

Diet & Nutrition Factsheet

Although underweight is an acknowledged problem among a defined population of cancer survivors, the majority of survivors of the most prevalent, metabolically-related cancers (ie, breast, prostate, colon) are overweight or obese.¹ Whilst available evidence in this field is of variable quality, difficult to interpret, and has not yet produced definitive results, it is becoming clear that weight management and healthy food choices has a role in improving overall health and promoting disease-free and overall cancer survival.¹ Recommendations for cancer survivors are consistent with what is recommended for cancer prevention for the general population.²

Key facts

- > Increased body mass index (BMI) at time of diagnosis is associated with poorer outcomes (breast, prostate cancers).¹
- > There is probable evidence that maintaining a stable healthy weight and physical activity improves quality of life, reduces the risk of cancer recurrence and extends overall survival for cancer survivors.^{3, 4}
- > An increased BMI (25-29kg/m or above) following a cancer diagnosis is associated with increased cancer recurrence, cancer mortality, or preventable mortality from other causes compared to survivors with normal BMI.^{1, 4}
 - Obesity is associated with a 30% increased risk of recurrence and death among breast cancer survivors.⁵
 - BMI greater than 35 is strongly associated with recurrent colon cancer and colon cancer mortality.¹
- > An increased BMI increases the risk of developing, or having poorly managed co-morbidities such as cardiovascular disease, diabetes and metabolic syndromes which negatively impact on a survivors' health.¹
- > The risk of second cancers is increased in cancer survivors and an increased BMI is associated with a further increased risk of developing cancers of the breast in postmenopausal women; colon and rectum; endometrium; and adenocarcinoma of the oesophagus, kidney and pancreas.⁶
- > Evidence is supportive of the role of dietary intake of fruit and vegetables (or related nutrients) in reducing cancer recurrence and extending survival.⁷

Assessment and monitoring

All health professionals can screen an individual's need for diet and nutrition intervention based on the person's BMI.

BMI = body weight (in kilograms) ÷ height (in meters) squared

Classification of Body Mass Index⁸

Classification	BMI (kg/m ²)	Risk of co-morbidities
Underweight	<18.50	Low (but possibly increased risk of other clinical problems)
Normal range (Healthy Weight)	18.50 – 24.99	Average
Overweight:	>25.00	
Pre-obese	25.00 – 29.99	Increased
Obese class 1	30.00 – 34.99	Moderate
Obese class 2	35.00 – 39.99	Severe
Obese class 3	>40.00	Very severe

Nutrition screening may identify individuals who are malnourished or at risk of becoming malnourished enabling nutrition interventions to be focused on those most likely to benefit.¹⁰ The person may report concerns about their nutrition, including weight loss or difficulty eating. Screening can be completed by nurses and other health professionals in the hospital, ambulatory or community setting.

The malnutrition screening tool (MST) is a quick and easy tool to use in the oncology population and is both valid and reliable for identifying patients at risk of malnutrition (see below page 3).

Malnutrition

Is your patient at risk?

Malnutrition Screening Tool'

1. Have you / the patient lost weight recently without trying?	
No	0
Unsure	2
Yes, how much (kg)?	
1 - 5	1
6 - 10	2
11 - 15	3
> 15	4
Unsure	2
2. Have you / the patient been eating poorly because of a decreased appetite?	
No	0
Yes	1
<hr/>	
Total Score	

If your patients have lost weight and / or are eating poorly they may be at risk of malnutrition i.e. score 2 or more

Applies to the last 6 months

Of weight loss and appetite questions

if unsure, ask if they suspect they have lost weight e.g. clothes are looser

For example, less than $\frac{3}{4}$ of usual intake

May also be eating poorly due to chewing and swallowing problems

Source: Malnutrition. Is your patient at risk. Factsheet. 2004 © Developed by Merrilyn Banks, APD with assistance from Abbott Nutrition.

<http://www.vdito.be/documenten%20nodig%20voor%20website/MST2.pdf>

Further assessment may identify issues with under or over nutrition. The individual may require a comprehensive assessment and individually tailored management plan from a private or community based [accredited practising dietitian](#). A general practitioner is able to refer eligible individuals to a dietitian who is registered with Medicare Australia. The individual may then receive a Medicare rebate for up to five services per calendar year.⁹

Recommended intervention strategies

The goal of any nutrition strategy is to maintain a healthy body weight, with a body mass index between 18.5-25kg/m².^{2, 3}

For survivors who are underweight:¹

- > consume energy-dense foods that are easy to chew and swallow, and mild in flavour
- > increase total energy and protein intake, consuming nourishing drinks and/or oral nutritional supplement drinks
- > have smaller meals more frequently

The following recommendations apply to all cancer survivors unless otherwise advised for reasons such as ongoing treatment toxicities, malnutrition or compromised gastrointestinal function:

- > Limit the consumption of foods and drinks that promote weight gain (such as sugary drinks, energy dense foods, fast foods)²
- > Eat more fruit and vegetables – aim for two serves of fruit and five serves of vegetables every day^{2,3}
- > Limit red meat consumption (to less than 500g a week) with very little, if any, processed meats²
- > Increase fish intake⁴
- > Limit consumption of salt (including salt preserved foods and processed food with added salt)²
- > If alcoholic drinks are consumed, limit consumption to no more than two standard drinks a day for men and one standard drink per day for women^{2,3}
- > Incorporate exercise as a key component of healthy lifestyle¹

Key Resources

Practice appropriate behavioural management skills to achieve dietary and exercise change¹
Key resources:

[Cancer Council Australia: Maintain a healthy weight](#)

[Cancer Council Australia: Eat for health](#)

[Cancer Council Australia: Nutrition and physical activity position statements](#)

[Cancer Council New South Wales 'How to reduce cancer risk by eating well and being active' fact sheet](#)

[Cancer Council Victoria 'Healthy eating to reduce cancer risk' fact sheet](#)

[American Cancer Society Guidelines for Nutrition and Physical Activity for Cancer Survivors](#)

[Dietitians Association of Australia](#)

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