## Open Peer Review on Qeios

## Sinecatechins

National Cancer Institute

## Source

National Cancer Institute. <u>Sinecatechins</u>. NCI Thesaurus. Code C76005.

A proprietary formulation composed of a defined, decaffeinated green tea extract, containing polyphenolic flavonol catechins, isolated from the plant Camellia sinensis with antiviral, antioxidant, and potential chemopreventive activities. The primary catechins found in green tea are epicatechin (EC), epigallocatechin (EGC), epicatechin-3 gallate (ECG), and epigallocatechin-3-gallate (EGCG), the most potent. As potential chemopreventive agents, catechins scavenge free radicals; inhibit enzymes involved in cell replication and DNA synthesis; interfere with cell-to-cell contact adhesion; and inhibit various intracellular communication pathways required for cell division. In addition, it has been postulated that EGCG may trap growth factors such platelet-derived growth factor (PDGF) on cell membranes, immobilizing growth factors on cell membranes and preventing ligand-receptor crosslinking and growth factor receptor activation.