CANINE JM
JOINT MOBILITY™

Complete dry pet food for puppies, adult and senior dogs to help improve mobility, reduce inflammatory mediators in the joints, and reduce oxidative stress and associated tissue damage.

RECOMMENDED FOR & NOT RECOMMENDED FOR

- ✓ Joint mobility
- ✓ Healthy dogs predisposed to joint disorders
- ✗ Chronic renal insufficiency

3 kg and 12 kg

KEY BENEFITS

Joint support
Formulated to help support dogs with decreased joint mobility

Omega-3 fatty acids
Increased levels to help support the natural anti-inflammatory processes in joints

Antioxidants
Increased antioxidants vitamin E and C to help reduce oxidative stress

ADDITIONAL BENEFITS & CHARACTERISTICS

Clinically proven to improve dog's mobility and quality of life
In 45 dogs, PURINA® PRO PLAN® Canine JM™ alleviated the clinical signs in dogs afflicted by joint mobility disorders[1]

Helps achieve and maintain a lean body condition and reduce joint stress
High protein to calorie ratio and moderate fat levels
Weight loss feeding guideline provided for dogs that are overweight

Supports cartilage and joint health
High levels of antioxidants

Supports joint mobility across all canine life stages
Complete and balanced for all life stages

Nutritional solution for joint-sensitive breeds
Maintaining dogs in an ideal body condition and providing increased levels of omega-3 fatty acids has been proven to improve gait and mobility in sensitive breeds

1. Moreau M, *et al.* (2013) Effects of feeding a high omega-3 fatty acids diet in dogs with naturally occurring osteoarthritis. *J Anim Physiol Anim Nutr* (Berl). **97**: 830-7.

COMPOSITION

Rice, dried salmon protein, dried poultry protein, wheat flour, soya protein powder, corn, dried egg, digest, fish oil, pea hulls, pork fat, minerals, cellulose.

KEY NUTRIENT VALUES*	
Moisture	7.5%
Protein	30.0%
Fat - Omega-6 fatty acids - Omega-3 fatty acids - EPA (eicosapentaenoic acid) - DHA (docosahexaenoic acid)	12.0% 1.6% 1.1% 0.32% 0.48%
Carbohydrate	41.0%
Crude fibre	2.5%
Crude ash	7.0%
Glucosamine + chondroitin	2000 ppm
Vitamin E	814 IU/kg
Metabolisable energy (ME)[1]	372 kcal/100g

* Typical analysis in the final product as fed.
[1] Calculated following NRC 2006 equations.

FEEDING GUIDELINES

PURINA® PRO PLAN® JM Joint Mobility™ provides complete and balanced nutrition for all lifestages and weights. The recommended period of use is initially up to 3 months, but the diet is appropriate for long-term feeding. For weight loss the indicated amounts should be given to initiate the weight loss programme. Weight loss feeding guidelines are based on the dog's actual body weight, not target weight, and the recommended feeding amount should be adjusted during the weight loss programme.

PUPPY GROWTH – AGE IN MONTHS						
Adult weight (kg)	1.5	4	6	9	12	24
	Daily feeding quantity (g/day)					
2.5	60	90	90	85	75	Adult
5	85	140	145	130	120	Adult
10	110	210	225	195	190	Adult
15	140	290	315	285	245	Adult
25	160	355	450	410	355	Adult
35	200	415	480	555	450	Adult
45	215	435	490	575	490	505
70	300	570	695	830	690	685

ADULT MAINTENANCE			
Body weight (kg)	Adult maintenance (g/day)	Adult weight loss (g/day)	Senior (g/day)
2.5	70	50	60
5	110	80	95
10	175	130	150
15	230	170	200
25	325	240	280
35	405	300	350
45	480	360	415
70	645	480	560

For dogs over 70kg: for each additional 5kg of body weight, feed an additional 30g, 20g or 25g of pet food for Adult Maintenance, Adult Weight Loss and Senior recommendations respectively.

Early dietary intervention is an important part of the recommended management of dogs with suboptimal mobility. Dietary interventions have been proven to improve radiographic signs of osteoarthritis and gait[2,4-10].

The **omega-6 fatty acid arachidonic acid** is the major substrate for the production of inflammatory eicosanoids under the influence of COX-1 and COX-2 enzymes.

This in turn may both **reduce joint inflammation**, and reduce cartilage degradation.

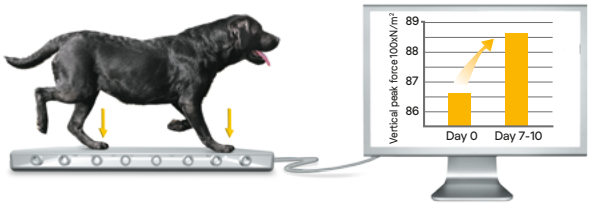
Osteoarthritis can have a significant inflammatory component contributing to clinical signs and disease progression. Modifying this inflammation may have benefits in reducing cartilage degradation:

Providing enhanced levels of **omega-3 fatty acids** such as EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) provides an alternative substrate for the action of the COX enzymes and results in production of less inflammatory or anti-inflammatory eicosanoids[3].

CLINICAL ADVANTAGES WITH THE USE OF CANINE JM JOINT MOBILITY™

PURINA® PRO PLAN® JM Joint Mobility™ provides:

- **DHA and EPA, long-chain omega-3 fatty acids** which improve biomarkers of Canine OA[3], and significantly improve objective force plate gait analysis in dogs with osteoarthritis within 10 days



Biomechanical force platform with integrated balance. Speed between 1.7 an 2.1 m/s

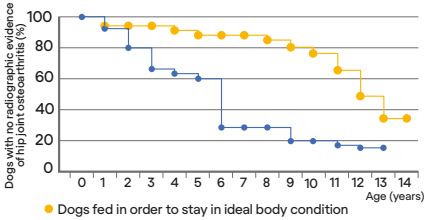
Vertical peak force increased before and after long chain omega-3 fatty acids supplemented diet ($p \leq 0.08$).

- **Feeding guidelines for weight loss and maintenance** to help reduce stress on the joints. Weight control is vitally important and has been proven to improve the gait in dogs with OA[3] as well as help reduce and delay radiographic evidence of OA in predisposed breeds[5-10]
- **Glucosamine, chondroitin and antioxidants**, which may play a useful role in maintaining joint health[8]

Canine JM Joint Mobility™ is clinically proven to improve dogs' mobility and quality of life[10]:

- **Significantly improved visible gait and improved quality of life.** In a study of 146 dogs, 88% of owners observed improvements in mobility of their dog and 87% of veterinarians noted there to be a significant improvement in quality of life after feeding JM Joint Mobility for 2 months.[10]

THE IMPORTANCE OF BODY CONDITION ON THE INCIDENCE OF OSTEOARTHRITIS IN LABRADOR RETRIEVERS



A 14-year Nestlé PURINA study has shown that dogs fed to maintain a lean body condition show reduced prevalence and severity of osteoarthritis.

2. Hansen RA, *et al.* (2004) Long chain n-3 PUFA improve biochemical parameters associated with canine osteoarthritis. *Proc Am Oil Chem Soc meeting, Cincinatti.* May 9-12.
3. Moreau M, *et al.* (2010) Effects of feeding a high omega-3 fatty acid diet on the pain-related disability in dogs with naturally occurring osteoarthritis. *Osteoarthritis and Cartilage; 18, Suppl.* **2:** S9-S44.
4. Burkholder WJ, *et al.* (2000) Weight loss to optimal body condition increases ground reactive force in dogs with osteoarthritis. In Proceedings Purina Nutrition Forum. 74.
5. Lawler DF, *et al.* (2008) Diet restriction and ageing in the dog: major observations over two decades. *Br J Nutr.* **99**: 793-805.
6. Kealy RD, *et al.* (2000) Evaluation of the effect of limited food consumption on radiographic evidence of osteoarthritis in dogs. *J Am Vet Med Assoc.* **217**: 1678-80.
7. Kealy RD, *et al.* (1992) Effects of limited food consumption on the incidence of hip dysplasia in growing dogs. *J Am Vet Med Assoc.* **201**: 857-63.
8. Smith GK, *et al.* (2006) Lifelong diet restriction and radiographic evidence of osteoarthritis of the hip joint in dogs. *J Am Vet Med Assoc.* **226**: 690-3.
9. Jaswal S, *et al.* (2003) Antioxidant status in rheumatoid arthritis and role of antioxidant therapy. *Clin Chim Acta.* **338**: 123-9.
10. Nestlé Purina study on 146 osteoarthritic dogs. 2004.