

FOOD, GLORIOUS FOOD!!

NUTRIGENOMICS: YOU ARE WHAT YOU EAT!

The exciting new field of Nutrigenomics studies the effects of nutrients on gene expression. While Didier & Julie were in the States they visited the very impressive Hills Pet Nutrition Centre in Kansas, where scientists are leading the way in Nutrigenomics.



The human DNA genome was finally mapped in 2001, followed by the dog genome in 2004.

Now, using computer technology called "Genechip analysis", scientists can study the expression levels of different genes in various disease states or life stages. The effects of specific nutrients on particular genes can then be tested.

The first product launched based on these principles was Hills Canine J/D, a food that helps dogs suffering from arthritis. Using gene maps, it was found that the fish oil EPA decreases the production of an enzyme that causes the destruction of cartilage in arthritic joints.

Another area that is receiving a lot of attention is obesity (in pets and humans). The gene expression maps of lean and obese dogs look completely different, but feeding specific nutrients to an obese dog changes it's gene expression towards that of a lean dog.

This research is enabling targeted nutrition to be developed much faster than ever before.

Of course this research is invaluable to the human sector as well. It is difficult to maintain humans on a healthy diet for extended periods without momentary (or extended) lapses, due to our wide choice of foods and (let's face it) our lack of willpower! These studies may provide evidence that Nutrigenomics can improve the health and quality of humans as well as our pets. Watch this space!!

NUTRITION: THE 5TH VITAL ASSESSMENT

The World Small Animal Veterinary Association has developed a global initiative to include a nutritional assessment as part of every standard physical examination for all small animals; adding to the first four vital assessments: temperature, pulse, respiration and pain.

It encourages us to record the body condition score (which evaluates body fat) and the current diet of every patient. We then look at nutritional risk factors such as growth or old age, obesity, bad teeth, poor coat or concurrent disease and make nutritional recommendations accordingly.



Appropriate nutrition throughout all life stages can help to prevent diet-associated diseases and assist in the management of other diseases. (A good example of this is kidney failure, where it has been proven repeatedly that feeding a prescription kidney diet is more effective than any other treatment.)

Of all the external factors that contribute to the health of our pets, nutrition is by far the easiest to control.

So, we don't mean to hound you, but we will be looking at your pets' diet. We're trying to help!

