THE 'FIBREVORES' GUIDE FROM BURGESS PET CARE

Essential facts for rabbits, guinea pigs & chinchillas.

WHAT IS A 'FIBREVORE'?

You'll be familiar with the words carnivore (a meat eater), omnivore (an eater of meat and plants) and herbivore (animals with a plant-based diet).

Rabbits, guinea pigs and chinchillas are all herbivores. But by far the most important element of their diet, the one thing they absolutely must have to stay healthy and happy is fibre.

Burgess Excel call them 'fibrevores' - and this guide will tell you exactly why fibre is so vital to them.

THE 'FIBREVORE' DIET

The need for fibre stems from the foraging habits of 'fibrevores' in the wild, the behaviour that has adapted over time to let them survive and thrive in their natural habitat.

In the natural world, rabbits, guinea pigs and chinchillas all live off grass, plants, twigs and bark. None of these is rich in nutrients, but they're all high in fibre.

To get what nutrients there are, the animals' digestive systems have to break these foods down into simple compounds that the body can absorb.

BIG vs SMALL

A cow survives on the same principle, but by a different method. Its enormous stomach capacity acts as a giant fermentation vat in which bacteria break down the plant material to allow nutrients to be extracted. The bigger the 'vat', the more efficient the process.

Rabbits, guinea pigs and chinchillas, however, are small prey animals with many predators and survival means being of a size and build that allows them to run away - fast. That rules out the large stomach and digestive system of an animal like the cow.

They have developed an alternative system instead: one where the fibre is passed through not once but twice. This allows the animals to get all the nutrients they need. Their bodies and behaviour have adapted to let them eat continuously while staying alert and ready to hide or run whenever danger threatens.

DOUBLE DIGESTION

The 'fibrevore' ferments fibre to get its nutrients just as the cow does. But without the cow's big-storage stomach capacity, it has to operate a different system. It's one that is based on the little-and-often eating of sufficient fibre for nutrition - but since what goes in must come out, keeping the whole digestive system moving is absolutely vital.

That's why ‘fibrevores' need two types of fibre: digestible and indigestible. The first gives them essential nutrients and the second keeps the digestive system moving along.

But ‘fibrevores' can't get enough nutrition from fibre as it first passes through the gut. So they pass it through the gut again.

Uniquely, ‘fibrevores' are able to separate these two types of fibre from each other in order to process them efficiently.

Indigestible fibre is moved through their digestive system and excreted as separate, round, hard droppings. This type of fibre acts to keep the digestive system moving and stimulate appetite. Healthy droppings are a sign of a healthy ‘fibrevore' - if they are not hard and round, but are tear-shaped or soft, this could be a sign of poor diet or an unhealthy digestive system.

Digestible fibre is moved up into an organ called the caecum - this is like a giant appendix and is where the fermentation occurs. Bacteria in the caecum ferment the fibre which then emerges in the form of clumps of sticky droppings - called caecotrophs.

‘Fibrevores' eat the caecotrophs and their systems extract essential nutrition as the digestible fibre passes through for the second time. These sticky droppings are mostly re-ingested at night. This again is behaviour that has evolved in the wild where ‘fibrevores' eat little and often when exposed to predators and re-process caecotrophs when safely tucked away at night in their burrow.

BENEFICIAL FIBRE

Having the correct ratio of digestible and indigestible fibre is essential for healthy, happy rabbits, guinea pigs and chinchillas. Burgess Excel call the correct ratio ‘Beneficial Fibre'.

Digestible fibre is very short - less than 0.3-0.5mm after being eaten - and as well as providing essential nutrition, helps to maintain the right level of bacteria in the gut. It is the bacteria in the caecum that ferment the fibre and if levels of bacteria change the fermentation process breaks down and diarrhoea can occur - this can lead to an illness called sticky bottom which is extremely painful and can be fatal. Too little digestible fibre in the diet leads to malnutrition.

Indigestible fibre is longer. In addition to creating the vital passage of food through the gut, it plays an essential role in keeping teeth ground down and helps to stimulate the

appetite. Too little indigestible fibre means the digestive system stops - and that can be fatal. Plus overgrown teeth can lead to painful injuries and eventually death.

Beneficial Fibre is therefore essential for the digestive, dental and emotional health of ‘fibrevores'.

For digestion, it keeps the gut mobile, maintains the right balance of gut bacteria, helps to prevent abnormal droppings and helps to stimulate the appetite.

For the teeth, which grow continuously, it encourages greater use and helps with optimal dental wear.

And for emotional health, fibre (in the form of hay and dried grass) encourages natural foraging behaviour and prevents boredom while in the form of healthy snacks it provides emotional enrichment and can strengthen the bond between pet and owner.

On packs of pet food, EU regulations only demand that a measure of ‘crude fibre' be listed. But that term only covers indigestible fibre, not the total Beneficial Fibre content. A crucial element of information on most ‘fibrevore' food packaging is therefore missing - when judging the best possible food to feed your pet this must be taken into consideration. Burgess Excel state Beneficial Fibre levels on their food in order to give all the facts.

THE WRONG FOOD CAN BE FATAL

Because 'fibrevores' have evolved to need such a specific diet, it is every pet owner's responsibility to makes sure that the animals in their care are fed correctly. Not doing so can lead to potentially fatal health problems, so the feeding of Beneficial Fibre is crucial.

That's why muesli-style foods are such a problem.

‘Fibrevores' can become fussy eaters, and will eat sweet foods as an easy way to get a glucose fix. As a result, they can pick out unhealthy elements of muesli-style foods and leave the rest. This is called selective feeding and will inevitably lead to an imbalanced diet, lacking in calcium, phosphorus and vitamin D. Above all, this behaviour can lead to a lack of fibre with potentially fatal consequences. When taken with the fact that muesli-style foods are commonly low in fibre to begin with, the problem is compounded.

And finally, the unhealthy ingredients in muesli-style foods are high in sugar and starch. These are difficult for ‘fibrevores' to digest and can lead to health problems and obesity. For example, rabbits eat caecotrophs directly from their bottoms -obese rabbits often cannot reach the caecotrophs which can lead to malnutrition and death.

There is no such thing as a ‘complete' food for ‘fibrevores' - that is, no single food that can be fed to the exclusion of every other. There are, however complementary foods -

like those developed by Burgess Excel - which when fed in combination with fresh greens and water, go to make up a complete dietary range.

Any ‘fibrevore' food packaging that claims to be ‘complete' is misleading, so please check it carefully before you buy.

GUARANTEED GOOD FEEDING

We worked with one of the world's leading small-animal vets to develop Burgess Excel and The Excel Feeding Plan and we continue to work with leaders in the fields of small animal behaviour and health. That's why we know so much about small animal health and nutrition and why experts, from vets to rescue centres to animal behaviourists, recommend and trust Burgess Excel.

We have established the fact that no one type of food on its own, whether it's hay, nugget or muesli can provide a complete and balanced diet for a 'fibrevore'. No one food on its own can possibly provide enough of the essential nutrients and fibre that rabbits, guinea pigs and chinchillas need.

To overcome this problem, Burgess Excel is the first to offer a complete feeding plan which provides all the vital fibre, nutrients, vitamins and minerals that 'fibrevores' need to stay healthy and emotionally enriched.

DENTAL HEALTH

The teeth of 'fibrevores' grow continuously - as much as 10-12cm every year in rabbits. Allowing teeth to overgrow can result in many health problems that are potentially fatal.

DIGESTIVE HEALTH

The digestive systems of ‘Fibrevores' need to be constantly moving - this is to ensure that bacteria levels in the caecum are maintained, but also to keep the whole process healthy and stimulate appetite.

EMOTIONAL HEALTH

In the wild, 'fibrevores' occupy their time by foraging for food, an activity which provides them with both physical and mental exercise. When they're kept as pets, all their food is provided for them, and foraging stops.

But foraging is a natural, instinctive behaviour of 'fibrevores' and it's important to let your pets carry on doing it. Those that don't can quickly become bored and develop behavioural problems such as aggression and fur-plucking.

Providing foods like Excel Nature Snacks and hiding them around their cage helps encourage foraging activity and maintains emotional health.

Additionally ‘fibrevores' chew many times per minute - rabbits on average 120 times. Providing food like Excel Herbage, Excel Tasty Nuggets and Excel Nature Snacks keeps 'fibrevores' gnawing and busy. It allows them to display their natural behaviour and helps maintain their emotional balance