



DRY PET FOODS

FACT SHEET 7

INTRODUCTION

The popularity of dry pet foods has grown considerably over the last few years. The main reasons for this has been convenience, ease of use and less waste compared to tinned products. In addition, a great many dogs and cats that cannot tolerate tinned foods are able to digest dry foods without any problems. Consequently, the variety of dry products has also increased, with specific foods now related to lifestyle, life stages and to health issues.

HOW DRY FOODS ARE PRESERVED

Tinned pet foods are preserved by cooking and then protected by the metal can from contaminants such as bacteria. In contrast, dry foods have a very low moisture content and are generally resistant to the effects of bacteria and fungi. They can, therefore, be packaged in sacks, which is much more convenient.

Unfortunately, the fats in dry pet foods must be protected from becoming oxidised and going rancid. A large number of manufacturers will use chemical preservatives to do this, although fats can be preserved adequately by natural means. Some manufacturers will also add colouring and flavouring agents, which are added purely for cosmetic reasons.

THE EFFECTS OF ADDITIVES

There is growing concern over the long-term use of additives in pet foods, particularly anti-oxidants (used as preservatives) and, to a lesser extent, colourings and flavourings.

The most frequently used chemical anti-oxidants include:

- BHT (butylated hydroxytoluene)
- BHA (butylated hydroxyanisole)
- Ethoxyquin

Most concern has been expressed over Ethoxyquin in recent years. It is used because it has superior anti-oxidant properties, high stability and is reputed to be safe. However, its toxicity rating is classed as 3 or "moderately toxic" (in a range of 1-6)¹ and is readily absorbed into the body and then excreted in the urine and faeces, with residual amounts left in the liver and fatty tissues.

¹ Gosein RE Smith RP and Hodge HE (1984), *Clinical toxicology of Commercial Products* 5th ed, pp 2 406, Baltimore Williams and Watkins.

Reports from the United States suggest that Ethoxyquin might be related to a number of health problems in dogs². These include liver cancer, skin allergies, autoimmune disease, thyroid problems and reproductive and birth problems.

Studies by the Federal Drugs Administration (FDA) in the States have shown that when levels of Ethoxyquin are greater than 75 parts per million (ppm), changes in the liver can occur as well as the development of spots on the liver³.

As a result of investigations carried out on the possible effects of Ethoxyquin, the levels in dog food have been reduced.

It appears that pure-bred dogs may be most susceptible to the effects of chemical anti-oxidants fed daily over long periods of time. The smaller breeds are at most risk, as they ingest proportionally more preservative in relation to their body size. Suspicions are hard to prove, but many would claim that the increasing incidence of chronic ill-health in dogs over the last 15 years or so is largely due to the addition of chemicals to processed pet foods. It would be reasonable to assume that the same may well be true of cats.

ADDITIVE-FREE DRY FOODS

Understanding the need for healthy, additive-free dry foods, Denes produce the following recipes, which also have the benefit of added herbs:

For dogs:

Puppy-Growth Rich in Chicken & Rice

Containing:

- Fenugreek to help where the digestion is disturbed
- Slippery Elm to soothe the digestion
- Dill to aid digestion

Denes OPTIONS Sensitive Digestion Rich in Lamb & Rice

Denes OPTIONS Healthy Skin Rich in Chicken with Turkey & Rice

Both containing:

- Alfalfa to help assimilation of nutrients
- Cleavers to help the lymphatic system
- Fenugreek to help where the digestion is disturbed
- Marshmallow root to soothe the digestion
- Celery seed to cleanse out toxins

For cats:

Denes OPTIONS Healthy Skin Rich in Chicken & Turkey With Rice

Denes OPTIONS Dental Care With Fresh Salmon & Rice

Both containing:

- Cleavers to help the lymphatic system
- Alfalfa to help in the assimilation of nutrients

² Pitcairn, RH (1995), *Natural Health for Dogs & Cats*, pp17-21, Rodale Press, Inc.

³ Johnson, RA, (1998), *Controversies in Pet Nutrition. Petfood Forum Proceedings*, 1998.

- Couchgrass to support the urinary tract
- Parsley which acts as a blood tonic
- Marshmallow root to soothe the digestion

The natural anti-oxidant properties of vitamin E and vitamin C are used to preserve the products and prevent the oxidation of fats, rather than chemical anti-oxidants. Each of the recipes is also free from artificial colourings and flavourings.

For further information on our food ranges, please ask for our product guides.

Other Denes fact sheets to read:

- Additives and Pet Food

If you have any queries concerning your pet's health or feeding problems, you can contact us for free pet care advice by:

- Visiting our website www.denes.com
- Emailing us at info@denes.com
- Calling us on **01273 325364** Mon-Fri, 9am – 12Noon
- Writing to us at:
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