

PUBLISHED AND  
NEW "in vivo" STUDY

**ABG10+**<sup>®</sup>  
protect your 



FIRST STANDARDIZED **AGED BLACK GARLIC**  
EXTRACT WITH PROVEN  
CARDIOPROTECTIVE EFFECT

**Effective dose response tested**  
*"in vitro" & "in vivo"*

PHARM  CTIVE  
BIOTECH PRODUCTS

*a natural difference*

## PHARMACTIVE'S ABG10+

- △ Premium quality product from Spain.
- △ 100% Spanish raw material.
- △ Odorless and tasteless.
- △ Active component- S-Allyl cysteine standardized by HPLC.
- △ High stability of bioactive compounds.
- △ Non-irradiated and non GMO sourced.
- △ Dose response tested "in vitro" & "in vivo".
- △ Cost effective 250 mg/day.



## ABG10+ AND ITS BENEFITS

The first Aged Black Garlic extract standardized to S-Allyl Cysteine by HPLC in the market.

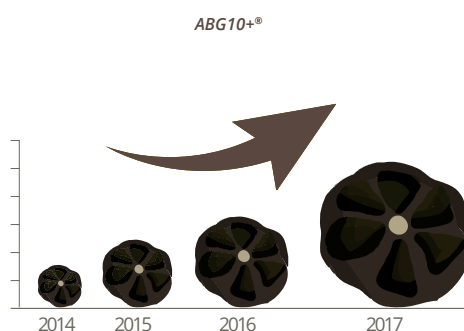
### The "in vitro" studies confirm that ABG10+:

- Promotes the release of nitric oxide and it has a vasodilatation effect.
- Decreases the blood pressure without affecting the heart rate.
- Increases the superoxide dismutase gene expression, and therefore the antioxidant mechanisms.

### The "in vivo" studies confirm that ABG10+:

- Plays a role in bodyweight management. - Decreases the triglyceride and LDL cholesterol levels in blood.
- Increases the HDL cholesterol level in blood.

## WORLDWIDE SALES OF ABG10+



## ABG10+ "in vitro" STUDY RESULTS WITH

### MAIN "in vitro" OUTCOMES WITH AORTA TISSUES:

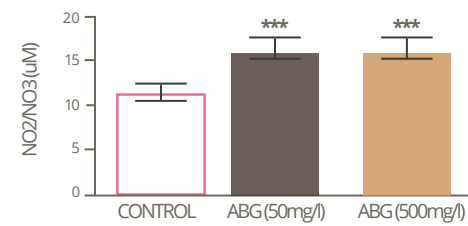


Figure 1. Nitrite release in aorta segments in culture medium in the presence/absence of ABG10+ (50 y 500 mg/l). (N=6 segments of 6 different rats). Values are represented as mean ± SEM \*\*\* p < 0.001 vs. control.

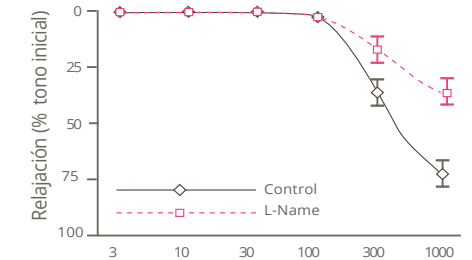


Figure 2. Relaxation of the caudal artery segments to ABG10+ (3-1000 mg/L) in presence or absence of L-NAME 10-4M (n = 6). Values are mean the ± S.E.M. \* P < 0.05 vs. control.

## ABG10+ "in vivo" STUDY RESULTS WITH

### EXPERIMENTAL PROTOCOL 3 RAT GROUPS

- "Ad libitum" diet
- High Fat Diet (HFD) + Saccharose (S) Diet
- HFD + S + ABG10+

### THE TREATMENT WITH ABG10+

- 40% decrease bodyweight
- 24% decrease triglycerides levels in blood
- Cholesterol levels in blood
  - 22% ↓ LDL
  - 46% ↑ HDL

The first "in vivo" study performed with a commercial Aged Black Garlic was done with different diet groups: "ad libitum", "high fat diet" and "high fat diet" with ABG10+ treatment during 6 months showed that ABG10+ has also a metabolic effect.

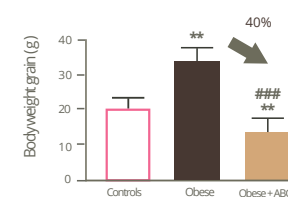


Figure 3 - Bodyweight gain of the different three groups.

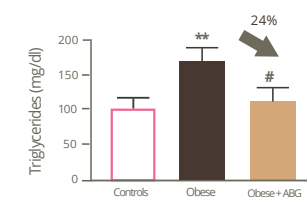


Figure 4 - Triglycerides levels in blood of the different three groups.

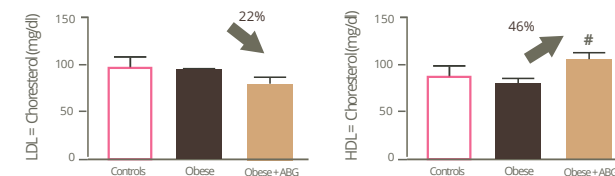


Figure 5 - Cholesterol levels in blood of the different three groups.

# BLACK GARLIC AGEING PROCESS

The resulting black cloves of sweet taste provide **ABG10+®** antihypertensive and cardioprotective effects due to its high SAC content and its antioxidant capacity that may reduce oxidative damage of LDL cholesterol.

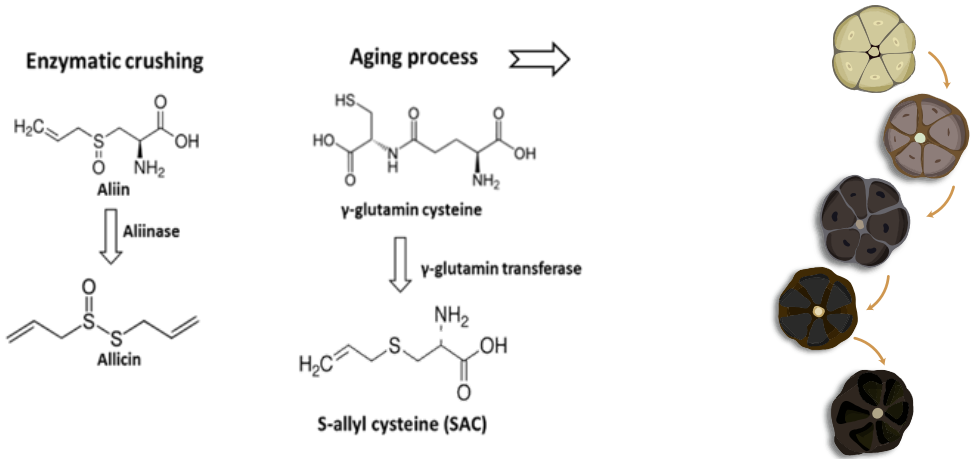



Figure 6. Innovative short term aging process developed by Pharmactive

**Proven mechanism of action**  
"in vitro" & "in vivo"

Published study in "Journal of Functional Foods"


Effective dose response tested "in vitro" & "in vivo"



SAC CONTENT ANALYZED BY HPLC-PDA/MS

100% Spanish raw material  
Proprietary aging process

100% safe



Reference n°3

## ABG10+® RECOMMENDED DOSAGE

Recommend daily dosage is 250 mg/day.

**PHARMACTIVE**  
 BIOTECH PRODUCTS  
*a natural difference*

www.pharmactive.eu

HEADQUARTERS  
 Av. del Dr. Severo Ochoa, 37 Local 4J  
 Alcobendas 28108 Madrid (Spain)

QC-R&D LABORATORY  
 C/ Faraday 7  
 28049 Madrid (Spain)

+34 911 123 848 – www.pharmactive.eu – info@pharmactive.eu