

ORGANIC COCOANEX™ COCOA REPLACER

Nutritious, Superior Quality and Highly Functional

- No Caffeine
- No Theobromine
- No Oxalate
- GMO Free
- Low in Heavy Metal



ORGANIC COCOANEX™: Nutritious with Market Sustainability

- Is based on roasted carob tree pods, which, unlike cocoa beans that only grows in a narrow band of tropical geography, grows in subtropical and semi-arid environments, without any production pressures or limitations, providing excellent production stability and growth potential;
- Like organic cocoa powder, has excellent mix of polyphenolic (antioxidant) compounds for excellent health benefits;
- Highly nutritious: very low fat and > 2.5x the calcium content of cocoa beans;
- Free of caffeine, theobromine, oxalate, GMO and gluten;
- Heavy metal levels are consistently below specified values of ≤ 2 mg/kg for arsenic and lead and ≤ 1 mg/kg for mercury and cadmium. In fact, third-party analytical results show that cadmium level is ≤ 0.01 mg/kg.

COMPOSITION OF RAW ORGANIC COCOA POWDER AND ORGANIC COCOANEX™

DIETARY COMPONENT	RAW ORGANIC COCOA POWDER (%)	ORGANIC COCOANEX™ (%)
Caloric content (kcal/g)	2.28	2.3
Total carbohydrates	67.02	88.0
Sugars	0.5	48.2
Dietary fiber	33.2	39.0
Total fat	8.82	1.6
Protein	17.6	4.6
Calcium (mg/100g)	141	341
Theobromine (mg/100g)	2110	0.0
Caffeine (mg/100g)	230	0.0
Polyphenols (as GAE, mg/100g d.b.)	101	22.9
Oxalates (mg/100g)	628	0.0
Ash	5.06	2.3
Cadmium (heavy metal) [mg/kg]:	> 0.6mg/kg*	≤ 0.01 mg/kg**

Abbrev.: GAE (Gallic acid equivalents), d.b. (dry basis). *The EC limit (0.6 mg/kg). Cadmium levels in cocoa powder from volcanic soils have been shown in literature to significantly exceed the EC limit at ~ 3 mg/kg. ** Method detection limit.

ORGANIC COCOANEX™: Superior cocoa replacer

- Excellent cocoa powder replacement without affecting functionality, taste or color;
- When used with cocoa powder, extends its utilization.

APPLICATIONS

- **Organic Cocoanex™ in chocolate manufacturing:**
 - Natural sugar and fiber increase;
 - No caffeine or theobromine.
- **Organic Cocoanex™ in cereal-based baked products:**
 - Gluten Free and GMO Free;
 - Can replace up to 100% of cocoa powder, increasing fiber and lowering fat;
 - No difference in sensory attributes, with up to 75% in cakes.
- **Organic Cocoanex™ in milk beverages, mousse, porridge:**
 - High polyphenolic content;
 - Excellent color, slightly coffee aroma/flavor, with caramel, mocha aroma and flavor notes;
 - Imparts acceptable viscosity.
- **Other potential Organic Cocoanex™ applications:**
 - Low-fat yogurt;
 - Low-lactose content yogurt for lactose intolerant individuals, with high fiber/natural sweetness;
 - Chocolate-like, low-fat ice cream with natural sugar.
- **Recommendations for use:**

Nexus recommends Organic Cocoanex™ be used to replace about 50% of organic cocoa powder, although 100% replacement is possible, thus providing excellent functionality, taste and color, while extending organic cocoa powder attributes.