

CROCODILIA-MAINT™ (Dry)



Crocodilia-MAINT™ canine dry diets contain a limited number of highly digestible ingredients making them appropriate for an elimination diet trial and maintenance options in dogs suspected to have allergic dermatologic or gastrointestinal disease.¹ Alligator provides a unique novel protein source, while limited carbohydrates include chickpea or quinoa.

Algae provides a vegetable omega-3 source in order to manage the most sensitive allergy patients.² Higher omega-3 fatty acids (EPA/DHA/DPA) contribute to reducing inflammation.^{2,3} An optimal blend of fibre and the addition of prebiotics helps to maintain gastrointestinal health.⁴

Features:

- Unique animal-source novel protein (alligator)^{1,4-6}
- No animal fat, corn or wheat (potential allergen sources)^{1,5-7}
- Unique vegetable omega-3 source provides higher levels of omega fatty acids (EPA/DHA/DPA)²
- Moderately low phosphorus content
- Low sodium content
- Moderate fat content
- Added prebiotics (fructooligosaccharides)⁴

Therapeutic Indications:

- Adverse reactions to food (dermatologic and gastrointestinal)⁵⁻¹²
- Adverse reactions to food (dermatologic and gastrointestinal) with concurrent disease
 - IRIS stage 1 and 2 +/- stage 3 renal disease¹³⁻¹⁵
 - Consideration for individual patients with proteinuric renal disease¹⁶
- Non-copper-associated liver disease (patient dependent)¹⁷⁻¹⁹

CROCODILIA-MAINT™ (Dry)



WITH CHICKPEA FORMULA



INGREDIENTS (DRY):

Dried chickpeas, alligator, dried peas, potato flour, pea protein, natural flavor, sunflower oil, (preserved with mixed tocopherols), coconut oil, calcium carbonate, marine microalgae, fructooligosaccharides, salt, dicalcium phosphate, vitamins (vitamin E supplement, vitamin B12 supplement, niacin, d-calcium pantothenate, vitamin A acetate, biotin, riboflavin, thiamin mononitrate, vitamin D3 supplement, pyridoxine hydrochloride, folic acid), dl-methionine, choline chloride, minerals (ferrous sulfate, zinc oxide, manganous oxide, copper sulfate, iron amino acid chelate, zinc amino acid chelate, manganese amino acid chelate, copper amino acid chelate, sodium selenite, cobalt carbonate, ethylenediamine dihydriodine), taurine, mixed tocopherols, rosemary extract.

NUTRITIONAL DETAILS (Calculated **) & AMOUNT/CUP:

Dry (3 kg & 11 kg)

ME: 3,524 kcal/kg as is;
 3,830 kcal/kg dry weight
Approximate g/cup: 107
kcal/cup: 378

Percentage of Metabolizable Energy from:

Protein 20.7%
 Fat 28.1%
 Carbohydrates 51.2%

CROCODILIA-MAINT (Dry)



WITH CHICKPEA FORMULA

Nutrient	% As Is	% Dry Matter	g/1000 kcal
Protein	20.9	22.7	59.2
Fat	11.7	12.7	33.1
Crude Fibre	2.6	2.8	7.4
Total Dietary Fibre	10.6	11.5	30.0
CHO-NFE#	51.5	56.0	146.2
Calcium	0.79	0.86	2.3
Phosphorus	0.51	0.55	1.4
Potassium	1.0	1.1	2.9
Sodium	0.23	0.25	0.65
Magnesium	0.14	0.15	0.39
Copper	16.5 mg/kg	17.9 mg/kg	4.7 mg
Taurine	1132 mg/kg	1333 mg/kg	378 mg
EPA/DHA/DPA*	0.42	0.45	1.18

#Carbohydrate Nitrogen-Free Extract

*Omega-3 fatty acids: eicosapentaenoic acid/docosahexaenoic acid/docosapentaenoic acid

**The values listed represent expected numbers and are based on thorough analysis of diet ingredients; some lot-to-lot variation due to ingredient-related factors is expected. Strict attention to nutrients of clinical concern is upheld with quality assurance analyses prior to product release.

CROCODILIA-MAINT™ (Dry)



WITH QUINOA FORMULA



INGREDIENTS (DRY):

Quinoa, alligator, millet, potato protein, dried sweet potato, natural flavor, calcium carbonate, sunflower oil (preserved with mixed tocopherols), coconut oil, marine microalgae, dicalcium phosphate, fructooligosaccharide, salt, choline chloride, vitamins (vitamin E supplement, vitamin B12 supplement, niacin, d-calcium pantothenate, vitamin A acetate, biotin, riboflavin, thiamin mononitrate, vitamin D3 supplement, pyridoxine hydrochloride, folic acid), taurine, dl-methionine, minerals (zinc methionine complex, zinc sulfate, iron proteinate, ferrous sulfate, copper proteinate, copper sulfate, manganese proteinate, sodium selenite, manganous oxide, calcium iodate, ethylenediamine dihydroiodide), mixed tocopherols, rosemary extract.

NUTRITIONAL DETAILS (Calculated **) & AMOUNT/CUP:

Dry (3 kg & 11 kg)

ME: 3,545 kcal/kg as is;
3,853 kcal/kg dry weight
Approximate g/cup: 107
kcal/cup: 379

Percentage of Metabolizable Energy from:

Protein 21.9%
Fat 27.8%
Carbohydrates 50.3%

CROCODILIA-MAINT (Dry)



WITH QUINOA FORMULA

Nutrient	% As Is	% Dry Matter	g/1000 kcal
Protein	22.2	24.2	62.7
Fat	11.6	12.6	32.6
Crude Fibre	2.2	2.3	6.1
Total Dietary Fibre	2.2	2.4	6.2
CHO-NFE#	51.0	55.4	143.8
Calcium	0.88	0.96	2.5
Phosphorus	0.59	0.64	1.7
Potassium	0.61	0.67	1.7
Sodium	0.16	0.18	0.45
Magnesium	0.18	0.19	0.51
Copper	19.4 mg/kg	21.0 mg/kg	5.5 mg
Taurine	1335 mg/kg	1451 mg/kg	377 mg
EPA/DHA/DPA*	0.42	0.45	1.17

#Carbohydrate Nitrogen-Free Extract

*Omega-3 fatty acids: eicosapentaenoic acid/docosahexaenoic acid/docosapentaenoic acid

**The values listed represent expected numbers and are based on thorough analysis of diet ingredients; some lot-to-lot variation due to ingredient-related factors is expected. Strict attention to nutrients of clinical concern is upheld with quality assurance analyses prior to product release.

FEEDING GUIDELINES:

- Always follow your veterinarian's instructions, as feeding amounts can vary by as much as 30% between dogs.^{20,21}
- Avoid free feeding (unless there is a specific medical reason); it may promote obesity over time.²²
- The tables below can be used to estimate the amount to feed using the dog's optimum weight.
- Always introduce new foods gradually over 5-7 days by substituting larger amounts of the new food in place of the old diet.

Please see our website to locate our Feeding Calculator. The calculator can assist with caloric requirements, feeding volumes, and includes combinations of the wet and dry diets.

CROCODILIA-MAINT™ (Dry)



WITH CHICKPEA FORMULA

378 kcal/CUP

Weight Class		Cups to Feed Per Day
LB	KG	
5 - 10	2.3 - 4.5	1/2 - 3/4
10 - 20	4.5 - 9.1	3/4 - 1 1/3
20 - 30	9.1 - 13.6	1 1/3 - 1 3/4
30 - 40	13.6 - 18.2	1 3/4 - 2 1/4
40 - 50	18.2 - 22.7	2 1/4 - 2 2/3
50 - 60	22.7 - 27.3	2 2/3 - 3
60 - 70	27.3 - 31.8	3 - 3 1/2
70 - 80	31.8 - 36.4	3 1/2 - 3 3/4
80 - 90	36.4 - 40.9	3 3/4 - 4 1/4
90 - 100	40.9 - 45.5	4 1/4 - 4 1/2

CROCODILIA-MAINT™ (Dry)



WITH QUINOA FORMULA

379 kcal/CUP

Weight Class		Cups to Feed Per Day
LB	KG	
5 - 10	2.3 - 4.5	1/2 - 3/4
10 - 20	4.5 - 9.1	3/4 - 1 1/3
20 - 30	9.1 - 13.6	1 1/3 - 1 3/4
30 - 40	13.6 - 18.2	1 3/4 - 2 1/4
40 - 50	18.2 - 22.7	2 1/4 - 2 2/3
50 - 60	22.7 - 27.3	2 2/3 - 3
60 - 70	27.3 - 31.8	3 - 3 1/2
70 - 80	31.8 - 36.4	3 1/2 - 3 3/4
80 - 90	36.4 - 40.9	3 3/4 - 4 1/4
90 - 100	40.9 - 45.5	4 1/4 - 4 1/2

Feeding guidelines are from the AAHA 2010 Nutritional Assessment Guidelines for Dogs and Cats.²⁰ The tables should be used as a starting guideline and the actual amounts fed may need to be increased or decreased based on each dog's individual energy requirement. Energy requirements will vary depending upon such factors as age, breed, gender and neuter status, activity level, and underlying disease state.

COMPATIBLE WET DIET

Crocodilia-MAINT wet diet is available and can be fed as a complete and balanced maintenance food or in combination with the Crocodilia-MAINT (with chickpea) or Crocodilia-MAINT (with quinoa) dry diets.

COMPATIBLE TREATS

Rayne Rewards S.I.T. Alligator treats are appropriate in otherwise healthy patients throughout a corresponding elimination diet trial and in stable allergic or non-allergic patients. All Rayne Rewards jerky treats are single protein, aligned with the proteins used in Rayne diets. They undergo rigorous quality control to ensure purity. Rayne Rewards S.I.T. Every Dog Apple & Pumpkin biscuits are acceptable vegetable-based treats for use in a stable allergic or non-allergic patient. Ensure that energy intake from treats does not exceed 10% of daily kcal intake and that the total kcal from treats is subtracted from the calculated daily kcal requirement when determining the volume of diet to be fed.²³

NUTRITIONAL ADEQUACY STATEMENT FOR DIFFERENT LIFE STAGES

The canine Crocodilia-MAINT (with chickpea) and Crocodilia-MAINT (with quinoa) dry diets have been formulated to meet the Association of American Feed Control Officials (AAFCO) nutrient requirements for maintenance of adult dogs.

HELP

For veterinarians or clinic staff wanting to discuss individualized patient recommendations, obtain additional diet information, access the veterinary login, or any other questions, please call or email for a consult. One of the Rayne clinical consult team members will be pleased to communicate with you: consults@raynenutrition.com or 1-800-816-1763.

References to support the above clinical indications and aid client discussions about the benefits of the above veterinary exclusive diets include:

1. Gaschen FP and Merchant SR. Adverse food reactions in dogs and cats. *Vet Clin Small Anim* 2011(41):361-379.
2. Lennox, CE, Overview of fatty acids in companion animal medicine. *JAVMA*, Vol 246, No 11, June 1, 2015. pp1198-1202.
3. Bauer J. Facilitative and functional fats in diets of cats and dogs, *JAVMA*, Vol 229, No. 5, September 1, 2006, 680-684.
4. Cave N. Nutritional management of gastrointestinal diseases. In: Delaney SJ, Fascetti A (eds). *Applied Veterinary Clinical Nutrition*. Chichester,UK: Wiley-Blackwell,2012:175-219.
5. Hensel, P. Nutrition and skin diseases in veterinary medicine. *Clin Dermatol* 2010;28 (6):686-693.
6. Wills J and Harvey R. Diagnosis and management of food allergy and intolerance in dogs and cats. *Aust Vet J* 1994;71(10): 322-326.
7. Verlinden A, Hesta M, Millett S, et al. Food allergy in dogs and cats: a review. *Crit Rev Food Sci* 2006;46:259-73.
8. Marsella R, Miller WH, Griffin CE, et al. Hypersensitivity Disorders. In: Miller WH, Griffin CE, Campbell KL, editors. *Muller and Kirk's Small Animal Dermatology*. 7th ed. St. Louis, MO: Elsevier, 2013:363-431.
9. Simpson K and Jergens A. Pitfalls and progress in the diagnosis and management of canine inflammatory bowel disease. *Vet Clin Small Anim* 2011(41):381-398.
10. Kennis R. Food allergies: update of pathogenesis, diagnoses, and management. *Vet Clin Small Anim* 2006;36(1):175- 84.
11. Chandler M. Focus on nutrition: dietary management of gastrointestinal disease. *Compend Contin Educ Vet*. 2013;35(6):E1-E3.
12. Kennis R. Food allergies: update of pathogenesis, diagnoses, and management. *Vet Clin Small Anim* 2006;36(1):175- 84.
13. Jacob F, Polzin DJ, Osborne CA, et al. Clinical evaluation of dietary modification for treatment of spontaneous chronic renal failure in dogs. *J Am Vet Med Assoc* 2002;220(8):1163-70.
14. IRIS (International Renal Interest Society) Canine Guidelines 2013. <http://www.iris-kidney.com/guidelines/recommendations.shtml>.
15. Finco DR, Brown SA, Crowell WA et al. Effects of dietary phosphorus and protein in dogs with chronic renal failure. *Am J Vet Res*. 1992;53(12):2264-71.
16. Parker VJ and Freeman LM, Nutritional Management of Protein-Losing Nephropathy, *Compendium Continuing Education for Veterinarians*, July 2012, ppE1-E5.
17. Center S. Nutritional support for dogs and cats with hepatobiliary disease. *J Nutr*. 1998;128 (12 Suppl):2733S-2746S.
18. Boub S et al, Portal Hypertension: Pathophysiology, Diagnosis, and Treatment. *J Vet Intern Med* 2011;25:169-186
19. Meyer HP et al. Hepatobiliary Disease. In Hand MS et al (eds.) *Small Animal Clinical Nutrition* (5th ed.) Topeka, KS. The Mark Morris Institute. 2008-2014. pp 1155-1192.
20. Baldwin K, Bartges J, Buffington T, et al. AAHA nutritional assessment guidelines for dogs and cats. *J Am Anim Hosp Assoc* 2010;46(4):285-96.
21. Subcommittee on Dog and Cat Nutrition, Committee on Animal Nutrition, National Research Council. *Nutrient requirements of dogs and cats*, 2006.
22. Jeusette I, Detilleux J, Cuvelier C, et al. Ad libitum feeding following ovariectomy in female Beagle dogs: effect on maintenance energy requirement and on blood metabolites. *J Anim Physiol Anim Nutr (Berl)* 2004;88(3-4):117-21.
23. Fascetti AJ and Delaney SJ. Feeding the healthy dog and cat. In: Delaney SJ, Fascetti A (eds). *Applied Veterinary Clinical Nutrition*. Chichester,UK: Wiley-Blackwell,2012:75-94.

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