

This series of informative articles is for those interested in learning more about the health of the PBGV breed.

Nutrition and Body Condition in Senior Dogs and Cats

Special Needs. In the past, dietary recommendations for senior dogs and cats have largely been drawn from nutritional management of diseases common to the aging process. Research however, has shown that special nutrition can proactively help manage body condition problems common in aging dogs and cats, such as:

- Obesity
- Loss of muscle mass

Obesity. Senior dogs and cats tend to gain weight, despite consuming fewer calories,, due to factors such as changes in their metabolic rate and lower energy expenditure, or both. They therefore can benefit from eating a diet with reduced fat levels and lower caloric density than adult maintenance foods.

Iams research in dogs also indicates that adding L-carnitine helps reduce weight in overweight dogs by escorting fat into cellular mitochondria, where it is turned into energy.

Loss of Muscle Mass. Protein is the building block of muscle tissues. It is important for maintenance of muscle tissues, muscle strength and mobility.

Research conducted by the Iams Co. has shown that senior dogs who eat a higher-protein diet maintain muscle protein stores. By providing optimal protein levels for muscle maintenance, senior dogs and cats can continue being physically active.

This research is contrary to conventional opinion that senior dog foods should contain lower protein levels than adult maintenance formulas in order to avoid progressive decrease in kidney function. However studies have shown that senior dogs who were fed a high-protein diet has stable renal function and a lower death rate than those dogs fed a lower-protein diet.

Maintaining Bone and Joint Health for Senior Dogs. During the aging process, cartilage between joints often begins deteriorating. There are several ways in which nutritional management may help maintain healthy bones and joints and mobility in dogs.

- Glucosamine and chondroitin sulfate are naturally occurring compounds that aid in the nourishment and maintenance of healthy joint cartilage. They help build strong cartilage and ensure joint lubrication.
- Optimal levels of vitamins and minerals promote the efficient production of cartilage and nutritionally support bone and nerve function.
- And a complete and balanced diet with an adjusted mega-6 omega 3 fatty acid ration nutritionally supports the natural healing process.

Some pet food manufacturers have endorsed reduced levels of calcium and phosphorus based on the belief that excesses of these minerals are harmful to the kidneys. However, research has shown that no damaging accumulation of calcium or phosphorus was found in the kidneys of older dogs fed diets containing maintenance levels of calcium and phosphorus for four years.

Nutritional Application. Eukanuba and Iams senior formulas include features such as:

- Reduced fat levels and L-carnitine to help burn fat and maintain a healthy weight.
- Moderately high protein levels to help maintain muscle mass
- Glucosamine and chondroitin sulfate for healthy joints and cartilage.

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Three ways you can help PBGVs ...

1. Please complete a health survey for all of your PBGVs. Go to www.pbgv.org, Health & Rescue Foundation Projects, to link to this survey.
2. Send blood samples from all of your PBGVs to the DNA Data Bank at the University of Missouri. Go to www.pbgv.org and click on PBGV DNA Bank for the form and instructions. You will be reimbursed up to \$75 for expenses occurred to do each blood draw.
3. Have a PBGV with epilepsy? The University of Missouri needs blood samples from this dog and its relatives, whether they are affected or not. Go to www.canine-epilepsy.net to read more about the ongoing study of this disorder. If your PBGV has a seizure disorder and has not responded well to traditional treatment, go to: <http://cvm.ncsu.edu/epilepsyresearch/> and look up current studies for more information.

Your assistance with these studies will help your dogs and all PBGVs worldwide.