Mareeba Black Garlic Benefits the Heart

Black garlic improved the cholesterol of patients with mildly high cholesterol levels in various studies.

In a 12-week human study (placebo) involving 60 people, 30 people were given 6 g of black garlic 2 times daily before meals. It **increased HDL (good) cholesterol** levels compared with the placebo group at the end of the study. However, there were no changes in LDL (bad cholesterol).

Black garlic's high levels of organosulfur compounds also relax blood vessels, which leads to lower blood pressure. In a 12-week study of 79 high blood pressure patients, they took either 2 or 4 black garlic tablets daily. Their **average blood pressure significantly decreased by 11.8 mm Hg.**

Black garlic also **significantly decreased apo B levels** in the blood. High levels of apo B are linked to heart disease.

Black garlic also **reduced fat cells**, by stopping the activity of the transcription factor 3T3-L1. The transcription factors create new proteins for fact cell formation.

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Black Garlic May Reduce Inflammation

In a human cell study, 5-HMF, an antioxidant found in black garlic, **stopped the activation of nuclear factor kappa B** (NF-κB).

This is important, as this molecule controls the release of cytokines that prolong and stimulate **TNF-α activated cells**.

TNF-α activated cells promote the inflammatory response and increase blood flow, swelling, and defensive cells to the area.

Black garlic also lowered the number of proteins that join cells and create blood clots. It also lowered the number of cells that cause inflammation and cell damage.

In a cell study using macrophages (immune cells), black garlic **decreased the production of nitric oxide, TNF-α, and prostaglandin E2**, which are all key promoters of inflammation. It accomplished this by decreasing various protein and enzyme levels, specifically of NO synthase, TNF-α, and cyclooxygenase-2 protein.

Black garlic **decreased blood clotting** effects caused by platelet aggregation in both human and animal studies.

In another mouse study, rodents were given 120 mg/kg of black garlic experienced **decreased levels of cytokines** TNF-α and IL-6 in the blood.