## Open Peer Review on Qeios

## Grape Seed Extract Supplement

National Cancer Institute

## Source

*National Cancer Institute. <u>Grape Seed Extract Supplement</u>. NCI Thesaurus. Code C135631.* 

An orally bioavailable dietary supplement composed of an extract from grape seeds containing high amounts of polyphenols, particularly lower proanthocyanidin oligomers (OPCs) and catechins, with antioxidant and chemopreventive activities. Upon administration, the active components in the grape seed extract (GSE) scavenge free radicals, protect against oxidation of low-density lipoprotein (LDL), and inhibit cell damage due to reactive oxygen species (ROS). This inhibits oxidative stress and protects against DNA damage. GSE also inhibits enzymes involved in inflammation, cell replication and DNA synthesis, and induces the expression of anti-oxidant enzymes. This may inhibit growth and induce apoptosis of cancer cells.