

## The most adequate food for the specific needs of a mature cat.

Cats are considered **old when they reach 7 - 8 years of life**, and **very old or geriatric around 10 - 12 years**.

Even if a cat of 7 years old would not appear old, **variations within the nutritional management and preventive care are important** in order to reduce the risk factors of the most common diseases related to age, preserving a good state of health and maximizing longevity.

The exclusive formulation of the **Trainer® Cat Senior** has been **studied to effectively counteract the changes which happen over the years**, like the **reduction of digestive ability** and nutrient absorption, the **weakening of the immune system** and the **reduction of the sense** of smell and taste.

To preserve an ideal weight and physical condition, and to contrast the lean body mass reduction, caused by the lack of physical activity, we should satisfy the higher protein needs of older cats using high quality proteins, without increasing of the ingested quantity: considering the high incidence of renal diseases in this age group, it is better not to exceed the quantity of proteins.

For this reason, the formulation of **Trainer® Cat Senior** suggests **25% of fresh chicken or turkey meat**, giving to the diet **proteins of high biological value and easy assimilation**, without using high quantities, giving **great appeal and pleasantness** to a food for pets whose taste buds are more and more difficult to satisfy.

**Pulp of beetroot, leaven and fructooligosaccharides** improve the state of health of the intestinal mucous, favour the growth of the specific bacterial microflora and inhibits the development of pathogen strains, reducing fecal odor.

**The bioflavonoids, extracted from citrus fruits**, play an important antioxidant role, protecting cells and tissues from free-radical action, consequently delaying obsolescence. Together with Vitamin E, they strengthen the immune system of mature cats.

**The glucosamine and chondroitin sulfate** counteract the thinning of the articular cartilages and maintain the full efficacy of articulations.

It is important to remember **that aging is influenced by genetics, nutrition and environment**, and that the chronological age of the animal could also be unable to reflect its physiological age. Moreover, we should remember that caloric restriction is the only known nutritional variation able to delay the obsolescence and lengthen the life span.

Together, these changes decrease the speed of basal metabolism. The goals of the older cats feeding are:

- To manage risk factors, for example minimizing disease risks;
- To manage diseases, improving the symptomatology of the most common diseases or delaying the advancement of some chronic diseases;
- To increase the quality and longevity of life.



## Nutritional Key-Factors

**Water:** aging weakens thirst sensibility, which is low if compared to other species. The decline of renal function is observed in several old cats, and it increases the loss of water determined by a reduced ability to filter the urine. The water ingestion in healthy cats should be around 200 - 250 ml per day.

**Energy:** The factors which reduce the energetic needs of older cats are the reduction of lean body mass, basal metabolism speed and physical activity. In many species, the decrease of lean body mass is coupled with an increase of total body fat, so that obesity is higher among cats of middle and old age. After 11 years of life (geriatric feline) underweight conditions are common, because of the high percentage of diseases and reduction of food, determined by a reduction of sensory functions, digestive ability and absorbency, or by a combination of all these factors. The energetic density of the food formulated for older cats should be included between 3.500 and 4.500 Kcal./Kg, while for very old felines between 4.000 e 4.500 Kcal./Kg.

**Proteins:** It is a very controversial topic if the actual protein needs of older cats would really be higher than that of adult cats (decrease of lean body mass, alteration of protein synthesis and turnover), considering also that renal insufficiency is rarely diagnosed before the ¾ of renal function are lost. Currently, moderate levels of diet proteins, included from 30 - 45%, are advised.

**Lipids:** Some diseases related to obesity are common in older cats (diabetes mellitus, hypertension, cardiac diseases). Moderate or low levels of fats are suggested to reduce obesity risk. Otherwise, very old cats need food with higher caloric density and high levels of essential acid fats (eg.linoleic, arachidonic and linolenic) in order to maintain their skin and coat in a good state.

Strong reductions of dietary fats are not advised for very old felines when there is no risk of obesity. The recommended levels are included between 10 - 25 %.

**Fibre:** Fibre helps to preserve the health of the gastroenteric line. It favours the normal intestinal peristalsis and gives food to enterocytes, through short chain acid fats, which are developed by the fermentation of bacteria inside the colon. We can obtain these effects with small quantities of soluble and insoluble fibre (<5%). Higher quantities (<10%) are suggested in case of constipation, which is very frequent for older felines due to a combination of factors, like the reduction of water ingestion, limited physical activity and decreased peristalsis. Higher levels of dietary fibre (>10%) are recommended only in case of obesity and other diseases (diabetes mellitus, colitis).

**Calcium and Phosphorus:** Older cats have a urinary pH which is lower than adult cats: this is a risk factor for the development of oxalate calcium uroliths, which are more common in older cats. Moderate levels of dietary calcium (able to preserve the bone mass) reduce this risk. The decrease of dietary phosphorus is commonly recommended for older felines food, because it can delay the advancement of renal diseases. Levels included between 0,5 – 0,7% are advised, with a calcium phosphorus ratio included between 0,9:1 and 1,5:1.

**Magnesium:** The benefit of magnesium reduction in older felines food is to reduce the risk of struvite stones, whose incidence in older cats is low.

**Urinary pH:** The food for older cats should contain a lower quantity of acidified ingredients, because for them the risk of developing struvite uroliths is lower, while the incidence of oxalate calcium uroliths and renal insufficiency is higher. The pH urinary value should be between 6,2 and 6,6.



### REFERENCES FOR OLDER DOGS

ENERGY	3.000 - 4.000 Kcal/Kg
PROTEINS	15 - 23%
FATS	7 - 15%
FIBRE	≥ 2%
CALCIUM	0,5 - 1%
PHOSPHORUS	0,25 - 0,75%
Ca / P	1:1 - 2:1