



What is it?

Bioperine® is a standardized extract from the fruit of *Piper nigrum* L (black pepper) or *Piper longum* L (long pepper). It contains 95 percent of piperine. Bioperine® may be co-administered with various nutrients for both human and animal health.

Sources

Black pepper is a common household spice. Extract from black pepper has also been used extensively as a medicine by our ancestors especially in India .

Bioperine® is an extract obtained from the black pepper fruit that is cultivated in the damp, nutrient-rich soil regions of southern India . The delicate pepper berries are harvested just prior to ripening and then sun dried to assure optimum maturity and quality. The extract of piperine, called Bioperine® in the patented form, has been clinically tested in the United States . Bioperine® significantly enhances the bioavailability of various supplement nutrients through increased absorption.

How does Bioperine® work?

The metabolic process that generates energy at the cellular level in the human body is called thermogenesis. Though thermogenesis has been identified as a key factor in maintaining weight loss, it has also been identified as playing an integral role in utilizing the daily food and nutrients that the human body consumes. It sets in motion the mechanisms that lead to digestion and subsequent gastrointestinal absorption. Piperine, in the patented form of Bioperine® enhances the body's natural thermogenic activity - hence the term Thermonutrient®.

This enhancement may be explained as a means of increasing the thermal energy sufficient to "power up" the mechanism related to thermogenesis. This in turn results in increased metabolic processes that creates a "demand" for "supply" of a broad range of nutrients that contribute to metabolism, i.e. vitamins, minerals, herbals, amino acids, etc. It is as if Bioperine® activates a metabolic paddle wheel, of sorts, that selectively provides a more efficient mode of nutrient transportation into the blood.

The Advantages of Bioperin®

Bioperine® is the only product sourced out of piperine to obtain a patented status for its ability to increase the bioavailability of nutritional compounds. Secondly, it is the only source from piperine to have undergone clinical studies in the U.S. to substantiate its safety and efficacy for nutritional use.

Bioavailability Enhancer

The nutritional materials which may be co-administered with Bioperine® are the following groups :

Herbal extracts : (e.g. CURCUMIN, BOSWELLIA SERRATA, ASHWAGANDHA, GINKGO BILOBA and CAPSAICIN)

Water-soluble vitamins : (e.g. Vitamin B1, Vitamin B2, Niacinamide, Vitamin B6, Vitamin B12, Folic acid and Vitamin C)

Fat-soluble vitamins : (e.g. Vitamin A, Vitamin D, Vitamin E, and Vitamin K)

Antioxidants : (e.g. Vitamin A, Vitamin C, Vitamin E, alpha-carotene, beta-carotene, beta-cryptoxanthin, lycopene, lutein/zeaxanthin, pine bark bioflavonoids complex, germanium, selenium and zinc).

Amino acids : (e.g. lysine, isoleucine, leucine, threonine, valine, tryptophan, phenylalanine, and methionine)

Minerals : (e.g. calcium, iron, zinc, vanadium, selenium, chromium, iodine, potassium, manganese, copper and magnesium).

Due to its ability to increase the absorption of nutrients comprising nutritional supplement formulations as shown in Figures 1-4, Bioperine® has been termed a natural Thermonutrient® and bioavailability enhancer.

Vs black pepper

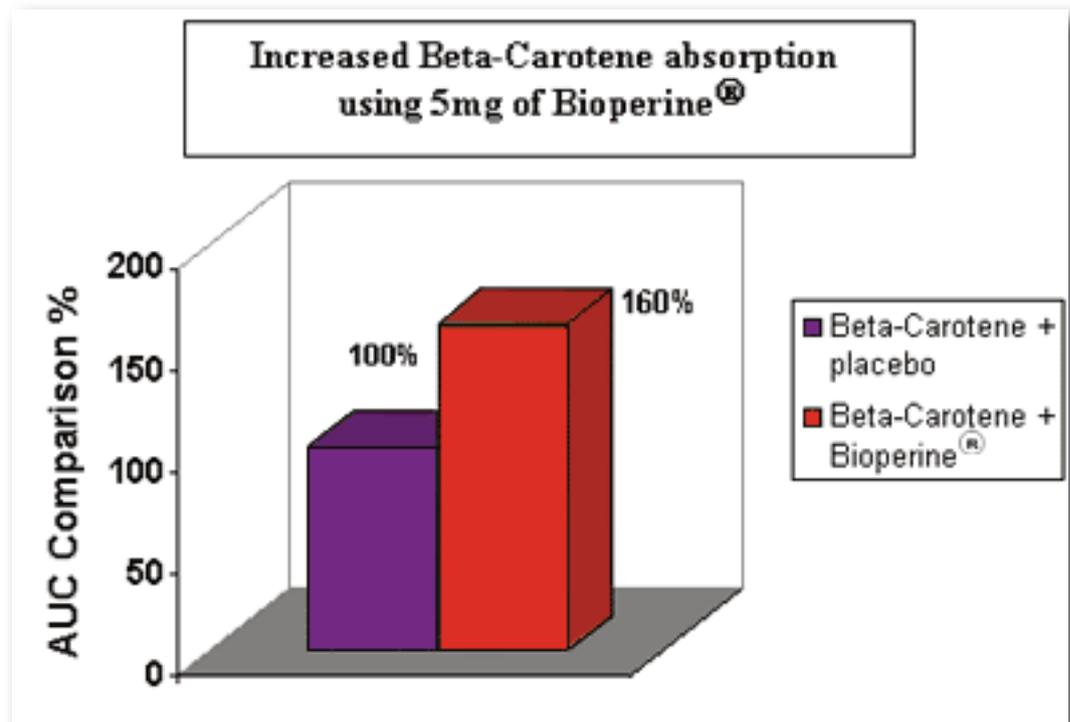
It is a general impression that the more you consume nutrients, the more will be made use of by the body. But biologically speaking, this is not always true. Some nutrients taken at a higher dose will actually negate the benefit and will not be absorbed by the body. Ideally speaking, the less, the best.

Similarly if one believes that since Bioperine is sourced out of black pepper, all one need to do is increase the consumption of black pepper. Again you have gone wrong, for the direct intake of black pepper will not help achieve enhanced nutrient absorption.

According to clinical reports, having Bioperine® in the "right place at the right time" in the digestive tract with supplemented nutrient results in enhanced absorption. So Bioperine when taken during illness will have the best nutrient absorption. Besides if piperine were to remain captive in the form of raw black pepper, it will take time for its bioavailability enhancing property to be released. Therefore, a purified extract of piperine is necessary to get the increased absorption.

Clinical studies

The subtle, yet potent properties of Bioperine® have been measured in several clinical studies with healthy volunteers in the U.S. These studies measured the absorption of three distinct categories of products. The categories evaluated with and without Bioperine® were fat-soluble (beta-carotene), water-soluble (vitamin B 6) and a mineral (selenium, in the form of selenomethionine). Gastrointestinal absorption of all the studied nutrients, as measured by amounts present in the blood, increased dramatically when administered with Bioperine® as compared to the control group receiving the nutrient alone. Selenium levels increased by 30%, beta-carotene increased by 60%, and the vitamin B 6 increase was slightly higher than beta-carotene. All studies used Bioperine® in the amount of 5 mg per dose.



Truth in ancient wisdom

A recognized feature of the 6000-year-old practice of Ayurveda is its preoccupation with the proper functioning of the digestive tract, specifically the digestion and absorption of nutrients. Nearly two-thirds of all traditional Ayurvedic formulas contain a special blend of ingredients, which includes black pepper, for this purpose.

There are various reasons discussed in scientific literature for the unfavorable nutritional status of a given population, but the focus essentially comes down to one single problem-nutrient bioavailability. By far, the greatest factors that reduce the bioavailability of nutrients are those that diminish the intestine's absorption capacity. Even today, there is a growing consensus among nutritionists that the obstacle to better nutrition clearly lies in the efficient delivery of nutrients to the