



# Have you handled the collateral effects of kidney failure in your patient?

Signs of kidney failure are only revealed after a significant amount of kidney tissue is already impaired. By then your patient's body has already been compromised by several metabolic consequences. However there is still time to initiate Plan **B**.



**Aventi Kidney Complete** is an all-in-one & easy-to-give supplement consisting of a comprehensive formulation

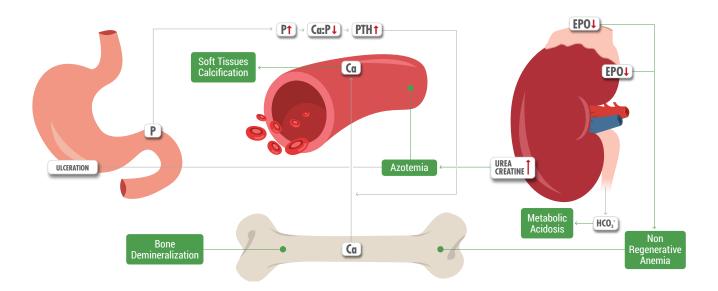
- <u>Binders of phosphate</u>, safe & effective: calcium carbonate, calcium lactate gluconate, chitosan
- <u>Buffer</u> of metabolic acidosis recommended by IRIS\*: sodium bicarbonate
- <u>Blood cleansers</u>—prebiotics & probiotics known to metabolize uremic toxins containing nitrogen: FOS, Lactobacillus acidophilus, Lactobacillus plantarum
- <u>Blood builders</u>: B & C vitamins known to contribute to red blood cell metabolism
- <u>Body antioxidant</u> support: chitosan, vitamin C, olive oil extract

<sup>\*</sup> International Renal Interest Society





## What are the major collateral effects of the impairment of the kidney function on the patient's body?



A failing kidney is not able to properly excrete phosphate (P) as it is absorbed by the intestine resulting in **hyperphosphatemia**. This causes a phosphate and calcium (Ca) imbalance with an increase in phosphate triggering a response aimed at increasing blood calcium levels. For that purpose, the parathyroid hormone (PTH) is produced by the parathyroid gland, triggering the break down of bone tissue. This results in **bone demineralization** and the accumulation of excess calcium in the blood eventually leads to **soft tissue calcification**<sup>1</sup>

that causes further damage to the kidneys as well as the adrenal glands. This impedes the production of erythropoietin (EPO) leading to **non-regenerative anemia**<sup>2</sup>. As kidney function is failing, reabsorption of bicarbonate ions (HCO<sub>3</sub>) from the urine is impaired resulting in **metabolic acidosis**<sup>3</sup>. In addition, the loss of the excretory capacity of the kidneys results in **azotemia**, ultimately causing nausea, vomiting and diarrhea.

8 studies conducted on a total of 160 patients with CKD stages 3 – 4 and up to 360 days of Aventi Kidney Complete administration showed a decrease in phosphatemia, metabolic acidosis, blood creatinine level & UPC ratio. No hypercalcemia was reported at the end of administration periods and improved Body Condition Score was shown. Pet owners described very good palatability and no adverse effects<sup>4</sup>.

#### **Presentations:**

 Powder in jars of 3.2 oz. & 10.5 oz.
0.6 g & 2.4 g scoops are both supplied with each jar

#### **Daily administration:**

- 1 small scoop (0.6 g) per 2.5 kg / 5.5 lbs.
- 1 large scoop (2.4 g) per 10 kg / 22 lbs.

### Ingredients per 0.6 g scoop:

Calcium carbonate	156 mg
Calcium lactate gluconate	96 mg
Chitosan	48 mg
Sodium bicarbonate	36 mg
Fructo-oligosaccharides (FOS)	120 mg
Lactobacillus acidophilus 180	million CFU
Lactobacillus plantarum60	million CFU
Vitamin B6	3 mg
Vitamin B9	1.20 g
Vitamin B12	0.06 mg
Vitamin C	30 mg
Olive oil extract	12 mg





1 Chew DJ et al. Prolonging life and kidney function. 2007 WSAVA Congress Proceedings, 2 Polzin DJ et al. Chronic kidney disease in small animals. Vet Clin Small Anim 2011;41:15-30, 3 Chen W et al. Metabolic acidosis and the progression of chronic kidney disease. BMC Nephrology 2014;15:55, 4 Data on file