



The various health effects of garlic have been known for over 2000 years, but have only been thoroughly studied in the last three decades. Specifically, the positive cardiovascular effects of garlic powder have been studied, leading researchers to conclude that regular consumption of 600-900 milligrams of standardized garlic powder can reduce serum cholesterol levels, improve the LDL-HDL ratio, lower triglycerides, reduce elevated blood pressure and improve blood circulation.

Garlic Revival

According to growing evidence of its heart health benefits, garlic may be ready for a comeback and a health claim.

By Joerg Gruenwald

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Other indications and usages, such as the antibiotic effects of garlic, offer additional research and marketing opportunities.

The German Commission E and ESCOP (the European Scientific Cooperative of Phytomedicine) published positive monographs for garlic powder, which led to strong market growth in the 1980s and 1990s, first in Europe, and later in the U.S. and the rest of the world. This market development was clearly science-driven, convincing not only consumers to try garlic products, but also physicians and researchers to promote and further study the effects of garlic on human health. In Germany, where garlic tablets are registered drugs, some high-dosage products were even prescribed by doctors and reimbursed by the health insurance system as one of the first measures to lower blood lipid levels in combination with a proper diet.

In marketing terms, garlic products are late in their lifecycle; peak sales hit 10-15 years ago. Additionally, some of the other natural products like soy protein and omega 3 fatty acids took some market share from garlic, especially in the cardiovascular area.

It became clear that new research was needed to give garlic an additional push. Such research had to focus not only on the risk factors, but also on the plaque development that occurs during the early development stages of cardiovascular diseases—the basis for all cardiovascu-

lar consequences, such as heart attack and stroke. This much needed research has finally come together as a combination of human data and experimental research to elucidate the effects of garlic on the first stages of nano-plaque development and the reduction of plaque growth as a clear indication that garlic can prevent cardiovascular disease.

The most recent data was presented at the Conference of Arteriosclerosis, Thrombosis, and Vascular Biology, held at the American Heart Association meeting in Washington in April. There new research was presented showing that garlic powder, and its active ingredient allicin, can reduce plaque buildup by up to 40%, dissolve existing nano-plaque by 25% and reduce calcification by up to 50%.

At a recent garlic symposium researchers also concluded that the evidence that garlic powder is effective in the prevention of cardiovascular disease has come to a stage where more than the present structure/function claims are justified, according to DSHEA. They concluded that it is time for FDA to review the data on garlic and the risk for coronary heart disease and authorize a complete health claim, as already exists for other natural substances, including soy protein, sterols/stanols, whole grain foods and soluble fiber.

The relevance of the authorization of a FDA health claim for the total market development of a natural substance became most obvious in the case of soy protein. Since the health claim was issued, the market has shown double-digit growth, expanding various product groups and initiating worldwide positive acceptance and recognition of soy. A similar revival of the garlic market is conceivable, should the FDA claim be issued.

Long-term, solid market development and a stable long-term business for natural products and their health properties can only be based on solid science. Marketing can drive new products, but only the recognition of real health benefits will guarantee long-term success on the international market. **NW**