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**Association between flavonoid intake and risk of cardiovascular disease among post-menopausal women**

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**Statement of the Problem:** Flavonoid intake has been proven to reduce the risk of developing cardiovascular disease. Post-menopausal women are at a higher risk of getting heart disease because of altered hormone levels. Good nutrition counseling associated with strategies to reduce the risk of cardiovascular disease can help subject's live longer, healthy life.

**Aim:** To study the association of cardiovascular disease risk with flavonoid intake, nutrient intake, BMI, lipid levels in post-menopausal women.

**Materials & Methods:** It was a prospective observational study which consisted of 100 post-menopausal subjects. Subjects were assessed of parameters like height, weight, BMI, total cholesterol, HDL, nutrient intake and flavonoid intake. They were also assessed using Framingham Risk Score sheet to find out the risk of developing heart disease in next ten years.

**Results:** Total cholesterol was highest and HDL was lowest in the high risk group which was found to be significant ( $p<0.001$ ). The fat intake was observed to be  $38.35\pm6.04$  g,  $46.67\pm10.19$  g,  $53.63\pm9.00$  g in low, intermediate and high risk groups, respectively, which was also found to be highly significant ( $p<0.001$ ). It is observed that intake of flavonoid was  $306.07\pm14.92$  g,  $212.08\pm45.08$  g and  $229.65\pm64.01$  g in low, intermediate and high risk category, respectively which was found to be highly significant ( $p<0.001$ ). Negative correlation was found with flavonoids, HDL and the risk scores ( $p<0.001$ ) which illustrates the proven fact that as flavonoid intake increases, risk for developing heart disease decreases.

**Conclusion:** High intake of flavonoids and low intake of fat seems to have less risk of cardiovascular disease, whereas value of high cholesterol and low HDL are considered as risk factors for developing CVD. It is mandatory for women beyond 40 years to be educated on lifestyle modification with more emphasis on reduction of fat and maintenance of appropriate body mass index and increased intake of flavonoids.

**Biography**

Harini N B has completed her MSc and BSc degrees in Clinical Nutrition from Sri Ramachandra University and Ethiraj College for Women, respectively. She is currently a Consultant Nutritionist at Almond Board of California and delivers lectures on the importance of the nutritional values of almonds and its health benefits. She has worked at the Apollo Hospitals, India as a Clinical Dietitian Associate for a year where she performed nutrition counseling, assessed the nutritional requirements and developed nutrition counseling programs for the patients and suggested diet charts to meet individual's requirements.

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