



Viyo Renafelin®,
the breakthrough in the treatment of cats
suffering from Chronical Kidney Disease (CKD)

The cause of chronic kidney disease (CKD) in cats can be very diverse. It is the most common metabolic disease in domestic cats and the cause of death number 1 in cats older than 5 years. Over 50% of geriatric cats are affected. The prevalence of CKD in the overall cat population is over 20% or more (SDMA test), and an average 10% of all cats who are seen by a veterinarian are suffering from it.

The renal function will go down progressively, and the problem is irreversible. CKD can not be cured, but the progress of the

clinical symptoms can be slowed down. This prolongation can be done by a reduction of phosphataemia, a reduction of protein intake and a reduction of glomerular hypertension.

The symptoms include less appetite, weight loss, excessive drinking, excessive urinating, regularly vomiting, or less activity. Unfortunately, sometimes those symptoms only appear when 75% of the renal tissue is already destroyed. So, if your cat is suffering from one of those symptoms, you need to consider the possibility of CKD and consult with your veterinarian.



STAGE 1

Normal appearance



STAGE 2

There may be an increase in drinking and urination

Average life expectancy for a cat with **stage 2 CKD** is **1.151 days** (approx. 3 years, 2 months)



STAGE 3

Common signs include:

- frequent drinking
- frequent urination
- reduced appetite
- weight loss
- dehydration
- vomiting
- a dull unkempt coat
- weakness

Average life expectancy for a cat with **stage 3 CKD** is **679 days** (approx. 1 year, 10 months)



STAGE 4

Common signs include:

- possible mouth ulcers
- blindness
- severe vomiting
- diarrhoea
- refusal to eat
- dehydration
- weakness
- lethargy

Average life expectancy for a cat with **stage 4 CKD** is **35 days** (approx. 1 month)

An innovative nutritional supplement offering much more than just a phosphate binder.

Next to medicines, nutrients (nutraceuticals) play a major role in the support of CKD.

Numerous studies have shown the benefits of phosphate reduction in cats suffering from kidney failure and it is now

widely accepted that there is a direct link between the length and quality of life of a cat with kidney failure and the amount of phosphates they get through their food. The ingredient in Renafelin®, calcium carbonate, acts as phosphate binding agent and lowers the absorption of phosphates from the intestines.

But Renafelin® is more than just a phosphate binder.

Key features and benefits:

- Highly palatable, for good patient compliance and in support of eating and drinking
- Liquid formulation, resulting in an optimal uptake (98%) of the active ingredients, compared to solid ingredients (less than 50%)
- Low in Phosphorus and Iodine
- High in potassium
- Contains vitamins B and C
- Contains calcium carbonate as phosphate binding agent
- Elevated levels of prebiotic fibres (FOS and inulin) in support of the good intestinal flora, and providing a positive effect on hypertension
- Low sodium level
- Product pH of 6,5
- Elevated levels of omega 3 fatty acids (EPA and DHA), reducing inflammation and maintaining blood flow through the kidneys
- Cranberry extract in support of the kidneys (clearance and structure)
- Artichoke extract to help reduce cholesterol levels and support the liver and gall bladder
- 100% natural, free from artificial preservatives and coloring agents

Science proven

The product was developed in collaboration with Colorado State University to support CKD cats with all (novel) nutrients that can be given via a nutraceutical.

Pilot study evaluating the use of an oral recuperation formula in the management of chronic kidney disease in cats. Study from the Center for Companion Animal Studies, Colorado State

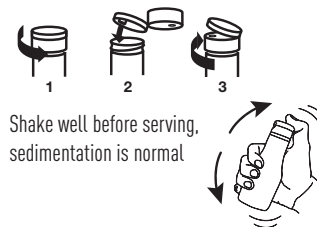
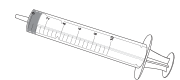
University, Fort Collins, Colorado, USA (CM Cooley, JM Quimby, S Summers, L Martin, MR Lappin).

Conclusions and relevance: In this pilot study, the ORF-CKD was accepted by most cats and no side-effects were noted. Several findings suggest that the ORF-CKD was inducing the effects expected from the formulation.

Feeding directions

- 20 ml/ Day – the exact amount may be adjusted by the veterinarian for the individual animal.
- For an optimal absorption, best served pure, at room temperature, in the morning before the first meal.
- To open the bottle for the first time, unscrew the white cap and perforate the safety film.

- In case of eating difficulties, Renafelin® can be added to a therapeutic renal diet
- The liquid form enables tube or syringe feeding.
- Not for parenteral use. Water should be available at all times
- Only suitable for cats
- Allergy advise: made with poultry (chicken) and fish oil



- Shake well before serving, sedimentation is normal

Storage:

- Once open, store the bottle in the refrigerator and use within 8 days.

Composition:

Poultry meat and poultry meat derivatives (7.6%)

Fish and Vegetable oils and fats

Derivatives of vegetable origin

Minerals

Inulin FOS* (0.6%)

Calcium carbonate** (0.55%)

Potassium Carbonate (0.61%)

Cellulose*** (0.6%)

Cranberry dried powder (0.5%)

Artichoke dried powder (0.2%)

Analytical constituents:

Moisture 82.1%

Crude protein 6.35%

Crude oils and fat 4.84%

Crude ash 2.8%

Crude fibre 0.6%

16.4 Kcal / portion of 20 ml

pH-Value: 6.5 – 6.7

* Inulin FOS: Prebiotic – Fructo-Oligosaccharide – soluble fibre

** Calcium carbonate: Potential Phosphate-Binder

*** Cellulose: Insoluble fibre

Additives per kg:

Amino Acids:

L-Carnitine (3a910) 500 mg/kg

Taurine (3a370) 1500 mg/kg

Vitamins and provitamins:

Vitamin D3 (Cholecalciferol 3a671) 1350.00 IU/kg

Vitamin B1 (thiamine mononitrate 3a821) 170.00 mg/kg

Vitamin B12 (Cyanocobalamin) 357 µg/kg

Vitamin B2 (riboflavin) 21 mg/kg

Vitamin B3 (Niacinamid 3a315) 102 mg/kg

Vitamin B5 (Calcium-D-Pantothenate 3a841) 25 mg/kg

Vitamin B6 (pyridoxine hydrochloride 3a831) 16.00 mg/kg

Vitamin B11 (Folic acid 3a316) 5.10 mg/kg

Vitamin C (Ascorbic acid 3a300) 180.00mg/kg

Vitamin E (all-rac-alpha-tocopheryl acetate 3a700) 370 mg/kg

Biotin (3a880) 459 µg/kg

Choline chloride (3a890) 2100 mg/kg

Trace elements:

Manganese from Manganese chelate of glycine, hydrate (3b506) 9.00 mg/kg

Zinc from Zinc Chelate of glycine, hydrate (3b607) 90.00 mg/kg

Iron from Iron(II) chelate of glycine, hydrate (3b108) 30.00 mg/kg

Copper from Copper Chelate of glycine, hydrate (3b413) 6.00 mg/kg

Iodine from Calcium iodate, anhydrous (3b202) 1.2 mg/kg

Feed materials:

Rapeseed oil as source of Linolenic acid C 18:3 (2000.00 mg/kg)

Poultry as source of Linoleic acid C 18:2 (5333.33 mg/kg)

Fish oil as source of EPA C 20:5 (3000 mg/kg) and DHA C 22:6 (2000 mg/kg)