

Complete dietetic dry pet food for adult dogs for the support of heart function in the case of chronic cardiac insufficiency.

RECOMMENDED FOR &
NOT RECOMMENDED FOR

- ✓ Chronic cardiac insufficiency
- ✓ Mitral valve conditions (Myxomatous Mitral Valve Disease)
- ✓ Heart murmur (associated with cardiac disease)
- ✗ Not suitable during pregnancy, lactation and growth



3 kg

KEY
BENEFITS



Helps support cardiac insufficiency



Helps to support hearts with compromised mitral valve function



Contains a Cardiac Nutritional Blend composed of amino acids, omega-3 fatty acids, medium chain triglyceride oil, minerals and vitamin E

ADDITIONAL BENEFITS &
CHARACTERISTICS

Contains a Cardiac Nutritional Blend including MCT oil, an alternative source of energy for myocytes

The Cardiac Nutritional Blend has been shown to help to support a heart with compromised mitral valve function to slow the progression of mitral valve conditions from Stage B1

Helps improve cardiac function with 60% of dogs showing a reduction in left atrial size and 30% of dogs demonstrating a reduction in mitral valve regurgitation (heart murmur)¹

Contains taurine to help support healthy cardiac function

Supports cardiac function from an early stage

1. Li Q, et al. (2019) Dietary intervention reduces left atrial enlargement in dogs with early preclinical myxomatous mitral valve disease: a blinded randomised controlled study in 36 dogs. *BMC Veterinary Research*. 15:425.

COMPOSITION

Rice, dried chicken protein, corn, barley, corn protein meal, medium chain triglyceride (MCT) oil (5%), amino acids, dried beet pulp, dried salmon protein, cellulose, fish oil, minerals, pork fat, digest.

KEY NUTRIENT VALUES*

Protein	26.5%
Fat	15.0%
- Medium Chain Triglycerides (MCTs)	5.0%
Carbohydrates	39.0%
Crude fibre	4.5%
Crude ash	7.5%
Methionine	1.4%
Lysine	2.02%
Taurine	0.2%
Omega-3 fatty acids (EPA+DHA)	0.7%
Sodium	0.18%
Magnesium	0.15%
Potassium	0.6%
Metabolisable energy (ME) ¹	369 kcal/100g

* Typical analysis in the final product as fed.

¹ Calculated following NRC 2006 equations.

FEEDING GUIDELINES

PURINA® PRO PLAN® VETERINARY DIETS CC CardioCare™ is a complete dietetic pet food for adult dogs for the support of heart function in the case of chronic cardiac insufficiency. It is recommended that advice from a veterinarian be sought before use and before extending the period of use. The recommended period of use is initially up to 6 months, but the product is appropriate for long term feeding.

ADULT	
Body weight (kg)	Daily feeding quantity (g/day)
2.5	70
5	110
10	175
15	230
25	325
35	410
45	485
70	650

For dogs over 70kg: for each additional 5kg of body weight, feed an additional 30g of dry pet food. Fresh clean drinking water should be always available.

Heart murmurs can be a common finding in dogs. Although they are not always a significant finding, they can also be an early sign of heart disease.

A dog's heart beats about 60-120 times every minute, which means about **a billion beats in a lifetime**¹. To make this huge effort, the **heart needs a lot of energy** – almost twice as much energy as the brain². Thousands of mitochondria are located in every heart cell, and are key to help meet this high energy demand.

Myxomatous mitral valve disease (MMVD) is the most common form of heart disease in dogs. It is characterised by a slowly progressive mitral valve degeneration, and is associated with alterations in energy metabolism, oxidative stress, inflammation, and in advanced stages, heart enlargement.

In the early stages, dogs show no outward signs of disease and can be considered as “healthy”. For this reason, detecting dogs in the early stages of MMVD may help prevent or slow disease progression³.

Diet is a fundamental part of the management of dogs with a cardiac condition, together with medication and controlled physical activity in order to maintain an ideal body weight. The main goal of diet is to slow progression of early MMVD to congestive heart failure, as once MMVD progresses to heart failure dogs have a much shorter life expectancy.

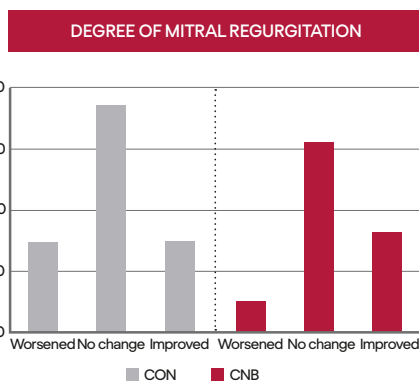
The innovative formula in PURINA® PRO PLAN® VETERINARY DIETS CC CardioCare™, contains a **Cardiac Nutritional Blend (CNB)** that help keep hearts healthy and may help slow or reverse the progression of MVD in the earliest stages of heart disease (B1 or B2)⁴.

The CNB contains key amino acids (methionine and lysine) that are precursors of carnitine, a crucial transporter for fatty acids to get into mitochondria; medium-chain triglycerides (MCTs) which provide a more efficient alternative energy source for cardiac cells; fish oil (omega 3 fatty acids); vitamin E, which has a powerful antioxidant effect; and magnesium, which binds ATP to deliver energy to the cardiac cells.

In one study conducted⁴, 60% of dogs with MMVD receiving a diet containing the CNB showed improvements in left atrial enlargement determined by echocardiography, while 30% showed a reduction in mitral valve regurgitation.

Aortic root diameter (LA/Ao) and left atrial diameter increased in MMVD dogs fed a control diet (without the CNB) by an average of 10% over baseline within this 6-month study, whereas MMVD-CNB dogs showed reductions in these parameters⁴.

This is the first dietary intervention to successfully demonstrate that **a blend of nutrients can effectively delay or reverse the progression of MMVD** in dogs with early, preclinical MMVD.



Percentage of MMVD dogs showing changes of at least one grade in mitral regurgitation after 6 months of feeding control diet (CON) or CNB-supplemented diet, compared to baseline.

* CLINICAL ADVANTAGES WITH THE USE OF CANINE CC CARDIOCARE™

Contains a **Cardiac Nutritional Blend**, composed of **amino acids, omega-3 fatty acids, medium chain triglyceride oil, minerals and vitamin E** that has been shown to help support hearts with compromised mitral valve function.



Helps support cardiac function with 60% of dogs with MMVD (Stage B1-B2) showing a reduction in left atrial size and 30% of dogs having a reduction in mitral valve regurgitation (heart murmur) after 6 months of feeding the CNB¹.

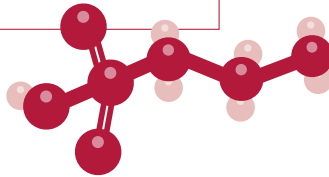


Help support cardiac insufficiency



Contains a Cardiac Nutritional Blend including MCT oil as an alternative source of energy for myocytes.

Contains taurine to help support healthy cardiac function.



- Haskins S, et al. (2005) Reference cardiopulmonary values in normal dogs. *Comp Med*. **55**: 156-61.
- Wang Z, et al. (2010) Specific metabolic rates of major organs and tissues across adulthood: evaluation by mechanistic model of resting energy expenditure. *The Am J Clin Nutr*. **92**: 1369-77.
- Borgarelli M, et al. (2010) Canine degenerative myxomatous mitral valve disease: Natural history, clinical presentation and therapy. *Vet Clin North Am Small Anim Pract*. **40**: 651-63.
- Li Q, et al. (2019) Dietary intervention reduces left atrial enlargement in dogs with early preclinical myxomatous mitral valve disease: a blinded randomized controlled study in 36 dogs. *BMC Vet Res*. **15**: 425.