

PHASE'OLEAN[®] FORTE

May Inhibit the Digestion of Carbohydrates
from Dietary Starches[◇]



Can Phase'olean Forte support weight management? In clinical studies, 1500 mg of the extract contained in Phase'olean Forte blocked 66% of the calories contained in 4 slices of white bread, compared to a placebo. As part of a healthy weight loss program that includes exercise and a sensible diet based on whole natural foods, Phase'olean Forte may help many people look and feel better, and improve their overall health by helping them maintain a healthier weight.[◇]

It's no secret that excess weight is an escalating problem in the Western World, both among adults and children. The number of overweight individuals in the U.S. has increased 66% over the last decade, and it is estimated that 60% of adults are overweight, and 20% are seriously overweight. 25% of American children are overweight, and 10-15% seriously so. It's a problem that leads to poor health—and high health care costs. Americans have lowered their dietary fat intake nearly 10 percent over the last decade, thanks to a proliferation of low fat products provided by the food industry, but we're fatter than ever. Associated with the decrease in dietary fat intake has been an increase in carbohydrate consumption, which many are beginning to implicate as a factor in weight gain.

There are two major types of carbohydrates: simple sugars, and complex carbohydrates, also known as dietary starch. Some complex carbohydrates, such as a baked potato or white bread are as absorbed and transformed into blood sugar as rapidly as if they were

pure white sugar—such foods are referred to as “high glycemic index” carbohydrates. The amount of carbohydrate in a food is referred to as the “glycemic load”. Foods with both a high glycemic index and a high glycemic load cause rapid increases in blood sugar, and require a large amount of insulin to be secreted by the pancreas, in order to avoid high blood sugar levels. Insulin is the peptide hormone that facilitates entry of sugar into the body's cells—it also stimulates the storage of carbohydrate calories that are not burned by activity as body fat. High protein meals, on the other hand, keep insulin levels low, and stimulate the secretion of glucagon—which has an opposing action to insulin, i.e. stimulating breakdown and burning of fat stores as fuel. Many people have successfully lost weight on carbohydrate restricted diets, because such diets lower insulin and raise glucagon levels, but then find it difficult to stay on them because they become boring, and because starch side dishes are routinely served with most cuisine.

Kidney Bean Extract Found to Inhibit Starch Digesting Enzymes

Phaseolamin is the unique ingredient in Phase'olean Forte, which can help keep absorption of calories from starchy foods lower, while still allowing people to enjoy some of their favorite foods, such as bread, pasta, potatoes, and popcorn. This development had its roots in an observation made by Venezuelan cattle ranchers, who fed their herds raw kidney beans in the early 1970's because they were more plentiful at that time than corn and other grains generally used to fatten cattle. These ranchers reported to government scientists that their cattle lost, rather than gained, weight from the kidney bean feed supplement. These findings were verified in laboratory animal feeding experiments, and published by Venezuelan scientists. Further research at the Howard Hughes Medical Center in Miami Florida, led to the isolation of a purified protein from the raw beans, which preferentially binds to alpha-amylase enzymes and make them unavailable for starch digestion. When the beans are cooked, the protein is denatured,

and the alpha-amylase inhibiting activity disappears.

Alpha-Amylase Inhibition Can Turn Starch Into Dietary Fiber

The discovery of alpha-amylase inhibition by phaseolamin was subsequently marketed as so called "starch blocker" dietary supplements in the 1980's, but low potency led to inconsistent results. More recently, higher potency extracts have been developed, so that 1000 mg (1 gram) of purified kidney bean protein, under laboratory conditions, may inhibit enough alpha-amylase to block the digestion of 2250 calories (which represents over a pound of starch). When dietary starch is not digested, and the calories therefore not absorbed in the upper digestive tract, the undigested starch moves to the colon, where it is partially digested by the colon microflora (bacteria). When consumed with an effective alpha-amylase inhibitor, dietary starch may therefore become a form of dietary

fiber (the definition of which being indigestible plant polysaccharides that are partially digested by colonic bacteria to form short chain fatty acids, which contribute to the health of the colon).

Clinical Studies Show Efficacy

In clinical studies, 1500 mg of the extract contained in Phase'oLean Forte blocked 66% of the calories contained in 4 slices of white bread, compared to a placebo. In a double blind placebo controlled weight loss study conducted in Italy with the same extract, 30 participants taking the placebo lost an average of 0.4 pounds over 30 days, with no change in body fat percentage, whereas the 30 participants taking the purified kidney bean extract lost an average of 6.4 pounds, with a 10% decrease in body fat, and no change in lean body mass. All participants were counseled to eat similar diets by dieticians, and maintained their usual levels of physical activity. In all studies to date,

this extract has proved to be safe and well tolerated.

As part of a healthy weight loss program that includes exercise and a sensible diet based on whole natural foods, Phase'oLean Forte may help many people look and feel better, and improve their overall health by helping them maintain a healthier weight.^o Phaseolamin kidney bean protein extract will not block the digestion of sugars (even though they too are carbohydrates), fats, proteins, vitamins, minerals, or phytonutrients; only the calories of long chain polysaccharides present as dietary starch, which are digested by the salivary and pancreatic alpha-amylase enzymes, are blocked by phaseolamin, the active ingredient in Phase'oLean Forte. The phaseolamin contained in Phase'oLean Forte is rapidly released in the stomach by Lifeplus' proprietary tableting process. Two Phase'oLean Forte tablets supply 500mg of phaseolamin, purified from raw white kidney beans.

REFERENCES:

1. "Have Your Bread And Eat It. The Complete Starch Blocker™ Weight Control Story." By J. John Marshall, Ph.D. With J. Robert Lemon, R. Ph. ©Copyright 1997.

Supplement Facts	
Serving Size / 2 Tablets	
Servings Per Container / 90	
Amount per Serving	% Daily Value
Calories	1
Total Carbohydrates	1 g 0%*
Sodium	9 mg 0%*
Kidney Bean (<i>Phaseolus vulgaris</i> L.) Extract	500 mg **

*Percent Daily Values are based on 2,000 calorie diet.
**Daily Value not established.

INGREDIENTS: Kidney Bean (*Phaseolus vulgaris* L.) Extract, Dicalcium Phosphate, Microcrystalline Cellulose, Croscarmellose Sodium, Silica, PhytoZyme[®] proprietary blend (Bromelain, Papain, Alfalfa, Parsley, and vegetable and fruit concentrates from Blueberry, Carrots, Broccoli, Spinach, Cauliflower, Kale, Asparagus, Beet, Chili Pepper, Green Bean, Pea, Sweet Potato, Cucumber, Pumpkin, Snow Pea, Tomato, Watercress, Zucchini, Lima Beans, Mushroom, Banana, Cantaloupe, Cranberry, Guava, Lemon, Mango, Orange, Papaya, Peach, Pineapple and Grapefruit), Magnesium Stearate, and Stearic Acid.

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EACH TWO TABLET SERVING CONTAINS: 500 mg of Kidney Bean (*Phaseolus vulgaris* L.) extract, a unique extract which may inhibit or delay the digestion of dietary starch. Based on laboratory studies, each two tablet serving may affect more than 1000 calories of dietary starch through amylase inhibition.^o Differences between controlled laboratory conditions and each individual's digestive situation may influence overall dietary benefit.

These special "Soft Tabs" are formulated to ensure rapid breakdown when taken, therefore, some breakage may occur.

As with all supplements, please consult your physician prior to taking if you are pregnant or attempting to become pregnant, breast-feeding, under a doctor's care or taking prescription medication.

Allergy Information: This product is processed in the same facility that processes products containing fish/shellfish, soy and dairy.

This product was not tested on animals.

Suitable for Vegetarians.

DIRECTIONS: Take two tablets (preferably 15-20 minutes) before each meal containing carbohydrates from dietary starch. More tablets can be taken half way through the meal if desired.

◊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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