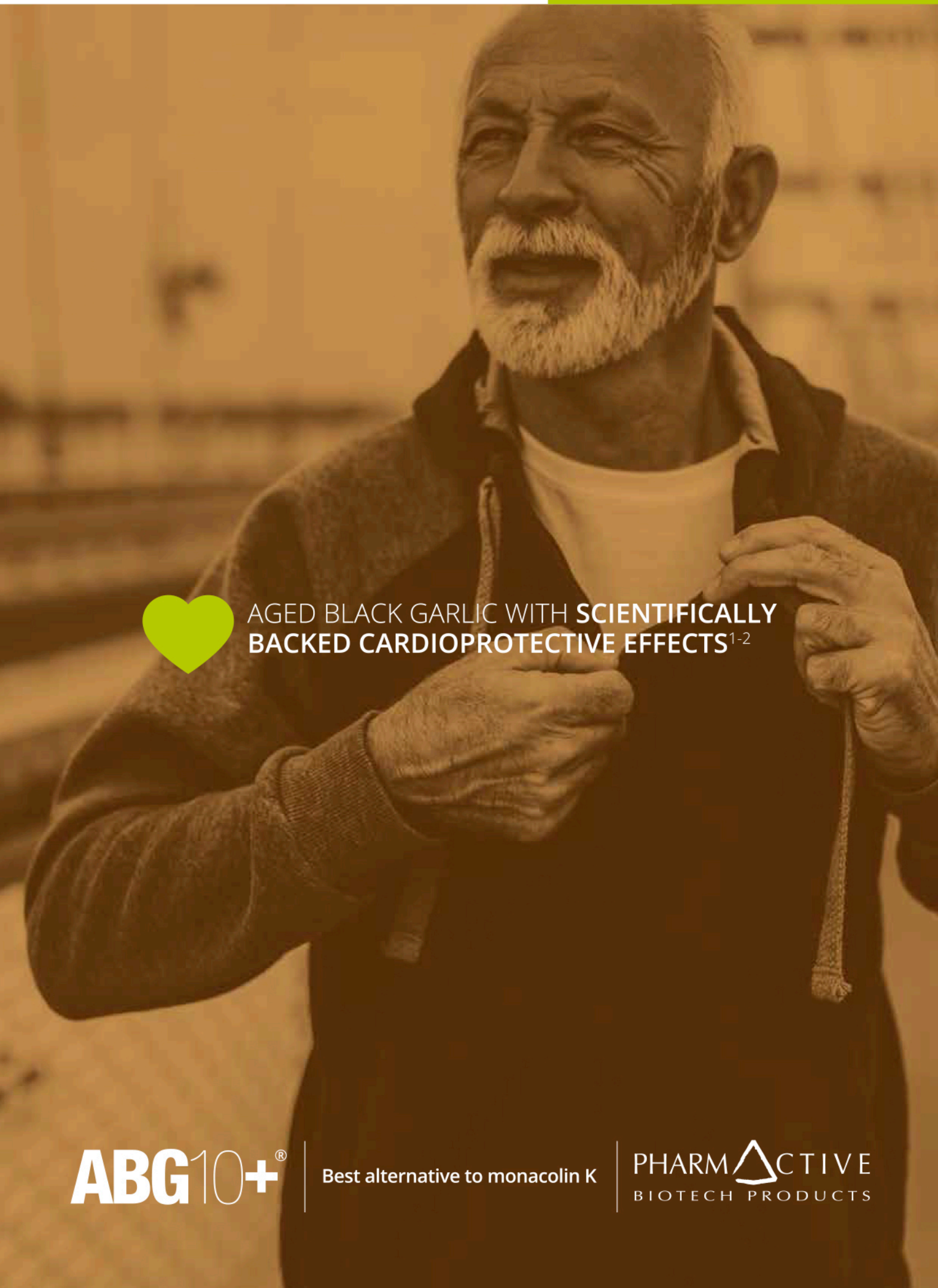

AGED BLACK GARLIC WITH **SCIENTIFICALLY BACKED CARDIOPROTECTIVE EFFECTS**[1-2]

ABG10+®

Best alternative to monacolin K

PHARMACTIVE BIOTECH PRODUCTS

Features

- Aged black garlic standardized to ≥0.1% S-allyl cysteine by HPLC.
- Proven cardioprotective effect[1-2].
- Improved organoleptic properties.
- Made in Spain.
- 100% vertically integrated.
- Halal and Kosher certified.

Differentiated value

- Best alternative to Monacolin K for cardioprotection[1-2].
- Mechanism of action identified *in vitro*[1] and *in vivo*[2].
- DNA-certified for *Allium sativum* L.
- Proprietary ageing process.

Cardiovascular diseases are the nº1 cause of death globally, representing 31% of all global deaths[3].

Bioactive compounds

ABG10+® is standardized to ≥0.1% S-allyl cysteine by HPLC. It is a highly stable and bioavailable biomolecule that has been associated to the inhibition of oxidative damage as a result of its potent antioxidant and cardioprotective properties[4,5].

Cardiovascular function

ABG10+® decreased the coronary perfusion pressure, allowing more blood to carry oxygen and nutrients to the heart, *ex vivo*[1].

ABG10+® increased the heart contraction, pumping a higher amount of blood throughout the body, *ex vivo*[1].

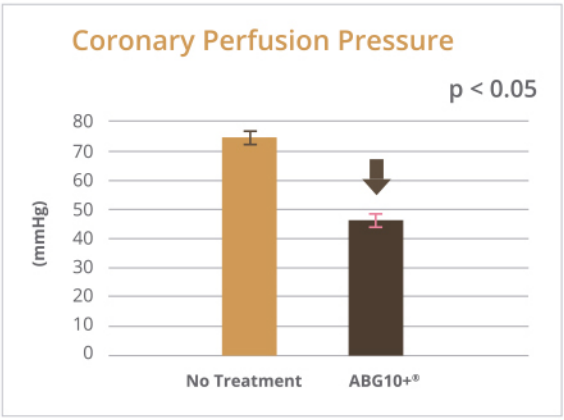

Figure 1: Coronary perfusion pressure analysis in perfused hearts.

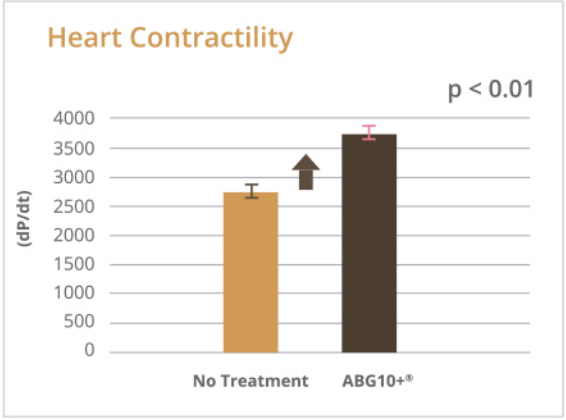

Figure 2: Left ventricular pressure analysis in perfused rat hearts.

Hypertension

ABG10+® promoted a set of synergetic effects that could jointly reduce hypertension caused by obesity, *in vivo* and *in vitro*[1,2].

- Nitric oxide release in endothelial vascular cells[1].
- Increased response to the vasodilator effect of acetylcholine[2].
- Decreased response to the vasoconstrictor effect of KCl[2].

Cholesterol and triglycerides balance

ABG10+® decreased LDL cholesterol by 22%, triglycerides levels by 24% and HDL cholesterol level by 46%, *in vivo*[2].

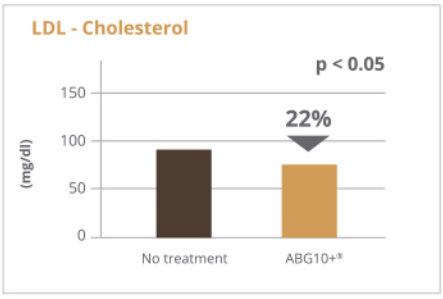

Figure 3: LDL-Cholesterol levels analysis in obese conditions.

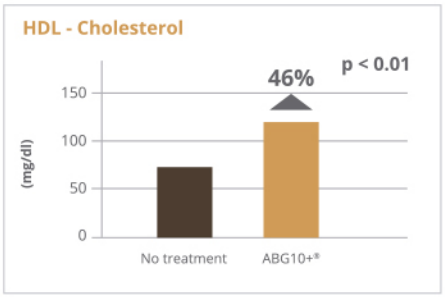

Figure 4: HDL-Cholesterol levels analysis in obese conditions.

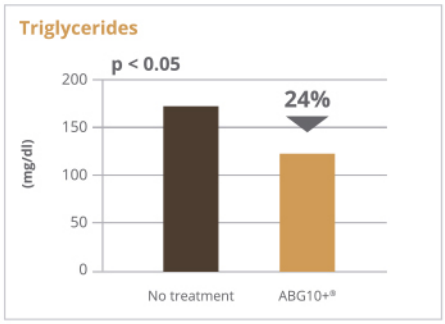

Figure 5: Triglycerides levels analysis in obese conditions.

Body weight management

ABG10+® decreased body weight gain by 40% as a result of the reduction in caloric intake, *in vivo*[2].

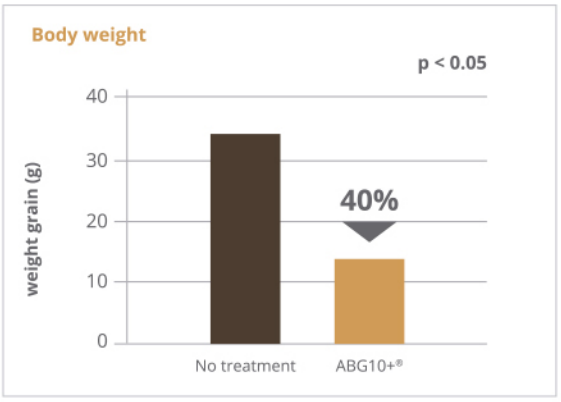

Figure 6: Body weight gain analysis in obese conditions.

Proprietary ageing process

ABG10+® is produced in controlled temperature and relative humidity, which eliminates the unpleasant garlic sensorial characteristics, increasing the content in bioactive compounds. The resulting black garlic bulbs are used to produce a unique black garlic extract, with potent cardioprotective effect[1-2].

There are no additives, preservatives, or burning of any kind during the process.

Main mechanism of action

ABG10+® targets different tissues, causing a decrease in appetite and caloric intake reduction together with an increase in insulin sensitivity through the modulation of the expression of several genes. These factors regulate the balance of the levels of cholesterol and triglycerides in blood and induce leptin and insulin resistance reduction, leading to an improvement of global cardiac function[2].

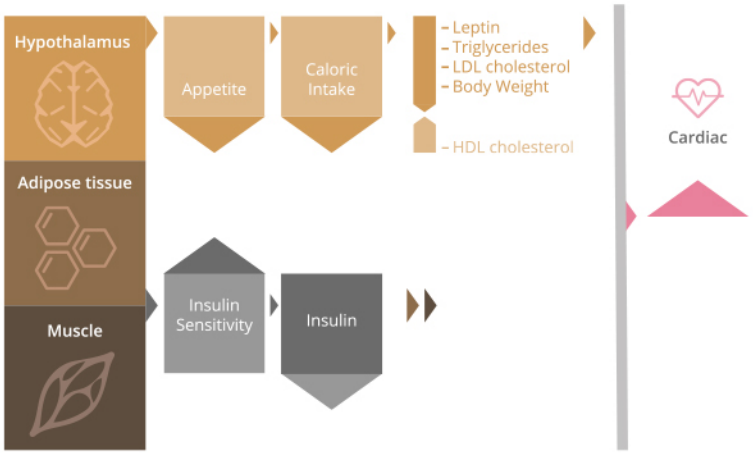

Figure 7: ABG10+® main mechanism of action.

References

(1) García-Villalón AL., et al. *Journal of Functional Foods*. 2016. 27: 189-200. **(2)** Amor S., et al. *Nutrients*. 2019; 11, 153. **(3)** *World Health Organization. Global Health Observatory (GHO)*, 2019. **(4)** Munday JS., et al. *Atherosclerosis*. 1999. 143, 399-404. **(5)** Ried K,. et al. *Maturitas*. 2010. 67, 144-150.

Botanical info

Botanical name: *Allium sativum* L.

Family: *Amaryllidaceae.*

Common name: Aged black garlic.

Part of the plant: Bulb.

Recommended daily dose

ABG10+® *(standardized to 0.1% SAC by HPLC)*:
250 mg/ day.

ABG25+® *(standardized to 0.25% SAC by HPLC)*:
100 mg/ day.

Other info

Shelf life: Two years*.

Non-GMO. Non-Irradiated.

MOQ: 25 Kg.

Water-soluble.

Multiple applications. Accurate for food matrices.

*When stored at room temperature, sheltered from light and moisture.

Contact us

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PHARMACTIVE BIOTECH PRODUCTS

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