

3.2.2. Recommended nutrient levels for dogs

TABLE III-3_a. Recommended nutrient levels for dogs - Unit per 100 g dry matter (DM)

| Nutrient | UNIT | Minimum Recommended | | | | Maximum | |
|--------------------------------|------|----------------------------|-----------------------------|------------------------------------------|----------------------------------------|--------------------------|-----------------------------------------------------|
| | | Adult - based on MER of | | Early Growth (< 14 weeks) & Reproduction | Late Growth (≥ 14 weeks) | (L) = EU legal limit | |
| | | 95 kcal/kg ^{0.75} | 110 kcal/kg ^{0.75} | | | (N) = nutritional | |
| Protein* | g | 21.00 | 18.00 | 25.00 | 20.00 | - | |
| Arginine* | g | 0.60 | 0.52 | 0.82 | 0.74 | - | |
| Histidine | g | 0.27 | 0.23 | 0.39 | 0.25 | - | |
| Isoleucine | g | 0.53 | 0.46 | 0.65 | 0.50 | - | |
| Leucine | g | 0.95 | 0.82 | 1.29 | 0.80 | - | |
| Lysine* | g | 0.46 | 0.42 | 0.88 | 0.70 | Growth: | 2.80 (N) |
| Methionine* | g | 0.46 | 0.40 | 0.35 | 0.26 | - | |
| Methionine + cystine* | g | 0.88 | 0.76 | 0.70 | 0.53 | - | |
| Phenylalanine | g | 0.63 | 0.54 | 0.65 | 0.50 | - | |
| Phenylalanine + tyrosine* | g | 1.03 | 0.89 | 1.30 | 1.00 | - | |
| Threonine | g | 0.60 | 0.52 | 0.81 | 0.64 | - | |
| Tryptophan | g | 0.20 | 0.17 | 0.23 | 0.21 | - | |
| Valine | g | 0.68 | 0.59 | 0.68 | 0.56 | - | |
| Fat* | g | 5.50 | 5.50 | 8.50 | 8.50 | - | |
| Linoleic acid (ω-6)* | g | 1.53 | 1.32 | 1.30 | 1.30 | Early Growth: | 6.50 (N) |
| Arachidonic acid (ω-6)* | mg | - | - | 30.00 | 30.00 | - | |
| Alpha-linolenic acid (ω-3)* | g | - | - | 0.08 | 0.08 | - | |
| EPA + DHA (ω-3)* | g | - | - | 0.05 | 0.05 | - | |
| Minerals | | | | | | | |
| Calcium* | g | 0.58 | 0.50 | 1.00 | 0.80 ^a 1.00 ^b | Adult: | 2.50 (N) |
| | | | | | | Early growth: | 1.60 (N) |
| | | | | | | Late growth: | 1.80 (N) |
| Phosphorus | g | 0.46 | 0.40 | 0.90 | 0.70 | Adult: | 1.60 (N) |
| Ca / P ratio | | 1/1 | | | | Adult: | 2/1 (N) |
| | | | | | | Early growth & reprod.: | 1.6/1 (N) |
| | | | | | | Late growth: | 1.8/1 ^a (N) or 1.6/1 ^b (N) |
| Potassium | g | 0.58 | 0.50 | 0.44 | 0.44 | - | |
| Sodium* | g | 0.12 | 0.10 | 0.22 | 0.22 | c | |
| Chloride | g | 0.17 | 0.15 | 0.33 | 0.33 | c | |
| Magnesium | g | 0.08 | 0.07 | 0.04 | 0.04 | - | |
| Trace elements* | | | | | | | |
| Copper* | mg | 0.83 | 0.72 | 1.10 | 1.10 | 2.80 (L) | |
| Iodine* | mg | 0.12 | 0.11 | 0.15 | 0.15 | 1.10 (L) | |
| Iron* | mg | 4.17 | 3.60 | 8.80 | 8.80 | 68.18 (L) | |
| Manganese | mg | 0.67 | 0.58 | 0.56 | 0.56 | 17.00 (L) | |
| Selenium* (wet diets) | µg | 27.00 | 23.00 | 40.00 | 40.00 | 56.80 (L) ^d | |
| Selenium* (dry diets) | µg | 22.00 | 18.00 | 40.00 | 40.00 | 56.80 (L) ^d | |
| Zinc* | mg | 8.34 | 7.20 | 10.00 | 10.00 | 22.70 (L) | |
| Vitamins | | | | | | | |
| Vitamin A* | IU | 702.00 | 606.00 | 500.00 | 500.00 | 40 000 (N) | |
| Vitamin D* | IU | 63.90 | 55.20 | 55.20 | 50.00 | 227.00 (L) 320.00 (N) | |
| Vitamin E* | IU | 4.17 | 3.60 | 5.00 | 5.00 | - | |
| Vitamin B1 (Thiamine)* | mg | 0.25 | 0.21 | 0.18 | 0.18 | - | |
| Vitamin B2 (Riboflavin)* | mg | 0.69 | 0.60 | 0.42 | 0.42 | - | |
| Vitamin B5 (Pantothenic acid)* | mg | 1.64 | 1.42 | 1.20 | 1.20 | - | |
| Vitamin B6 (Pyridoxine)* | mg | 0.17 | 0.15 | 0.12 | 0.12 | - | |
| Vitamin B12 (Cyanocobalamin)* | µg | 3.87 | 3.35 | 2.80 | 2.80 | - | |
| Vitamin B3 (Niacin)* | mg | 1.89 | 1.64 | 1.36 | 1.36 | - | |
| Vitamin B9 (Folic acid)* | µg | 29.90 | 25.80 | 21.60 | 21.60 | - | |
| Vitamin B7 (Biotin)* | µg | - | - | - | - | - | |
| Choline | mg | 189.00 | 164.00 | 170.00 | 170.00 | - | |
| Vitamin K* | µg | - | - | - | - | - | |

When a nutrient has an asterisk (*), additional information and substantiation references are available in Chapter 3.3.1. and 3.3.2. Footnotes a-g are summarised below Table III-4_c.