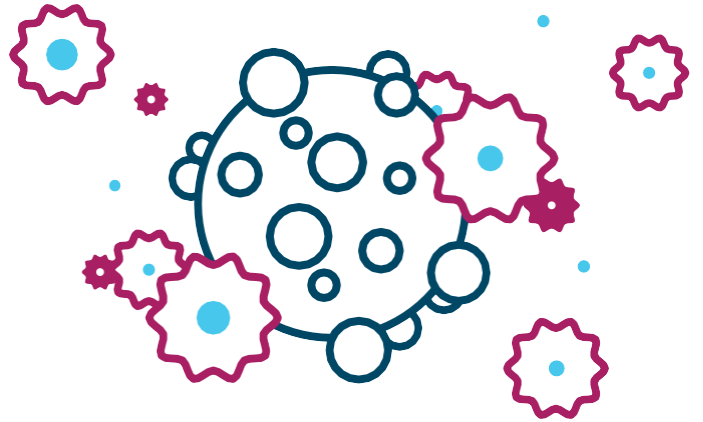


# GOOD NUTRITION CAN HAVE A POSITIVE EFFECT ON YOUR CANCER JOURNEY

## WHAT IS CANCER?

Cancer is a disease that affects the body's cells. It starts when cells grow and divide uncontrollably. Cancer can happen anywhere in the body, and sometimes it can spread from one part of the body to another.



**CANCER AND CANCER TREATMENTS MAY CAUSE YOUR BODY TO UNDERGO CHANGES THAT AFFECT HOW WELL IT TAKES IN AND USES NUTRIENTS.**

### SOME SYMPTOMS YOU MAY EXPERIENCE INCLUDE

Losing your appetite  
Feeling full quickly  
Foods tasting differently  
Feeling nauseated  
Dry mouth  
Trouble swallowing  
Vomiting  
Diarrhoea  
Muscle loss, muscle weakness  
Weight loss  
Fatigue



### WHICH MAY LEAD TO

Eating and drinking less  
Decreased ability to absorb nutrition from food  
Changes in your body's ability to use nutrition for energy



### WHICH CAN LEAD TO

Malnutrition

## MALNUTRITION

Poor nutrition is caused by the inability to eat or take in nutrients or changes in digestion and absorption.<sup>1</sup> Malnutrition can cause muscle loss and loss of strength, making it hard to maintain health and independence.<sup>2</sup> Malnutrition can also impact how well a person tolerates cancer treatment.<sup>3</sup>

Cancer treatments work by destroying cancer cells. Some treatments have side effects that can put you at risk for malnutrition and muscle loss, which can make it difficult to complete treatment.

## HOW DO YOU KNOW IF YOU'RE AT RISK FOR MALNUTRITION OR ARE CURRENTLY MALNOURISHED?

Your healthcare team may ask you questions like these during your visits to help determine your nutritional status:<sup>3</sup>

1. Have you recently lost weight without trying?
2. Have you noticed any changes in the types and amounts of foods you eat?
3. Do you have any problems with the desire or ability to eat, like loss of appetite, trouble digesting foods, or pain?
4. Are you able to walk and do other routine activities like preparing a meal, getting dressed, making your bed, getting out of a chair, or taking a shower?

## GOOD NUTRITION IS IMPORTANT BEFORE AND DURING TREATMENT

Everyone's experience with cancer is unique, and treatments can affect people differently. Focusing on good nutrition and regular physical activity will help you maintain your strength and may help you better tolerate your treatment.

### Good nutrition can help you:

- Keep your immune system functioning well – and help lower your risk of infections<sup>4</sup>
- Complete treatments with fewer side effects<sup>5,6</sup>
- Recover after treatment
- Shorten the length of time you're in the hospital,<sup>6,7</sup> if time in the hospital is necessary

# THE IMPORTANCE OF GOOD NUTRITION

Getting adequate calories and protein is essential in maintaining optimal nutrition status.

## CALORIES

**Calories** are found in carbohydrates, protein and fats and give you the energy your body needs to function. Eating a variety of foods can help you meet your calorie and vitamins and mineral needs.

## PROTEIN IS IMPORTANT FOR MUSCLE

**Your body has more than 600 muscles**, and you use those muscles every day for movement, balance, posture, and strength.

You need a steady supply of protein from your diet to replenish, build, and maintain your muscles.

Protein is also essential to maintaining a healthy immune system.

Not all foods have the same quality of protein.

You want to eat foods that contain high-quality protein to get the nutrients your body needs.

Eating a well balanced diet will provide your body with a variety of nutrients before and during your treatments. Here are some tips and choices to help you get started.



### PROTEIN

#### TIP

Include high-quality protein in every meal and snack.

Milk, yoghurt, and cheese

Eggs

Lean red meats

Poultry

Seafood

Beans & peas

Nuts & seeds

Tofu

Oral nutritional supplements\*



### FRUITS

#### TIP

Go for a variety of whole or cut-up fruits – they're loaded with fibre and other key nutrients.

Apples

Pears

Bananas

Grapes

Mangoes

Kiwi fruit

Oranges

Tangerines

Watermelon

Melon



### VEGETABLES

#### TIP

Eat a variety of colorful cooked or fresh vegetables - gives you fibre, vitamins, and minerals.

Carrots

Aubergines

Green leafy vegetables

Peppers

Tomatoes

Courgettes



### GRAINS

#### TIP

Vary the grains you eat and make half your grains whole grains.

#### Whole grains:

Brown rice

Oatmeal

Whole wheat pasta

Wild rice

#### Refined grains:

Bagels

Cornflakes

Pasta

Soda crackers

White bread

White rice



### DAIRY

#### TIP

Choose milk or yoghurt for protein, calcium and other nutrients.

Milk

Yoghurt

Greek yoghurt

Soya milk

Natural or processed cheese

## TRY THESE IDEAS FOR HEALTHY MEALS AND SNACKS

Work with your dietitian or healthcare team to create a meal plan that meets your personal nutritional needs.



### BREAKFAST

Whole wheat toast

Scrambled eggs

Greek yoghurt

Fresh berries



### LUNCH

Chicken salad on whole wheat bread  
Cherry tomatoes  
Crackers & Cheddar cheese  
Grapes



### DINNER

Grilled salmon  
Sautéed spinach  
Steamed brownrice  
Watermelon



### SNACKS

Hummus  
Sliced carrots  
Pita bread

Or

Oral nutritional supplement\*

\*As advised by your healthcare professional

# NUTRITIONAL STRATEGIES FOR MANAGING SIDE EFFECTS DURING TREATMENT

Discuss all side effects with your doctor. Your healthcare team will use this information to help you develop and adjust your treatment plan.



**NAUSEA** Avoid strong smells and hot temperature foods. Try eating cold or room temperature foods.



**POOR APPETITE** Try concentrating on calories and protein. For calories, you can use olive oil on bread; spread peanut butter or other nut butters on toast, crackers or fruit like bananas and apples. Try adding some avocado slices to a sandwich. For protein, add extra meat, poultry, fish, or cheese to casseroles or soups.



**CONSTIPATION** Increase your water intake and fibre from whole grains, fruits, and vegetables. Take a daily walk and drink prune juice to stay regular.



**DIARRHOEA** Some treatments can cause diarrhoea. At this time, avoid fibre and increase your fluids to stay hydrated. Drink plenty of mild, clear liquids during the day that are room temperature. To replace fluids, drink at least 1 cup of liquid after each loose bowel movement. Drink and eat small portions of food that provide sodium and potassium (two minerals that your body loses when you have diarrhoea). Choices include broths, soups, fruit juices, sport drinks, crackers, pretzels, potatoes without skin, and ripe bananas.



**MOUTH SORES** Try salt or bicarbonate of soda mouth washes during the day. Just before bedtime, try a mix of glycerin and warm water; you can also try baking soda or salt.



**HEARTBURN** Sit upright when eating or drinking and eat small portions. Try to avoid lying down after you've eaten. If you need to lie down, use a pillow to keep your head up.

## NAUSEA & POOR APPETITE

Choosing one food over another can help you manage these two very common side effects.

NAUSEA AFFECTS  
**2 OUT OF 3**  
PEOPLE WITH CANCER.<sup>8</sup>

It's caused by cancer treatments, certain cancers, and sometimes by anxious or depressed feelings.

### WHAT YOU CAN DO ABOUT IT

- Avoid greasy or spicy foods.
- Sip liquids slowly to stay hydrated.
- Eat small meals and snacks throughout the day. Don't miss a meal – going hungry can make your nausea worse.
- Try eating some crackers, dry toast, pretzels or breadsticks throughout the day.
- Open a window or turn on a fan for fresh air.
- Note when you eat and how you feel, like before or after treatment. You may learn that you have less nausea when you eat a light snack before treatment.
- Rest after you eat. Sit up or recline with your head raised up.
- Let your care team know you're experiencing nausea. They can recommend and prescribe medications to help manage.

POOR APPETITE IS COMMON, AFFECTING NEARLY  
**60% OF PEOPLE**  
UNDERGOING CANCER TREATMENT.<sup>8</sup>

Cancer treatment, cancer itself, fatigue, pain, and some medicines can take away your appetite.

### WHAT YOU CAN DO ABOUT IT

- Eat small meals and snacks during the day.
- Keep snacks handy, like dried fruit, nuts, peanut butter crackers, fig bars, or granola bars.
- Sip on liquids during the day; pick ones that have nutrition, like milk, fruit juices, or soups, instead of carbonated drinks.
- Choose foods that are soft and cool like yoghurt and milkshakes, or frozen like sorbet or ice lollies.
- Have a small bedtime snack.
- Be flexible with food. Foods that didn't appeal to you yesterday might taste good today.
- Eat larger meals when you're feeling better.
- Keep meal time as calm and relaxed as possible.
- Talk with your dietitian for more ideas about what to eat when you don't have an appetite.

# WAYS TO FOCUS ON NUTRITION

## POSITIVE WAYS TO FOCUS ON YOUR NUTRITION AS YOU PREPARE FOR AND BEGIN TREATMENT

Work with your healthcare team to:



**CREATE A MEAL PLAN** that meets your individual needs. It's important to remember to include protein in all your meals and snacks.



**MAINTAIN YOUR WEIGHT** At this time, it's important to maintain your weight, even if you're overweight. Now is not the time to intentionally lose weight or diet.



**CONTINUE WITH PHYSICAL ACTIVITY** Find activities you can do, are enjoyable, and will help maintain your strength. Not moving, for instance staying in bed or a chair for long periods of time, can lead to muscle loss and fatigue.



**CHECK YOUR BLOOD SUGAR** If you have diabetes or prediabetes, it's important to check your blood sugar levels regularly and keep your levels within normal range.



**EVALUATE YOUR ORAL HEALTH** Your dentist can clean your teeth, check for cavities, treat any infections, and show you how to maintain good oral health before starting treatment.






## ORAL NUTRITIONAL SUPPLEMENTS ARE A GOOD OPTION TO INCREASE YOUR NUTRITIONAL INTAKE

Your healthcare team may recommend oral nutritional supplements for additional nutrition before, during, and after treatment.

Oral nutritional supplements can help you:

- Increase your protein and calorie intake
- Maintain your weight during treatment<sup>9</sup>
- Receive nutrients when your appetite is low

### How to use oral nutritional supplements

-  Drink one with a meal or as a snack.
-  Consider chilling them or serving them with ice.
-  Heat them gently for a warm treat.
-  Mix them with other foods, like ice cream or frozen yoghurt.
-  Use them to make a smoothie or milkshake.

Visit [anhi.org/uk](https://anhi.org/uk) for more educational resources.

1. NHS, 2020. Malnutrition. <https://www.nhs.uk/conditions/malnutrition/causes/> Accessed February 2021. | 2. Deutz NEP, et al. *J Am Med Dir Assoc*. 2019;20(1):22-7. | 3. Arends J, et al. *Clin Nutr*. 2017;36(1):11-48. | 4. Cancer Research UK, 2020. Why diet is important. <https://www.cancerresearchuk.org/about-cancer/coping/physically/diet-problems/about/why-diet-is-important> Accessed February 2021. | 5. Cereda E, et al. *Radiother Oncol*. 2018;126(1):81-8. | 6. Odelli C, et al. *Clin Oncol*. 2005;17(8):639-45. | 7. Gillis C, et al. *Gastroenterology*. 2018;155(2):391-410.e4. | 8. Kim ES, et al. *Clin Cancer Res*. 2018;24(22):5543-51. | 9. de van der Schueren MAE, et al. *Ann Oncol*. 2018;29(5):1141-53.