

# **Perspectives on Nutrition The BC-Med diet**

Dr Andrea Braakhuis Sweet Louise Advanced Cancer Forum

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World Cancer Research Fund Cancer Research

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## Breast Cancer 2010 Report

Food, Nutrition, Physical Activity, and the Prevention of Breast Cancer





## Limited-No conclusion

Dietary fibre; vegetables and fruit; soya and soya products; meat; fish; milk and dairy products; total fat; folate; vitamin D; glycaemic index; dietary patterns; adult weight gain; abdominal fatness

### RESEARCH Original Research: Brief





## Exploring Diet, Physical Activity, and Quality of Life in Females with Metastatic Breast Cancer: A Pilot Study to Support Future Intervention

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#### **ARTICLE INFORMATION**

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#### ABSTRACT

Background Historically, women with metastatic breast cancer are excluded from lifestyle interventions under the assumptions that diet and physical activity will have little impact on their disease trajectory. However, recent treatment advances have led to significant increases in survivorship that pose challenges to this assumption.

**Objective** The objectives of this study were to measure dietary intake, physical functioning, and quality of life in a subset of women with metastatic breast cancer, and to inform future interventions in this growing population.

Design Demographics, clinical characteristics, dietary intake, physical functioning, and quality of life were examined cross-sectionally using validated methodologies.

Participants/setting Twenty-five women with metastatic breast cancer were recruited during a 4-month period (June 2014 to September 2014) from two university hospitals in the Midwest that serve an ethnically diverse patient population. Women completed questionnaires and 24-hour dietary recalls (1 weekday, 1 weekend). Main outcome Lifestyle habits were analyzed.

Statistical analyses Means (±standard deviations) and frequencies were tallied and t tests were conducted.

**Results** On average, participants were 58.8 ( $\pm$ 12.8) years of age, predominantly minority, had been living with metastatic breast cancer for a mean of 36.9 ( $\pm$ 29.3) months, and exhibited significant nutrition-impact symptomology (eg. pain, dry mouth, fatigue). Bone and lung were the most common sites of metastases. Compared to a larger, normative sample of women with metastatic breast cancer, study participants displayed similar physical (P=0.61) and functional well-being scores (P=0.76), but higher social (P=0.10) and emotional well-being scores (P<0.01). The analyses of lifestyle factors showed that the majority of women were overweight or obese (n=14), not routine

exercisers (n=15), and had dietary patterns high in fat and low in fiber.

**Conclusions** This study supports that many women with metastatic breast cancer are in need of carefully tailored, evidence-based lifestyle strategies that address symptom burden, including weight management. The implications of diet and physical activity on quality of life in this population remain unexplored. *J Acad Nut Det*. 2015;115:1690-1698. This study supports that many women with metastatic breast cancer are in need of carefully tailored, evidence-based lifestyle strategies that address symptom burden, including weight management

## Mediterranean Dietary Pattern in a Randomized Trial

Prolonged Survival and Possible Reduced Cancer Rate

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Arch Intern Med. 1998;158(11):1181-1187. doi:10.1001/archinte.158.11.1181.

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### Article Figures Tables References Comments

### ABSTRACT

ABSTRACT | SUBJECTS AND METHODS | RESULTS | COMMENT | ARTICLE INFORMATION | REFERENCES

**Background** The Mediterranean dietary pattern is thought to reduce the risk of cancer in addition to being cardioprotective. However, no trial has been conducted so far to prove this belief.

Methods We compared overall survival and newly diagnosed cancer rate among 605 patients with coronary heart disease randomized in the Lyon Diet Heart Study and following either a cardioprotective Mediterranean-type diet or a control diet close to the step 1 American Heart Association prudent diet.

**Results** During a follow-up of 4 years, there were a total of 38 deaths (24 in controls vs 14 in the experimental group), including 25 cardiac deaths (19 vs 6) and 7 cancer deaths (4 vs 3), and 24 cancers (17 vs 7). Exclusion of early cancer diagnoses (within the first 24 months after entry into the trial) left a total of 14 cancers (12 vs 2). After adjustment for age, sex, smoking, leukocyte count, cholesterol level, and aspirin use, the reduction of risk in experimental subjects compared with control subjects was 56% (P=.03) for total deaths, 61% (P=.05) for cancers, and 56% (P=.01) for the combination of deaths and cancers. The intakes of fruits, vegetables, and cereals were significantly higher in experimental subjects, providing larger amounts of fiber and vitamin C (P<.05). The intakes of cholesterol and saturated and polyunsaturated fats were lower and those of oleic acid and omega-3 fatty acids (P<.001) in experimental subjects. Plasma levels of vitamins C and E (P<.05) and omega-6 fatty acids were lower (P<.001) in experimental subjects.

**Conclusions** This randomized trial suggests that patients following a cardioprotective Mediterranean diet have a prolonged survival and may also be protected against cancer. Further studies are warranted to confirm the data and to explore the role of the different lipids and fatty acids in this protection.

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# **Mediteranean Diet**



- High in fruits, vegetables, cereals, and legumes
- Low in red meat
- High in olive oil (unsaturated fat)
- Beneficial protective effect due to high levels of unsaturated fat and antioxidants (in particular, polyphenols)



# How to eat a Mediteranean Diet

- Eat Daily
  - 3 servings of fruit
  - 3+ servings of vegetables
- Eat weekly
  - 3 servings of fish (not fried)
  - 3 servings of legumes

- Choose
  - Olive oil and nuts most days
  - Mostly white meat, chicken and fish
- Limit
  - Cookies, pastries, pies and candy
  - Red meat and processed meat
  - High fat dairy

# **Simple Med Diet**



	Day 1	Day 2	
BREAKFAST	Oatmeal	Plain or Greek yoghurt with honey, apple and raisins Toast and PB	
SNACK	Red grapes	Hummus with crackers	
LUNCH	Sardines on toast Nut bar	Bean soup Sourdough bread	
SNACK	Nuts and Seeds	Fruit	
DINNER	Tuna patties, boiled potato and side salad (with balsamic vinegar)	Grilled chicken with broccoli and long grain rice	

## Healthy Menu for Chronic Disease Prevention: Diabetes, Heart Disease, Stroke, Dementita

HIGH OMEGA 3 FATS, LOW IN SATURATED FATS, ANTICKIDANT RICH	BREAKFAST	LUNCH	DINNER	SNACK
SUNDAY	Dakos (Bruchetta) Coffee (Greek/Espresso) Mandarin	Mussels stewed in white wine. Slice grain bread Greek Salad	Eggplant moussaka with lamb mince. Raddichio fennel and walnut salad.	Low Fat Greek yoghurt with berries. Sesame snack bar
MONDAY	Slice grain bread with poached egg and sliced avocado sprinkled with lemon juice and cracked pepper.	Rocket, pear and walnut salad with small tin tuna. Mandarin Plain mineral water	Baked chicken breast, skinless. Boiled broccoli salad. Small baked potato. Beetroot and garlic salad.	Low fat Greek yoghurt with walnuts and honey. Slice watermelon. Greek biscuit (koulourakia)
TUESDAY	Porridge (cooked rolled oats with skim milk) topped with fresh blueberries. Coffee (Greek/Espresso)	Stuffed vine leaves (4-6) Greek coleslaw salad. Eggplant dip	Baked snapper. Salad of boiled greens and beetroot with garlic side salad. Glass white wine	Risogalo dessert Whole orange Almonds (8-10)
WEDNESDAY	Dakos (Bruchetta) Herbal tea Whole orange	Beetroot and runner bean salad with walnuts and feta. Slice grain bread.	Vegetable bake. Greek salad. Mineral water	Dried figs (2-3) Walnuts (30g) Low fat Greek yoghurt with berries
THURSDAY	Porridge (cooked rolled oats with skim milk) topped with fresh blueberries. Herbal tea	Cannellini bean soup. Greek salad Slice grain bread.	Rabbit stew with red wine (can use chicken if prefer) Mixed potato salad Glass red wine	Low fat Greek yoghurt with honey and walnuts. Slice revani cake (or other) 1 Apricot
FRIDAY	Slice grain bread with poached egg and sliced avocado. Sprinkled with lemon juice and pepper.	Roasted vegetable open sandwich. Plain mineral water	Baked risoni with lamb. Lettuce, cucumber, spring onion salad. Plain mineral water.	Slice walnut cake. Low fat Greek yoghurt with berries. Slice rock melon.
SATURDAY	Poached eggs in stewed tomatoes. Slice grain bread. Whole orange	Baked sardines on toasted grain bread. Greek coleslaw salad. Plain mineral water.	Stuffed tomatoes with rice. Black eye bean salad. Tzatziki dip Glass white wine.	Baklava (sm. serve). Greek yoghurt with honey. Slice watermelon
8000kj	78 g Protein (16% Energy)	180 g Carbs (38% Energy)	92 g Fat (42% Energy)	6 g Alic (2.2% Energy)





Thank-you

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