

## Xact Nutrition Sports Drink

1 scoop (25 g) to be mixed with 500 ml of water.

Ingredients:

Nutritional facts per 25g serving

Amount/Teneur		% daily value/valeur quotidienne
Calories	90	
Fats/lipids	0 g	
Saturated/saturé 0g	0 g	0%
+ Trans/ trans 0g	0 g	0%
Cholesterol	0 mg	
Sodium	300 mg	
Carbohydrate/glucides	22 g	8%
Fibres	0	
sugars	22 g	
Proteins	0 g	0%
Vitamin C		22%
Vitamin B12		25%
Biotin		43%
Potassium		3%
Calcium		6% (of 780 mg)
Magnesium		18% (Of 210 mg)
Iron		35% (of 10 mg)

### B vitamins

B vitamins act as coenzymes, they are the keys that make metabolic reactions happen. They play an essential role in converting carbohydrates and fats into energy. In some cases, without these, the body will literally stop making energy.

- **Thiamin** works as a coenzyme in reactions that produce energy. Without thiamin we deprive every cell in our body the ability to use energy!
- **Riboflavin** is part of two required in the reactions that extract energy from glucose, fatty acids and amino acids.
- **Niacin** plays a crucial part in coenzymes used in over 200 metabolic reactions, and therefore plays a critical role in energy metabolism under both normal conditions and **during high intensity activity where energy demand is higher!**
- **Vitamin B6** plays a part in the conversion of amino acids into other types of amino acids. It also plays a part in white blood cell synthesis and a healthy immune system, as well hemoglobin synthesis and binding oxygen
- **Folate** is crucial for DNA synthesis and cell development, it is therefore crucial at early stages of pregnancy.

- **Vitamin B12** is essential in converting folate to its activated form. Without B12, folate cannot play its role in the body.
- **Pantothenic acid** is crucial in extracting energy from nutrients
- **Biotin** is involved in amino acid metabolism and converting amino acids to glucose

### **Vitamin C**

Vitamin C is an antioxidant and helps protect cells from oxidative damage. It also helps form collagen, the fibrous part of connective tissue that hold together the structure of the body, as well as enable our immune system to function properly.

Vitamin C also helps the absorption of non-heme iron and can help overcome some of the inhibiting factors of iron absorption.

There is some evidence that suggests low vitamin C levels reduced work efficiency during submaximal exercise and supplementing vitamin C increased work performance.

### **Minerals**

Minerals play a wide range of functions in the body but for athletes play a particular role in fluid retention and .....

**Sodium** is critical for regulating both cellular fluid and total body fluid. Dehydration has a serious impact on sport performance as well as health but hyponatremia, excessive water intake that dilutes the body's sodium levels, is also dangerous.

**Potassium** works alongside sodium. Together, they help contract muscles, transmit nerve impulses and regulate blood pressure and heartbeat.

**Magnesium** participates in over 300 metabolic reactions, including muscle contraction, ATP production and protein synthesis.

Iron is vital to oxygen transport in both the blood and muscles and so a key mineral for all types of athlete! It also plays a critical role in enzymes used for energy production and both immune and brain function. The body carefully regulates iron levels and it is important for athletes to maintain iron levels as low iron can take months to restore.