

Preventive medicine: Hope or Hype?

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Cancer is the second leading cause of morbidity and mortality worldwide. Billions of dollars have been spent to study cancer and tremendous advancements in the understanding and treatment of cancer have been made. Nevertheless, as effective cures for a variety of cancers continue to elude us, natural protection against cancer has been receiving a great deal of attention lately not only from cancer researchers and patients, but also from physicians. There is compelling evidence from epidemiological and experimental studies that highlight the importance of compounds derived from plants “phytochemicals” to reduce the risk of colon cancer and inhibit the development and spread of tumors in experimental animals. More than 25% of drugs used during the last 20 years are directly derived from plants, while the other 25% are chemically altered natural products. Still, only 5-15% of the approximately 250,000 higher plants have ever been investigated for bioactive compounds. The advantage of using such compounds for cancer treatment is their relatively non-toxic nature and availability in an ingestive form. An ideal phytochemical is one that possesses anti-tumor properties with minimal toxicity and has a defined mechanism of action. This presentation will shed some light on numerous herbal remedies that have shown potential protective effects against cancer along with other illnesses that are currently represented in the area at alarming rate. Finally, “whether the drug discovery and pharmaceutical industry in Middle East have gone far enough” is a concern that remains to be carefully addressed.

Biography

Prof. Amin is a graduate faculty at UAE University who supervised many graduate theses. He earned his PhD from University of Illinois at Chicago and received a postdoctoral training at University of Pennsylvania School of Medicine. After joining UAEU Prof. Amin's focus was redirected to the field of preventive medicine. His lab is interested in natural product's protection against diabetes and cancer. He has published many articles, reviews and book chapters in reputable journals. He serves on the editorial boards and as a reviewer of many international journals. Prof. Amin is also the recipient of many national and international awards.