



**HILTON** VETERINARY  
HOSPITAL

# Hilton Veterinary Hospital

Website: [www.hiltonvethospital.co.za](http://www.hiltonvethospital.co.za)

72 Hilton Avenue Hilton 3245

Tel (033) 343-4602

Small Animal Veterinary Advice e-mail: [martin@hiltonvethospital.co.za](mailto:martin@hiltonvethospital.co.za)

Hi to all our news letter readers,

As summer approaches please be sure to intensify preventative measures against viral diseases (vaccinate), kennel cough (vaccinate), ticks and fleas, worms (including *Spirocerca lupi*) and seasonal allergic dermatitis. Many vets have given conflicting reports on when and how to vaccinate. The facts are, that the most important vaccinations are the initial ones. These need to carefully be considered according to age and time with the demand circumstances. Usually three are given at puppyhood including two rabies.

These vaccinations are followed by an booster at 1 year and then triennially. Annual vaccination is not required by law in South Africa, even though this is often erroneously quoted as such especially by veterinarians. It is very important to have an annual thorough check up at your veterinarian where the need for the out of label use of annual vaccinations can be discussed. The responsibility of complications caused by over vaccination according to the vaccine label will fall upon the vaccinator unless the owners consent was obtained before doing so. In an area with recent rabies cases, annual vaccination may be justified although checking to see whether the animal has an immune titre capable of providing protection would be better.

There may be connections between animals developing autoimmune blood, kidney, skin and liver diseases and over vaccination. Importantly animals bitten by potential rabid animals need day 0 and day 3 boosters irrespective of annual or triennial vaccination status. The really important thing for vets to do, is thoroughly check your animals every year at least for underlying problems.

At the same time a rabies risk assessment can be done and the decision to vaccinate annually or not can be a joint decision between pet parent and vet.

An immune titre can also be done in house to assess the need for vaccination against distemper, hepatitis and parvovirus. This is most important in young puppies displaying symptoms of vomiting and diarrhoea even after vaccination.

In reality things are seldom as wonderful as the advertisements imply. This is no different when it comes to pet food. In this newsletter the article on pet food labels (the only part of the advertising on the bag governed by laws) empowers people to see what is actually in what they are buying. Unfortunately it still does not address the issue of mycotoxins in pet food. That is something I plan to research independently after my initial questioning of pet food companies has led to dead ends.

Congratulations to Nicky and Jason Rose Innes on the birth of Jasmin. Nicky has now started working on some weekends again.



Our family had the misfortune of being on the other side of the table 2 months ago. My two sons have written a tribute to Jane our Labrador. I could not have said it better.

Thank you to all our clients for your support. We hope that you have seen some of the benefits that our new facility and staff members offer you and your beloved pets. Enjoy reading the newsletter.

Kind regards

Martin de Scally

Dedicated to the health of your pets.

## Inside this issue:

Opening Letter: 1

Nurse's Clinic:  
Blood Donors 2

Deciphering pet  
food labels 3

Deciphering pet  
food labels 4

Tribute to Jane 5

Hilton Vet  
Parlour 5

Staff Profile: 6

To make you  
smile: 6

**After Hours  
Emergencies:**  
Please phone  
(033) 343 4602

**Contact Details:**  
If your contact details have changed then please inform us.

**This month's  
themes:**  
Blood Donors  
*Spirocerca*  
Kennel cough

## Nurse's Clinic: Is your dog a blood donor? by Sr Vicki Smith

Your pet could be a hero by having him or her donate blood and help a fellow pet survive surgery, an illness or serious trauma. We all know how important it is for humans to donate blood, but it is just as important for our pets. Just as with humans, there is often a shortage of blood supply for pets. Some of the common reasons why a dog would require a blood transfusion: biliary (tick bite fever), blood loss from trauma, worm infestation, poisoning

To become a blood donor your pet will need to fit certain criteria:

- 🐾 The donor must be over 25Kg and able to donate 450ml of blood.
- 🐾 Between the ages of 1 - 7 years old and vaccinations up to date.
- 🐾 The donor must be healthy and well tempered.
- 🐾 Tick control up to date.
- 🐾 If your pet previously received a blood donation, it is recommended they not become a donor.
- 🐾 If your pet has any chronic disease such as a heart murmur or seizures they are not fit to donate.
- 🐾 Your pet can donate blood at three month intervals.



### What is the process like for my pet?

Your pet is brought through to a consulting room and put onto the table lying on his/her side. A small patch of fur is shaved off your dog's neck, and a needle is gently inserted into the jugular vein, this process then takes about 10 - 30 minutes. Most dogs just love all the attention and lay still while the blood bag is fulling.

Typically, a 25Kg dog has 2 litres of blood and the donation is no more than 450mls, leaving your dog with adequate blood to continue being healthy with no side effects. Overall dogs recover quicker than humans from blood donation. As soon as the blood is drawn, the body begins to produce more to replace it, while some dogs may be sluggish or weak for a few days after donating, others will have no after effects at all. Every dog is different.

There are differences in blood types for dogs, the samples will be tested to determine if a dog is DEA (Dog Erythrocyte Antigen) 1.1 positive or negative. DEA 1.1 Negative dogs should only get negative blood, while a dog that is positive can get either. As with people, blood transfusion plays a critical role in saving animal's lives every day. Used in both emergency and routine surgeries, we always need a fresh healthy stock of blood. A blood donation won't guarantee an ill pet's survival, but it can facilitate a faster recovery.

For more information or if you would like to register your pet as a donor please feel free to contact us.



## Deciphering pet food labels: by Sonja Maricevic (Pack leader)

Veterinarians are often faced with the task of comparing pet food labelling in order to choose the best diet for their patients. This article will give you simple rules of thumb useful when scrutinizing front of bag claims, ingredient lists and guaranteed analysis panels of foods as well as highlighting some common tricks used by pet food manufacturers.

### **Front of bag claims**

The product name can be a key factor in the consumer's decision to buy the product. For that reason, manufacturers are often tempted to emphasize a particular aspect of the product, usually an ingredient considered desirable to consumers such as chicken, ostrich, or lamb. Product wording is regulated and relates to overall presence of the highlighted ingredient in the food. These terminology differences are subtle while ingredient percentage differences are not and this can mislead unsuspecting consumers

**Chicken Dog Food:** -needs to be made with at least **65%** chicken

Chicken **Formula/Diner/Entree** for Dogs: **26%** chicken or more

Dog Food **Rich** in Chicken: at least **14%** of this ingredient

Dog Food **With** Chicken: only **4%** chicken

Chicken **Flavoured** Dog Food: Under the "flavour" rule, **a specific percentage of the ingredient is not required at all**, provided the product contains an amount sufficient for detection. Pet foods often contain "digests," which are materials treated with heat, enzymes and/or acids to form concentrated natural flavours. Only a small amount of a "chicken digest" is needed to produce a "flavoured" food, which need not contain any actual chicken.

Some companies disclose the actual percentage of the ingredients the food is made with, either amongst the front of bag claims or vignettes, or in the ingredient list, which you will find on the back of the packaging.

### **Ingredient list**

All pet foods must list the ingredients present in the food in descending order of pre-cooked weight. The biggest contributors are first and the smallest last in the ingredient list. A good rule of thumb is that the ingredients before the first "fat ingredient" - e.g. animal fat or chicken fat, tend to make up the bulk of the food. Vitamins and minerals are added to supplement natural sources if needed. Other ingredients might include colourings, preservatives, or stabilizers.

Ingredients can range from clearly labelled ones like "fresh chicken meat" to more vague "bulk" ingredients like "meat and bone meal" which do not specify which animal or parts of animal the meal is made from.

Meals are created via a rendering process, where the materials are subjected to heat and pressure, removing most water and fat and leaving primarily protein and minerals. Meat meals vary greatly in protein quality and overall mineral content ranging from highly digestible meat meals supplying superior amino acid balances to poor quality by-product meals with high bone content. Plant protein sources are not as balanced or available as protein from high quality animal sources but are more consistent in these characteristics, and can therefore be preferable, to very poor quality animal sources.

The weights of ingredients are determined as they are added in the formulation, **including their inherent water content**. This latter fact is important when evaluating relative quantity claims, especially when ingredients of different moisture contents are compared.

### **Example:**

*One pet food may list "chicken" as its first ingredient, and "pea protein concentrate" as the next protein ingredient. The manufacturer doesn't hesitate to point out that it has chicken as the no.1 ingredient, however, chicken is very high in moisture (approximately 75% water). On the other hand, water and fat are already removed from pea protein concentrate (what's left is mostly protein and minerals). Realistically you may find that the majority of protein in the food, a dehydrated end product, will be supplied by pea protein concentrate, and not chicken.*

Be careful of another tactic used by some manufacturers to disguise less desirable ingredients. Breaking an ingredient into several different smaller ingredients and listing them individually is used to lower these undesirable ingredients farther down the ingredient list.

### **Example:**

*An ingredient list could contain chicken, ground corn, corn gluten, ground wheat, corn bran, wheat flour, wheat middling, etc. If we were to group all of the corn ingredients as one, they would probably far out-weigh the amount of chicken.*

### **Guaranteed analysis**

The guaranteed analysis shows the minimums or maximums of nutrients in the final product. The food ingredients and various additives listed in the ingredient list supply these. SA regulations require a pet food manufacturer to guarantee the following:

- crude protein - minimum %
- crude fat - minimum %
- crude fiber - maximum %
- moisture - maximum %

The "crude" term refers to the specific method of testing the product, not to the quality of the nutrient itself. The maximum percentage of ash (the overall mineral component) is also often shown

## Deciphering pet food labels (continued)

There is no minimum requirement for carbohydrates for dogs or cats, and the carbohydrate content is not disclosed in the guaranteed analysis, although it can constitute up to 60% of dry pet food. If you are looking for a low carb diet for a patient, and need to calculate the overall "as-fed" carbohydrate content of a diet use the following equation:

$$100\% - \% \text{ protein} - \% \text{ fat} - \% \text{ fiber} - \% \text{ ash} - \% \text{ moisture} = \% \text{ carbohydrate}$$

While the guaranteed analysis is a start in understanding what's in the food, be careful about relying on it exclusively. The guaranteed analysis does not provide the exact nutrient quantities or makes a judgement as to the digestibility or quality of the food and ingredients. A pet food manufacturer made a mock product that had a guaranteed analysis of 10% protein, 6.5% fat, 2.4% fiber, and 68% moisture, similar to what you see on many canned pet food labels. The only problem was, that the ingredients were old leather boots, used motor oil, crushed coal, and water!

### **How to compare different foods**

Guaranteed analysis is declared on an "as fed" or "as is" basis, that is, the amounts present in the product as it is found in the can or bag. When comparing the guaranteed analyses between dry and canned products, you will notice that the levels of crude protein and most other nutrients are much lower for the canned product. This can be explained by looking at the relative moisture contents.

Canned foods typically contain 75-80% moisture, whereas dry foods contain only 10-12% moisture. To make comparisons of nutrient levels between a canned and dry product we need to mathematically "remove" the water from both foods, and convert the guarantees for both products to a moisture-free or dry matter basis (DM). The percentage of dry matter of the product is equal to 100% minus the percentage of moisture guaranteed on the label.

$$100\% - \% \text{ moisture} = \% \text{ dry matter (DM)}$$

A dry food is approximately 88-90% dry matter, while a canned food is only about 20-25% dry matter. To convert an "as fed" nutrient guarantee to a dry matter basis, the percent "as fed" nutrient should be divided by the percentage of the dry matter, and then multiplied by 100.

$$(\% \text{ "as fed" nutrient} / \% \text{ dry matter}) \times 100 = \% \text{ nutrient on a DM basis}$$

Example:

A canned food guarantees 8% crude protein and 75% moisture (or 25% dry matter).

A dry food contains 27% crude protein and 10% moisture (or 90% dry matter).

Which has more protein, the dry or canned?

Calculating the dry matter protein of both, the canned contains 32% crude protein on a DM basis ( $8/25 \times 100 = 32$ ), while the dry has 30% on a DM basis ( $27/90 \times 100 = 30$ ). Thus, although it looks like the dry has a lot more protein, when the water is counted out, the canned actually has a little more.

An easier way is to remember that the amount of dry matter in the dry food is about four times the amount in a canned or frozen product. To compare guarantees between a dry and canned food, multiply the guarantees for the canned food times four first.

### **The impact of portion size**

High moisture content in canned or frozen food dramatically increases the daily recommended portion size needed, where up to 8 times food by weight needs to be fed when compared to the recommended portion size of a dry food for the same pet.

Recommended portions sizes for different dry foods can also vary by as much as 100%. The lower the quality, digestibility or caloric density of the food is, the bigger the recommended portion size will be. To make meaningful comparisons between different diets with varying amounts of moisture, calories or digestibility, you would need to first work out the daily amount of nutrients ingested by weight.

$$\% \text{ as fed nutrient} \times \text{daily portion size} = \text{daily amount of nutrient ingested}$$

Example:

We were looking for a diet that is moderate in calcium for a patient. We select 2 foods of the shelf that both show 1.4% calcium "as fed" in their guaranteed analysis panels. But do the foods supply the same amount of calcium?

The recommended daily portion size of one the foods is 310g, translating to 4.3g calcium ingested per day ( $1.4\% \times 310g = 4.3g$ ).

The recommended portion size of the second food is 185g for the same dog and this diet will supply only 2.59g calcium per day. ( $1.4\% \times 185g = 2.59g$ ).

Even though the "as fed" percentages on the bags are the same, the second food supplies significantly less calcium overall.

### **Conclusions**

The bag label contains a wealth of information, if one knows how to read it correctly. The front of bag claims, guaranteed analysis, ingredient list and feeding guidelines all tell part of the story, but need to be read in conjunction with each other in order to paint the full picture. Certain companies can provide full guaranteed analysis of their products including EPA, DHA and individual amino acid, mineral and vitamins levels. Check the website, or contact the manufacturer, if you would like more information than is provided on the label

## Tribute to Jane: Nicholas and Christopher de Scally

Dear Jane

You were such a loyal friend to us. We will never forget the days of running, mischievousness and laughter. All you cared about was how we were feeling and your food came after that. You loved burying tennis balls in the garden and we are sure we will still be finding the balls on days to come. We remember you holding the unofficial world record of the dog who ate the fastest. This trick of yours slowed down, when we bought you a bowl that controlled the speed you could gobble your food at. We are sure you were able to now enjoy the food by actually tasting it.

In your more agile days you were able to run up to 12km with us in the forest, our loyal companion and running partner. Towards the end you had slowed down but still enjoyed a gentle run with us.

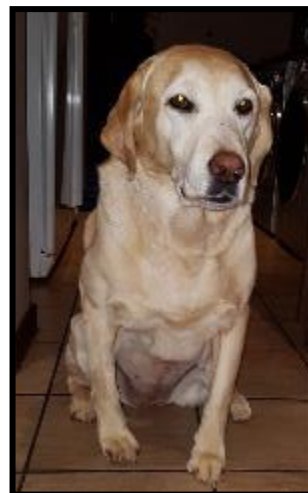
We knew there was something wrong the day that you sniffed at your food bowl and walked away.

Thank you for coming in to our lives and uplifting us when we were sad.

You will always be in our hearts. We miss you so much.

With love your friends

Nick and Chris



## HILTON VET PARLOUR:

**Hilton Vet Parlour is now offering a collection and delivery service. This service will be charged for accordingly and booking is essential**

We cater to all shapes and sizes, both canine and feline and offer a complete range of grooming services.

Working hand in hand with the vets, allows us to sedate animals if required.

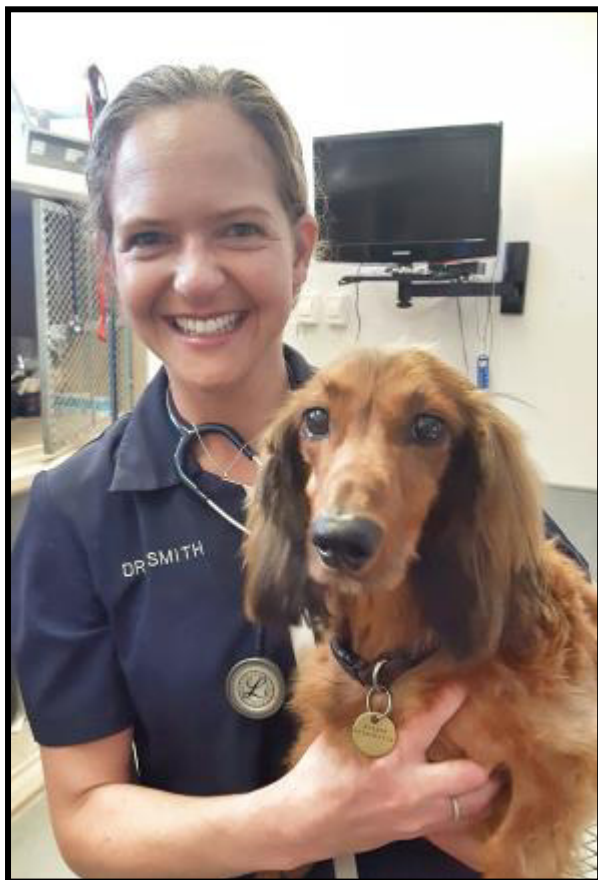
Contact Heather on 0762798589 for any further information regarding the parlour. Bookings are essential.



## Dr Anuschka Smith:

## To make you smile:

Anuschka joined Hilton Veterinary Hospital in June 2016. She is one of our dedicated, caring vets that form part of our team. She qualified at Onderstepoort 2007 and completed her honours in small animal medicine and clinical pathology in 2013. Anuschka loves being a vet. She knew she wanted to be a vet since she was a little girl. She is kind and compassionate. She values the bond that families have with their fur children. She has a 'dog child' called Spud. He is a spirited Parson Jack Russell Terrier. They enjoy long walks together and visiting family in Durban. Anuschka's other passion is rowing and she serves on the Durban Rowing Club Committee. She also enjoys photography and yoga.



**In the next issue:** Spiracerca and Kennel cough