

Why Eating Well Matters After a Cancer Diagnosis



Veronica McSharry
Specialist Dietitian in Oncology and Haematology

Objectives

- **Eating Well at Diagnosis and On Treatment**
 - Benefits
 - Barriers to eating well
 - Practical tips for optimal nutrition
- **Eating Well After Treatment**
 - Benefits
 - Barriers to eating well
 - Practical tips to nourish your body after treatment
- **Where to get good quality nutrition advice.**

Why Eating Well Matters on Treatment

The goal of nutrition during cancer treatment is not to treat the cancer but to support the person to withstand their cancer treatment.

Benefits	
Weight stability	Maintain muscle mass and strength
Less toxicity during radiotherapy and chemotherapy	Less interruptions during treatments
Lower risk of post operative complications	Maintain independence and quality of life during treatment
Improved response to anticancer therapy	

Why Eating Well Matters on Treatment

The goal of nutrition during cancer treatment is not to treat the cancer but to support the person to withstand their cancer treatment.

Aim to maintain your weight from the time of diagnosis and during your cancer treatment.

This applies to all weight categories i.e. normal weight, overweight or obese.

Malnutrition and Sarcopenia

- 30-70% experience unintentional weight loss (1-4)
- 52% muscle loss and reduced muscle strength (5)
- Why this happens?
 - Psychological impact
 - Hormonal and physiological changes due to cancer
 - Fasting for procedures and surgeries
 - Bed rest and reduced physical activity
 - Symptoms of cancer or cancer treatments

Barriers to Eating Well



Early Intervention is Important

- 5% weight loss ⁽¹⁾
- Self monitor your weight and appetite
- Speak to your medical team if you have any concerns
- Request referral to a dietitian in your hospital
- Speak to GP regarding referral to community dietitian
- INDI website- find a dietitian (www.indi.ie)

High Calorie and Protein Diet

- Aim for 6-8 small meals and snacks daily
- Eat your biggest meal at the time when you feel hungry.
- Make the most of each bite- Add extra protein and calories
- Use nourishing drinks- high protein milk, smoothies, fortified soups
- Work with flavours and textures that suit you.
- Avoid all dietary restrictions unless medically indicated.
- www.breakthroughcancerresearch.ie –Good Nutrition for Cancer Recovery
- Irish Cancer Society: Diet and Cancer Booklet

If you're having...

Puddings or breakfast cereals

Add...

- ▶ Nuts or seeds
- ▶ Dried fruit
- ▶ Banana
- ▶ Whole milk or fortified milk (see next page)
- ▶ Greek or natural yoghurt



If you're having...

Casseroles, meat dishes or soups

Add...

- ▶ Lentils or beans
- ▶ Rice, noodles or pasta (ideally brown or wholewheat)
- ▶ More lean meat, fish or meat alternatives like tofu
- ▶ More oil when cooking
- ▶ Greek yoghurt or creme fraiche before serving
- ▶ A serving of bread (ideally wholemeal) or potatoes with oil-based spread



If you're having...

Vegetables, mashed potatoes, beans or sauces

Add...

- ▶ Oil
- ▶ Whole milk or fortified milk (see next page)
- ▶ Oil-based spread
- ▶ Cheese
- ▶ Egg (hard-boiled or added when making savoury sauces)



If you're having...

Salads

Add...

- ▶ Avocado slices, nuts, seeds and pulses
- ▶ Oil-based dressings
- ▶ Oily fish, cooked lean meat or poultry
- ▶ Houmous
- ▶ New potatoes
- ▶ Hard-boiled egg
- ▶ A serving of bread (ideally wholemeal) with oil-based spread



If you're having...

Sandwiches, toast or crackers

Add...

- ▶ A thick layer of cream cheese, cottage cheese, nut butter or houmous
- ▶ A filling of sliced avocado and tuna or chicken



WCRF, 2018

- ▶ **Fortified milk:** add 2–4 tablespoons of skimmed milk powder to a pint (570ml) of whole milk. Keep it in the fridge for up to two days and use in hot and cold drinks, smoothies, on cereal and for cooking. This adds calories and protein without adding much volume.

Top Tips During Treatment

1: Self monitor weight and appetite weekly.
Speak to oncology team if you can any concerns.

2. Keep active when possible.
Protects muscle mass
Minimises fatigue

Breakthrough cancer research booklet- The Truth behind Food and Cancer

4: Experiment with flavours.
Tastes can change during treatment
Try alternatives

5: Stay Hydrated
Aim for 8-10 cups of fluid
All liquids count

6. Manage Symptoms
Speak with your medical team if uncontrolled symptoms.

Top Tips During Treatment

- 6. Manage symptoms

Diet and Cancer Book
Irish Cancer Society

Eating problems during treatment

- 25 Poor appetite
- 26 Taste and smell changes
- 27 Sore mouth, gums or throat
- 28 Dry mouth
- 29 Difficulty swallowing
- 29 Indigestion
- 30 Feeling full
- 30 Nausea (feeling sick)
- 31 Vomiting
- 31 Cramping
- 32 Bloating
- 32 Diarrhoea
- 37 Constipation
- 38 Fatigue (too tired to cook or eat)
- 38 Weight loss
- 38 Severe weight loss (cancer cachexia)
- 39 Too much weight gain
- 40 Other problems

7. Adequate protein intake recommended





Have protein in each meal

How Much Protein Do I Need?

People with cancer need between 1.2-1.5grams of protein per kilogram of body weight per day

Example: 75kg
 $= 75\text{kg} \times 1.2\text{kg}$ or 1.5kg
 $= 90\text{-}113\text{grams}$ of protein per day

How Can I Get the Protein That I Need?

Food Group*	Food	Serving Size	Protein (g)**
Meat & Alternatives 	Beans, canned or cooked	3/4 cup (175 mL)	9-11
	Beef or pork, cooked	2 1/2 oz (75 g)	21-28
	Chicken or turkey, cooked	2 1/2 oz (75 g)	17-22
	Chickpeas, canned, cooked or hummus	3/4 cup (175 mL)	9-11
	Eggs, large	2	12
	Eggs, pasteurized, whites or whole	6 Tbsp (60 mL)	10-12
	Fish, cooked or canned	2 1/2 oz (75 g)	11-19
	Lentils, canned or cooked	3/4 cup (175 mL)	13
	Nuts and seeds	1/4 cup (60 mL)	5-8
	Peanut butter	2 Tbsp (30 mL)	7
	Soy burger patty	1 patty (2 oz/70 g)	10
	Tofu, firm	3/4 cup (175 mL)	10-17
Milk & Alternatives 	Cheese block (Cheddar, Mozzarella, Swiss, feta)	1 1/2 oz (50 g)	10-12
	Cheese (goat)	1 1/2 oz (50 g)	9-15
	Cottage cheese	1 cup (250 mL)	28-30
	Fortified soy beverage	1 cup (250 mL)	7
	Milk	1 cup (250 mL)	9
	Milk powder	1/3 cup (75 mL/25 g)	9
	Yogurt, Greek (plain and flavoured)	3/4 cup (175 mL)	14-18
	Yogurt, Regular (plain and flavoured)	3/4 cup (175 mL)	6-8
Grain Products 	Bread	1 slice (35 g)	3-6
	Cooked cereal (oat bran, mixed grain, rolled oats)	3/4 cup (150 g)	4-6
	Cold cereal (labelled as high protein; read for label serving size)	30 g (1/8-3/4 cup) (30 mL-175 mL)	5-7
	Granola protein bar (labelled as high protein)	1 bar (40-50 g)	10
	Pasta (protein-fortified), cooked	1/2 cup (125 mL)	5-6
	Quinoa, cooked	1/2 cup (125 mL)	3-4
	Ground flax seeds	3 Tbsp (45 mL)	6
	Hemp seed hearts	2 Tbsp (30 mL)	7-8
Nutrition Supplements & Other Foods 	Nutrition supplement drinks	1 cup (250 mL)	9-20
	Nutrition supplement puddings	3/4 cup (175 mL)	4-7
	Protein bars	1 bar (50-80 g)	10-20
	Soy protein powder	2 Tbsp (30 mL)	9-12
	Wheat germ	3 Tbsp (45 mL)	6
	Whey protein powder	2 Tbsp (30 mL)	20

Weight gain during treatment

- Weight gain occurs due to:
 - Psychological factors
 - Decreased physical activity
 - Menopausal/ hormonal changes
 - Anti-cancer treatments e.g. steroids
 - Changes in food intake/preferences
 - Retention of fluid
- Focus on weight stability and maintain muscle mass and strength during cancer treatment.
- Follow healthy eating advice in the next section for people after cancer treatment.

Nutritional Considerations after Cancer Treatment



Why Nutrition Matters After Treatment

- Recovery
- Immune function
- Reduced risk of recurrence
- Risk reduction for cardiovascular disease and diabetes
- Bone health

Barriers to Eating Well

- Ongoing symptoms after treatment
- Gastrointestinal issues
- Finding good quality advice
- Habits and food preferences

**LIMIT CONSUMPTION
OF RED AND
PROCESSED MEAT**

**LIMIT CONSUMPTION
OF SUGAR
SWEETENED DRINKS**

**LIMIT ALCOHOL
CONSUMPTION**

**DO NOT USE
SUPPLEMENTS
FOR CANCER
PREVENTION**

**FOR MOTHERS:
BREASTFEED YOUR
BABY, IF YOU CAN**

**AFTER A CANCER
DIAGNOSIS: FOLLOW OUR
RECOMMENDATIONS,
IF YOU CAN**

wcrf.org

**BE A
HEALTHY WEIGHT**

**BE PHYSICALLY
ACTIVE**

**EAT A DIET RICH
IN WHOLEGRAINS,
VEGETABLES,
FRUIT AND BEANS**

**LIMIT CONSUMPTION
OF 'FAST FOODS' AND
OTHER PROCESSED
FOODS HIGH IN FAT,
STARCHES OR SUGARS**



**World
Cancer
Research
Fund International**

OUR CANCER PREVENTION RECOMMENDATIONS

Not smoking and avoiding other exposure to tobacco and excess sun are also important in reducing cancer risk. Following these Recommendations is likely to reduce intakes of salt, saturated and trans fats, which together will help prevent other non-communicable diseases.



1. Be a Healthy Weight

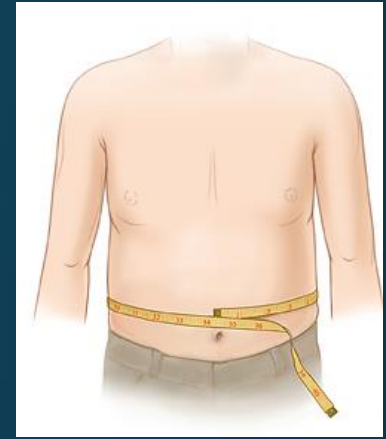
- Be as lean as possible within a health body weight range
- Associated with reduced risk of cancer recurrence and chronic diseases ⁽¹⁻³⁾
- Ways to assess body weight

1. Be a Healthy Weight

- Be as lean as possible within a health body weight range
- Associated with reduced risk of recurrence and chronic diseases
- Ways to assess body weight
 - Body Mass Index – $\text{Weight(kg)} / \text{Height (m}^2\text{)}$

Normal Weight	Overweight	Obese
18.5-24.9 kg/m ²	25-29.9kg/m ²	30.0kg/m ² +

1. Be a Healthy Weight



- Be as lean as possible within a health body weight range
- Associated with reduced risk of recurrence and chronic diseases
- Ways to assess body weight
 - Waist Circumference

How to measure waist circumference

- 1) Place a tape measure around your waist, the middle point between the bottom of your lowest rib and the top of hip bone. This is usually at the level of your belly button.
- 2) Make sure it is level and snug fit but not digging in.
- 3) Breathe normally, measure when you have breathed out.

	Normal	High Risk	Very High Risk
Men	>94cm	94-102cm	>102cm
Women	>80cm	80-88cm	<88cm

2. Be Physically Active

- Important at all stages of the cancer pathway.

Outcome	Systematic review evidence
Physical function	Significant improvements in fitness were observed from pooling 14 RCTS
Fatigue	Significantly lowered fatigue was demonstrated from analysing 14 RCTs
Well Being	Significant improvements in quality of life were indicated from 16 RCTs, depression from 10 RCTs and anxiety from 7 RCTs
Body Composition	Significant small reductions in body fat were reported by pooling 15 RCTs, and increases in muscle mass from 5 RCTs
Recurrence	<p><u>Breast</u>: Results of the two RCTs suggested that women reaching 150 minutes of moderate-intensity activity per week had 40% lower risk breast cancer-specific mortality, and breast cancer recurrence, compared with women active for less than one hour/week.</p> <p><u>Colorectal</u>: 2 RCTs suggested that risk of disease recurrence, cancer mortality was reduced by about 50%, by performing the equivalent of six hours of physical activity per week.</p> <p><u>Prostate</u>: 2 RCTs indicated a lower risk of prostate-specific mortality of approximately 30% and a lower rate of disease progression of 57% with three hours per week of moderate intensity physical activity</p> <p>(Macmillan Evidence Review 2018)</p>

3. Eat Predominantly Plant Based Diet

- Eat a diet rich in wholegrains, fruit, vegetables, pulses, legumes
- 75% diet from plant based sources, 25% diet from animal sources
- Why?
 - Reduces risk of certain forms of cancer
 - Rich in fibre, vitamins and minerals, phytochemicals
 - Higher fibre helps in appetite regulation

Eat plenty of....	Eat less of....
<p>Whole-wheat / rye / spelt breads</p> <p>Whole-wheat pasta</p> <p>Basmati, Brown or Wild Rice</p> <p>Whole-wheat Couscous</p> <p>Bulgur Wheat</p> <p>Quinoa</p> <p>Sweet potato /potatoes with skins on</p> <p>Oats, wholegrain cereals</p> <p>Pulses and legumes – chickpeas, lentils, kidney beans</p> <p>Vegetables and fruits</p> <p>Nuts & Seeds (in moderation)</p>	<p>Carbonated drinks and fruit juices</p> <p>Sweets/ Biscuits/ Cakes</p> <p>Breakfast cereals with added sugar</p> <p>Chips or crisps</p> <p>White bread</p> <p>White pasta</p> <p>Short-grain rice</p>

4. Limit fast foods/processed foods



5. Limit Red Meat and Processed Meat

- **Limit red meat to two portions per week.**

Beef, pork, veal, venison, lamb, mutton.

Replace red meat with beans or lentils in stews/casseroles.

Make fish cakes or chicken burgers rather than beef/pork.

- **Avoid processed meats.**

Sliced meats, charcuterie, sausages, rashers, pudding.

Replace in “fry up” with baked beans, eggs, mushrooms, tomatoes.

Use tinned fish, hummus, low fat cream cheese, roasted chicken, egg mayo in sandwich.

Protein Alternatives



6. Limit intake of sugary drinks

- Soda, minerals, sports and energy drinks, barley water, cordial and coffee and tea-based beverages that have sugars or syrups.



7. Limit Alcohol

There is strong scientific evidence that all drinks containing alcohol can increase your risk of certain cancers and recurrence. To reduce your cancer risk the WCRF recommends not to drink alcohol at all.

If you do drink alcohol then follow the national guidelines.

11 standard units of alcohol per week.

17 standard units of alcohol per week.

Aim to have at least 3 alcohol free days per week.

A pint of beer or larger contains 170 calories- similar to 3 chocolate chip cookies.

A large (250ml) glass of wine contains 190 calories- similar to a butter croissant.

What is a drink?

A drink contains about 10-15 grams of alcohol, so one drink is the same as:

Half a pint of normal strength beer, lager or cider (3-5% ABV*)



One 25ml measure of spirits such as vodka or whisky (40% ABV*)



One small (125ml) glass of wine (12-13% ABV*)



* Alcohol by volume – the strength or amount of alcohol a drink contains

8. Supplements

- Advice: Do not use supplements for cancer prevention
- “For most people consumption of the right food and drink is more likely to protect against cancer than dietary supplements (WCRF 2018)
- Exception: Vitamin D (15-20mg/day)



Useful Websites

- Breakthrough Cancer Research: www.breakthroughcancerresearch.ie
- Irish Cancer Society: www.cancer.ie
- World Cancer Research Fund: www.wcrf-uk.org
- Memorial Sloan Kettering Cancer Centre (USA): www.mskcc.org
- Cancer Research UK: www.cancerresearchuk.org
- Irish Nutrition and Dietetics Institute: www.windi.ie

Questions?

Thank you for your time.