## Grains, Pasta, Eggs & Supplement Nutrition Data

Author: Tony Booth (www.tony-booth.com)

<u>Note</u>: Phosphorus values are used to prioritize list ranking, so those with the **least phosphorus content** are at the top of the list. This should make it easier to choose the most suitable grains, pulses and pasta to include in homemade diets for kidney failure dogs. The values given are **per 100grams** of cooked and rinsed grains, pulses and pasta, unless otherwise stated. Brown and whole-meal versions of grains and pasta are not included, as they are harder to digest and therefore not advised for dogs.

The top ranking foods are not necessarily the best for a dog with kidney disease. Despite phosphorus being lower, other adverse elements such as sodium and potassium may be higher than other preferable options. The best tend to be those low in phosphorus and sodium and high in carbohydrate. Omega-3 and Omega-6 need to be balanced to the best 1:3 ratio in the daily diet, so more or less of either needs careful overall consideration. Bear in mind that while Omega-6 fatty acids can be stored in the canine body, Omega-3 (which is beneficial to kidney failure dogs) cannot and therefore has to be obtained from within the diet. Some canine nutritionists suggest more Omega-3 and less Omega-6 is beneficial. When giving omega-3 (for example, as pure organic salmon oil) it is important to give a canine formulated vitamin E with it. The recommendation when feeding eggs is to feed 3 egg whites to every 1 egg yolk, so the high Omega-6 content of the yolk is balanced with the high Omega-3 content of the egg-whites. Depending on what is being fed (in home-cooked recipes), it may be better to feed egg white only. But note that egg-whites are high in protein.

Magnesium, potassium, calcium and some vitamins also play a role in kidney failure and their emphasis for more or less within the diet will depend on current blood level results. Selenium is an antioxidant mineral dogs need, but it is also a toxic substance and presents a moderate danger to kidney failure dogs, who cannot metabolize it properly. The US National Research Council recommends 37 mcg selenium daily for 10-pound dogs and up to 207 mcg daily for dogs weighing 100 pounds. Dietary intake for a healthy dog should not exceed 900mcg for every 450 grams of food eaten. Selenium is represented in the chart as "Selinm" and measured in mcg. There are 1,000mcg in 1mg.

A separate list for calorie content is given at the end of each section, which is useful if you are looking to add weight to an already under-weight dog. Protein plays a vital role in canine health and vitality. The protein needs to be high-quality to be beneficial to kidney failure dogs, so the best foods are those that have been organically produced with no growth additives, pesticides, insecticides or preservatives used in either the growing or processing stages. Resdtricted protein is required for some types of kidney disease and in late stages.

| Grain/Pulse/Pasta                  | <u>Phos</u> | <u>Potassium</u> | <u>Sodium</u> | <u>Calcium</u> | Vitamins (top4) | <u>Iron</u> | Omega-3 | Omega-6 | <u>Protein</u> | <u>Carbs</u> | <u>Magnesium</u> | Satd Fats | <u>Selinm</u> |
|------------------------------------|-------------|------------------|---------------|----------------|-----------------|-------------|---------|---------|----------------|--------------|------------------|-----------|---------------|
| Tapioca (dry)                      | 7mg         | 11mg             | 1mg           | 20mg           | Nil             | 1.6mg       | 1mg     | 2mg     | 0.2g           | 88.7g        | 1mg              | Nil       | 0.8mcg        |
| White Rice glutinous (sticky/Thai) | 8mg         | 10mg             | 5mg           | 2mg            | Nil             | 0.1mg       | 3mg     | 66mg    | 2g             | 21g          | 5mg              | Nil       | 5.6mcg        |
| Couscous                           | 22mg        | 58mg             | 5mg           | 8mg            | E & K           | 0.4mg       | 3mg     | 60mg    | 3.8g           | 23.2g        | 8mg              | Nil       | 27mcg         |
| White Rice (short grain)           | 33mg        | 26mg             | Nil           | 1mg            | B6              | 1.5mg       | 9mg     | 41mg    | 2.4g           | 28.7g        | 8g               | 0.1g      | 7.5mcg        |

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|----------------------------|-------------|------------------|---------------|----------------|-----------------|-------------|---------|---------|----------------|--------------|------------------|-----------|---------------|
| White Rice<br>(long grain) | 43mg        | 35mg             | 1mg           | 10mg           | В6              | 1.2mg       | 13mg    | 62mg    | 2.7g           | 28.2g        | 12mg             | 0.1g      | 7.5mcg        |
| Barley                     | 54mg        | 93mg             | 3mg           | 11mg           | B6, K & A       | 1.3mg       | 21mg    | 193mg   | 2.3g           | 28.2g        | 22mg             | 0.1g      | 8.6mcg        |
| Spaghetti                  | 58mg        | 44mg             | 1mg           | 7mg            | E               | 1.3mg       | 24mg    | 295mg   | 5.8g           | 31g          | 18mg             | 0.2mg     | 26mcg         |
| Pasta                      | 76mg        | 31mg             | Nil           | 1mg            | B6 & A          | 0.3mg       | 10mg    | 316mg   | 2.6g           | 28g          | 36mg             | 0.1g      | 2.8mcg        |
| Wild Rice                  | 82mg        | 101mg            | 3mg           | 3mg            | E, K, B6 & A    | 0.6mg       | 95mg    | 119mg   | 4g             | 21.3g        | 32mg             | Nil       | 0.8mcg        |
| Rice flour :               | 98mg        | 76mg             | Nil           | 10mg           | B6 & E          | 0.4mg       | 67mg    | 313mg   | 5.9g           | 80g          | 35mg             | 0.4mg     | 15mcg         |
|                            |             |                  |               |                |                 |             |         |         |                |              |                  |           |               |

Calories:

Rice Flour: 366 calories per 100grams

Tapioca (dry): 358 calories per 100grams

Spaghetti : 158 calories per 100grams

White Rice (long grain): 130 calories per 100grams

White Rice (short grain): 130 calories per 100grams

Pasta: 126 calories per 100grams

Barley: 123 calories per 100grams

Couscous: 112 calories per 100grams

Wild Rice : 101 calories per 100grams

White Rice glutinous:

(sticky/Thai)

97 calories per 100grams

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| Eggs & Supplement                     | s Phos | <u>Potassium</u> | <u>Sodium</u> | <u>Calcium</u> | Vitamins (top4) | <u>Iron</u> | Omega-3 | Omega-6 | <u>Protein</u> | <u>Carbs</u> | <u>Magnesium</u> | Satd Fats | <u>Selinm</u> |
|---------------------------------------|--------|------------------|---------------|----------------|-----------------|-------------|---------|---------|----------------|--------------|------------------|-----------|---------------|
| Pure Salmon Oil<br>(per teaspoon)     | Nil    | Nil              | Nil           | Nil            | Nil             | Nil         | 1589mg  | 69mg    | Nil            | Nil          | Nil              | 1g        | Nil           |
| Pure Coconut Oil (per teaspoon)       | Nil    | Nil              | Nil           | Nil            | E & K           | Nil         | Nil     | 81mg    | Nil            | Nil          | Nil              | 3.9g      | Nil           |
| Egg White 33g<br>(one egg white only) | 5mg    | 54mg             | 55mg          | 2.3mg          | B12 & B6 trace  | Nil         | Nil     | Nil     | 3.6g           | 0.2g         | 3.6mg            | Nil       | 6.6mcg        |
| Egg Yolk 17g<br>(from one fresh egg)  | 66mg   | 18mg             | 8mg           | 22mg           | E, B6, A & D    | 0.5mg       | 38mg    | 601mg   | 2.7g           | 0.6g         | 1mg              | 1.6g      | 9mcg          |
| Egg (one large 50g)<br>hard-boiled    | 86mg   | 63mg             | 62mg          | 25mg           | B12, E, B6 & A  | 0.6mg       | 39mg    | 594mg   | 6.3g           | 0.6g         | 5mg              | 1.6g      | 15mcg         |

Calories:

Egg (one large hard-boiled egg) : 77 calories

Egg Yolk (one large 17g) : 54 calories

Pure Salmon Oil (per teaspoon): 41 calories

Pure Coconut Oil (per teaspoon): 39 calories

Egg White (one large 33g) : 19 calories

Combined Data Source: <a href="www.nutritiondata.self.com">www.nutritiondata.self.com</a> and the USDA National Nutrient Database.

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