

ELEMENTS “H”

PRE-EXERCISE SUPERHYDRATION BEVERAGE

ELEMENTS-H is a Pre Workout water supplement useful as a temporary aid to prevent dehydration. The ingredients in **ELEMENTS-H** help to improve fluid retention within the muscle cells. When used prior to intense physical activity the additional hydration effect may result in increased endurance and a reduction in heat stress.

How does **ELEMENTS-H** work?

Dogs rely upon evaporation of body water through their lungs (panting) to keep cool. Consumption (evaporation) of body water can be quite large in hot weather or low humidity conditions frequently encountered during winter. Dehydration can be severe during these times which can then lead to loss of metabolic (osmotic) fluid balance and loss of cooling ability (hyperthermia). Because dogs seldom drink sufficient water soon enough during exercise to fully replace water losses, pre-exercise hydration is critical to optimize performance.

ELEMENTS-H is an easy to use liquid concentrate containing USP glycerol which acts to improve fluid retention within the muscle cells beyond that possible with plain water. This effect is often referred to as “superhydration” or “hyperhydration”. Given mixed with water 1-2 hours before exercise, **ELEMENTS-H** provides additional body water for evaporation during exercise. More water means an increase in “cooling capacity” and improved endurance because osmotic balance is maintained. The hydration effect typically lasts 6-8 hours.

Usage Guidelines & Recommendations:

ELEMENTS-H is a highly concentrated liquid that goes into solution easily and does not require refrigeration. Simply mix the proper amount of **ELEMENTS-H** with water. Be sure the whole serving is consumed, and then give unlimited water thereafter.

Pre-Event: Provide **ELEMENTS-H** as a beverage 1-2 hours before activity. Mix 1 ounce per 75# of body weight into 24-32 oz of drinking water. Because your dog may not be thirsty when you want him to drink, it is helpful to add a few pieces of kibble to encourage consumption. Alternatively to improve acceptance, a double strength solution, (2 oz per 75# in 24-32 oz water) can be mixed with food 10 - 12 hours before exercise. Always provide free choice access to clear water when using this method.

During Activity: In adverse weather, additional amounts of a ½% to 1% solution (approximately 1 oz / gallon water) may be given in place of clear water throughout the day to extend the hydration effect.

Common Questions:

Is **ELEMENTS-H** an electrolyte solution?

No!!! Unlike humans and horses, dogs sweat very little and thus do not lose significant amounts of electrolytes (salts) during exercise. In fact, electrolytes often become concentrated in the blood during exercise, disrupting osmotic balance prompting frequent urination to reduce the salts, causing further dehydration. Obviously then, giving supplemental electrolytes to your dog during exercise is not a good idea and may even cause dangerous levels of dehydration. **ELEMENTS-H** contains no harmful electrolytes and does not disrupt osmotic balance.

Is **ELEMENTS-H** a Sport Drink solution?

No!!! In addition to harmful electrolytes, most sport drinks contain large amounts of simple sugars (mainly Glucose) that have two major negative effects on performance if given before or during exercise. They shut down the metabolic pathway using fat for energy (which also generates body water) in favor of glucose energy pathway which consumes water. Sugary sport drinks products can also cause an insulin spike and subsequent blood glucose crash (hypoglycemia), a dangerous situation during intense exercise.

My dogs get plenty of water before we go out, why do I need a supplement?

While it is critically important to always give a canine athlete plenty of water, plain water is not retained to any significant degree in the body and water in the stomach during exercise increases torsion risk. The superhydration effect of **ELEMENTS-H** results in additional water retention in the tissues, providing more water for later usage.

Nutrition Data per 1 fl. oz. Serving (34g)

Total Energy: 145 kcal

Guaranteed Analysis (not less than):

Crude Protein: 0.5g, Crude Fat: 0.5g, Carbohydrate (includes Glycerol): 30g

Ingredients: UPS Glycerol, Natural Flavor, Filtered Water, Lecithin

DO NOT give UNDILUTED ELEMENTS-H to your dog

No acclimatization period required prior to use.

Not for dogs with diabetes, liver ailments or puppies under 6 mos.

Intended for Supplemental Nutrition use only.

Avoid Sunlight or Temperatures Above 100° F

Storage:

Store **ELEMENTS-H** in a cool dark location. Avoid exposure to direct sunlight or temperatures above 100°F