



# STARCH & FAT METABOLIZER

NPN 80040586

## Supports healthy glucose metabolism

The Ultimate line is about improving lives, one body at a time, by correcting and maintaining metabolism and hormone balance as well as providing stress and immune support. Effective nutrient supplementation can often be the missing piece to optimal health. Our supplements are carefully formulated to provide the Ultimate in abundant energy, metabolism, health, and longevity.

### Product summary

Ultimate Starch & Fat Metabolizer features Phase 2<sup>®</sup> Carb Controller™ white kidney bean extract with green tea extract, chromium, *Gymnema* extract, and BioPerine<sup>®</sup> black pepper extract to support the healthy metabolism of glucose and fats. It can be used as part of a healthy diet to reduce the impact of carbohydrate- and fat-rich meals.

### Benefits

- Supports healthy glucose metabolism
- Reduces the caloric impact of starchy foods
- Helps the body metabolize carbohydrates and fats
- Helps maintain the body's ability to metabolize nutrients
- Provides a source of antioxidants for the maintenance of good health

### Research

Blood sugar disorders are a worldwide health problem. (1) High blood sugar puts stress on the body and increases the risk of weight gain and chronic health problems. After a meal, the starches and carbohydrates from food are converted into sugars to be used as energy or to be stored as fat. Reducing intake of carbohydrates and starchy foods, as well as eating more foods with a low glycemic index, can help with weight loss and stabilizing blood sugar. (1)

Ultimate Starch & Fat Metabolizer contains Phase 2 Carb Controller white kidney bean extract to help with glucose metabolism and reduce the digestion of starches from carbohydrate-rich meals. (1) Phase 2 temporarily inhibits alpha-amylase, an enzyme responsible for breaking carbohydrates down into simple sugars during digestion. It allows some starch to pass through the intestinal tract undigested rather than being converted into sugar. (1,2) This helps reduce the glycemic load of foods, reduces blood sugar levels after eating, and may lower the number of calories absorbed from food. (1)

Several studies have shown that Phase 2 reduces postprandial spikes in blood glucose and allows blood sugar levels to return to baseline more quickly. Through a placebo-controlled trial, young adults were supplemented with 100 mg of white kidney bean extract immediately before eating. After 30 minutes, blood glucose levels were 10.7% lower and feelings of satiety lasted longer compared to those who took the placebo. (3) Additionally, a small placebo-controlled study found that participants who took 750 mg of Phase 2 with a carbohydrate-rich meal reduced their absorption of carbohydrates by 28–41% compared to the placebo group. (4)

Green tea is a concentrated source of antioxidant catechins and epigallocatechin-3-gallate (EGCG), which help counteract free radical damage to the body's cells. A placebo-controlled trial found that a daily 379 mg dose of green tea extract for three months helped increase antioxidant status and reduce markers of inflammation and oxidative stress in patients with obesity-related hypertension. Supplementation also helped reduce blood glucose and insulin levels, and improve blood pressure and lipid profiles. (5)

Green tea polyphenols also improve metabolic function and the oxidation of dietary fats. A placebo-controlled trial supplemented obese participants with 250 mg of green tea extract per day for 12 weeks. Supplementation helped reduce body weight by increasing energy expenditure and fat oxidation. By week 8, there was a 5.1 kg difference in body weight between the green tea and placebo groups. (6)

*Gymnema sylvestre*, also known as "gurmar," or sugar destroyer, in Hindi, is a well-recognized Ayurveda herb. It contains multiple active compounds, including gymnemic acids, that help lower blood sugar levels by delaying the absorption of glucose from food and stimulating insulin secretion from the pancreas. (7)

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Chromium is an essential trace mineral needed for the metabolism of carbohydrates, fats, and protein. (8,9) Studies show that supplementation supports healthy glucose metabolism by assisting insulin with the uptake of glucose into cells. Without chromium, insulin's action is blocked and glucose levels can become elevated. (8,9)

BioPerine Black Pepper Extract is standardized to 95% piperine, an active alkaloid that improves the bioavailability of nutrients that may otherwise be difficult to absorb. (10)

## Ingredients

### Each vegetarian capsule contains:

Green Tea Extract ( <i>Camellia sinensis</i> ) (80% total catechins, 45% EGCG*, <1% caffeine) (leaf) ....	91.67 mg
Chromium (enriched yeast).....	1 mcg
Gymnema Extract ( <i>Gymnema sylvestre</i> ) (25% gymnemic acids) (leaf and stem) .....	83.3 mg
PHASE 2® CARB CONTROLLER™	
White Kidney Bean Extract ( <i>Phaseolus vulgaris</i> ) (500 AAU**) (bean).....	166.67 mg
BioPerine® Black Pepper Extract ( <i>Piper nigrum</i> ) (95% piperine) (fruit) .....	0.67 mg

\*EGCG: Epigallocatechin-3-gallate

\*\*AAU: Alpha-Amylase Inhibiting Unit

**Non-medicinal ingredients:** Vegetarian capsule (cellulose, purified water), rice starch, croscarmellose sodium, vegetable grade magnesium stearate (lubricant).

**Recommended adult dose (19 years and older):** 1 capsule 3 times daily with carbohydrate rich meals or as directed by a health care practitioner. Consult a health care practitioner for use beyond 12 weeks.

**Caution:** Consult a health care practitioner prior to use if you have a kidney or liver disorder, have an iron deficiency or diabetes, or if you are taking prescription medication. Stop use and consult a health care practitioner if you develop symptoms of liver trouble such as yellowing of the skin/eyes (jaundice), stomach pain, dark urine, sweating, nausea, unusual tiredness, and/or loss of appetite. Rare, unpredictable cases of liver injury associated with products containing green tea extract have been reported (in Canada and internationally). Piperine may increase the bioavailability of drugs and natural health products. Do not take if you are pregnant or breastfeeding. If you have inflammatory or other chronic bowel disease, avoid use. Discontinue use and consult a health care practitioner if you experience symptoms of hypoglycemia including feelings of anxiety, dizziness, tremor, sweating, nausea, or headache. Keep out of reach of children.

*This product does not contain artificial preservatives, colours, or sweeteners; no dairy, sugar, wheat, gluten, soy, corn, egg, fish, shellfish, animal products, salt, tree nuts, or GMOs. Suitable for vegetarians and vegans.*



## References

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