

IPAKITINE COMPOSITION

Fine white powder made of :

Calcium carbonate.....	10%
Chitosan (crab shell extract).....	8%
Lactose.....	82%

IPAKITINE : DOSE RATE

1g for 5kg body weight, twice a day, combined with feed.
Drinking water should be made available for the pet

PRESENTATIONS

- 60 g tub
- 180 g tub
- 300 g tub

1 g spoon is available inside the tub



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Supporting pets with
Chronic **R**enal **F**ailure



IPK4/2016

CRF: HOW TO PROLONG LIFE EXPECTANCY IN CATS AND DOGS ?

by fighting against compensatory mechanisms



Reduction of phosphataemia: the corner stone of CRF treatment.

Reduction of phosphataemia has been shown to be the only way that increases life expectancy in dogs and cats whatever the stage of the disease.

Reduction of protein intake: proven ineffective on survival time

Protein restriction has no effect on survival time^{(1), (4), (5)}. Nevertheless low protein diets are generally recommended for limiting azotemia, caused by excess in protein catabolism. Special care should be given not to reduce too much the intake of protein: it could result in protein depletion.

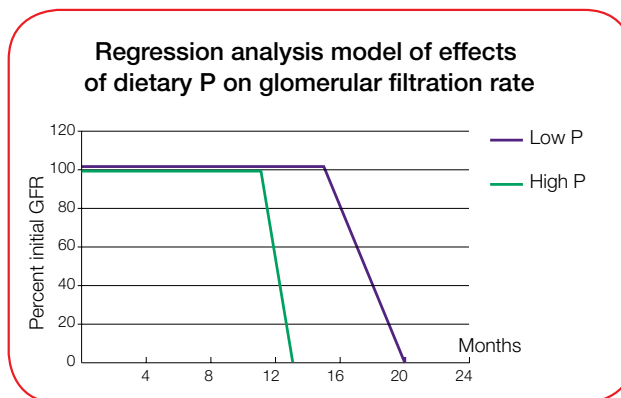
Reduction of glomerular hypertension: limited to the most severe cases

Vasodilators which specifically target the efferent arteries of the glomerulus should help in decreasing intraglomerular hypertension thus limiting glomerular sclerosis. In cats, no publication on clinical efficacy has been issued yet. Some preliminary results seem to show that it would be effective on the most severe cases (Urine Protein to Creatinine ratio > 0.8).

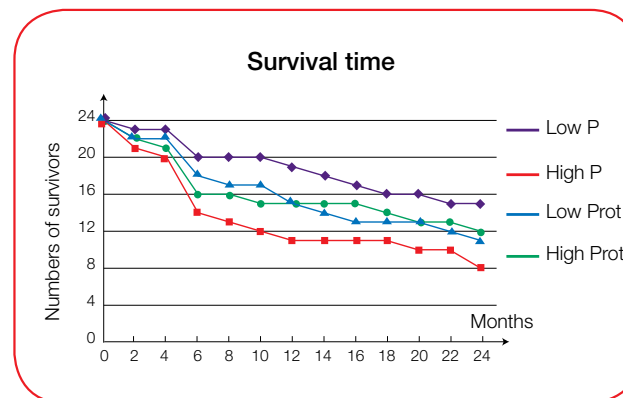
REDUCTION OF PHOSPHATAEMIA IN DOGS (1)

Dogs fed with low phosphorus diets show better glomerular filtration rate.

They also enjoy a significant prolonged survival. Protein has no effect.



(Finco and coll. 1992)

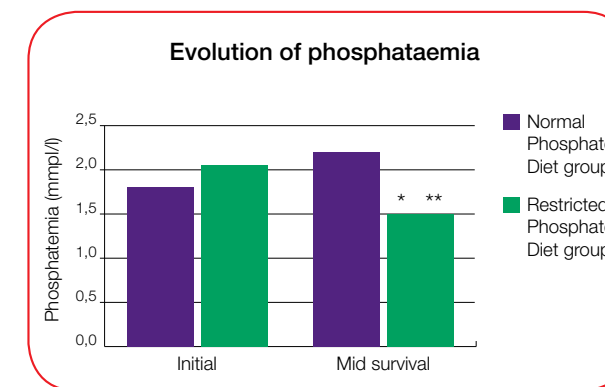


(Finco and coll. 1992)

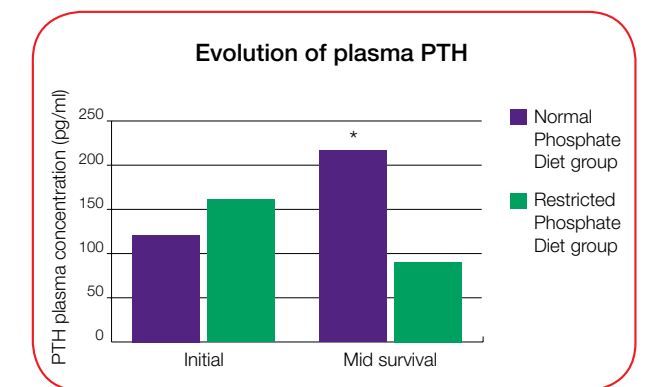


REDUCTION OF PHOSPHATAEMIA IN CATS (3)

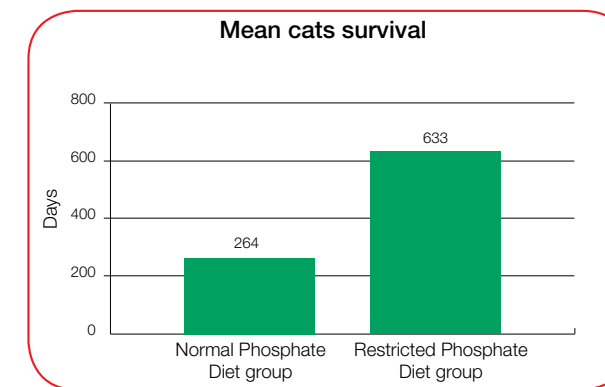
The life expectancy of cats with borderline naturally occurring CRF is 2.5 times longer when they are fed with phosphate restricted diets in combination, when needed, with phosphate binders.



* p<0.01 vs NPD Group (Elliott and coll. 2000)
** p<0.002 vs initial diagnosis



* p<0.015 vs initial diagnosis (Elliott and coll. 2000)



The Kaplan-Meier survival curves show a highly significant difference between the 2 groups (p=0.0036) (Elliott and coll. 2000)



(1) Effects of dietary phosphorus and protein in dogs with renal failure. Delmar R. Finco, Scott A. Brown, Wayne A. Crowell, Robert J. Duncan, Jeanne A. Barsanti, Samuel E. Bennett. 1992 Am. Journ. Vet. Res. 53, 2264-2271.
 (2) Effects of phosphorus/calcium-restricted and phosphorus/calcium-replete 32% protein diets in dogs with chronic renal failure. Delmar R. Finco, Scott A. Brown, Wayne A. Crowell, Carlotta A. Groves, Robert J. Duncan, Jeanne A. Barsanti. 1992 Am. Journ. Vet. Res. 53, 157-163.
 (3) Survival in cats with naturally occurring chronic renal failure: effect of dietary management. J. Elliott, J. M. Rawlings, P. J. Markwell, P. J. Barber. 2000 Journ. Small Anim. Pract. 41, 235-242.
 (4) Protein and calorie effects on progression of induced chronic renal failure in cats. Delmar R. Finco, Scott A. Brown, Cathy A. Brown, Wayne A. Crowell, Gregory Sunwold, Tanya L. Cooper. 1998 Am. Journ. Vet. Res. 59, 575-581.
 (5) Long term renal responses to high dietary protein in dogs with 75% nephrectomy. John L. Robertson, Michael Goldshmidt, David S. Kronfeld, John E. Tomaszewski, Gary S. Hill and Kenneth C. Bovee. 1986, Kidney International, 29, 511-519.

PRODUCT DESCRIPTION & MODE OF ACTION.

Ipakitine® is a complete and optimised combination of chitosan and calcium carbonate. Both substances play their role in binding phosphates. In addition chitosan binds some uraemic toxins, causes of the clinical symptoms.

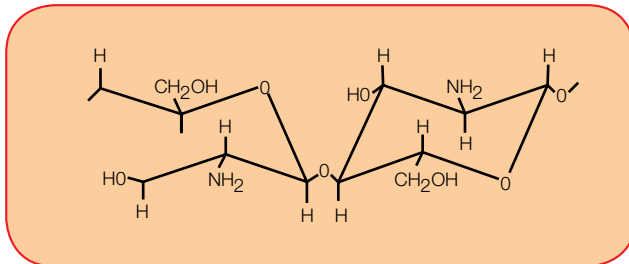
Years of use in the field has confirmed the very high palatability of Ipakitine. This is very important in the case of CRF and especially for cats.

CALCIUM CARBONATE: THE PHOSPHATE ELIMINATOR AGENT

- Calcium carbonate belongs to the short list of substances commonly used in human medicine to bind phosphate in patients with CRF:
- Calcium carbonate is safe. It is not an aluminium based phosphorus binding agent. Aluminium accumulates in various tissues of the body including bones and brain and may lead to encephalopathy, anaemia, bone disease...

CHITOSAN: THE RENO-PROTECTIVE AGENT

- Chitosan results from the de-acetylation of the chitin of crabs. There are many different types of chitosan according to their molecular weight and de-acetylation rate.



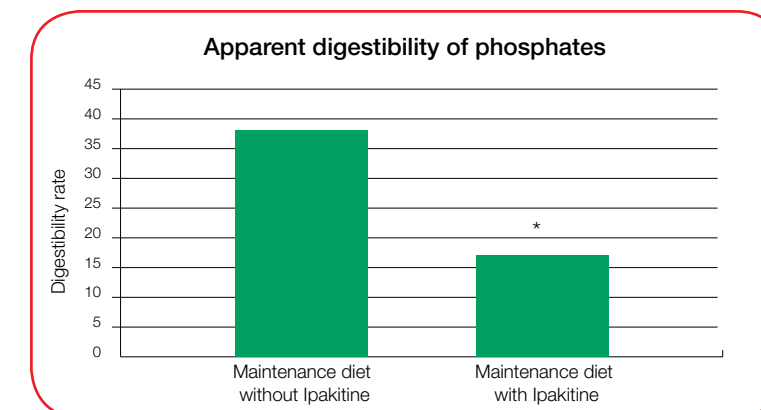
- Chitosan has been proven to decrease blood urea and creatinine in rats, mice and human.
- Chitosan decreases blood phosphorus and urea in cats.
- Chitosan binds numerous uraemic toxins, in vitro.

IPAKITINE®, A PROVEN EFFICACY.

Ipakitine® was the subject of a comparative study at the Veterinary University of Vienna in 2003⁽⁶⁾. It was aimed at assessing Ipakitine efficacy in reducing phosphataemia and uraemia. It involved both healthy young cats and cats with early stage naturally occurring chronic renal failure.

IPAKITINE® REDUCES PHOSPHORUS BLOOD CONCENTRATION

IPAKITINE® LOWERS PHOSPHORUS ABSORPTION IN NORMAL CATS

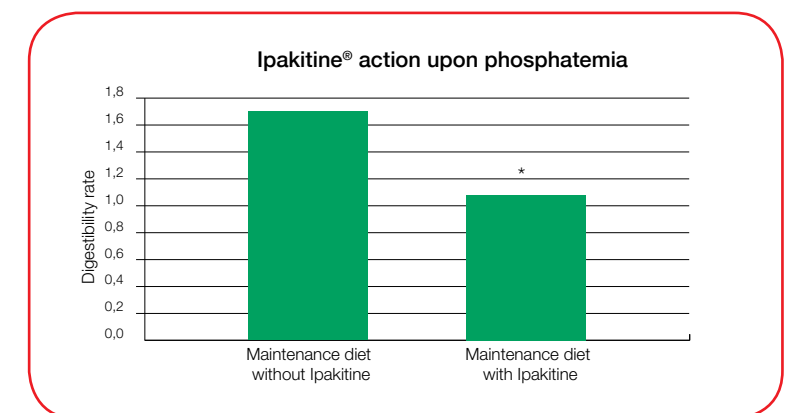


* significant difference $p < 0.05$

(Wagner and coll. 2004)



IPAKITINE® LOWERS PHOSPHATAEMIA IN CATS WITH CRF



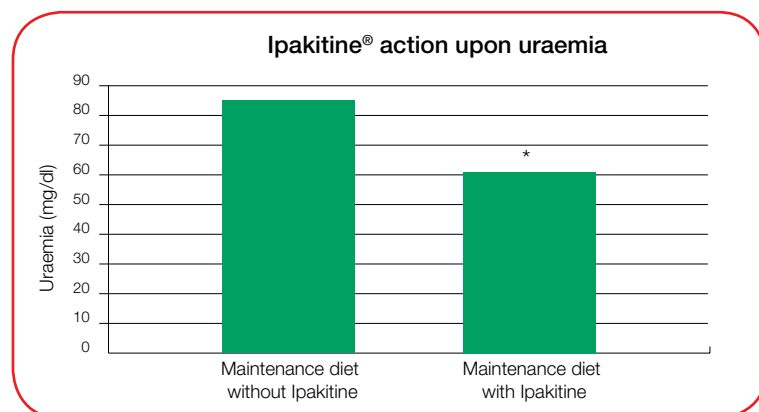
* significant difference $p < 0.05$

(Wagner and coll. 2004)

In cats with CRF, Ipakitine decreases the serum phosphorus concentration from 1.7mmol/l (above the normal range) to 1.1 mmol/l (within the normal range).

IPAKITINE[®], A PROVEN EFFICACY.

IPAKITINE[®] REDUCES URAEMIA IN CATS WITH CRF



* significant difference $p < 0.05$

(Wagner and coll. 2004)

IPAKITINE[®] SHOWS EXCELLENT SAFETY

All other biological parameters (TP, AST, ALT, WBC, RBC, Hk, MCV, MCH, MCHC) remained at a normal level and especially blood calcium concentration which did not change during the 35 days of the trial.



(6) Effects of a dietary chitosan and calcium supplement on Ca and P metabolism in cats. E. Wagner, I. Schwendenwein, J. Zentek, BMTW 117: 7/8 (2004)

HOW AND WHEN TO USE IPAKITINE[®] ?

EARLIEST STAGES OF CHRONIC RENAL FAILURE: A PREVENTATIVE MEASURE

Reducing plasma phosphorus blood concentration is now considered as the primary goal in CRF treatment. It should take place even before the reduction of protein intake.

MILD CHRONIC RENAL FAILURE: A PRAGMATIC ALTERNATIVE TO A RENAL DIET

Once azotemia has been diagnosed, it is advised to lower the protein intake in order to relieve clinical symptoms. Nevertheless, anorexia is a very common clinical symptom for CRF and the main one for cats. In many cases it is very difficult or even impossible to make the cat change its usual diet towards a less palatable renal diet.

Ipakitine[®] is palatable, therefore no change in the current diet is required.

Ipakitine[®] reduces phosphataemia and uraemia.

Therefore Ipakitine[®] is a sensible and pragmatic alternative that enables the practitioner to keep close to the main objectives of the CRF treatment: increase in survival time and improvement in health status.

MODERATE TO SEVERE CHRONIC RENAL FAILURE: A COMPULSORY COMPLEMENT TO A RENAL DIET

Because at some point in the evolution of CRF, feeding with specific renal diet is not enough to limit phosphataemia to an acceptable level, phosphorus binders must be used.

Ipakitine[®] is the only veterinary phosphorus binder and it offers in addition palatability, safety and beneficial action on uraemic toxins.

In combination, ACEis may be used in the latest stages of the evolution of the disease.

