

PRODUCT GUIDE

Lalmin®

Chromium 250

Lallemand Health
Ingredients

AN IMPORTANT ELEMENT CRITICAL FOR OVERALL HEALTH

- Chromium is a trace mineral, and the trivalent form is required for normal carbohydrate, lipid and protein metabolism.
- Chromium yeast intake is linked to **improved blood glucose levels, lower serum lipids** and a **decreased risk of coronary heart disease.**⁽¹⁾
- It is also a co-factor for the hormone **insulin** and its activity parallels insulin activity in the body.⁽²⁾

EFSA AUTHORIZED HEALTH CLAIMS^(a):

1. Chromium contributes to the maintenance of normal blood glucose levels.
 2. Chromium contributes to normal macronutrient metabolism.
- Both claims are authorised for a daily chromium intake of 40 µg^(b). 175 mg of Lalmin® Cr250 will provide 40 µg of chromium.
 - Based on EFSA evaluation, supplemental intake of trivalent chromium (including high chromium yeast) is safe up to 250 µg/day.

(a) European Food Safety Authority

(b) Nutrient Reference Value as per Reg. (EU) 1169/2011



CHROMIUM YEAST BENEFITS

The bioavailability of chromium from chromium-enriched yeast may potentially be up to ten times higher than that of chromium from non-yeast-bound chromium chloride.⁽⁶⁾ Yeast contains biologically active Cr or "Glucose Tolerance Factor GTF" suggesting that Cr from GTF is more readily assimilated by the body.⁽⁸⁾

Chromium may help to lower blood glucose levels.^(2,3)

Therefore, it may help people with Type II diabetes control their blood glucose.^(2,3,4,5,6)

It is often prescribed to control diabetes mellitus.⁽³⁾

Chromium improves supports improved cholesterol levels.⁽⁷⁾

It helps reduce the risk of heart disease.⁽⁷⁾

It may supports muscle building and weight loss efforts.⁽⁷⁾

Chromium improves insulin sensitivity in those with PCOS (polycystic ovary syndrome).⁽⁷⁾

It may help prevent insulin resistance.^(2,5,6)



LALLEMAND BIO-INGREDIENTS

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CHROMIUM YEAST AND INSULIN RESISTANCE/ T2D

- **Type 2 diabetes (T2D)** is often associated with obesity, dyslipidemia and cardiovascular anomalies and is a major health problem approaching global epidemic proportions.⁽²⁾
- Insulin resistance, a prediabetic condition, precedes the onset of type 2 diabetes and offers potential avenues for early intervention to treat the disease.⁽²⁾
- Most available drugs that improve insulin sensitivity have adverse effects, such as abdominal discomfort, diarrhea, muscle cramping, painful urination and others.⁽²⁾
- **The risk of type 2 diabetes is lower in adults taking chromium** containing supplements.⁽⁴⁾
- Chromium yeast supplementation often improves impaired glucose metabolism via "Glucose Tolerance Factor GTF".⁽¹⁾
- The mechanism of activity is thought to be modulation of insulin signaling pathways.^(2,6)
- Chromium deficiency results in impaired glucose tolerance.⁽⁸⁾



CHROMIUM AND CHOLESTEROL

- Since the 1980s, studies have supported evidence for trivalent chromium benefitting cholesterol metabolism.^(3,8)
- Animal studies show that chromium is efficient at **reducing levels of total cholesterol, LDL cholesterol, triglycerides and non-esterified fatty acids.**^(3,8)
- Increased levels of HDL-cholesterol and the beta-oxidation process were also associated with chromium intake.^(7,9)

References

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7. Anderson, Richard. Chromium as an Essential Nutrient for Humans. *Regulatory Toxicology and Pharmacology*, Volume 26, Issue 1, August 1997, Pages S35-S41.
8. Bahijiri SM, Mira SA, Mufti AM and Ajabnoor MA, 2000. The effects of inorganic chromium and brewer's yeast supplementation on glucose tolerance, serum lipids and drug dosage in individuals with type 2 diabetes. *Saudi Medical Journal*, 21, 831-837.
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Non-GMO
Allergen-free
Gluten-free
Vegan
Kosher
Halal