Metabolic Lean® Weight Management Formula

DESCRIPTION

Metabolic Lean® by Douglas Laboratories is a novel weight management formula[†] that includes three branded and clinically studied ingredients-- Meratrim® plant extract, Capsimax[™] capsicum extract, and Zychrome® chromium complex. This special combination of ingredients may improve lipolysis, thermogenic activity, and insulin function. The ingredients in Metabolic Lean[™] also help to increase adiponectin levels which facilitate healthy fat metabolism and glucose regulation. [‡]

INDICATIONS

For individuals desiring weight management support.[‡]

FUNCTIONS AND MECHANISM OF ACTION

Meratrim®

Meratrim® is a proprietary plant extract blend for weight management derived from two plants, *Sphaeranthus indicus* and *Garcinia mangostana*, traditionally used in Southeast Asian culture. Meratrim has been shown in two independent, randomized, double-blind, placebo-controlled clinical studies to significantly reduce body weight, BMI, and waist circumference within 8 weeks when used in combination with a diet and exercise plan. Meratrim appears to achieve this by modulating the accumulation of fat while simultaneously supporting lipolysis. ‡ Toxicological studies on Meratrim have demonstrated a wide margin of safety. *In vitro* studies demonstrate that Meratrim modulates the expression of biomarkers that control adipogenesis and lipogenesis as follows:

- Active in the expression of the peroxisome proliferator-activated receptor gamma (PPAR)
 hormone receptor. PPAR induces adipocyte-specific genes involved in the formation and growth
 of fat cells
- Active in the expression of adipocyte differentiation related protein (ADRP). This is a signaling
 protein which facilitates the uptake of fatty acids to form lipid droplets and adipocyte
 differentiation.
- Active in the expression of cluster of differentiation 36 (CD36)—a trans-membrane receptor that facilitates fatty acid uptake by adipocytes.
- Perilipins are adipocyte proteins that are localized at the surface of the lipid droplet and inhibit fat break down by restricting access of lipase to the lipid droplet.

Capsicum

CapsimaxTM capsicum extract is a proprietary encapsulated form of premium, highly concentrated natural capsicum fruit extract manufactured from hot red peppers. Capsaicinoids are a group of compounds which cause the "heat" found in hot peppers. In fact, over the past 30 years, studies including animal and human subjects support the potential of red hot capsicum and capsaicinoids as a safe, effective ingredient to aid in weight management. Benefits of capsicum and capsaicinoids in animal and human studies have shown that it helps manage appetite, supports healthy metabolism to burn calories, and helps induce thermogenesis. CapsimaxTM is a patent-pending encapsulated form of premium, highly concentrated natural capsicum extract. Using a proprietary matrix, Capsimax capsicum extract gives users the maximum effectiveness of capsaicinoids without any oral or gastric irritation, thus solving the problem of capsicum compliance. [‡]

Chromium

Zychrome® is a unique, patent-pending chromium complex consisting of chromium, niacin and L-cysteine (chromium dinicocysteinate). Seventeen chromium complexes were screened in preclinical studies in order to arrive at the complex found in Zychrome. *In vitro* and *in vivo* studies demonstrated that Zychrome is more

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efficacious than other forms of chromium in supporting healthy fasting glucose levels, glycated hemoglobin levels (HbA1c), insulin levels, CRP, MCP-1, ICAM-1 and oxidative stress levels. These effects of Zychrome are mediated by the regulation of cell signal transduction pathways associated with insulin function, and glucose control. A randomized, double-blind, placebo-controlled clinical study showed that Zychrome significantly modulated the levels of insulin and insulin resistance as well as the cytokine TNF and protein carbonyl content, a marker of oxidative stress. Toxicological studies have demonstrated a wide margin of safety. ‡

FORMULA (#201350-60X)

Serving Size: 1 vegetarian capsule

Amount Per Serving

Chromium......100 mcg

(as Chromium Dinicocysteinate)

Meratrim® Proprietary Blend400 mg

(Sphaerantus indicus [flower heads] extract, Garcinia mangostana [fruit rind] extract)

Capsaicinoids......0.5 mg

(from Capsimax[™], providing capsaicin, dihydrocapsaicin, nordihydrocapsaicin)

Other Ingredients: Hydroxypropyl methylcellulose (capsule), dicalcium phosphate, cellulose, vegetable stearate, pharmaceutical glaze and silica.

Zychrome® is a trademark of InterHealth N.I.

Meratrim® brand proprietary blend of two natural plant extracts. Meratrim™ is exclusively distributed by InterHealth N.I Capsimax™ is a trademark of OmniActive Health Technologies.

SUGGESTED USE

Adults take 1 capsule 30 minutes before breakfast and 1 capsule 30 minutes before dinner, or as directed by your health care professional.

SIDE EFFECTS

WARNING: If you are pregnant or nursing, or taking blood thinning medication, consult a physician prior to use.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

REFERENCES

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For more information on Metabolic Lean®, visit douglaslabs.com

† Provides weight management support as part of a healthy lifestyle with a reduced-calorie diet and regular exercise.

‡These statements have not been evaluated by the Food and Drug Administration.

This product is not intended to diagnose, treat, cure, or prevent any disease.

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You trust Douglas Laboratories. Your patients trust you.

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