

SESSION 8

Prevention of Colorectal Cancer: Where are we Going?

S23. Primary Prevention of Colorectal Cancer: Lifestyle, Nutrition, Exercise

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The past decade has been filled with a plethora of literature related to the primary prevention of colorectal cancer. Large international variation in colorectal cancer incidence and mortality rates and the prominent increases in the incidence of colorectal cancer in groups that migrated from low to high incidence areas provided important evidence that lifestyle factors influence the development of this malignancy. Moreover, there is convincing evidence from epidemiological and experimental studies that dietary intake is an important etiological factor in colorectal neoplasia. Study designs used to test the existing hypotheses include, among others: ecologic studies, case-control studies, prospective studies, and clinical trials. Although the precise mechanisms have not been clarified, several lifestyle factors are likely to have a major impact on colorectal cancer development. Physical inactivity and to a lesser extent, excess body weight, are consistent risk factors for colon cancer. Exposure to tobacco products early in life is associated with a higher risk of developing colorectal neoplasia. Diet and nutritional factors are also clearly

important. Diets high in red and processed meat increase risk. Excess alcohol consumption, probably in combination with a diet low in some micronutrients such as folate and methionine, appear to increase risk. There is also recent evidence supporting a protective effect of calcium and vitamin D in the etiology of colorectal neoplasia. The relationship between intake of dietary fiber and risk of colon cancer has been studied for three decades but the results are still inconclusive. However, some micronutrients or phytochemicals in fiber-rich foods may be important; folic acid is one such micronutrient that has been shown to protect against the development of colorectal neoplasia and is currently being studied in intervention trials of adenoma recurrence. The overwhelming evidence indicates that primary prevention of colon cancer is feasible. Continued focus on primary prevention of colorectal cancer, in combination with efforts aimed at screening and surveillance, will be vital in attaining the greatest possible progress against this complex, yet highly preventable disease.