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Impact of consumption and cooking manners of vegetable oils on cardiovascular diseases- A critical review

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**Abstract**

**Background:** Cardiovascular disease (CVD) is the number one leading disease which causes morbidity and mortality worldwide. The rapid consumption of dietary vegetable oils is highly linked to the pathogenesis of CVD. The practice of using repeatedly heated oil is common among the populations due to its cost-effectiveness. Consumption of these oils generates free radicals that may cause potentially harmful and detrimental effect on CVS through the accumulation of TC, TG causing an increase in blood pressure, endothelial dysfunction, and vascular inflammation. It eventually leads to atherosclerotic plaque in the arteries.

**Scope and Approach:** The present review aims to provide comprehensive information on twelve fresh as well as repeatedly heated vegetable oils to explore their beneficial and harmful effects. This is to provide an insight and awareness to the public on the consumption of repeatedly heated oils which is detrimental to health.

**Key findings and conclusion:** Remarkable studies demonstrated that the health beneficial effects of vegetable oils have been often attributed to their antioxidant properties and abilities to increase cellular antioxidant defense system and thereby scavenge free radicals, inhibit lipid peroxidation, augment anti-inflammatory potential, and further protect the CVS from various adverse effects. However, the repeatedly heated vegetable oils increase the effect of lipid peroxidation and aggravate the development of CVD. In conclusion, it is noted that we should consume the nutritionally rich fresh vegetable oil and discourage the use of repeatedly heated oil in our daily diet to reduce the risk of CVD.

**Keywords:** vegetable oils; beneficial; repeatedly heated oils; adverse effect; CVD.

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