



## Choosing Garlic Supplements

The way garlic is processed has a marked effect on its therapeutic properties. Based on the research evidence, here's how to get the best from whichever type of garlic you use.

Type	Preparation	Active ingredients	Useful for
Fresh	None. Leaving 10 minutes between peeling and cutting/cooking will preserve beneficial constituents.	Alliin, allyl sulphides including S-allyl cysteine plus a range of useful minerals and other nutrients.	Prevents some forms of cancer (e.g. bowel, colon). May also reduce cholesterol levels, boost immunity and aid cardiovascular health.
Dehydrated Powder	Cloves are sliced or crushed, dried and pulverised into powder. Products oven-dried at low temperatures may have marginally more active constituents.	Similar to fresh though slightly more alliin and S-allyl cysteine. Some oil soluble sulphur compounds. Enteric-coated products preserve the enzyme alliinase (necessary for the conversion of alliin into allicin) from destruction by stomach acid.	Stimulates the immune system, acts as a free radical scavenger, improves cholesterol profile, aids cardiovascular health.
Dried Alcohol Extract (Kyolic or Aged garlic)	Whole or sliced garlic cloves soaked in an extracting solution (e.g. water and alcohol) for varying lengths of time. With kyolic preparations the extract is aged for up to 20 months.	Mostly water-soluble sulphur compounds (e.g. S-allyl cysteine and S-allyl mercaptocystein). Small amounts of oil-soluble compounds. No alliin or allyl sulphides. Aged garlic results in a product with more stable sulphur compounds.	May reduce cholesterol, possible cancer prevention. Gentler on the stomach, and less odour. Water-soluble compounds less cytotoxic than oil soluble compounds.
Oil Maceration	Whole cloves ground into vegetable oil at low temperatures	During processing some alliin is converted into allicin. Over time this converts into other beneficial compounds such as dithiins, sulphides and ajoene.	Acts as a free radical scavenger, improves cholesterol levels, aids heart health, boosts immunity.
Steam distillation	Whole cloves ground in water, heat (steam) distilled or extracted in alcohol. Supplements usually contain 1 per cent garlic oil in a vegetable oil base. Available in gelpcaps	Minute quantities of oil soluble sulphides (e.g. diallyl sulphide and diallyl disulphide), but no alliin.	May be useful topically but few benefits when ingested. Toxic in very large amounts.