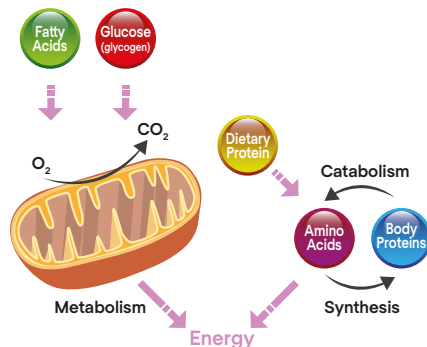


PERFORMANCE NUTRITION FOR HIGHLY ACTIVE DOGS

PURINA® PRO PLAN® ALL SIZE ADULT Performance has been specially formulated to provide the nutrients needed for peak performance activity.

It improves:

- Oxygen metabolism for optimised beta-oxidation of fatty acids and energy production.
- Sparing of amino acids and carbohydrates during exercise, to allow better recovery between bouts of exercise.



THE BENEFIT OF HIGH FAT IN THE DIET OF HIGHLY ACTIVE DOGS

Successfully improving the endurance capabilities of dogs is based on **enhancing oxidation of fat for energy and sparing the use of more limited nutrient stores.**

Studies undertaken by Nestlé PURINA® have demonstrated:

- A 27% increase in maximal oxygen consumption and maximal fat oxidation when the diet of trained active dogs is changed from a low to a high fat content¹.

- Dogs fed high fat diets use their glycogen stores at only half the rate of dogs fed a high carbohydrate diet, and mobilise their fat stores twice as fast².

THE BENEFIT OF CARBOHYDRATES IN THE DIET OF HIGHLY ACTIVE DOGS

Adding carbohydrates to the diet has no real impact on performance levels in these dogs, but dietary carbohydrates can

help maintain dogs' glycogen stores, enabling repeated episodes of exercise and work on a long-term basis.

THE BENEFIT OF PROTEIN IN THE DIET OF HIGHLY ACTIVE DOGS

Studies have shown that a diet containing a **minimum of 24% of metabolisable energy from protein** facilitates³:

- Optimal maximal oxygen consumption values ($\text{VO}_2 \text{ max}$) to be maintained during training.

- A reduction in the incidence of soft tissues injuries.

1. Reynolds *et al.* (1995) Effect of diet and training in on muscle glycogen storage and utilisation in sled dogs. *J. Applied Physiol.* **79**: 1601-1607.
 2. Reynolds *et al.* (1994) Lipid Metabolite Responses to Diet and Training in Sled Dogs *J. Nut.*, **124**: 2754S-2759S.
 3. Reynolds *et al.* (1999) Effect of protein intake during training on biochemical and performance variables in sled dogs. *Am J Vet Res.* **60** (7):789-95.

