

Celebrating Seniors!



Wellness Profiles Make a Difference!

Over 17,000 Canadian dogs & cats have taken part in our Celebrating Seniors! Program

Here's what the wellness testing revealed:

- **The most common abnormalities detected on history and physical examinations included:**
 - ~ Dental disease, lumps, vomiting, polyuria/polydipsia, coat changes, arthritis and heart murmurs;
 - ~ Weight problems. Many dogs were reported to be overweight. Conversely, weight loss was commonly reported in mature cats.
- **The most common laboratory abnormalities detected included:**
 - ~ Elevated liver enzymes (ALT, serum alkaline phosphatase);
 - ~ Elevated kidney enzymes (BUN, creatinine);
 - ~ Inappropriate urine specific gravity;
 - ~ Diabetes mellitus and hyperthyroidism (in cats).

Because of the age of these animals and the high incidence of concurrent disease, the animals' individual needs must be examined to determine each pet's dietary needs.

Here's what you can do:

Dental disease

Dental disease was noted in more than 80% of pets seen during our Celebrating Seniors! program. Once a dental prophylaxis has been performed, Canine and Feline **Dental Formula** is recommended to help reduce the accumulation of plaque and tartar. This diet is formulated to meet the needs of adult and senior pets.

Canine and Feline Dental Formula features appropriate high quality proteins, reduced fat, as well as soluble and insoluble fibre. The addition of glucosamine in Canine Dental Formula helps ease the effects of osteoarthritis and aging joints. Omega fatty acids, antioxidants, carnitine and glutamine help promote wellness and are included in these diets. A larger kibble size and the addition of a sequestering agent work together to reduce dental tartar and plaque formation.

Liver disease

In dogs, liver enzymes may be elevated for many reasons and their elevation does not equate to liver failure. Reasons for elevation of liver enzymes in an older dog include:

- "Reactive hepatopathy" due to disease elsewhere in the body (e.g. gastrointestinal disease, metabolic disease, cancer, cardiovascular disease);
- Drugs (phenobarbital, steroids, etc.);
- Idiopathic vacuolar hepatopathy;
- Nodular hyperplasia;
- Cushing's disease.

In cats, elevation of liver enzymes may be indicative of hyperthyroidism.

Our diet recommendations for the older pet with elevated liver enzymes or mild/moderate liver dysfunction are **Vegetarian Formula** or **Weight Control/Mature** for the dog and **Weight Control** or **Mature Formula** for the cat. For dogs with copper accumulation, **Hepatic** is recommended. **Hepatic** (dog) and **Reduced Protein** or **Renal LP** (cat) are recommended for the patient with liver failure (laboratory abnormalities in patients in liver failure include low urea, low albumin, abnormal bile acids; liver enzymes may be normal in the patient with liver failure).

Weight Control/Mature for small and medium sized dogs, **Renal MP** for large breed dogs and **Mature Formula** for cats are recommended for:

- Patients with renal insufficiency (inappropriate urine specific gravity and normal serum urea and creatinine);
- Patients with mild/moderate renal failure who are still feeling well (not uremic) and who are not proteinuric.

These diets provide the animal with high quality, readily available protein sources in amounts designed to help reduce nitrogenous waste products and kidney workload. In addition, the presence of soluble or fermentable fibre in these diets helps decrease nitrogen excretion. Supplemental omega 3 fatty acids may help improve renal blood flow.

For dogs and cats with significant proteinuria (an elevated protein:creatinine) or those with renal failure who are uremic (vomiting, inappetance, nausea, weight loss, lethargy, etc.), we recommend **Reduced Protein** or **Renal LP** for small and medium sized dogs and cats and **Renal MP** for large breed dogs.

Diabetes in cats

Cats are carnivores and lack an active glucokinase enzyme. Consequently, the rate of glucose metabolism in the liver of the cat cannot increase in response to high levels of carbohydrate (CHO) in the diet to the same degree as in the canine liver. It is currently thought that feline diets high in CHO result in increased insulin concentrations, which potentially predisposes susceptible cats to beta cell exhaustion and type 2 diabetes mellitus. Consequently, high protein, low CHO diets (canned diets) or dry diets that are formulated to moderate the glycemic index by incorporating low glycemic index CHO (barley and corn) and slow gastric emptying by the incorporation of moderate amounts of soluble fibre (psyllium) are now being recommended for diabetic cats. As most diabetic cats are older and may have concurrent renal and thyroid disease, we recommend screening for proteinuria (ERD test or urine protein:creatinine) and performing a BUN/creatinine before recommending high protein, low CHO diets. A high protein diet would not be the diet of choice for a cat with significant proteinuria or a cat showing signs of uremia.

Our recommendation for diabetic cats:

- **Diabetic** (dry)
- Additional recommendations include:
 - ~ If overweight without underlying renal disease - **Calorie Control** (canned) or **Reducing Formula** (canned)
 - ~ If underweight without underlying renal disease - **Development Formula** (canned) or **Mature Formula** (canned)
 - ~ If early renal failure - **Mature Formula** (canned)

Joint disease

The most common form of joint disease in dogs is osteoarthritis, a progressive, painful and debilitating disease characterized by the degeneration of articular cartilage and the formation of new bone at the joint margins. Without treatment, osteoarthritis is a progressive disorder with serious, life altering consequences (pain, immobility, behavioural changes). **Mobility Support** is recommended for dogs with degenerative joint disease, or for dogs at risk of developing joint disease (overweight, of advanced age, active lifestyle, large breeds, genetic predispositions, history of joint trauma, post surgical). Mobility Support is formulated with green-lipped mussel powder (GLMP), a unique shellfish supplement that has been clinically proven to relieve arthritic pain. GLMP contains several beneficial ingredients including anti-inflammatory omega-3 fatty acids, chondroitin sulfate (a constituent of cartilage), glutamine (a glucosamine precursor), and antioxidant minerals (zinc, copper and manganese) to reduce inflammation and to improve joint health.

Heart disease

As dogs age, heart valves undergo degeneration resulting in endocardiosis most commonly affecting the mitral and tricuspid valves. Most of these patients have heart murmurs picked up on auscultation (Class I heart disease). Clinical signs are variable. Dogs with Class II heart disease may have mild exercise intolerance; coughing, dyspnea, exercise intolerance and weakness may be apparent with progression of the disease to Class III and IV.

The most common form of heart disease in cats is hypertrophic cardiomyopathy. This is often idiopathic in nature and most frequently diagnosed in mid-aged (5-7 years) and older cats. Hyperthyroidism and systemic hypertension (secondary to hyperthyroidism or renal failure) are common disorders of the older cat and can contribute to myocardial hypertrophy. Cats with any form of heart disease may present with dyspnea (cats are more likely to develop pleural effusion vs. dogs), inappetance, vomiting and lethargy.

- For all dogs with early heart disease (Class I or II), **Early Cardiac** is recommended. **Weight Control/Mature** is an option for dogs with early heart disease and a concurrent medical condition that would benefit from the addition of glucosamine and digestive aids like fructo-oligosaccharides.
- For small or medium sized dogs and cats with heart failure (Class III or IV) or with concurrent renal failure, **Reduced Protein** or **Renal LP** is recommended.
- For larger dogs with heart failure (Class III or IV) or with concurrent renal failure **Renal MP** is recommended.
- **Mature Formula** dry is recommended for the normal or overweight cat with early heart disease (Class I or II) and **Mature Formula** canned for thin or underweight cats (and if cat has concurrent renal insufficiency or early renal failure).
- **Reduced Protein** or **Renal LP** is recommended for cats with heart failure (Class III or IV) or with concurrent renal failure.

Healthy senior pets

The good news is that many senior pets have normal blood and urine results. Consider the dog or cat's overall physical appearance, body condition score, coat quality, mobility and dental health when determining dietary needs. For many cats over 7, a change to **Mature Formula** is suggested. For senior dogs, we recommend **Weight Control/Mature**, **Dental Formula** or **Mobility Support**.