



Considerations When Evaluating Carna4 with Common Assessment Tools

When assessing Carna4 it's very important to first recognize that **Carna4 is not a conventional kibble**. Carna4 is made with completely different types of ingredients and processing methods. For instance, we do not use any synthetic supplements in any of our formulas. Instead, **we gently process a blend of fresh, whole food ingredients to retain their native nutrition** and then **thoroughly test to ensure nutrient guarantees have been met from food alone**.

Large, profit-driven manufacturers try to persuade pet-owners that smaller, “boutique” pet food manufacturers do not have the resources to research, formulate and test products as well as the giants do. In fact, the opposite is often true. A health-focused enterprise like Carna4 can seek out the best, independent researchers to help produce leading-edge products using the most current science and test them more frequently without being constrained by corporate goals. Compare ingredient lists, nutrient levels and breadth of nutrient guarantees, between Carna4 and the “factory food” products you have been shown. Consider the differences between using only natural, whole food ingredients like Carna4, instead of man-made, synthetic ingredients (meat meal, rendered fat, processed grains, added chemical supplements, etc.) in synthetic kibble. You don't need to be a nutritionist to see the difference.

In most pet food stores, Carna4 will be stocked in the minimally-processed pet food category, next to dehydrated, freeze-dried, air-dried, etc. which are much closer in nature to raw or home-prepared diets than they are to conventional kibble. Unfortunately, many assessment tools are better suited for conventional pet foods and do a poor job assessing the features of more natural diets that set them apart. **Nutritious and appropriate pet foods can come in many forms** which is why it's so important to thoroughly research what each category offers and the different brands within them to determine what is **the best option for your pet and your lifestyle**.

Below are our responses to WSAVA questions....

1. Do you employ a full-time qualified nutritionist? Appropriate qualifications are either a PhD in animal nutrition or board-certification by the American College of Veterinary Nutrition (ACVN) or the European College of Veterinary Comparative Nutrition (ECVCN). What is this nutritionist's name and qualifications?

For formulating and testing our products, Carna4 works with the most experienced and professional pet nutrition laboratory in North America, Mortec Scientific & Medical Group (morteclabs.com), whose scientists hold graduate degrees in food sciences for humans and animals. Their relevant work includes managing a Canadian Veterinary Medical Association Certification Food Program. We keep Mortec on retainer to provide us with weekly R&D support and laboratory analysis results. We also follow AAFCO guidelines during our R&D process to ensure we've met their requirements.

2. Who formulates your foods and what are his/her credentials?

The owners and creators of Carna4, David and Maria, each have 30+ years of experience making pet food. Prior to Carna4, Dave spent 22 years in charge of creating pet foods for Canada's largest pet specialty retailer, producing one of the country's best-selling dog and cat food lines in the early 2000s. This experience opened his eyes to the shortcomings in commercial pet foods available. Maria, who is also a practitioner of complementary medicine, co-founded Sojourner Farms Natural Pet Products in the 1980's, one of North America's first raw-diet dog and cat food brands. Together, they combined their years of practical experience with a passion for Real Food nutrition, resulting in the most innovative whole food complete diets for pets. For any new Carna4 product, all Research & Development, product formulation and laboratory testing is done by David and Maria, Dr Scott Morton (President, Mortec) and Dr Morton's team of food scientists.

3. Are your diets tested using AAFCO feeding trials or by formulation to meet AAFCO nutrient profiles? If the latter, do they meet AAFCO nutrient profiles by formulation or by analysis of the finished product?

We do not participate in AAFCO feeding trials as we believe these trials are not available on a scale (number of participants and duration) required to offer valuable information on a truly natural pet diet. Our formulas are consistently tested and verified to meet and exceed AAFCO requirements by analysis of the finished product.

4. Where are your foods produced and manufactured?

We bake our Carna4 dog and cat food recipes in an EU-certified family-run bakery called Bio Biscuit Inc. in Quebec, Canada. We source all our ingredients directly from producers, building relationships with as many family-owned small businesses and farmers as we can.

5. What specific quality control measures do you use to assure the consistency and quality of your ingredients and the end product?

We hold and test every batch of food we make in the bakery before it is cleared for shipment. Samples from each batch are sent for 3rd party safety testing for pathogens and toxins such as **salmonella and enterobacteria**. We adhere to EU standards set for the human sector, not the lower safety standards for pet food. Nothing is shipped until it is guaranteed safe. Below is a list of heavy metals, pathogens and toxins we regularly test for the following:

- cadmium
- arsenic
- lead
- mercury
- PCBs
- Aflatoxins (B1, B2, G1 & G2)
- Vomitoxin
- Fumonisin
- Ocharatoxin A
- Zearalenone 1
- Salmonella
- E-Coli 0157
- Coliforms
- Listeria
- Yeast & Mold

6. Will you provide a complete nutrient analysis for the dog or cat food in question? (Can they provide an average/ typical analysis, not just the guaranteed analysis which is only the minimums or maximums and not an exact number)? You should be able to ask for any nutrient - e.g., protein, phosphorus, sodium, etc. - and get an exact number. This should ideally be given on an energy basis (i.e., grams per 100 kilocalories or grams per 1,000 kilocalories), rather than on an 'as fed' or 'dry matter' basis which don't account for the variable energy density of different foods.

The regulators at AAFCO understand that there are natural and unavoidable variabilities in nutrient levels of ingredients and finished products from batch to batch. No manufacturer can guarantee an unvariable, "exact number", which is why AAFCO requires guarantees of minimum and/or maximum levels for any essential nutrient.

We follow the AAFCO guidelines for packaging declarations, which require us to guarantee minimum and maximum levels of nutrients by weight "as fed". We also provide guaranteed levels of a far larger list and healthier concentrations of vitamins, minerals, antioxidants, and other essential nutrients than required by AAFCO.

Declarations in terms of nutrients by caloric serving size are not approved by AAFCO. However, there is sufficient information regarding caloric and nutrient densities declared on our packages, brochures and website for a competent professional to calculate nutrients levels per 100 kilocalories. Your advisor should be able to perform these calculations.

7. What is the caloric value per gram, can, or cup of your foods?

The caloric values of each recipe, expressed in kilocalories per cup, and kilocalories per kilogram are listed on every bag of Carna4.

8. What kind of product research has been conducted? Are the results published in peer-reviewed journals?

Carna4 Dog and Cat foods have been formulated, and tested continuously over the last 12 years by leading industry professionals specified above. Their role in improving animal health has been validated by in-home feeding trials prior to launching of any new products.

January 2022