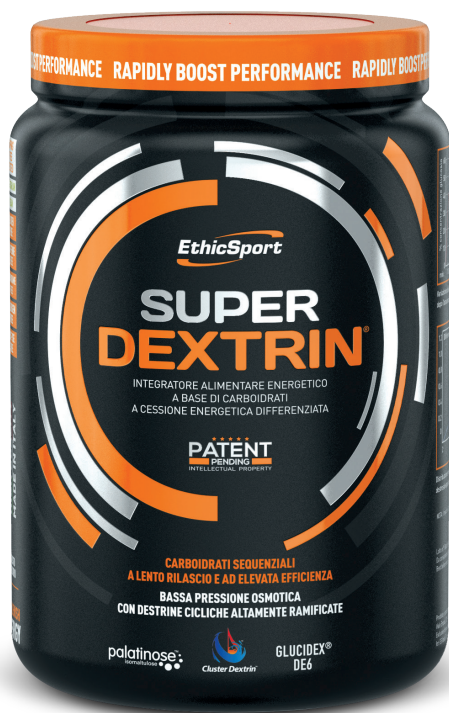


# SUPER DEXTRIN®

## ENERGY FOOD SUPPLEMENT CARBOHYDRATE-BASED WITH DIFFERENTIATED ENERGY RELEASE



STEADY ENERGY RELEASE



- SEQUENTIAL CARBOHYDRATES WITH SLOW RELEASE AND HIGH EFFICIENCY
- LOW OSMOTIC PRESSURE
- HYPOTONIC
- WITH HIGHLY BRANCHED CYCLIC DEXTRINS

**PATENT**  
INTELLECTUAL PROPERTY

palatinose™  
isomaltulose

Cluster Dextrin®  
New Energy Source for Athletes

GLUCIDEX® DE6  
Long chain maltodextrin

### RECOMMENDED FOR

- People who need steady energy during the activity
- People who need carbohydrates before the performance
- People who need a long lasting energy for high performance

### WHEN TO USE SUPER DEXTRIN®



PACKAGING: JAR 700 g (with measuring scoop and guarantee seal)  
15 SINGLE-DOSE SACHETS, 30 gr each

## NEW ERA FOR ENERGY SUPPLEMENT DEVELOPED BY ETHICSPORT RESEARCH

### FEATURES

SUPER DEXTRIN® is an energy food supplement of new generation. The special formula uses the synergy between Cluster Dextrin® (HBCD = Highly Branched Cyclic Dextrin), Palatinose™ (Isomaltulose) and maltodextrins with different dextrose equivalence (DE6 and DE18). Presence of HBCD and DE6 allow a low osmotic pressure<sup>(1)</sup> of blend, which permits a rapid and efficient gastric emptying. Different carbohydrates molecular structure facilitates a differentiated energy release, allowing a better energy reserve distribution. SUPER DEXTRIN® formula is patented (Patent Pending), thanks to its innovative features. SUPER DEXTRIN® is caffeine free, gluten free and doping free tested\*

### HOW TO USE AND RECOMMENDED DAILY DOSE

Dissolve 50 g of product (3 full measuring spoons) in 500 ml of water, taking it during physical activity. In case of hard activity, with difficult supply during, it can be used also before the session. It is preferred do not exceed maximum dosage of 150 g per day, equal to 3 bottles of 500 ml.

### INDICATIONS

SUPER DEXTRIN® is an energy food supplement with advanced carbohydrate-based. The product is recommended for people carrying out hard and/or long training sessions, which causes muscle fatigue and impoverishing of glycogen reserve in muscle.

### INGREDIENTS

Highly Branched Cyclic Dextrin (Cluster Dextrin®), corn Maltodextrin DE18, Isomaltulose® (Palatinose™), corn Maltodextrin DE6 (Glucidex®), flavouring, acidity regulator: citric acid. Isomaltulose is a source of glucose and fructose.

### NUTRITIONAL INFORMATION

	Per 100 g	Per dose (50 g)
<b>Energy</b>		
kcal	381	190
kJ	1619	810
<b>Typical Values</b>		
Fat	0 g	0 g
of which saturates	0 g	0 g
Carbohydrate of which sugars	95 g 22 g	47 g 11 g
Protein	0.02 g	0.00 g
Salt (Na x 2.5)	0.16 g	0.08 g

WATCH THE VIDEO



<sup>(1)</sup> Hypotonic product - Osmolarity around 120 mOsm/l (50g of powder in 500ml of water)

\*This product is tested free from nandrolone and testosterone, with their precursors, free from Beta2-agonists, amphetamines and ephedrine.

<sup>(2)</sup>In accordance with annex II Regulation UE 1169/2011

# IN-DEPTH ANALYSIS ON FORMULATION COMPONENTS



**Cluster Dextrin®**  
New Energy Source for Athletes

HBCD (Highly Branched Cyclic Dextrin) represents a new era in energy supplement. Highly Branched Cyclic Dextrins are the evolution of classic maltodextrins and are particularly useful in intense and prolonged training sessions.

## HOW THEY ARE MADE

These particular molecules have a cyclic structure with numerous ramifications and have the features to release glucose in a constant and regular way. Cluster Dextrin® is the brand and corn starch is the starting raw material.

## HOW THEY ARE OBTAINED

The process to obtain HBCD uses a particular enzyme, which permits to obtain molecules with high molecular weight, low osmolarity and excellent solubility.

HBCD allows a constant glucose supply to the body, permitting a regular **MUSCLE GLYCOGEN REACTIVATION DURING INTENSE AND SUSTAINED TRAINING SESSIONS.**



Is a special carbohydrate with low glycemic index useful to provide energy in a balanced way. Palatinose™, whose molecule is called isomaltulose, is defined also "smart sugar", it provides energy in a balanced way (4 kcal/g) and has a low effect on glycemic surge. Palatinose™ helps to improve fat oxidation during physical activity, this permits to measure out energy in an excellent and prolonged way. Palatinose™ (isomaltulose) is obtained from sugar beet sucrose.

## HOW IT IS OBTAINED

It comes from natural source, 100% vegan, kosher and halal. It is commercially produced by enzymatic union of glycosidic bond between glucose and fructose. New molecular bond in Palatinose™ is much more stable than the sucrose one.

## GLUCIDEX® DE6

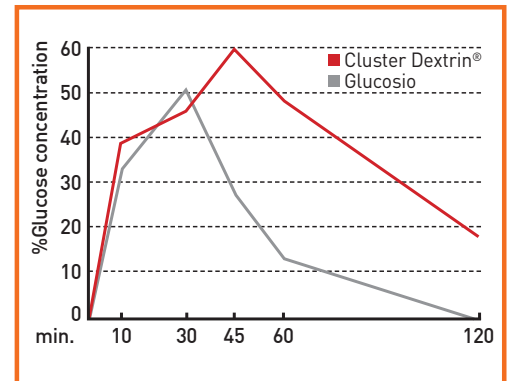
Long chain maltodextrin

### WHAT THEY ARE

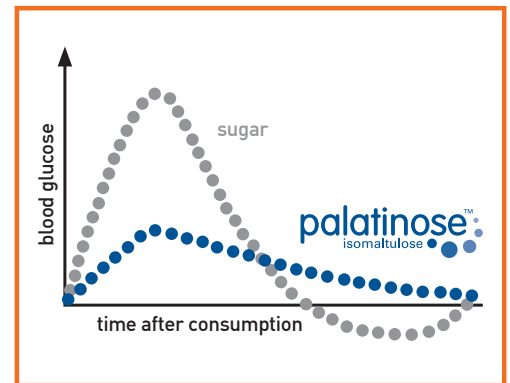
Maltodextrins are complex carbohydrates, hydrosoluble, obtained from enzymatic hydrolysis processes. According to starch transformation degree are obtained maltodextrins with glucose polymer of different length. The chain length permits to classify maltodextrins according to their DE "dextrose equivalence" (usually included between 3 and 19). Higher is DE and shorter will be chain polysaccharide, so maltodextrins have a similar glucose function, from a digestive point of view.

### WHY THEY ARE USED

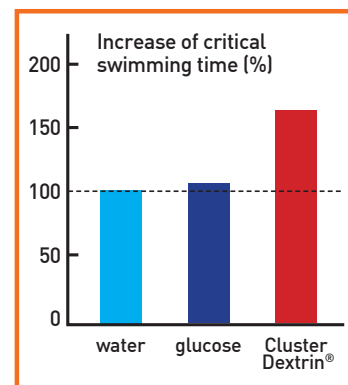
Maltodextrins are used in athlete diet, because osmolarity in a maltodextrin-based drink is less than an isocaloric amount of dextrose. Combined maltodextrin use, with different DE, rises medium molecular weight of blend and gives less osmolarity, this permits short times of transit and a fast energy recovery.



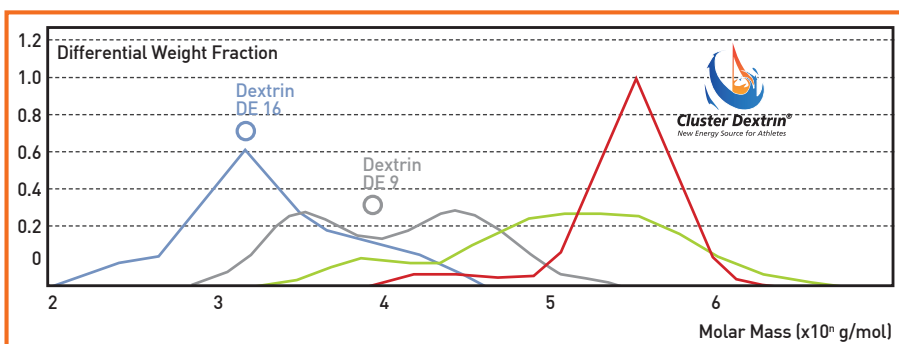
Variation of glucose availability in blood after Cluster Dextrin® vs Glucose intake



Variation of glucose availability in blood after Palatinose™ vs Sugar intake



Test on a group of professional swimmer



Average distribution of maltodextrins molecular weight with different dextrose equivalence (DE) compared to Cluster Dextrin®