

Klean Hydration™

Natural orange flavored drink mix

DESCRIPTION

Klean Hydration™ by Klean Athlete® contains 6% carbohydrates with additional minerals for the replacement of fluid and electrolytes lost through sweat during physical activity. The carbohydrates and sodium in this great-tasting drink mix support the intestinal absorption of fluids to maximize hydration efficiency.†

Klean Hydration™ and the entire Klean Athlete® line have undergone rigorous testing by the NSF Certified for Sport® program which was created to meet the growing demands of athletes, coaches and healthcare professionals to certify that sports supplements are safe and free from banned substances. Every product that carries the NSF Certified for Sport® mark has undergone stringent laboratory testing to confirm content, purity and compliance.

FUNCTIONS

Adequate fluid intake before, during, and after exercise is critical for physical performance and recovery. Even modest dehydration (1% of body weight) can result in diminished exercise capacity. Fluid losses resulting in a 2-3% decrease in body weight result in significant physiological stress with associated reductions in athletic performance.

The risk for dehydration and heat injury increases dramatically in hot, humid environments where the ambient temperature exceeds body temperature. During exercise, especially at high intensities and/or long durations in warm climates, significant amounts of water and sodium may be lost through sweat. In these conditions, which often include indoor training facilities, heat cannot be dissipated easily due to lower evaporation of sweat from the skin. Dehydration may also occur in cool or cold environments as a result of respiratory fluid losses and high sweat rates associated with multiple layers of clothing. Exertion at altitudes above 9250 m (8200 ft) may also compromise hydration status through mandatory diuresis and high respiratory water losses. Other risk factors include heavier body weight, genetic predisposition and acclimatization state. Sweat rates among athletes engaging in diverse types of summer training often range from 0.5 to 2 L/hr, although higher sweat rates are not uncommon. Body weight changes reflect sweat losses and can be measured during training to estimate fluid requirements on an individualized basis.

To optimize hydration during physical activity, experts recommend beverages containing 4-8% carbohydrates and 20-50 mmol/L sodium (120-170 mg/8 fl oz). Simple sugars and sodium support the uptake of fluid from the digestive tract. Sodium helps to reduce urinary fluid losses and in combination with sugars, sustains the desire to drink. Preferred forms of carbohydrate supported by clinical research include glucose, glucose polymers, dextrans, and fructose. A 6% carbohydrate solution is supported by ample research on athletes in a variety of settings and environments.† Klean Hydration™ is a 6% carbohydrate beverage comprised of simple carbohydrates (glucose and fructose) and a complex carbohydrate (branched dextrin).

Klean Hydration™ has an osmotic concentration, or osmolarity, that is similar to body fluids. Low osmolarity solutions are typically well-tolerated and support optimal hydration, whereas solutions with high osmolarity typically have a higher sugar and/or sodium content and are absorbed less readily. Specifically, higher osmotic concentrations reduce the rate of emptying of the stomach, impeding the mechanical transport of fluid through the gastrointestinal tract.

Electrolytes

Sodium is an electrolyte that is vital to fluid balance. Sodium also encourages repeated consumption of a beverage by mitigating the attenuation of thirst that athletes often experience in the later stages of an endurance event.† Potassium is another electrolyte that is located inside of cells and cooperates with sodium in many ways. Both sodium and potassium are necessary for the normal functioning of cells, nerves, and

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muscles.† Magnesium is a mineral that is largely found in the bones but plays roles in muscle function. † Calcium is a mineral that can be lost in small amounts through sweat and urine. TRACCS® calcium in Klean Hydration™ is chelated for enhanced absorption.†

Highly Branched Dextrins

Carbohydrates support the uptake of fluid from the intestine into the plasma while serving as a readily available energy source during aerobic or anaerobic efforts. A 6% carbohydrate solution typically has a high osmotic concentration. Complex carbohydrates facilitate the formulation of low-osmolarity solutions without sacrificing carbohydrate content. Cluster Dextrin® has a lower molecular weight than typical long- chain starch molecules and contributes to the unique carbohydrate composition and low osmolarity.†

INDICATIONS

Klean Hydration™ can be used to hydrate, maintain electrolyte balance, and rehydrate before, during and after exercise. †

FORMULA (#KA57694P)

One serving (17.9g) contains:

Calories	60
Total Carbohydrates.....	16g
Sugars	12g
Includes 12g Added Sugars	
Sodium (as citrate)	180 mg
Potassium (as citrate).....	70 mg
Magnesium (as citrate)	25 mg
Calcium (as TRAACS® calcium bisglycinate chelate)	35 mg
Vitamin C (as ascorbic acid)	12.5 mg
Carbohydrate blend	15 g
Sucrose (from cane/beet), Highly Branched Cyclic Dextrin (Cluster Dextrin®), Dextrose, Fructose	

Other ingredients: citric acid, organic orange flavor with other natural flavors, red beet (for color), beta carotene (for color).

Cluster Dextrin® is a registered trademark of Gilco Nutrition Co., Ltd.

SUGGESTED USE

Adults mix 1 scoop in 8 oz of water or as directed. For 20 servings, mix 1 bottle of this product with approximately 4.7 L (1.2 gallons) of water and serve.

After exercise, consume approximately 16–24 oz (450–675 mL) of fluid for every pound (0.5 kg) of body weight lost during exercise. Optimal consumption before and during and exercise will vary considerably depending on individual needs. For best results, use as directed by a coach, trainer or health care professional.

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SIDE EFFECTS

There are no known side effects of this product.

STORAGE

Store in a cool, dry place away from heat and humidity.

REFERENCES

Kenney W. Gatorade Sports Sci Exch. 2004;17:1–6. Gatorade Sports Science Institute Web site [Internet]. 2004 [cited 2008 June 20]. Available from: http://www.gssiweb.com/Article_Detail.aspx?articleid=667.

Bergeron MF. J Sci Med Sport. 2003;6:19–27.

Palmer MS, Spriet L. Appl Phys Nutr Metab. 2008;33:267–71.

Sawka MN, Burke LM, Eichner ER, Maughan RJ, Montain SJ, Stachenfeld NS. Med Sci Sports Exercise 2007;39:377–90.

Armstrong LE, Casa DJ, Millard-Stafford M, Moran DS, Pyne SW, Roberts WO. Med Sci Sports Exerc. 2007;39:556–72.

Castellani JW, Young AJ, Ducharme MB, Giesbrecht GG, Glickman E, Sallis RE. Med Sci Sports Exerc. 2006;38:2012–29.

Oliver JM, Almada AL, Van Eck LE, Shah M, Mitchell JB, Jones MT, et al. (2016) PLoS ONE 11(9): e0163009.

Int J Sports Med, 26: 314-319, 2005

For more information on Klean Hydration™ visit kleanathlete.com

† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

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