# OLIFERINO VASCOLIVE KEEP your Blood Vessels Healthy

- Contain olive phytonutrients, clinically tested pomegranate fruit extract & ginkgo biloba extract
- Traditionally used to improve blood circulation.
- Promote vascular integrity & healthy aging



Olive (Olea suropase) Extract with Pomegranate Puese passes tas Ginkgo Biloba Extract. & Bioperine

**OLIFERIN** 

60 cm

\*This is a traditional product advertisement.

As we grow older, our blood vessels become more rigid and less elastic because we all develop a degree of arteriosclerosis. Atherosclerosis is a condition that occurs when a substance called plaque builds up in the walls of the arteries. The plaques are made up of cholesterol, fat, cellular waste product, calcium and fibrin (a clotting material in the blood). These buildups narrow the arteries, reducing blood flow and the supply of oxygen to the cells. When a blood clot forms, it can partly or completely block the flow of blood. Clogged arteries can lead to a heart attack or stroke.

Endothelial cells coat the inner surface of blood vessels, forming a continuous lining called endothelium for the entire vascular system and play a key role in the maintaining homeostasis of circulation. Endothelium serves as a physical barrier between the blood and the remainder of the vessel wall. Endothelial cells secrete vasoactive substances that cause relaxation (vasodilation) and contraction (vasocontriction) of the underlying smooth muscle, thus controlling blood pressure. The cells also control blood clot and platelet adhesion as well as regulating immune and inflammatory reactions. Endothelial dysfunction is an initiative step in the development of atherosclerosis and appears to result from reduced levels of nitric oxide (NO) availability.

Nitric oxide (NO) released by endothelial NO synthase (eNOS) causes smooth muscle cell relaxation and stops platelet aggregation and adhesion, thus contributing maintenance of vascular integrity. This is critical in preventing blood clots in the vascular system that can lead to a cardiovascular diseases.





## **OLIFERIN**<sup>®</sup> VASCOLIVE

#### Olive extracts (OleaA®)

- Deliver high levels of antioxidants, including hydroxytyrosol, oleuropein, triterpenoids and tocopherol (vitamin E).
- Protect LDL cholesterol from oxidation in the walls of blood vessels.

#### Pomegranate fruit extract (Pomanox<sup>®</sup>)

- Standardised to contain at least 30% punicalagin, a unique and powerful antioxidant that contribute highly to the control of cardiovascular risk.
- Obtained using a patented ultrapure water-based extraction process without organic solvents.
- Improves coronary endothelial-dependent relaxation.
- Reduces blood pressure and stress hormone level. (J Nutr Sci. 2017. 6: e39: EC Nutrition 2015. 2.4: 396-411)

#### Ginkgo biloba extract (Ginkgolon-24)

- Contains 24% flavonoid glycosides & 6% terpenoids (ginkgolides and bilobalide) \*<1ppm of ginkgolic acid.
- Inhibits platelet aggregation induced by platelet-activating factor (PAF) and lipid peroxidizing agents.
- Exhibits vasodilating effect.
- Alleviates symptoms associated with impaired cerebral blood flow. (Biochem & Mol Bio Intl 1998, 46: 1243–1248; Life Sci 2003, 27: 2659–2667)

#### Black pepper extract (Bioperine®)

Enhances nutrient absorption in the intestines.

#### Punicalagin (Pomanox<sup>®</sup>)

- Unique to Pomegranate
- 100% water soluble
- Active before and after metabolism(5,7,9)
- 95% absorption rate (6)
- 5-10 times antioxidant potency of pure EA (1)
- Backed by in vitro, in vivo, and safety studies
- Primary active antioxidant from pomegranate fruit(1,8)
- Connected to beneficial heart and vascular mechanisms (10.11)

#### Ellagic acid (most other pomegranate extracts)

- Antioxidant found in several fruits and extracts.
- Highly insoluble in water.
- Poorly absorbed when taken orally in free form (2,3,4)
- Antioxidant potency from in vitro data only.
- Free form naturally found in small amounts in whole pomegranate

## What are the differences

between Pomanox<sup>®</sup> and other pomegranate extracts?

#### References:

- 1. J.Agric Food Chem 2000 48(10) p4581.
- Xenobiotica 1980 (10) p2470
  Carcinogenesis 1986 (7) p1663
  J.Chromatogr Bull 2003 (796) p189.
- 5. 228th ACS National meeting AGFD-044. American Chemical Society 2004, 69FTZ8
- 6. Eur J Nutr 2003 (42) p18
- 7. Clinica Chimica Acta 2004 (348) p63 8. J Nutri Biochem 2005 Jun; 16(6): 360-7
- 9. J Agric Food Chem 2006 Nov 15 54(23) p8956-61
- 10. Atherosclerosis 2007 Feb 9 (Epub)
- 11. Cardiovasc Res 2007 Jan 15; 73(2): 414-23



Study design: Double-blind, controlled, crossover trial Participants: 67 subjects (14 men, 53 women aged 45-65 years) Duration: 20 weeks

Daily dose: 195 mg punicalagins (PN) + 9,9 mg Hydroxytyrosol (HT).



Endothelial function (FMD%) at the beginning and end of treatment, in subjects with ED, depending on the treatment. oxLDL levels in blood at baseline and end of study based on the treatment.

The prehypertension and hypertension subgroups exhibited decreased systolic ( $-15.75\pm9.9$  mmHg; p<0.001) and diastolic blood pressure after SAx(PN+HT) consumption. Moreover, the prehypertension and hypertension subgroups presented significant differences in systolic blood pressure compared to the placebo ( $-15.75\pm9.9$  vs.  $-2.67\pm12.0$  mmHg, p<0.05).



Supplementation with extracts of Punicalagin and Hydroxytyrosol for 8 weeks could help reducing c-LDL oxidation and improved SBP, DBP, and FMD in middle-aged subjects.







50mg

150mg

60mg

1mg





### STRENGTH PER CAPSULE:

Fructus Olea Europaea Extract

Fructus Punica Granatum Extract

Folium Ginkgo Biloba Extract/

Fructus Piper Nigrum Extract

(GMP)

## INDICATION:

Traditionally Used For Improving Blood Circulation.

## DOSAGE:

Adult take 1-2 capsules each time, once daily after meal.

## **CONTRAINDICATION** in pregnancy.

As the use of Ginkgo may increase the tendency of bleeding, please consult your physician pharmacist if you are on or intend to start using any other medicines and before you undergo any surgical/dental procedure.



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