An innovative review on the relation of cafestol and kahweol in coffee to coronary heart disease

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The relation of coffee consumption to coronary heart disease has been extensively studied. Cardiovascular diseases have been denominated as the world’s “biggest killer” and the principal cause of death among nontransmittable diseases. Coffee contains various bioactive compounds that can be included alkaloids such as caffeine and trigonelline, phenolic acids, diterpenes such as cafestol, lignans, flavonoids. Dietary polyphenols, both in vitro and in vivo have been demonstrated to display anti-atherosclerotic properties by effectively modulating endothelial and vascular function; haemostasis and platelet function; and inflammatory biomarkers.

Coffee has two diterpenoids named Cafestol and Kahweol which involve in increasing cholesterol, but only caffeine in coffee has pharmacological effects. The diterpenes cafestol and kahweol have been implicated as the components in boiled coffee responsible for its hypercholesterolaemic effects. The amount of cafestol and kahweol in coffee depends on the method of brewing. The most of amount this two materials release when was contacted boiled water. Diterpenes of Cafestol and Kahweol are part of boiling coffee, which is responsible for increasing blood cholesterol. Their amount in a coffee beverage is affected by the brewing manner. Surveys have shown dose-dependent effect of Cafestol and Kahweol on elevating serum cholesterol levels. Boiled coffee contains the highest concentrations such as Scandinavian-style and Turkish-style while, trace amounts see in instant, drip-filtered and percolated coffees.

As a result, coffee consumption and coronary heart diseases are contradictory but, in general coffee can affect coronary heart diseases and these effects can depend on method of brewing coffee, brewing time, genetics such.

Biography
Betul Ozaltun completed her education Ankara University faculty of medicine, she studied at Adana numune hospital cardiology department between 2011-2015. For one years she is working in Omer Halisdemir university hospital.

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