# Purine Content of Various Foods

We use different ranges of low, moderate, and high purines for plant and animal foods because if you restrict the amount of purines that come from plant foods as much as possible, that allows you to feed small amounts of moderate-purine meats while still keeping the total purine content of the diet low.

The foods that are highest in purines are organ meats such as liver, kidney, heart, and sweetbreads (thymus glands), as well as baker's and brewer's yeast. Vitamin supplements containing glandular substances and yeast are best avoided. Theobromine, the alkaloid that makes chocolate toxic to dogs, is extremely high in purines. Foods that can be fed in moderation include muscle meat, such as beef, lamb, and poultry, and some vegetables. Eggs and dairy products contain almost no purines and can be fed in any amount. The purine levels of fish vary from moderate to high. Fruits, nuts, and honey are mostly low in purines, with the exception of peanuts, which are really a legume.

The numbers following each food show the milligrams of purines per 100 grams (about 3.5 ounces). Ranges indicate values found from different sources. In a few cases, we were not able to find actual values but only indications as to whether the foods are low, moderate, or high in purines.

Note that there is limited information on the purine content of foods. For example, we found only one source for lamb liver, from 1976. Although this food appears to be low enough in purines to feed occasionally, it is probably safer to follow the rule to avoid organ meats rather than rely on this particular type of liver being low enough in purines to feed.

**Chart color code:**
- **RED:** high in purines, avoid (more than 200 mg for animal foods; more than 50 mg for plant foods).
- **YELLOW:** moderate purines, feed sparingly (50-200 mg for animal foods; 25-50 mg for plant foods).
- **GREEN:** low in purines, safe to feed (less than 50 mg for animal foods; less than 25 mg for plant foods).

## Egg & Dairy Products
- **✓** Egg whites: 0
- **✓** Eggs: 5
- **✓** Cheese: 6 - 8
- **✓** Cottage cheese / ricotta: 8 - 10
- **✓** Yogurt: 7 - 9

## Meat & Poultry
- **✗** Beef (calf) liver: 197 - 554
- **✗** Beef kidney: 213 - 269
- **✗** Chicken liver: 236 - 243
- **✗** Chicken heart: 223
- **✓** Pork heart: 530
- **✗** Pork liver: 289 - 515
- **✗** Beef heart: 171 - 256
- **✗** Lamb heart: 171 - 241
- **✗** Beef muscle: 90 - 133
- **✗** Chicken muscle: 94 - 179
- **✓** Lamb liver: 147
- **✗** Lamb muscle: 127 - 182
- **✗** Pork muscle: 119 - 166
- **✗** Rabbit: 105 - 132
- **✓** Turkey: 150
- **✓** Venison: 105 - 138

## Fish / Shellfish (Fresh or Canned)
- **✗** Anchovies: 239 - 411
- **✗** Herring: 210 - 378
- **✗** Mackerel: 145 - 246
- **✗** Salmon: 170 - 250
- **✗** Sardines: 234 - 480
- **✗** Shrimp: 234
- **✗** Trout: 297
- **✗** Tuna: 142 - 290
- **✓** Carp: 160
- **✗** Clams: 52 - 136
- **✓** Cod: 109
- **✗** Haddock: 95 - 193
- **✓** Halibut: 178
- **✓** Oysters: 107
- **✗** Pike / perch: 110
- **✗** Scallops: 136
- **✓** Sole: 131
- **✓** White fish: 116 - 129

## Vegetables
- **✗** Beans (dried), legumes: 162 - 230
- **✗** Broccoli: 81
- **✗** Brussels sprouts: 69
- **✗** Cauliflower: 51
- **✗** Corn: 52
- **✗** Lentils: 127 - 222
- **✓** Peas: 84 - 195
- **✓** Soy: 80 - 190
- **✓** Spinach: 57
- **✓** Tofu: 68
- **✗** Cabbage: 21 - 37
- **✗** Green beans: 37
- **✓** Kale: 48
- **✓** Pumpkin: 44
- **✗** Asparagus: 23
- **✗** Carrots: 17
- **✓** Cucumber: 7
- **✓** Lettuce: 13
- **✗** Potato: 16 - 18
- **✓** Summer squash: 24
- **✓** Sweet potato: (low)
- **✓** Yam: (low)

## Nuts
- **✗** Peanuts: 79
- **✓** Almonds: 37
- **✓** Walnuts: 25

## Fruit
- **✗** Apricot (dried): 73
- **✓** Banana: 57
- **✗** Cantaloupe: 33
- **✓** Apple: 14
- **✓** Avocado: 19
- **✓** Bilberry, blueberry, huckleberry: 22
- **✓** Orange: 19
- **✓** Raspberries: 18
- **✓** Strawberries: 21

## Grains, Cereal, Grasses
- **✗** Alfalfa: (high)
- **✓** Barley: 95
- **✓** Millet: 62
- **✓** Oats: 94
- **✓** Rye: 51
- **✗** Wheat, whole grain: 51
- **✓** Egg noodles: 40
- **✗** Macaroni: (mod.)
- **✓** Rice, white: 6
- **✓** Wheat flour: 12

## Supplements
- **✗** Brewer's yeast: 1810