

# NATURAL SUGAR BEET EXTRACT

## A NATURAL SOURCE OF ANHYDROUS BETAINE

*NutriScience Innovations, LLC provides research-based, innovative ingredients for the dietary supplements and functional foods markets. We offer a broad-based portfolio of ingredients to meet your needs.*

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#### **What are the Benefits?**

It is an *Osmolyte* - protects dehydration and stress associated with cell water loss

- can prevent or reduce accumulation of fat in the liver, a common result of obesity, high fat diet, diabetes and alcohol consumption, and may have the potential to aid in the treatment of Alcoholic Liver Disease
- may enhance athletic performance by improving a sense of well-being, lessening fatigue, providing greater strength and endurance, and increasing a desire for (and performance of) physical and mental work
- a flavor-enhancer that has been approved by the FEMA GRAS as a flavoring substance and can be easily added to foods and beverages
- is known to extend the shelf life of foods by acting as a humectant
- Taste-masking properties minimize off-notes caused by vitamins, minerals and other supplements added to sports nutrition beverages

#### **What is Betaine?**

A nutrient found in most plants and animals

#### **How is Betaine produced?**

It is extracted from sugar beet molasses using a water extraction process

#### **What are the potential applications of Natural Betaine?**

Beverages, gels, sports bars, nutrition bars, drink mixes and snack products. It can also work in partnership with other nutrients, including the B-vitamins

- Betaine is lactose free, gluten free, and contains no animal matter.
- Betaine is ® kosher.
- Betaine is both pH and heat stable up to 200°C.

#### **Regulatory Information**

USA

- DSHEA for nutritional supplements
- FEMA GRAS as a flavor enhancer in all foods (up to 0.5%) and labeled as betaine or natural flavor
- GRAS substance under 21 CFR 170.30 for use as a humectant and flavor enhancer/modifier in selected foods and is labeled as betaine

Japan

- Approved as a food additive

Korea

- Approved as a natural food