

# Why Your Pet Might Go Quackers for This Protein Swap

While your dog or cat may enjoy chicken or beef regularly, it's good to introduce them to new flavors every once in a while. This alternative protein may be a healthy, enjoyable way to change things up.

Reviewed by Dr. Becker



## STORY AT-A-GLANCE

- Duck meat can be used as a novel protein in a dietary elimination trial to remove allergic ingredients from your pet's diet
- Duck meat contains omega-3 fatty acids as well as amino acids, including creatine, carnosine, anserine, betaine and L-carnitine
- Duck meat also happens to be a good source of protein, providing 6.6 grams in just an ounce
- One ounce (28 grams) provides a microgram of riboflavin (vitamin B2), 1.4 milligrams of niacin (vitamin B3) and 6.3 micrograms of selenium
- You can also feed duck eggs to your dog or cat, as they contain a mixture of protein and other nutrients that may support wellness

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When it comes to feeding protein to your pets, the default choices that typically come to mind are chicken and beef. However, there may be times when you want to explore more novel forms of protein as a way to introduce new flavors, and duck meat is one option. Not only is it tasty, it's also filled with bioactive compounds that may support health. And duck eggs are no slouch in the nutrition department, either.



### Did You Know?

Duck meat is darker than chicken meat, and has a rich, gamey flavor that's closer to red meat.<sup>1,2</sup>



## Duck Meat as a Novel Protein Source

In a study published in 2016, researchers noted the top allergenic proteins for dogs that were surveyed were beef, chicken and lamb. As for cats, beef and chicken were found to be the top two allergens.<sup>3</sup> With this in mind, novel proteins can be used in place of typical ones when you're figuring out food allergies via a dietary elimination trial. Duck meat can be considered novel because it may be a protein source your pet hasn't consumed before.

If your pet is allergic to a certain protein, duck may be the foundation of a nutritionally complete homemade diet that works well. If you haven't tried duck meat as a healthy treat or topper, read on to learn why this excellent protein source may become a household favorite.

## Amino Acids and Healthy Fats in Duck Meat

According to a study published in 2020, duck meat contains anti-inflammatory omega-3 fatty acids.<sup>4</sup> Furthermore, it contains amino acids such as creatine, carnosine, anserine, betaine and L-carnitine.<sup>5</sup> Each of these compounds is essential for protein synthesis and each plays a role in keeping animals healthy.

For example, L-carnitine is used for energy metabolism.<sup>6</sup> In a 2021 canine study, L-carnitine was described as an antioxidant.<sup>7</sup> In another study, researchers found that increased L-carnitine intake was associated with increases in lean muscle mass and enhanced muscle recovery as well as lower oxidative stress during vigorous exercise.<sup>8</sup>

As for creatine, it's another bioactive compound related to production of energy. In a study published in Frontiers in Veterinary Science, creatine is found in animal tissues, and plays a role in the regeneration of adenosine triphosphate during short bouts of exercise.<sup>9</sup> Carnosine, on the other hand, is shown to be integral to the health of all vertebrate animals. It acts as an antioxidant, as well as helps chelate heavy metals, reduce lipid peroxidation and manage inflammation.<sup>10</sup>

## Duck Meat Also Contains a Variety of Vitamins and Minerals

Duck meat also contains a variety of vitamins and minerals that may support your animal companion's health. One ounce (28 grams) already provides a microgram of riboflavin (vitamin B2), 1.4 milligrams of niacin (vitamin B3) and 6.3 micrograms of selenium.<sup>11</sup>

Taking a closer look at the mentioned nutrients, published research suggests that riboflavin plays a role in the activity of antioxidant enzymes, such as superoxide dismutase.<sup>12</sup> Another study noted that riboflavin is essential for growth, as well as energy metabolism.<sup>13</sup>

Niacin also plays a role in energy metabolism in both animals and humans, as it is incorporated into the coenzymes NAD (nicotinamide adenine dinucleotide) and NADP (nicotinamide adenine dinucleotide phosphate).<sup>14</sup> In the case of selenium, adequate intake may help with thyroid metabolism, DNA synthesis and reproduction. Researchers suggest that selenium may also help lower the risk of cancer.<sup>15</sup>

Duck meat also happens to be a good source of protein, providing 6.6 grams in just an ounce.<sup>16</sup> Protein is required by animals for hormonal and enzymatic production, as well as maintaining proper function of muscles and organs.<sup>17</sup>



### Fun Fact About Duck Meat

Duck was a popular source of meat for ancient civilizations. China has records of eating duck meat going back 4,000 years ago!<sup>18</sup>



## Don't Forget About Duck Eggs

In addition to duck meat, duck eggs may be introduced as a nutritious pet treat as well. Low in calories while simultaneously rich in vitamins, minerals, healthy fats and proteins, eggs (from duck, quail or chicken) are a well-rounded treat.

A single, raw duck egg contains 8.96 grams of protein as well as 44.8 milligrams (mg) of calcium, 11.9 mg of magnesium and 155 mg of potassium.<sup>19</sup> All these nutrients can support your pet's health, so don't forget to ask your local farmer for duck eggs when sourcing duck meat.

### Top Duck Meat Producers Worldwide



As of 2022, China is the world's top supplier of duck meat at 5.5 million tons, accounting for 76% of total production. Second place belongs to France (233,000 tons), while third place goes to Myanmar (174,000 tons).<sup>20</sup>



## Sustainability of Duck Farming

With their assortment of nutrients, duck meat and eggs can be good additions to your pet's nutritionally balanced, species-appropriate diet. However, there are some considerations to keep in mind. The logistics for industrial-sized duck farming have a negative impact on the local environment where these farms are located. In a report from Lancaster Online, locals complained that an industrial duck barn may damage nearby bodies of water, and the strong smell emanating from the facility may eventually affect the health of residents.<sup>21</sup>

For that reason, purchase certified organic, pasture-raised duck meat or eggs from trustworthy, sustainable farmers whenever possible.

Purchasing organic, pasture-raised meat or eggs not only helps ensure that you're getting a safe, high-quality product, but also gives you peace of mind that the animals were raised humanely and lived in better environments.<sup>22</sup> But if your budget is tight, you can use duck meat from conventionally grown sources. Just make sure the product you're buying is clean.

## Preparing Duck Meat for Your Pet

You can serve duck meat to your pet in different ways, such as adding sliced bits (gently cooked or raw) to their meal as a food topper or as training treats. Soft-boiled duck eggs make great food toppers as well.

If your pet is allergic to a common protein source, such as beef or chicken, you can switch to duck meat in your homemade meals or look for a commercially available pet food using duck as the protein source. When using duck meat as your pet's primary protein source for homemade meals, remember to follow a recipe that's formulated to provide the minimum nutritional requirements for your dog or cat (don't guess at a homemade recipe).

Freeze-dried or dehydrated duck meat and organs are becoming increasingly popular treats, but remember when giving duck meat or eggs to your pet as a topper or bowl add-in, that the amount should not be more than 10% of their daily intake of calories.

## Sources and References

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<sup>4</sup> [Animal. 2020 Mar 31;14\(9\):1969–1975, Introduction](#)

<sup>5</sup> [Korean J Food Sci Anim Resour. 2015 Feb 28;35\(1\):114–120, Abstract](#)

<sup>6</sup> [VCA Animal Hospitals, L-Carnitine \(Archived\)](#).

<sup>7</sup> [Animals \(Basel\). 2021 Feb 23;11\(2\):581, Abstract](#)

<sup>8</sup> [Journal of Nutritional Science, Volume 6, 2017, e8](#)

<sup>9</sup> [Front. Vet. Sci., November 25, 2022, Sec. Animal Nutrition and Metabolism, Volume 9](#)

<sup>10</sup> [Antioxidants \(Basel\). 2021 Jun 28;10\(7\):1037, Introduction](#)

<sup>11,16</sup> [NutritionData, Duck, domesticated, meat only, cooked, roasted \(Archived\)](#).

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<sup>13</sup> [Front. Bioeng. Biotechnol., November 12, 2020, Sec. Industrial Biotechnology, Volume 8](#)

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<sup>20</sup> [EuroMeatNews.com, September 19, 2022](#)

<sup>21</sup> [Lancaster Online, August 22, 2021](#)

<sup>22</sup> [Poult Sci. 2021 Nov 20;101\(3\):101614, Overarching Research Gaps and Concluding Remarks](#)

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