

Healthy Eating and Breast Cancer



HELPFUL TIPS

Why healthy eating is important
Meal preparation ideas
The five food groups

RECIPE IDEAS

Overnight Oats
Green Eggs with Avocado
Chicken and Lentil Ginger Soup
Warm Ginger and Honey Drink



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Healthy Eating and Breast Cancer

HEALTHY EATING IS IMPORTANT DURING AND AFTER BREAST CANCER TREATMENT TO STRENGTHEN THE BODY.

The nutrients from our diet are the building blocks for our health – helping to support our immune system, mental health, energy levels, bones and muscles, heart health and more. Healthy eating combined with regular exercise can help reduce the severity of treatment side effects, improve stress management during a trying time, and increase quality of life.

While there is no ‘one-size-fits-all’ when it comes to healthy eating during cancer treatment, there are ways you can maximise the benefits of your diet to gain real benefits. The food we eat is one of the main aspects of our lives we can control, which can be a comfort during a time where life can feel somewhat out of control.

However, many women receive all kinds of diet advice from different people, and it is natural to feel confused and overwhelmed by the many choices facing you. This booklet explains the role of nutrition during cancer treatment and provides some practical tips to help you sustain a healthy diet throughout your journey.





HEALTHY EATING DURING CANCER TREATMENT IS IMPORTANT FOR

- Helping to reduce the severity of side effects during and after treatment
- Supporting the immune system
- Reducing inflammation in the body
- Supporting the body's increased need for nutrients
- Promoting optimal digestion and regular bowel movements
- Keeping a healthy weight
- Supporting body tissue healing
- Keep up your strength and energy

CHANGES IN DIET DURING TREATMENT ARE COMMON, BECAUSE

- Food preferences may change
- The taste and smell of foods may change, impacting the enjoyment of food
- Appetite may increase or decrease
- Fatigue, changes in energy levels and reduced motivation can lead to difficulty preparing food
- Pain, vomiting, mouth ulcers, nausea, and difficulty swallowing can reduce the intake and absorption of foods
- Impacts on emotional health and stress can affect which foods you reach for
- Digestive symptoms of diarrhoea, constipation, haemorrhoids, and anal fissures
- Confusion about what a healthy diet looks like

These changes may lead to malnutrition, poor absorption of nutrients, changes in body weight and changes in the choice of food. It's important to talk to your doctor about your symptoms, and consider how you can plan your meals to ensure you are receiving the right nutrients while bearing in mind any changes you are experiencing.



Australian Guide to Healthy Eating

Enjoy a wide variety of nutritious foods from these five food groups every day.
Drink plenty of water.



Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties



Vegetables and legumes/beans



Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans



Milk, yoghurt, cheese and/or alternatives, mostly reduced fat



Fruit



Use small amounts



Only sometimes and in small amounts



Follow the Australian Guide to Healthy Eating on the five food groups to eat each day.

Healthy Eating Tips

MEAL PREPARATION HACKS

- Cook and prepare batches of food in advance
 - Make meals in bigger quantities and divided into portions
 - Soups and stews can be easily frozen and reheated
- Choose simple, easy to prepare meals that are gentle on the stomach
 - Scrambled eggs, smoothies, soups, porridge, congee, overnight oats
- Choose foods that taste good to increase your appetite when experiencing treatment symptoms
- If your usual meal size is hard to manage, try eating smaller meals over the day
- Tune into your body by chewing slowly and reflecting upon how hungry or full you feel, this can help you in finding the right portion sizes for you
- Buy ingredients which are pre-prepared to reduce time standing in the kitchen, such as grated cheese, frozen chopped vegetables, pre-cut carrot or celery sticks, or diced meat
- Eat the rainbow
 - Eat a wide range of fruit and vegetables of different colours as they contain different antioxidants
 - Dark leafy green and orange vegetables are high in antioxidants beneficial in cancer treatment





CHOOSE HEALTHIER FATS

- Fats are important in our diet for energy, keeping us full over time and helping our body absorb those all-important vitamins
- Consume mainly polyunsaturated and monounsaturated fats:
 - Seafood, shellfish, avocado, extra virgin olive oil, canola oil, soy, nuts, good quality nut butter, and spreads made from canola, safflower, sunflower, soybean oils
- Limit or reduce saturated fats and trans fats, which can contribute to inflammation in the body:
 - Fried and processed foods, bacon, ham, processed meats, butter, cream, commercial hamburgers, chips (crisps), meat pies, pastry, pizza, cakes, biscuits, donuts

CHOOSE WHOLEGRAINS

- Opt for mainly wholegrain (complex carbohydrates) that are minimally processed, as these will provide you with the best fuel for your body while also containing many useful vitamins, minerals and fibre
 - Brown rice, basmati rice, wholegrain bread, wholegrain spelt, oats, quinoa, barley, polenta
- Try to reduce processed or refined sugars (simple carbohydrates), which provide very little in the way of nutritional value
 - Glucose, fructose, table sugar, sucrose, honey, syrups, fruit juice, soft drinks, baked goods, biscuits, breakfast cereals
 - Refined sugars are commonly high in processed food and drinks

CHOOSE QUALITY PROTEIN

- Proteins are essential for the energy levels, growth, and repair within the body, which is especially important when undergoing cancer treatment
- Look for mainly low-fat protein sources, such as pork tenderloin, fish, poultry, and turkey
- Legumes such as lentils, chickpeas and beans are a great plant-based protein source
- Aim to consume protein 3-4 times a day, with a source of protein at every meal
- To reach your minimum protein requirement in a day, you could try a combination of 80g grilled chicken, 2 large eggs, a handful of mixed nuts, and a serving of yoghurt



ENJOY PLENTY OF FRUITS & VEGGIES

- Fruits and vegetables are high in vitamins, minerals, antioxidants, and fibre that are protective in breast cancer
- Aim to eat a minimum of 5 kinds of vegetables and 2 types of fruit each day
- Help to enhance the immune system, reduce inflammation, lower estrogen levels, and aid in cancer recovery

HYDRATE REGULARLY

- Dehydration is common when managing treatment symptoms, and can contribute to constipation and haemorrhoids
- Aim for 2 Litres or 8 cups of water each day
- Reduce alcohol and coffee consumption as they contribute to dehydration

MAINTAIN A HEALTHY WEIGHT

- Maintaining a healthy body weight is important for breast cancer recovery, overall health and may reduce the risk of chronic health conditions including diabetes, hypertension and heart disease.
- Where possible, continue physical activity to help maintain lean muscle mass – even a little each day makes a difference
- Weight Loss
 - Can result from lowered appetite, impaired nutrient absorption, and tumour and cancer cell changes
 - Weight loss greater than 10% of total body weight in less than 6 months or a BMI <20 increases the risk of malnutrition and bone fractures
- Weight Gain
 - Can result from increased appetite, side effects of medications or decreased physical activity
 - As a guide between 5-10% of initial body weight is a safe weight loss target
- It is important to work in consultation with your GP, dietitian, or nutritionist to safely increase or decrease weight to prevent negative health outcomes

Simple Healthy Recipes

OVERNIGHT OATS

- 1 ½ cups rolled oats
 - 1 ½ cups skim/trim milk
 - 1 ½ cups reduced-fat, Greek yoghurt
 - Fruit, nuts, and seeds: apples, berries, banana, almonds, walnuts, ginger, cinnamon
1. Place oats, milk and yoghurt in a large container that has an airtight seal. Stir well, cover and refrigerate overnight.
 2. In the morning, divide oats among 4 bowls. Add toppings of your choice, serve.

GREEN EGGS AND AVOCADO

- Spray oil
 - 1½ cups chopped greens, eg, kalettes, spinach, broccoli
 - 2 eggs, lightly beaten
 - 1 tablespoon grated parmesan
 - 1-2 slices grainy bread
 - ¼ avocado
1. Spray a pan with oil and set over a medium-high heat. Add greens and cook, stirring, until just tender.
 2. In a bowl, combine eggs and parmesan. Add to pan and stir gently, until eggs are cooked.
 3. Serve eggs with toasted bread spread with avocado. Season with black pepper.

WARM GINGER AND HONEY DRINK

- 8cm fresh ginger, peeled and sliced
 - 3 cups boiling water
 - 8 teaspoons runny honey (2 teaspoons per serve)
1. Place sliced ginger in a jug and pour over boiling water. Infuse for 5–10 minutes.
 2. Pour into cups and add 2 teaspoons of honey to each.

JAFFA NUT BAR

- ½ cup roughly chopped cashews
- ½ cup roughly chopped almonds
- ½ cup roughly chopped hazelnuts
- zest of 1 orange
- ¼ cup sunflower seeds
- ½ cup dark chocolate peanut butter
- ¼ cup honey
- 2 tablespoons soft brown sugar
- 2 tablespoons olive oil
- 1 tablespoon cacao nibs

1. Preheat oven to 180°C. Line 20cm-square baking tin with baking paper.
2. In a bowl, mix all ingredients except cacao nibs until well combined.
3. Tip mixture into the baking tray. Spread evenly, sprinkle with cacao nibs and press down firmly. Bake for 15-20 minutes until firm and golden. Allow to cool for 5 minutes and firm up a bit in the tray, before tipping onto a flat surface and slicing into 24 pieces.
4. Store in airtight container for up to 2 weeks.

CHICKEN AND LENTIL GINGER SOUP

- 5 teaspoons olive oil
- 6cm fresh ginger, peeled, thinly sliced
- 1 leek, scrubbed, thinly sliced
- 2 carrots, sliced or ribboned
- 1 potato, diced
- 1 cup reduced-salt chicken stock
- ½ cup trim milk
- 1 bay leaf or Makrut lime leaf, optional
- ¼ teaspoon dried mixed herbs
- 5 cups boiling water
- 250g skinless chicken breast, halved
- ⅔ cup red lentils
- ¼ cup chopped fresh parsley, optional

1. In a non-stick pan, heat oil over medium. Add ginger and sauté for 1–2 minutes. Add leek, carrot and potato and cook, stirring for 3–4 minutes further.
2. In a large pot over a high heat, add stock, milk, leaf, mixed herbs and boiling water and bring to a boil. Reduce heat to simmer and add chicken. Cover and cook for 20–25 minutes.
3. Once soup has cooked for 25 minutes, add lentils and cook for another 10 minutes. Remove chicken and shred into small pieces. In a blender, blitz half of the soup until smooth. Return soup to the pan with chicken and heat through. Serve, garnished with parsley.



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REFERENCES

Better Health Channel. Protein. [Internet]. Victoria: Department of Health; 2020. Available from <https://www.betterhealth.vic.gov.au/health/healthyliving/protein>

Buja A, Pierbon M, Lago L, Grotto G, Baldo V. Breast cancer primary prevention and diet: An umbrella review. *Int J Environ Res Public Health*. 2020 Jul 1; 17(13): 4731. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7369836/>. DOI:10.3390/ijerph17134731

Custodio I, et al. Impact of chemotherapy on diet and nutritional status of women with breast cancer: A prospective study. *PLoS One*. 2016;11(6). Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4911080/>. DOI:10.1371/journal.pone.0157113

Eat for Health. Australian dietary guidelines: Summary. Canberra: NHMRC; 2013. Available from https://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n55a_australian_dietary_guidelines_summary_book.pdf

Limon-Miro A, Lopez-Teros V, Astiazaran-Garcia H. Dietary guidelines for breast cancer patients: A critical review. *Adv Nutr*. 2017 Jul 14; 8(4): 613-623. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5502868/>. DOI:10.3945/an.116.014423

Medline Plus. Facts about trans fats. [Internet]. National Institutes of Health, 2021. Available from <https://medlineplus.gov/ency/patientinstructions/000786.htm>

Nutrition Australia. Eat a rainbow. [Internet]. Nutrition Australia, 2013. Available from <https://www.nutritionaustralia.org/national/resource/eat-rainbow>

Nutrient Reference Values for Australia and New Zealand. Protein. [Internet]. NHMRC, 2014. Available from <https://www.nrv.gov.au/nutrients/protein>

Nutrient Reference Values. Water. [Internet]. NHMRC, 2014. Available from <https://www.nrv.gov.au/nutrients/water>

Rinniella E, Mele MC, Cintoni M, Raoul P, Ianiro G, Salerno L, et al. The facts about food and cancer diagnosis: A systematic review of prospective cohort studies. *Nutrients*. 2020 Aug; 12(8):2345. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7468771/>. DOI: 10.3390/nu12082345

Taha Z, Eltom S. The role of diet and lifestyle in women with breast cancer: An update review of related research in the Middle East. *Biores Open Access*. 2018; 7(1): 73-8. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5982158/>. DOI: 10.1089/biores.2018.0004

Whisner C, Aktipis C. The role of the microbiome in cancer initiation and progression: How microbes and cancer cells utilize excess energy and promote one another's growth. *Curr Nutr Rep*. 2019; 8(1): 42-51. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6426824/>. DOI: 10.1007/s13668-019-0257-2

Wu G. Dietary protein intake and human health. *Food Funct*. 2016 Mar; 7(3): 1251-65. Available from <https://pubs.rsc.org/en/content/articlelanding/2016/FO/C5FO01530H#divAbstract>. DOI: 10.1039/c5fo01530h

