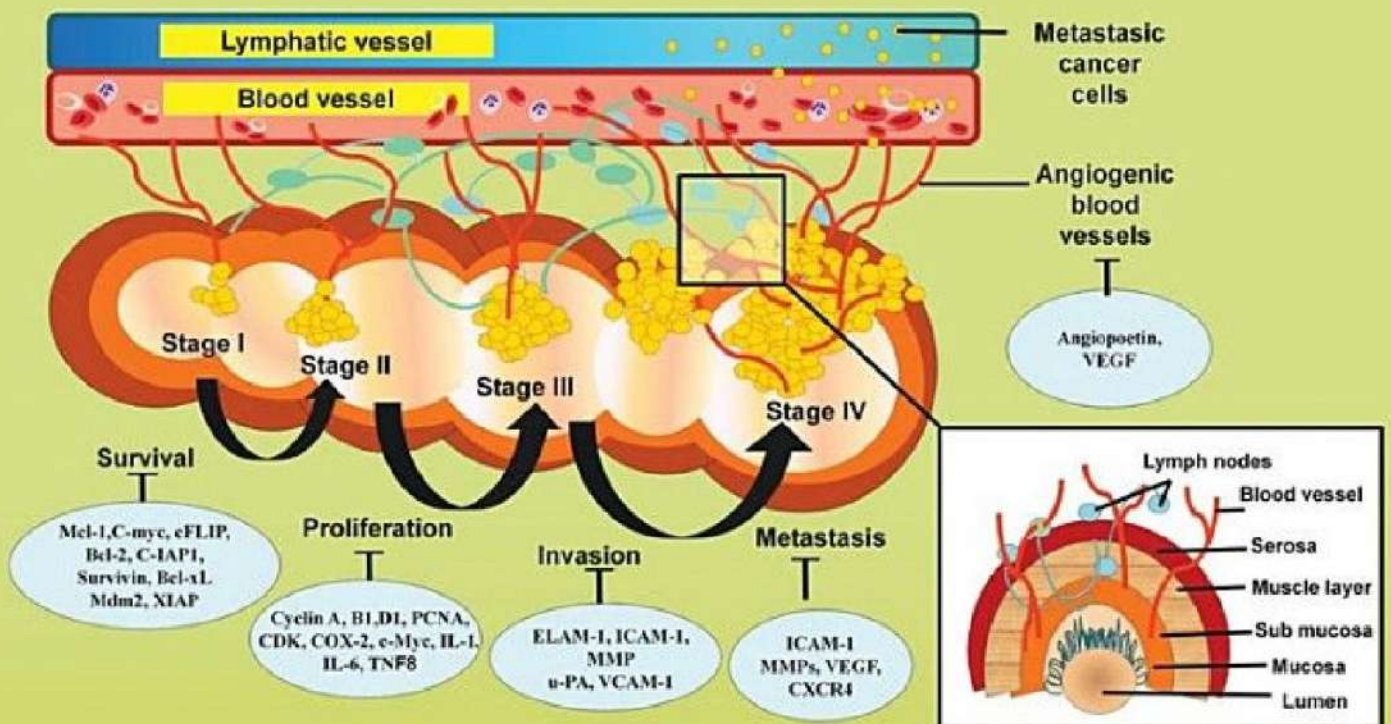




# ADVANCES IN NUTRACEUTICAL APPLICATIONS IN CANCER

RECENT RESEARCH TRENDS AND CLINICAL APPLICATIONS



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Cancer is a disordered condition between cell proliferation and cell death. Factors have been identified that are involved in the process of invasion and metastasis of tumors and cause resistance to treatment. A huge effort has been made in the past 20 years to provide the data to design more effective, individualized, and target-oriented advance treatment strategies. Regardless of the development of various new treatment regimes, cancer still causes a large number of deaths in the United States, according to the American Cancer Society [1]. It is now concluded by various studies that lifestyle is a major factor behind 90%–95% of all cancers, whereas faulty genes are involved in 5%–10%. A number of research studies have shown that inclusion of foods rich in fruits and vegetables decreased the occurrence of cancer. As per the studies, nutrition could prevent a large number of cancer deaths and a great likelihood of certain cancers could be avoided by dietary modifications [2]. The roles of dietary agents and lifestyle have already been studied for various cancers such as colorectal, skin, prostate, breast, ovarian, cervixal, vaginal, lung, and gastrointestinal tract [4].

It is concluded by studies that occurrence of cancer can be controlled by improving diet, quitting tobacco use, regular exercise, and maintaining body weight. Pharmaceutical companies and various research centers have been working to develop multitargeted therapies. Various nutraceuticals have properties to act as multitargets. In addition, they are cost-effective, safe, and readily available [3].