# NATURAL ANTIOXIDANT AND CAPILLAROTROPIC



# OPCS RICH GRAPE SEED EXTRACT

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Please note that the physiological activity of the ingredient described herein is supported by the referenced clinical trial reports. Marketers of finished products containing the ingredient described herein are responsible for determining whether the claims made for such products are lawful and in compliance with the laws of the country in which they will market the products.



#### WHAT IS ENOVITA®?

ENOVITA® is proprietary proanthocyanidin (OPCs) rich extract made exclusively with grape seeds from white wine production. Using only water as extraction solvent, ENOVITA® is a food grade grape seed extract whose development has capitalized on Indena's 40 year experience in grape seed extract production.

#### SPECIFICATIONS

ENOVITA<sup>®</sup> is standardized to provide: ≥95.0% of proanthocyanidins by spectrophotometry, ≥5.0% ≤15.0% of catechin and epicatechin by HPLC.

#### RECOMMENDED USE AND DOSE

**ENOVITA®** is a light orange brown powder for use in nutritional supplements and food items with a very limited insoluble residual amount and **compliant to USP specifications**.

Recommended dose: 2 x 150 mg/day.

Reterences <sup>1</sup> Belcaro G., Ledda A., Hu S., et al., Evidence-Based Complementary and Alternative Medicine, in Press.



## WHAT MAKES ENOVITA® UNIQUE?

**ENOVITA®** has a relatively **low amount** (5.0-15.0%) **of flavane monomers** (catechin and epicatechin) and **high contents of oligomeric proanthocyanidins** as determined with the Folin-Ciocalteu method and a very specific gel permeation chromatography profile.

- ENOVITA<sup>®</sup> maintained blood pressure at normal range when associated to diet and lifestyle modification in healthy people with borderline pressure<sup>1</sup>
- ENOVITA® is produced according to Indena 30 Quality system and under HACCP conditions in a GMPs and ISO 14001 certified facility, ensuring full traceability from grape harvest to the finished product.
- ENOVITA® is Halal and Kosher certified, Self-Affirmed GRAS and its environmentally friendly production process is designed to minimize the production of waste.

### WHAT ARE OPC AND PROANTHOCYANIDINS?

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Proanthocyanidins, also known as condensed tannins, are products formed from the condensation of flavan-3-ol units. Depending on the number of condensed flavan-3-ol units (up to 10 or more) they are divided into Oligomeric Proanthocyanidins (OPC) or Polymeric Proanthocyanidins (PPC). According to the number of bonds that link the flavan units, Proanthocyanidins are further classified as A-type (twofold bond), or B-type (single bond). Grape seeds Proanthocyanidins are mostly B-type. Due to their stereochemical complexity and the number of different isomers that can be generated during the formation of the interflavane link, the structure of Proanthocyanidins is poorly known, except for the lower terms (dimer to tetramers). Proanthocyanidins mixtures are characterized by the ratio between flavane monomers, lower oligomeric and higher oligomeric constituents.

<sup>, TM</sup> trademarks of Indena S.p.A

