American Cancer Society 2005 report estimates half of cancer deaths preventable

The newly released annual report of the American Cancer Society entitled " Cancer Prevention and Early Detection: Facts and Figures," estimates that healthier lifestyle practices and greater participation in cancer screening programs could cut deaths from the disease in half. The report discusses the importance of not smoking, good nutrition, proper weight maintenance, exercise, sun protection, and utilization of tests such as mammography, colonoscopy, pap smears and prostate cancer screening. Deaths from cancer, cardiovascular disease and diabetes currently account for two-thirds of all mortality in the United States.

According to the report, 570,280 cancer deaths will occur in 2005, with 168,140 caused by tobacco. One-third of the projected deaths will be caused by poor nutrition, lack of exercise, or being overweight. The American Cancer Society recommends that people emphasize plant sources in their diet by consuming five or more servings of vegetables and fruits each day, and by limiting processed grains and sugars, and red meat. Alcoholic beverage consumption should be limited. With 65 percent of American adults classified as overweight or obese, calorie consumption should be carefully balanced with physical activity.

A large number of projected deaths from cancers of the breast, cervix, colon and rectum could be prevented if men and women participated in regular screening for these cancers. Ninety-seven percent of breast cancer patients diagnosed at the localized stage are alive at five years, making early detection of the disease critical. Colorectal cancer, if diagnosed and treated early, has a 90 percent five year survival rate, yet the failure of the majority of individuals to take advantage of screening tests for this cancer has resulted in only 39 percent of the cases diagnosed in their early stage. Improved insurance coverage for colorectal cancer screening procedures is recommended to increase their use.

The fact that half of the deaths from this major killer could be avoided is good news, and should encourage better nutrition and greater participation in cancer screening. While tobacco use continues to decline, obesity is increasing, making an awareness of proper nutrition and exercise even more critical.

Protocol

Cancer prevention

Thousands of published scientific findings provide a clear road map as to what one can do to reduce their risk of developing cancer. The problem is that people are overwhelmed by the volume of cancer prevention data and have largely failed to take the necessary steps to reduce their personal risk.

Cells operate under the direction of genes located in the DNA. Our existence is dependent on the precise genetic regulation of all cellular events. Healthy young cells have nearly

perfect genes. Aging and environmental factors cause genes to mutate, resulting in cellular metabolic disorder. Gene mutations can turn healthy cells into malignant cells. As gene mutations accumulate, the risk of cancer sharply increases.

Human studies show that about 70% of gene mutations are environmental and, thus, relatively controllable based on what we eat, whether we smoke, or exposure to genotoxins or radiation (Ljungquist et al. 1995; Herskind et al. 1996; Finch et al. 1997). Antioxidant supplements have become popular because they reduce gene damage inflicted by free radicals. However, it takes more than antioxidants to adequately protect genes against environmental mutation.

The first line of defense against the many carcinogens in the human diet are agents that prevent gene mutation. Many antimutagenic agents have been identified in fruits and vegetables, the most potent being the indole-3-carbinols, the chlorophylls, and chlorophyllin (Negishi et al. 1997). The traditional dietary antioxidants should be considered only as a secondary line of defense against cancer because it is more important to inactivate or neutralize carcinogens in the first place than to try to protect the cells and proteins downstream from their effects.