

Title: Nutritional Intervention in Breast Cancer patients as integral part of the multimodal therapeutic approach

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Background and aims: Breast cancer (BC) is the second most common cancer worldwide and the most commonly occurring malignancy in women. There is growing evidence that lifestyle factors, including diet, body weight and physical activity, may be associated with higher BC risk. BC patients undergoing chemotherapy and/or radiotherapy experience a variety of symptoms that worsen patient quality of life. Studies investigating nutritional interventions during BC treatment have shown that nutritional counselling and supplementation with some dietary constituents might be useful in limiting drug-induced side effects, as well as in enhancing therapeutic efficacy.

Methods on September 2019 started in our Breast Unit a nutritional counselling and follow up of 110 women,affected by breast cancer. Clinical observation and laboratory investigation were performed respectively every month and every four-six months with the aims to reach e/o maintain an ideal body weight, improve the physical activity up to 180 minutes/week, and correct the metabolic blood panel (glycemia, cholesterol, triglycerides, vit.D, calcium, iron pattern,complete blood count etc). The follow up is ongoing,while more women has been enrolled.The dietary pattern is based on high consumption of whole grains, vegetables, fruits, poultry and fish, high-calcium water, and low consumption of red meat, refined foods, sweets,high-fat dairy products.

Results when dietary pattern and physical activity has been tight observed results has been: more than 10% of weight lost and low level of metabolic blood pattern, no need to use more drugs to correct hyperglycemia or hypercholesterolemia, calcium, low experience of lack of energy or fatigue during chemio or radiotherapy, and low percentage of symptoms like nausea, vomiting,dry mouth and changes in taste or smell percepton.

Conclusion in our experience ,consistent with dietary guidelines by the World Cancer Research Fund/American Institute for Cancer Research (WCRF/AICR),data from the clinical observation and laboratory suggest that a healthy dietary pattern characterized by the consumption of specific food-stuffs/food-nutrients, physical activity and ideal body weight maintenance may be considered an integral part of the multimodal therapeutic approach to improve long-term survival and quality of life in breast cancer patients.

