Oncology Myths and Legends

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Can a Macrobiotic Diet Cure Cancer?

**Myth:** The macrobiotic diet, a common dietary alternative, can cure cancer.

**Answer:** The various cultures present in the United States are filled with contradictions when it comes to nutrition. Americans are bombarded with fast food franchises and restaurants serving larger and larger portions of mass produced food. However, at the same time, media outlets and infomercials report on the obesity crisis in America and countless diet plans, precooked health food programs, or dietary supplements are offered from a variety of sources. More nutrition information has become available to the average consumer through product labeling and the internet and, as these factors continue to interplay with one another, interest in the connection between nutrition and disease increases.

**Macrobiotic Diet**

A macrobiotic diet (or macrobiotics) is a dietary approach that involves eating grains as a staple food supplemented with other foodstuffs such as vegetables and beans and avoiding the use of processed or refined foods (see Figure 1). The macrobiotic diet was first introduced in the 18th century by German physician Christoph Hufeland and the belief that a well-balanced diet is essential. However, in the mid-1960s by George Ohsawa, a Japanese prophet, philosopher, and lecturer, and established in the United States by Michio Kushi, a student of Ohsawa, and popularized in the mid-1960s by George Ohsawa, a Japanese prophet, philosopher, and lecturer, and established in the United States by Michio Kushi, a student of Ohsawa, American Cancer Society [ACS], 1972, 1993; Kushi et al., 2001). Based on the Chinese philosophy of yin and yang—the belief that there are two opposing yet complementary aspects to all things in the world—Ohsawa believed that people who adhered to the macrobiotic diet would have a long life free from illness, have renewed energy, and have improved memory and thought processes. Ohsawa said “No illness is more simple to cure than cancer through a return to the most elementary and natural eating and drinking diet” (ACS, 1972, p. 373).

Ohsawa’s macrobiotic diet included 10 progressively restrictive stages with the 10th stage being a diet of only water and brown rice. However, by the late 1960s, severe complications arose in individuals who were following Ohsawa’s diet regimen. A statement from the American Medical Association’s Council on Foods and Nutrition documented cases of scurvy, anemia, hyperproteinemia, hypocalcaemia, emaciation and malnutrition, starvation, renal failure, and even death (ACS, 1993).

The macrobiotic diet was denounced by the Council on Foods and Nutrition and its popularity faded until the early 1980s. At that time, Kushi published his macrobiotic diet regimen and several books containing first-hand accounts of how the diet cured people’s cancer (Kushi et al., 2001). The macrobiotic diet once more entered into American dietary patterns. Kushi’s less austere diet has evolved into a diet consisting of the daily food consumption of 40%–60% whole grains (organically grown and home cooked) 20%–30% vegetables (including a small volume of pickle varieties), and 5%–10% beans, bean products, and sea vegetables. Small amounts of fish, seeds or nuts, and locally grown seasonal fruit are permitted weekly. Rare portions of red meat, eggs, poultry, and dairy products are permitted monthly. Refined sugars, artificial sweeteners, vitamin and mineral supplementation, and other chemical additives are avoided (Cunningham, 2001; Kushi et al.).

**Limited Research**

Research on the connection between a macrobiotic diet and cancer treatment has been limited despite the surge of interest in complementary and alternative medicine (CAM) options by patients and healthcare professionals. In two surveys conducted by the National Cancer Institute ([NCI], 2004a, 2004b) Office of Cancer Complementary and Alternative Medicine, 75.5% of researchers and 72.4% of practitioners surveyed indicated an interest in collaborative research in nutritional therapeutics. Of the practitioners surveyed, 84% had included some type of nutritional therapy into their treatment plan. The macrobiotic diet was one of 14 nutritional therapies listed in survey examples.

In a study conducted by Risberg, Lund, Wist, Kaasa, and Wilsgaard (1998), 45% of patients with cancer involved in the study used some type of CAM therapy (Granai, 1999, Risberg et al.). The National Center for Health Statistics completed a comprehensive survey of Americans’ use of CAM in 2004 (N = 31,041), and found that the use of CAM crossed all age groups, races, economic backgrounds, education levels, health factors, and genders (National Institutes of Health [NIH], 2004). Of the respondents, 1,087 (3.5%) reported using diet as a form of CAM in the past 12 months, making it the 10th most common therapy (NIH).

Findings from the limited research that has studied macrobiotic diet and public opinion are mixed. Some found that the macrobiotic diet was nutritionally inappropriate, ineffective as a treatment, and potentially harmful to patients with cancer (ACS, 1993, 2007; August, 2003; Cassileth, 2007).
with breast cancer, and metabolic syndrome was reversed, decreasing the risk of breast cancer recurrence through lower serum insulin levels (Kushi et al., 2001).

Conclusion
A more systematic research approach is needed to evaluate the risks and benefits of a macrobiotic diet in its relationship to cancer prevention and the disease process (August, 2003; Granai, 1999; Kushi et al., 2001; NCI, 2004a, 2004b). Until more definitive research findings of either risk or benefit exist, a patient following a macrobiotic diet and not experiencing any negative side effects should be supported by his or her healthcare providers. However, clinicians should be aware of the potential for nutrition deficiencies if the macrobiotic diet is followed rigorously. Does a macrobiotic diet work to treat cancer? No, it is not a cure, but researchers need to learn more about nutrition and macrobiotics and their relationships with cancer.

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References

Breast Cancer
Castagnetta et al. (2002) and Berrino, Villarini, De Petris, Raimondi, and Pasanisi (2006) demonstrated that, as a result of eating more whole grains, soy products, and legumes, patients’ testosterone levels dropped. This correlates with a lower incidence of breast cancer in postmenopausal women. In addition, weight control was achieved in overweight or obese patients, which is a factor in patients...