BioSculpt
FOR AN OPTIMIZED HEALTHSPAN

METABOLIC SUPPORT

CLINICAL APPLICATIONS

- Multidimensional Support for Optimal Blood Pressure Levels
- Helps Enhance Metabolic Activity and Efficiency
- Aids in Supporting Optimal Weight and Reducing Cravings
- Supports Healthy Cardiometabolic Function

This product is a high-concentration, highly purified polyphenolic blend that has been scientifically demonstrated to make positive shifts in functional metabolic targets. It provides multidimensional support to maintain blood pressure levels already within the normal range, manage weight, and increase satiety and appetite control. This product provides a potent formula for those seeking to optimize their metabolism and cardiovascular health.

Overview

Maintaining healthy blood pressure levels has become a primary concern for many in the United States and across the globe. Blood pressure fluctuations cause a variety of cardiovascular challenges, and this is one of the most common cardiometabolic challenges experienced. In the Framingham study, the risk of having blood pressure challenges over a lifetime was 90%, while it is estimated that the global burden will increase to 1.56 billion by 2025.[1] While traditional therapies are available, most are not well-tolerated, making diet and lifestyle changes, such as whole food-based diets, increasing physical activity and targeted nutrient support, the optimal way to maintain blood pressure levels already within the normal range.[2]

There is abundant evidence that dietary factors play a central role in determining cardiovascular risk driven by several potential mechanisms.[3] Among various factors determining human health, dietary patterns such as the Mediterranean diet or the DASH diet model have been demonstrated to play a role in helping maintain vascular health and preserving optimal blood pressure levels.[4] A common feature of such dietary patterns is the richness in plant-derived foods, which are high in fiber and phytochemicals proven to be antioxidant powerhouses. Polyphenols are a large group of plant metabolites that exert a variety of key biological activities including increasing satiety hormones (like GLP-1 [glucagon-like peptide-1]) and decreasing hunger hormones (like ghrelin). In addition, targeted plant bioactives have also been shown to stimulate 5'adenosine monophosphate-activated protein kinase (AMPK), which has been shown to be a primary activating mechanism for human metabolism. AMPK may create such positive effects through its capability to modulate energy homeostasis, total daily energy expenditure, lipid oxidation and metabolism.[5]

This product provides a targeted blend of key polyphenols that maintain energy and metabolic efficiency, maintain normal blood pressure levels, and support overall cardiometabolic function.

Metabolaid®
(Hibiscus and Lemon Verbena Extract)

Lemon verbena (*Lippia citriodora*) has been used as a food spice, cosmetic, and in traditional formulations in South America and Southern Europe. Hibiscus flower (*Hibiscus sabdariffa* L.) is used in traditional Chinese formulations in

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the manner of a tea to help maintain normal blood pressure levels and normal inflammatory balance. Metabolaid® is a combination of the plant polyphenols in lemon verbena and hibiscus flower extracts. These extracts have been shown to work synergistically on the activation of the energy sensor AMPK and promote optimal metabolic efficiency through the modulation of fat metabolism.

In a 2018 double-blind, placebo-controlled and randomized trial in 56 subjects with weight management challenges, participants were given 500 mg of a combination of polyphenolic extracts from *Lippia citriodora* and *Hibiscus sabdarifa* L. for two months and showed significant improvement in body weight, abdominal circumference, and body fat percentage. Heart rate and systolic blood pressure also were maintained within the normal range.[6] In another eight-week, randomized, double-blind, placebo-controlled trial, 54 participants given the same extract showed an improvement of anthropometric measurements, maintenance of blood pressure within the normal range, and improved heart rate. In addition, they experienced positive perception of overall health status. This polyphenolic combination has been shown to significantly increase metabolic function and support healthy weight by decreasing appetite biomarkers. This may help to avoid the undesired weight rebound typical of calorie restriction diets.[5]

Green Coffee Bean Extract

Coffee is one of the most consumed drinks in the world. Green coffee beans are the beans from the *Coffea* fruit that have not yet been roasted. Coffee beans are naturally high in chlorogenic acid, and roasting them reduces the chlorogenic acid content. Chlorogenic acid, a polyphenol, is what holds the antioxidant properties and increases the overall health benefits of coffee;[7] therefore, the effects and benefits of coffee are maximized in its natural and unroasted state. In addition, the green coffee bean extract in this product has had the caffeine removed, so the benefits of the polyphenols can be maximized.

A meta-analysis of nine randomized, controlled trials with green coffee bean extract (GCBE) administered for four weeks showed a benefit in maintaining blood pressure levels already in the normal range—both systolic and diastolic.[8] In another systemic review and meta-analysis study consisting of 637 participants, it was shown that green coffee bean extract consumption can help maintain optimal lipid markers, decrease body weight, and improve metabolism and glucose disposal.[9] Finally, in a randomized clinical trial, 43 subjects consumed GCBE for eight weeks. After supplementation, all indices of cardiovascular health showed benefits. Additionally, waist circumference and appetite score of the individuals supplemented with GCBE indicated a significant decline.[10]

Magnesium Citrate

Magnesium is a cofactor in more than 300 enzyme systems that regulate diverse biochemical reactions in the body, including protein synthesis, muscle and nerve function, blood glucose control, and blood pressure regulation.[11-13] Magnesium is required for energy creation, which involves oxidative phosphorylation and glycolysis. It contributes to the development of bone and is required for the synthesis of DNA, RNA, and the antioxidant glutathione. Magnesium also plays a role in the active transport of calcium and potassium ions across cell membranes, a process that is important to nerve impulse conduction, muscle contraction, and normal heart rhythm.[13] The role of magnesium as an enzyme cofactor for activities that generate adenosine triphosphate (ATP) highlight its significance for maintaining energy levels and metabolic efficiency.

A meta-analysis of randomized, double-blind, placebo-controlled studies on the effects of magnesium supplementation on blood pressure showcased 34 trials involving 2,028 participants who, while using magnesium supplementation with a median duration of three months, showed benefits in maintaining systolic and diastolic blood pressure within the normal range for adults.[14,15] Overall, oral magnesium citrate supplementation has been shown to maintain healthy blood pressure and blood sugar markers.[15]

Directions

2 capsules per day or as recommended by your health care professional.

Does Not Contain

Gluten, corn, yeast, artificial colors or flavors.

Cautions

Do not consume this product if you are pregnant or nursing. Consult your physician for further information.

Supplement Facts

V1

Serving Size 2 Capsules
Servings Per Container 30

	Amount Per Serving	% Daily Value
Magnesium (as Magnesium Citrate USP)	50 mg	12%
Metabolic Blend (Metabolaid®)	500 mg	
Lemon Verbena Leaf Extract		*
Hibiscus Flower Extract		*
Green Coffee Bean Extract (Decaffeinated, standardized to contain 112.5 mg Chlorogenic Acids)	250 mg	*

* Daily Value not established.

Other Ingredients: Hypromellose (Natural Vegetable Capsules), Microcrystalline Cellulose, Magnesium Stearate and Silicon Dioxide.

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