



UNIVERSITY of CALIFORNIA, SAN DIEGO
 MEDICAL CENTER MOORES CANCER CENTER

Complementary and Alternative Therapies For Cancer Patients

Outreach
 (Public Education)

Complementary &
 Alternative
 Medicine

Therapies List

Modified Citrus Pectin (MCP)

This treatment modality is thought to promote wellness and optimize overall health. Modified citrus pectin should be used with, not in place of, standard cancer therapy.

What does modified citrus pectin therapy involve? Pectin is a carbohydrate found in fruit and is most concentrated in ripe citrus fruits. Pectin is used for commercial purposes in the manufacturing of foods, drugs and cosmetics. The pH and polysaccharide structure have been altered in modified citrus pectin, found in the peel and membranes of citrus fruits, to be more easily processed in the digestive tract. Therapy involves ingestion of MCP, in capsule or powder form, three times a day.

How is modified citrus pectin thought to promote wellness and optimize overall health? MCP is thought to be useful in the prevention and treatment of metastatic cancer, not as a curative therapy of already established tumors. MCP molecules bind to receptors on cancerous cells, thereby preventing these cells from penetrating into nearby healthy tissue. Once this has occurred, the cancer cells circulate in the blood stream until they die or are eliminated. By working to inhibit the spread of cancer, MCP keeps the body's immune system from becoming overwhelmed by an increasing cancer cell load.

What has been proven about the benefit of modified citrus pectin? In one study, MCP inhibited metastasis in rats injected with melanoma and human prostate cancer cells. Animal studies have resulted in the discovery of the mechanisms by which MCP exerts its anticancer effects but these results have not been translated to humans yet. MCP is thought to have great potential because secondary metastatic cancers are often more threatening to patients than the original tumor. Further research is needed to understand the biological and molecular regulation of carbohydrate recognition during the metastatic cycle and process."

What is the potential risk or harm of modified citrus pectin? Citrus pectin has been classified by the FDA as "Generally Regarded As Safe" (GRAS), and side effects of MCP treatment are rare. Patients with allergies to citrus may experience stomach discomfort.

How much does modified citrus pectin cost? Modified citrus pectin can be purchased in powder or capsule form. Costs vary depending on the manufacturer.

For additional information:

University of Texas M.D. Anderson Cancer Center
 Complementary/Integrative Medicine Education Resources
 1515 Holcombe Boulevard
 Houston, TX 77030
 Telephone: (800) 392-1611
 Web site: <http://www.mdanderson.org/departments/cimer/>

[Back to list of therapies](#)