

Physiological Function of Sulfur-containing Compounds

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< Abstract >

Studies on the physiological functions of sulfur-containing compounds in foods have been carried out. Especially, organic sulfur compounds in *Allium* species such as onion and garlic, etc. are very important in terms of a large amount and physiological function. Major sulfur compounds in *Allium* species are sulfur containing amino acids, S-alk(en)yl-L-cysteine sulfoxides, and the enzymic and thermal reactions of sulfoxide amino acids with C-S lyase (alliinase) by cutting of *Allium* vegetables give rise to hydrophobic sulfur compounds. So far, antioxidative (volatile trisulfides and vinylthiols), platelet aggregation inhibitory (allyl trisulfides, vinylthiols and ajoenes), ameliorative substances of memory impairment (dipropyl trisulfide), cancer preventive (diallyl trisulfide and alkenyl trisulfides) and testosterone promoting substances (*Allium* sulfur amino acids) have been reported as physiologically functional constituents.