon per rabbit per day for all small and medium breed rabbits, while a maximum of two tablespoons per rabbit per day should be fed to giant breed rabbits. This may need to be reduced or completely removed from the diet if the rabbit fails to lose weight.

The commercial rabbit food is fed as a vitamin and mineral supplement, and therefore if the hay or grass is of good quality, the rabbit doesn't need any further supplementation. Excessive feeding of commercial rabbit food is a very common

cause of obesity, as is feeding human food including chocolate biscuits.

As rabbits have more than 21 taste-buds they enjoy variety in their diet. A large handful of leafy and fibrous vegetables and weeds, fed morning and evening, will provide good environmental enrichment and be a good source of calcium and vitamins.

Treat foods are still allowed while on a diet. Good treat foods for rabbits include: a few sprigs of herbs and edible flowers such as roses. During the diet all root vegetables and fruit should be avoided. Once the rabbit has achieved body condition score 3 a small amount of fruit (one-eighth of an apple or pear or four berries) or a small amount of root vegetables (one-quarter of a carrot or turnip, or one-eighth of a swede). Fresh drinking water must always be available. To check that the maintenance diet is not too high in calories for the rabbit and its current lifestyle, further weight and body condition scoring will be required. Once the rabbit has slimmed down to body condition score 3, its weight can be recorded, and this is from then on considered its optimum body weight.

Exercise

Increasing the opportunities and encouraging the rabbit to exercise is a very important part of a weight loss plan for rabbits. Rabbits are naturally most active early in the morning and at dusk – therefore allowing them to run around a rabbit-proofed room or house or supervised secure garden, for at least 30 minutes twice daily, is recommended.

Hiding tasty treats (including their portion of commercial rabbit food) in a box of hay or a food ball will encourage their inquisitive nature. Hand feeding treats in response to the rabbit following the owner is also a good

B Reusch



A male rabbit with a dewlap - which he should not have (above)

way to encourage a lazy rabbit to exercise. A gradual increase in exercise is recommended for older rabbits (over six years for small and medium breeds, over four years in giant breeds) as arthritis is common.

Regular weight clinics for rabbits are recommended to help monitor and prevent problems associated with obesity and assess if further diet adjustments are required. At the Rabbit Clinic at the Royal (Dick) Vet School, Edinburgh we have a free of charge weight clinic (www.rabbitclinic.com). Check with your vet to see if they have a similar clinic.

Vegetables		Weeds	Fruit	Herbs	Flowers	Trees
Beetroot leaves (feed in small amount)	Cauliflower leaves and white heads	Bramble	Tomatoes	Basil	Carnations	Branches and leaves of apple or hazel trees.
Beetroot (don't be alarmed if the urine changes colour to purple)	Cucumber	Chickweed	Apple	Bay leaves	Geraniums	
Broccoli	Green beans	Clover	Pear	Chamomile	Nasturtiums	
Brussel sprouts	Kale (fed in moderation as high in calcium and oxalic acid)	Coltsfoot	Black berries	Chives	Roses	
Cabbages	Peppers	Dandelion	Blue berries	Lavender		
Carrot tops (feed in moderation as very high in calcium)	Rocket salad	Goosegrass	Raspberries	Rosemary		
Celery stalks and leaves	Salad family (fed in moderation) (except Iceburg)	Mayweed		Sage		
	Spinach	Plantain		Thyme		
	Spring greens	Shepherd's purse				
	Water cress					