



multiple myeloma cancer coaching

antioxidants guide

introduction



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The widest chasm between patient and oncologist since I was first diagnosed with multiple myeloma in 1994 has been the role of supplementation before, during and after chemotherapy and radiation.

Most myeloma patients supplement. Most of us who supplement don't tell our oncologists that we do. Why? Because most oncologists caution patients not to supplement.

Multiple myeloma is an incurable blood cancer. Standard myeloma chemotherapy regimens cause short, long-term and late stage side effects. Standard chemotherapy regimens eventually stop working. Myeloma patients need more than standard therapies to manage their multiple myeloma.

The PeopleBeatingCancer Multiple Myeloma Cancer Coaching Program (MM CC) is centered around evidence-based, non-toxic therapies that are cytotoxic to MM by themselves and/or may integrate with and enhance standard myeloma therapies. Evidence-based nutritional and antioxidant supplementation is a key component of MM CC.

The studies linked below clearly indicate that MM CC clients should learn about and understand the benefit of nutritional and antioxidant supplementation.

the studies

Should patients undergoing chemotherapy and radiotherapy be prescribed antioxidants?

"There is far more information available regarding antioxidant supplements as an appropriate adjunctive cancer therapy than is acknowledged...A blanket rejection of the concurrent use of antioxidants with chemotherapy is not justified by the preponderance of evidence at this time and serves neither the scientific community nor cancer patients. ([READ MORE](#))"

Antioxidants and other nutrients do not interfere with chemotherapy or radiation therapy and can increase kill and increase survival, part I.

"Since the 1970s, 280 peer-reviewed in vitro and in vivo studies, including 50 human studies involving 8,521 patients, 5,081 of whom were given nutrients, have consistently shown that non-prescription antioxidants and other nutrients do not interfere with therapeutic modalities for cancer. Furthermore, they enhance the killing of therapeutic modalities for cancer; decrease their side effects, and protect normal tissue. In 15 human studies, 3,738 patients who took non-prescription antioxidants and other nutrients actually had increased survival. ([READ MORE](#))"

► Dietary antioxidants and human cancer.

"Epidemiological studies show that a high intake of anti-oxidant-rich foods is inversely related to cancer risk... experimental studies show that antioxidant vitamins and some phytochemicals selectively induce apoptosis in cancer cells but not in normal cells and prevent angiogenesis and metastatic spread, suggesting a potential role for antioxidants as adjuvants in cancer therapy. ([READ MORE³](#))"

► Multiple dietary antioxidants enhance the efficacy of standard and experimental cancer therapies and decrease their toxicity.

"The authors also propose that after completion of standard therapy and/or experimental therapy, a maintenance nutritional protocol that contains lower doses of antioxidants and their derivatives, together with modification in diet and lifestyle, may reduce the risk of recurrence of the original tumor and development of a second cancer among survivors. Experimental data and limited human studies suggest that use of these nutritional approaches may improve oncologic outcomes and decrease toxicity... ([READ MORE⁴](#))"

► Antioxidants and Other Micronutrients in Complementary Oncology.

"Despite the fact that chemotherapy-induced formation of free radicals is well-demonstrated, chemotherapy-induced cytotoxicity in general does not seem to depend on formation of reactive oxygen species... Currently, evidence is growing that antioxidants may provide some benefit when combined with certain types of chemotherapy. ([READ MORE⁵](#))"

► The use of antioxidant therapies during chemotherapy.

"There are many concerns that antioxidants might decrease the effectiveness of chemotherapy, but increasing evidence suggests a benefit when antioxidants are added to conventional cytotoxic therapies... ([READ MORE⁶](#))"

► Micronutrients in Oncological Intervention.

"Nutritional supplements are widely used among patients with cancer who perceive them to be anticancer and antitoxicity agents... Nutritional supplementation tailored to an individual's background diet, genetics, tumor histology, and treatments may yield benefits in subsets of patients... ([READ MORE⁷](#))"

► Curcumin Enhances Cytotoxic Effects of Bortezomib in Human Multiple Myeloma H929 Cells:

"Combined curcumin and PS-341 treatment has been reported to enhance cytotoxicity and minimize adverse effects through ERK and p38MAPK mechanisms in human multiple myeloma cells... ([READ MORE⁸](#))"

► Omega-3 fatty acids are able to modulate the painful symptoms associated to cyclophosphamide

"Moreover, systemic DHA significantly prevented the neutrophilia/lymphopenia caused by Cytoxan... ([READ MORE⁹](#))"

► The effects of cannabidiol and its synergism with bortezomib in multiple myeloma cell lines

"These results showed that CBD by itself or in synergy with BORT strongly inhibited growth, arrested cell cycle progression and induced MM cells death... ([READ MORE¹⁰](#))"

FOOTNOTES

1. <https://www.ncbi.nlm.nih.gov/pubmed/16484715>
2. <https://www.ncbi.nlm.nih.gov/pubmed/17283738>
3. <https://www.ncbi.nlm.nih.gov/pubmed/15523104>
4. <https://www.ncbi.nlm.nih.gov/pubmed/15523102>
5. <https://www.ncbi.nlm.nih.gov/pubmed/12648599>
6. <https://www.ncbi.nlm.nih.gov/pubmed/21373176>
7. <https://www.ncbi.nlm.nih.gov/pubmed/26985904>
8. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3344248/>
9. <https://www.ncbi.nlm.nih.gov/pubmed/26482705>
10. <https://www.ncbi.nlm.nih.gov/pubmed/24293211>