

## **Diet and physical activity in women on neo-/adjuvant therapy for breast cancer: a baseline analysis of a dietary intervention study**

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**Background and aims:** Poor diet and sedentary behaviors are risk factors for breast cancer (BC) development and relapse. Evidence suggests that high level of adherence to the Mediterranean-style dietary pattern (MD) and increased physical activity may have beneficial effects, improving overall health. This analysis aimed to evaluate the adherence to MD and physical activity in patients with BC, before starting a tailored dietary intervention.

**Methods:** Adherence to MD and physical activity were assessed at baseline in women aged > 18 years and with a BMI < 30kg/m<sup>2</sup> on neo-/adjuvant therapy for BC participating in an ongoing randomized controlled trial. Adherence to the MD was assessed, using the 14-item Med-Diet questionnaire, as low (score=0-5), average (score=6-9) or high (score≥10). Physical activity was evaluated using the short form of International Physical Activity Questionnaire (IPAQ).

**Results:** A total of 122 BC patients participated, having a mean age of 49.4±10.8 years and an average BMI of 24.7±3.03kg/m<sup>2</sup>. Overall, the adherence to MD was high in 24 % of patients, moderate in 64% and low in the remaining 12 %. Most patients (>50%) did not consume adequate portions of vegetables, fruit, legumes, fish, and nuts. According to IPAQ, physical activity was low in 72% of patients, whose 27% did not even walk for at least 10-minutes and spent a median value of 4-hours sitting on a weekday.

**Conclusions:** This baseline evaluation showed that adherence to MD was high only in a small percentage of BC patients and most of them were inactive. Therefore, a tailored lifestyle intervention is needed for improving adherence to MD and active behaviors to enhance overall health.