



## How much Omega 3 fatty acids should I give my dog? Recommended Dosing Form

Omega 3 fatty acids are a powerful, natural method of decreasing the inflammation and pain associated with arthritis. However, studies in dogs and cats have found that they need **higher doses than what most over-the-counter products recommend** in order to get the most anti-inflammatory benefits.

What makes it more complicated is that Omega 3s include EPA (eicosapentaenoic acid), DHA (docosahexaenoic acid), and Alpha Lipoic Acid (ALA). Dogs specifically need EPA and DHA to decrease inflammation associated with arthritis. The most potent source of EPA and DHA is fish oil. Dogs cannot metabolize ALA (flaxseed, linseed or canola oil) sufficiently to be helpful for treating arthritis. Making sure your dog gets the appropriate amount of EPA is essential. You can give them Omega 3s in the form of fish oil supplements, whole fish (anchovies, sardines), and prescription foods supplemented with fish oil.

### **So, how much Omega 3s does your dog need?**

#### *Dosage*

**The recommended dose of fish oil is 75-100 mg/ kg total EPA/DHA.** (The dose range reported for dogs is 50-220 mg/kg, but we typically recommend staying around 100 mg/kg)

The maximum daily dose is  $310(\text{kg})^{0.75}$

To figure out your dog's body weight in kilograms (kg), divide their weight in lbs by 2.2. For example, 50 lb equals 22.7 kg. A 50 lb dog would need about 2,000 mg (2 grams) of fish oil per day. The maximum dose for a 50 lb dog would be 3,200 mg/ day.

Too much math? Here is a chart to help you find your dog's dose of fish oil

<b>Body Weight lbs</b>	<b>Body Weight kg</b>	<b>Recommended Daily Dose 100 mg/kg</b>	<b>Maximum Daily Dose <math>310(\text{kg})^{0.75}</math></b>
5	2.3	230	574
10	4.5	450	965
15	6.8	680	1308
20	9.1	910	1623
25	11.4	1140	1919
30	13.6	1360	2200
35	15.9	1590	2469
40	18.2	1820	2730
45	20.5	2050	2982
50	22.7	2270	3227
55	25	2500	3466
60	27.3	2730	3700
65	29.5	2950	3924

<b>Body Weight lbs</b>	<b>Body Weight kg</b>	<b>Recommended Daily Dose 100 mg/kg</b>	<b>Maximum Daily Dose 310(kg)<sup>0.75</sup></b>
70	31.8	3180	4153
75	34.1	3410	4374
80	36.4	3640	4591
85	38.6	3860	4804
90	41	4100	5014
95	43.2	4320	5222
100	45.5	4550	5427
105	47.7	4770	5629
110	50	5000	5829
115	52.3	5230	6027
120	54.5	5450	6222
125	56.8	5680	6415
130	59.1	5910	6607
135	61.3	6130	6797
140	63.6	6360	6985
145	65.9	6590	7171
150	68.2	6820	7356

**Natural sources:** Salmon, sardines, anchovies

6 oz can of anchovies has 3.4 g (3400 mg) of EPA/DHA

6 oz can of sardines has 2.8 g (2800 mg) of EPA/DHA (about 100 mg per small sardine)

6 oz of salmon has 2.2- 3.8 g (2200- 3800 mg) of EPA/DHA

### **Common Products**

Most products will list the amount of EPA, DHA and total Omega 3s. The total number will be larger than the sum of EPA and DHA due to “other” Omega 3s. The ideal dose should be the total of EPA + DHA, not necessarily the total Omega 3 content. However, since a dose range for Omega 3s exists, it is OK to determine the dose using the total Omega 3 content

### **Nordic Naturals Omega- 3 Pet**

Liquid: 1.0 teaspoon ( 5ml) 782 mg EPA/460 mg DHA 1426 mg total omega-3s

Soft gels: 1 capsule = 1000 mg fish oil

### **Welactin**

1 soft gel capsule = 155 mg EPA/100 mg DHA 300 mg total omega 3s

**Drug interactions:** Aspirin-- when combined, may cause blood thinning (decreased platelet function). **Aspirin is NOT recommended for dogs.**

**Side effects:** Diarrhea at higher doses (increase slowly to prevent)

### **Other considerations:**

- Fish oils are highly prone to oxidation, so they need to be protected from light and need adequate levels of Vitamin E or other antioxidants to preserve them.
- Flax seed (and other Omega 3 fatty acids) are **not readily converted** to the active forms EPA & DHA in pets.

- There is CONSIDERABLE variability in supplements in terms of amount of EPA & DHA per capsule or ml of liquid in both human and pet products. Dosing is critical to achieve desired effects.
- DHA is more important in cats (specifically related to bladder & joint disease), and cognitive issues in both older dogs & puppies. It's common to see DHA added to puppy foods to help to increase learning.
- There are several prescription pet foods that contain high levels of Omega 3s and therefore you would not need to add further supplements. Talk to your vet about whether one of these foods is right for your dog.