

# The dilemma and benefit of functional treats

**By: Dr George Collings** 

Keeping our pets healthy is a growing concern of most pet owners. In some countries, the percentages of pets that are overweight are consistent with the weight of their human owners.

# Top ten health problems

A recent veterinary insurance review reports the top ten health problems for dogs and cats. This included issues for dogs that would have some potential nutritional solutions: skin allergies (#2), gastritis/vomiting (#4), enteritis/diarrhoea (#5) and osteoarthritis (#8). In cats, lower urinary tract disease was #1 followed by gastritis/stomach upsets (#2), enteritis/diarrhoea (#4) and skin allergies (#6). Each of these issues in cats also has nutritional solutions. The interesting contrast with this market research data is found in US pet supplements sales statistics which shows 45% of the sales are joint health solutions.

As owners search for nutritional and health alternatives to pharmaceuticals/drugs for themselves, the same search carries over to their pets. These nutritional solutions are incorporated into humanized products resulting in 'functional' foods and treats.

## Supplements, treats and rewards

We give 'extra' treats and foods to pets for a variety of reasons. Sometimes, we give them because we believe the foods do not have what they should and are really not as 'complete and balanced' as they should be. In this case, we call these 'supplements'. The dictionary defines supplements as something added to 'complete' a product or to reinforce the product. As another option, we give extra food products to 'treat' our pets. The dictionary defines treats as a nutritional product given for enjoyment and pleasure. In yet another option, we give extra food products to 'reward' our pets. The dictionary defines rewards as the nutritional product given in return for doing something (sitting, not barking, fetching a ball, et cetera).

All treats, rewards and supplements provide more calories from fat, protein and carbohydrate to the overall nutritional regime. These 'extra' calories are on top of what the pet is given in the complete and balanced food. So, if my Golden Retriever needs 1,200 calories per day to maintain his weight, any treat or supplement or chew consumed adds more calories and more nutrients. Since food does not evaporate into the air, the 'mass' in the food must go somewhere or be used somewhere. That becomes the dilemma of maintaining the weight of our pets when so many additional calories come from these 'extra' food products (treats, rewards and supplements).

#### **Extra benefits**

Functional treats bring all three 'extras' together in as a reward, a treat and a supplement. The goal is to provide some extra benefit (or function) nutritionally while tasting great or providing a level of chewing enjoyment or benefit. Sometimes the message or purpose of the products are not well communicated to the pet owner and are used purely as a treat or as a reward and not for the nutritional functionality. In general, too much of a nutritional additive is not a good thing and can have negative consequences.

In some cases, the product's base formula can be a detriment or barrier to the delivery of the nutritional ingredient in the functional treat by being abrasive or enrobing. The wide range of processing systems used in functional treats brings unique stability challenges (baked, soft-moist, chews, extruded nuggets, moulded, co-extruded, et cetera). Additionally, if the nutritional (functional) ingredient is sensitive to heat, light, acid, moisture or pressure, extra quantities must be added or unique deliveries must be used. For instance, the probiotics used in a functional treat (to support intestinal health or digestion) are likely not alive if any level of heat, pressure, acid and moisture is present in processing. Unless these probiotics have been enrobed or encapsulated, they are functionally useless in most dry to moist products. Many supplements/nutritionals (for joint care, breath, hair coat, etc.) are best added on top of the food rather than including them in the formula due to heat in processing.

#### **Selection of functional treats**

Functional treats have been developed for: Mobility and joint care - adding glucosamine, chondroitin and other chondroprotective ingredients.

Oral and dental care - building unique





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balancing products correctly and suggesting limitations of some functional treats.

Consumers are used to feeding treats for enjoyment, rewards for performance and supplements for health concerns. Functional treats bring the opportunity to wrap these together and provide multiple benefits, but the overall nutritional balance is often over-looked.

product structures and adding key minerals to reduce plague and tartar formation. Recently, new probiotics have been found to help reduce mouth odour. Specific forms of vitamin C may also be useful. Functional chews help support teeth cleaning, but maximize the high level of additional calories.

Skin and coat support – adding specific fatty acids from flaxseed, vegetable oils and fish to provide a balanced and supplemented level of omega 3 fatty acids.

Immune care – adding insurance or supplemental levels of vitamin A, vitamin C and vitamin E plus antioxidants from multiple sources including fruits and vegetables. Weight management – providing lower calorie or reduce fat treat options in good tasting pieces. Often, these treats add a high amount of calories to the food regime even though they are low in fat or calories.

Other functional treats include products for cognitive function, tranquillity or calmness, eye care and a wide variety of other health issues. It is interesting to note while digestive health or intestinal upsets are high on the list of issues in pets, few functional treats exist to help. Alternatively, there

are many products providing 'real' protein sources or 'real' vegetables.

### **Imbalance**

A secondary dilemma occurs by adding the functional treat to the pet food. The pet food has been carefully balanced to meet specific nutritional requirements and life-stage functions. Functional treats bring other nutrients besides the added nutritional ingredient which ultimately imbalances the overall nutritional regime. Soft-moist treats bring high sugar - high salt content along with high moisture and stabilizing ingredients including acids, antioxidants and humectants. Extruded products bring more protein, more fat and more vitamins and minerals. Most owners do not know how to carefully balance the nutrients in the food, treats, chews, supplements and table scraps to methodically provide a new and balanced food mixture. The resulting nutritional profile (with its 'extra' nutrients and unique additive) tends to be imbalanced along with a higher level of calories. If not corrected, this will lead to more health problems with our pets rather than helping them. I believe this can be overcome by good communication of calorie levels,

