

SUPER DEXTRIN[®]

**SEQUENTIAL CARBOHYDRATES WITH SLOW
RELEASE AND HIGH EFFICIENCY**

**LOW OSMOTIC PRESSURE - HYPOTONIC WITH
HIGHLY BRANCHED CYCLIC DEXTRINS**

palatinose™
isomaltulose


Cluster Dextrin®
New Energy Source for Athletes

GLUCIDEX®
DE6



EthicSport
MAKE YOUR BEST PERFORMANCE

NEW ERA FOR ENERGY SUPPLEMENT DEVELOPED BY ETHICSPORT RESEARCH

WHY YOU SHOULD CHOOSE SUPER DEXTRIN®

- 1 SUPER DEXTRIN® is a special and innovative energy blend, sequential carbohydrates-based with high efficiency and duration, useful for athletes carrying out intense activities, mainly endurance.
- 2 The blend combines for the first time Highly Branched Cyclic MaltoDextrin (HBCD) with isomaltulose, maltodextrins DE6 and maltodextrins DE18
- 3 The product generates glucose transfer with slow release..
- 4 The formula provides simultaneously 4 carbohydrates with different physico-chemical features, which have metabolic pathways slightly different for a gradual energy release.
- 5 HBCD and maltodextrins DE6 permit a reduced osmotic pressure, this is able to influence positively gastric emptying and at the same time permit a more gradual energy release to the body.
- 6 The special blend generates less insulin peak than normal maltodextrin, permitting to the body energy reserves coming from fats. Too much insulin reduces energy metabolism of fats.
- 7 The product is useful for endurance athletes, who need glucose in a continuous and gradual way.
- 8 The formulation is more fluid than simple malto-dextrin or carbohydrate blends, usually used for energy purposes like athlete support.
- 9 Hypotonic product 120 mOsm/l
- 10 Patented formula

PATENTED FORMULA

This new formulation is the result of a long study of EthicSport Research.

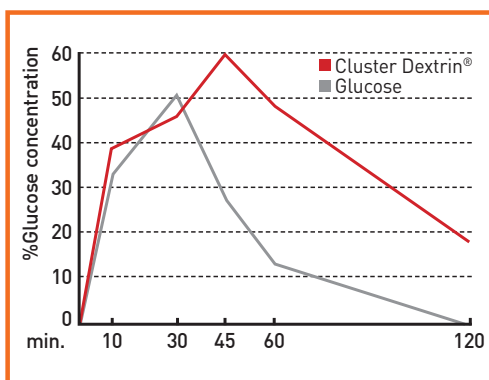
It is a special carbohydrate-based blend with different features, studied specifically for providing energy to athletes carrying out intense and prolonged activities.

SUPER DEXTRIN® has a series of unique and particular features, which permitted the formulation patent. Blend combines the following ingredients: Highly Branched Cyclic MaltoDextrin (HBCD), Maltodextrins DE18, Palatinose (isomaltulose), Maltodextrins DE6, a real innovation in sport supplement.

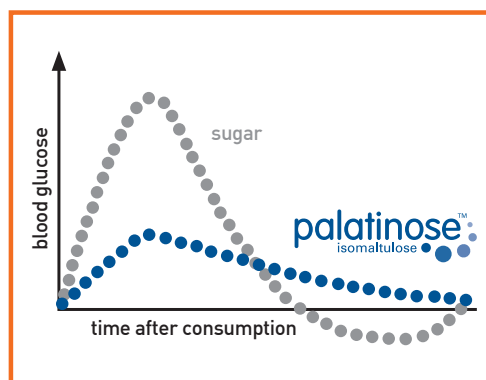
REPLENISH ENERGY

**HIGH QUALITY
MADE IN ITALY**

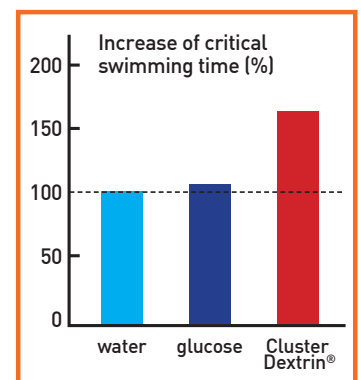
**PATENT
PENDING**
INTELLECTUAL PROPERTY



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

IN-DEPTH ANALYSIS ON FORMULATION COMPONENTS



CLUSTER DEXTRIN®

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.

PALATINOSE™

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.

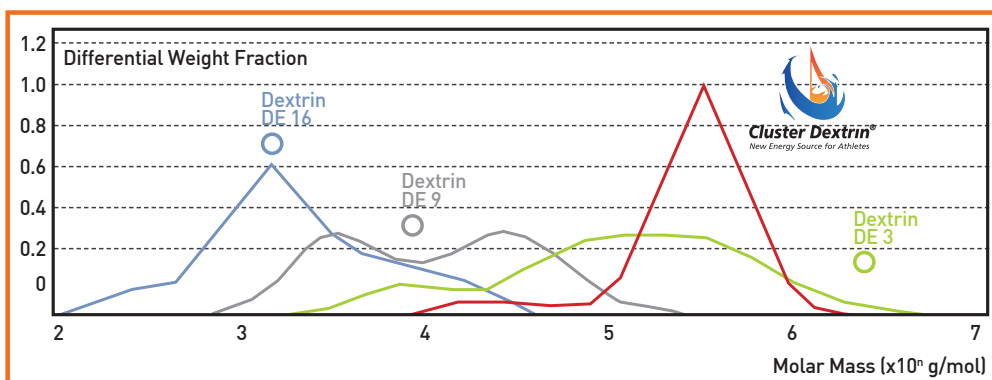
GLUCIDEX DE6 AND MALTODEXTRINS DE18

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.



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



SUPER DEXTRIN®

ENERGY FOOD SUPPLEMENT CARBOHYDRATE-BASED
WITH DIFFERENTIATED ENERGY RELEASE

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⁽¹⁾ 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*.

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.

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.

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.

WARNINGS: Do not exceed the recommended daily dosage. Keep out of reach of children under the age of 3. Food supplements are not intended to be used as a substitute for a varied and balanced diet and a healthy lifestyle.

STORAGE CONDITIONS: Store in a cool dry place at room temperature. Do not expose to heat sources and solar radiation. The expiration date applies to the product in its intact container when stored as directed. Do not throw out in the environment after the use.

CONSUMPTION TIMING

BEFORE
OK

DURING
OK

AFTER
POSSIBLE

INFORMAZIONI NUTRIZIONALI/ NUTRITIONAL INFORMATION		
	Per 100 g	Per dose (50 g)
VALORE ENERGETICO/ ENERGY		
kJ	1619	810
kcal	381	190
Grassi totali/ Fat	0 g	0 g
di cui grassi saturi/ of which saturates	0 g	0 g
Carboidrati/ Carbohydrate	95 g	47 g
di cui zuccheri/ of which sugars	22 g	11 g
Proteine/ Protein	0 g	0 g
Sale / Salt (Na x 2,5)	0.16 g	0.08 g

DOPING
FREE
TESTED*

VEGETARIAN

VEGAN

GLUTEN
FREE

CAFFEINE
FREE

ASPARTAME
FREE

ALLERGEN
FREE**

⁽¹⁾ 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-Zagonists, amphetamines and ephedrines.

**In accordance with annex II Regulation UE 1169/2011

PACKAGING: jar, 700 g with measuring scoop and guarantee seal

NET WEIGHT: 700g e

Produced and packaged on exclusive formulation on behalf of: ES Italia S.r.l.
Viale Empoli, 33 - Riccione (RN) Italy, in the establishment of: Via Volpago Sud, 47 - Ponzano Veneto (TV)

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