



Bringing hydration to the next level

WHY IS IT ESSENTIAL TO REHYDRATE?

Maintaining optimal **hydration is essential for the body** to function correctly. When dehydrated, it is important to restore the body's water balance as soon as possible. Simply drinking large amounts of water is usually not sufficient.

The water in our bodies contains crucial electrolytes — important minerals that enable critical chemical reactions. **Effective rehydration must restore these electrolytes, which are lost through sweating.** Failure to do so can lead to a condition called **hyponatremia, or "water intoxication"**. Symptoms include headaches, fatigue, muscle cramps, stomach upset, and in severe cases, it can even be fatal.

HYDRA4G HAS BEEN DESIGNED TO COVER MINERAL LOSS DURING PERSPIRATION

It's an innovative formula involving **4 chelated electrolytes**. This premix includes the powerful glycerophosphates, for a superior absorption. It efficiently reloads the body, supplying a unique ratio of essential minerals. The simplest solution for everyday hydration.

During perspiration, we typically lose essential electrolytes in the following amounts per liter of sweat:

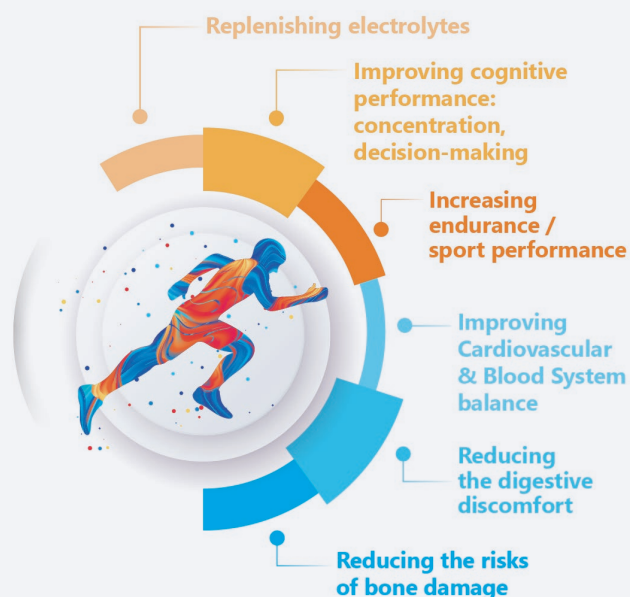


Studies show that athletes, on **average, replace only 30-70% of these mineral losses through sweating.** Therefore, plain water is insufficient for proper rehydration. To restore **electrolyte balance** and ensure optimal performance and health, it is crucial to consume beverages or foods that replenish these lost minerals. Our mix is designed to **boost magnesium and potassium intake**, addressing common deficiencies in the average diet. Magnesium salts enhance cognitive functions, while glycerol serves as **an efficient cerebral energy source.** The highly bioavailable GivoMag is an **optimal choice for supporting brain health.**

EFFECTS OF OPTIMUM HYDRATION ON HEALTH PERFORMANCES



OBSERVED BENEFITS: FUELING PERFORMANCE & HYDRATION





WHY WE CHOOSE HYDRA4G ?

Hydra4G is a **blend of chelated salts** in powder form, specifically formulated to include powerful **magnesium & calcium glycerophosphates**. Hydra4G can significantly improve crucial physiological roles during **exercise, heat waves, diarrhea episodes and daily hydration**. This powder seamlessly mixes into wide range of formula, providing an easy and effective way to **replenish essential electrolytes and maintain optimal metabolism without being hard on the gastrointestinal tract**.

THE ADVANTAGE OF GLYCEROPHOSPHATE ANION

Glycerophosphate chelates are lipophilic carriers that deliver bioavailable phosphorus, serving as **reliable sources of glycerol and organic phosphorus to enhance brain & memory functions, protein synthesis, and ATP production**.

Additionally, glycerol acts as a **hyperhydrating agent with osmotic properties**, allowing for greater fluid retention compared to water alone.

Glycerophosphate Anion

GLYCEROL

- **Energy production**
1 molecule of glycerol = 19 ATP
- **Phospholipids synthesis**
- **Water retention effect**
- **Energetic Metabolism**
- **Blood Brain Barrier Permeation**
- **Cell membranes & metabolism improvement**



PHOSPHATE

- **Improves Brain Function**
- **Regulates balance of hormones**
- **Improves Health of digestive system**
- **Helps to maintain healthy bones & teeth and eliminates muscle weakness & fatigue**
- **Facilitates the maximum utilization of protein in body**

CHARACTERISTICS



Taste & Odor:
Neutral



Bioavailable:
Minimizing the risk of stomach upset



Solubility:
Highly water soluble



31.1% of Cations
K 9.4%, Na 7%, Mg 4.7%,
Ca 2.3%, Ph 7.7%

Source of glycerol

References

J. Maughan, Nutrition in sport, Encyclopedia of sports medicine and IOC medical commission publication, 2000. **G. Dubnov-Raz, Y. Lahav, N.W. Constantini**, Non-nutrients in sports nutrition: fluids, electrolytes and ergogenic aids, the European e-Journal of Clinical Nutrition and Metabolism; 6, 2011. **L.M. Burke**, Nutritional needs for exercise in the heat, Comparative Biochemistry and Physiology; Part A 128, 2001. **Nga Huynh Tran Nguyen, Anders Brathe and Bjørnar Hassel**, Neuronal uptake and metabolism of glycerol and the neuronal expression of mitochondrial glycerol-3-phosphate dehydrogenase, Journal of Neurochemistry, 2003. **S.P. Rosendal, M.A. Osborne, R.G. Fassett, J.S. Coombes**, Guidelines for glycerol use in hyperhydration and rehydration associated with exercise, Sports Med. 2010 Feb 1;40(2):113-29.

APPLICATIONS



Capsules



Beverages



Stik and sachet



Functional food

ABOUT ISALTIS

High purity organic mineral salts manufacturer

- Produced in France, Worldwide supply
- Nutrition & Cosmetic ingredients
- FSSC Certification
- Kosher & Halal Certifications
- GRAS self-asserted
- Gluten & Allergen free
- GMO free & natural origin



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