



Fresubin®

Manage your symptoms

Help yourself in **cancer-related fatigue**
and stay in a good nutritional status

 **FRESENIUS
KABI**
caring for life

Dear reader,

Fatigue is one of the unfortunate consequences of cancer and cancer treatment. It is characterised by feelings of tiredness, weakness, and lack of energy. It is often worse than usual tiredness, and it does not usually get better with rest. This feeling may last even after your treatment is completed. Cancer-related fatigue has many causes; anaemia, sleep disturbances, physical inactivity and poor nutrition being some of them.

This guide will help you understand the causes and signs of cancer-related fatigue, and give you helpful hints how you can manage your symptoms. There are many practical things you can do that may relieve fatigue.

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Please note!

This guide does not replace advice from your health care team.

Cancer-related fatigue - what you need to know

Fatigue is one of the most common and distressing side effects of cancer and its treatment. Fatigue may already be present when cancer is first diagnosed, but it commonly occurs as a side effect of cancer treatment, e.g. following surgery or during chemotherapy and radiation therapy.

Fatigue can include feelings of physical tiredness, making it hard to stay physically active and to continue usual activities. Fatigue also can include feelings of mental tiredness, making it hard to concentrate or think.



Fatigue can range from mild to severe and may change over time. Your symptoms can even change from day to day.

Fatigue is a common side effect in cancer patients:

- Up to 90% of cancer patients are affected receiving chemotherapy and/or radiation therapy, bone marrow transplantation, or treatment with immunomodulators
- Approximately one-third of patients still experience fatigue after completion of therapy



How bad is your fatigue?

The severity of fatigue is different in each person. Some patients may feel too tired to even get out of bed, while others may be able to do their regular daily activities and some even continue working.

It is important to tell your doctor and your health care team about your fatigue and how severe it is. The doctor may ask you:

'How would you rate your fatigue on a scale of 0-10 over the past 7 days?'



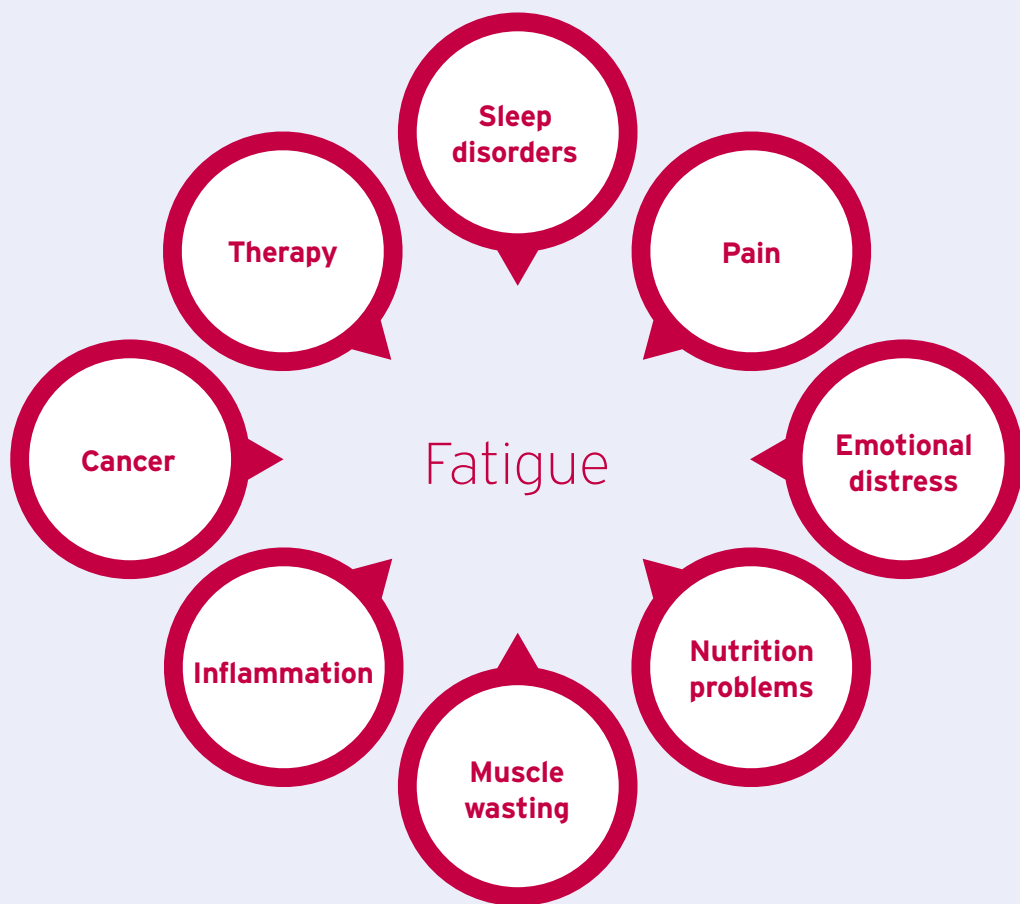
The following questions might help you to find out about being fatigued and the severity of it:

	not at all ▼	very much ▼
Do you feel		
• weak all over?	_____	_____
• listless ('washed out')?	_____	_____
• tired?	_____	_____
Do you have		
• trouble starting things because you are tired?	_____	_____
• trouble finishing things because you are tired?	_____	_____
• less energy?	_____	_____
Are you		
• unable to do your usual activities?	_____	_____
• too tired to eat?	_____	_____
• frustrated by being too tired to do the things you want to do?	_____	_____
Do you need		
• to sleep during the day?	_____	_____
• help doing your usual activities?	_____	_____
Do you have to limit your social activity because you are tired?	_____	_____

Please mark the lines accordingly.

Causes of fatigue

The exact cause of fatigue is not known, but it can be assumed that cancer-related fatigue has many causes:



It is important to find and treat the causes that may contribute to your fatigue. Any small step can help to ease your symptoms and to feel more comfortable.



Combat fatigue and get your energy back

Good news: You can do a lot to combat fatigue and get your energy back



Eat a healthy and full balanced diet



Stay physically active



Manage your energy resources



Improve your sleep



Deal with your emotions and stress



Help yourself in cancer treatment-related fatigue and stay in a good nutritional status

You have already learned that fatigue may result from poor nutrition but may also impair your nutritional status due to reduced energy reserves and ability to care for proper nutrition.

Therefore, one of the most important things you can do is to pay attention to your diet and a stable weight optimally from the beginning of the disease. Early nutrition support in case your oral intake is compromised may help to stabilise your weight and provide sufficient energy and nutrients for your body to cope with cancer effectively and support treatment on the road to recovery.



Good nutritional status



Reduced weight-
and performance losses



Less severe fatigue and better
performance status

How you can find out the need for nutrition support

Questions you may ask yourself

Do I have problems preparing my meals?	<input type="checkbox"/> no/mild	<input type="checkbox"/> moderate	<input type="checkbox"/> severe	<input type="checkbox"/> very severe
Do I have symptoms impairing food intake, e.g. nausea, mucositis, dysphagia, taste and smell alterations?	<input type="checkbox"/> no/mild	<input type="checkbox"/> moderate	<input type="checkbox"/> severe	<input type="checkbox"/> very severe
Do I avoid certain foods or have I changed meal habits?	<input type="checkbox"/> no/omission of few foods	<input type="checkbox"/> minor changes in meal habits	<input type="checkbox"/> major changes in meal habits	<input type="checkbox"/> nearly no food at all
Do I eat at least three main meals and 1-2 snacks per day?	<input type="checkbox"/> at least three main meals and 1-2 snacks per day	<input type="checkbox"/> mostly only three main meals per day	<input type="checkbox"/> less than three main meals per day	<input type="checkbox"/> nearly no food at all
Do I eat less since cancer treatment started?	<input type="checkbox"/> no - 100% of what I ate before	<input type="checkbox"/> 75% of what I ate before	<input type="checkbox"/> 50% of what I ate before	<input type="checkbox"/> 25% or less of what I ate before
Have I lost weight in the last 4 weeks?	<input type="checkbox"/> no - weight is stable	<input type="checkbox"/> up to 2%	<input type="checkbox"/> up to 5%	<input type="checkbox"/> up to 10%



You should talk to your doctor about the results of this questionnaire. It is important for him to know if side effects of treatment occur and impairments of food intake are present.



Tips for coping with cancer-related fatigue

You will find many helpful tips on the following pages to alleviate your complaints and to be adequately supplied with nutrients during cancer treatment.

1. Eat a healthy and full balanced diet

- Take care of a healthy and full balanced diet from the beginning of your cancer disease. Your body needs enough calories and nutrients, especially protein, to support the effectiveness of your treatment and your ability to cope with the side effects.
- Ideally, you should eat a varied and healthy mixed diet with lots of fruit, vegetables, wholemeal and dairy products, but also fish, meat and eggs.
- Eat small meals and snacks throughout the day.

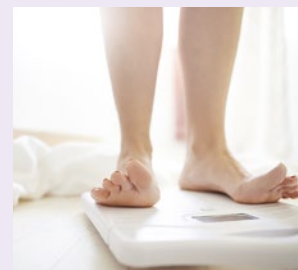
When energy is lacking for meal preparation

- Prepare meals when you have the most energy and plan extra portions to keep in the freezer.
- Buy healthy but convenient food (like pre-cut fruit and vegetables).
- Take advantage of a delivery service when possible.
- Ask family and friends for support when your energy level is very low and you have trouble doing your regular activities.



Tips to maintain a healthy weight

When food intake and composition is impaired



For many people, adequate nutrition and protein intake is not possible despite a balanced diet or enrichment of usual meals. In this case energy and protein-rich sip-feeds (oral nutritional supplements, ONS) offer the body good support in obtaining the nutrients it needs. With these, even large gaps in nutrient supply can be closed in a targeted way.



Did you know that low recent protein intake (< 1 g/kg/d) in cancer patients undergoing chemotherapy is associated with a twofold higher risk of cancer-related fatigue?

Supplements needed to fill the gap



1x

≥ 2x



Your nutritional gap*

*reduced amount compared to your usual food intake

Sip-feed is usually a liquid with a rounded flavour containing all the nutrients such as carbohydrates, fats, proteins, minerals, vitamins and trace elements. Sip-feed preparations are balanced, i.e. they deliver all the nutrients the body needs, in exactly the right quantity. Therefore, they can be consumed in addition to normal food but are also suitable as the patient's sole nutrition.



Oral nutritional supplements may be beneficial

Oral nutritional supplements are proven to have beneficial effects for cancer patients, including:

- ✓ Augmenting the nutritional intake
- ✓ Retaining and improving your appetite, which may help increasing quality of life
- ✓ Enhancing treatment tolerance
- ✓ Lowering hospital admissions

Practical tips to incorporate oral nutritional supplements into daily meal planning

- Oral nutritional supplements are perfect snacks between meals, but may also be a good start in the morning or a bedtime treat.
- Some patients may like variation in temperature
 - Gently warmed to make hot chocolate
 - Frozen in an ice cube tray
- Oral nutritional supplements* can be included into food and drinks all over the day:



Breakfast

Milk used for cereal, porridge, scrambled eggs or omelette (whisk into mixture before cooking)



Lunch/Dinner

Pureed meals (make up to required consistency as advised), mashed potatoes, cream soup, sauces



Dessert

Cream or condensed milk to accompany desserts, rice pudding, custard, yoghurt (plain or fruit), mousse



Drinks

Hot drinks: Tea, coffee, hot milk, hot chocolate or malted drinks

Cold drinks: Milkshakes or smoothies

*ONS with neutral flavour go perfectly with savoury dishes. Recipes for sweet meals may be enriched with neutral tasting ONS as well as sweet flavours.

2. Stay physically active



While a few years ago, people with cancer were often told to rest and reduce their physical activity, newer research has shown that exercise

- is safe and possible at any time during or after treatment,
- may ease the adverse effects of treatment, and
- helps in recovery and rehabilitation when cancer therapy has ended.



Experts recommend:

- Try to be physically active for 30 minutes on most days.
- Choose an activity you like doing most.
- Both aerobic exercise (like walking or cycling) and strength training (like lifting weights) seem to be effective.



Studies show that exercise is one of the best treatment options for cancer-related fatigue.



What you should consider:

- Before you start: Talk to your health care team about how to exercise safely.
- Start slowly choosing 5-10 minute units of exercise and begin with light exercise like walking, swimming or yoga.
- Take your time for rest periods and adapt the training to the daily energy level.
- Be careful: Stop and rest if you feel any inconvenience.



3. Manage your energy resources



- Plan your day and do not overload it. Plan enough rests and save energy for the most important activities of the day.
- Arrange your home so that you have small distances and few stair-steps to do your regular activities.
- Accept help from your family or friends with housework, child care, shopping, gardening.
- Don't forget to plan rests when you are out of home.

4. Improve your sleep



Getting an adequate amount of sleep every night can give you more energy.

If you have problems with sleeping try the following:

- Maintain a consistent bedtime and wake up at the same time every day.
- Regular exercise may help you get better sleep.
- Carry out relaxing activities before bed (e.g. listening to music or reading).
- Keep the bedroom quiet and temperature regulated.
- Avoid caffeine and nicotine for at least 6 h before bedtime.
- Drink alcohol only in moderation and avoid use for at least 4 h before bedtime.
- Avoid napping before bedtime.
- Do not drink fluid in excess in the evening to avoid waking up to go to the toilet at night.



5. Deal with your emotional distress



A cancer diagnosis may cause tremendous psychological distress in people with cancer and in their family members. For some people, it can be overwhelming and absorbing the body's energy.

These tips can help yourself cope with your stress and emotions:

- Get emotional support: Talking to someone about your feelings can help you deal with stress and anxiety.
- A support group for people with cancer may help you find answers to a lot of your questions about dealing with your disease.
- Change or stay away from situations that cause you additional stress.
- Distract yourself by doing activities you like, performing exercise, playing games or talking with friends.
- Focus on positive things and things you can control.






Talk to your doctor when you cannot manage your sleeping disorders by yourself and when problems like depression, anxiety and stress disturb your sleep and drain your energy.

Products to help you eating a full balanced diet and maintain a healthy weight

Fresenius Kabi offers a range of products for nutrition support.

This range of products is designed to support you through times when eating normal food is impaired and you are lacking energy. Oral Nutritional Supplements (ONS) are an effective source of nutrients in a balanced formulation and concentrated form. They are high in energy and protein and contain all the necessary micronutrients in a concentrated format. They are available in various forms including as flavoured drinkable (sip-feeds) or spoonable food.

Product	Product features	Recommended dose per day
Fresubin 2 kcal DRINK Fresubin 2 kcal Fibre DRINK	<ul style="list-style-type: none"> High-caloric, high protein ONS: 400 kcal and 20 g protein per 200 ml bottle Available with prebiotic fibre as well as without fibre Flavours: Vanilla, Chocolate, Cappuccino, Apricot-Peach, Toffee, Fruits of the Forest, Lemon, Neutral, Mushroom, Tomato-Carrot, Asparagus 	<ul style="list-style-type: none"> 1 bottle in patients eating 75-100% of usual intake 2 bottles in patients eating 50-75% of usual intake
		
Supportan DRINK	<ul style="list-style-type: none"> ONS high in EPA from fish oil: 1 g EPA per 200 ml bottle with 300 kcal and 20 g of protein Adapted to the specific metabolic changes in cancer cachexia Flavours: Cappuccino, Tropical Fruits, Chocolate, Pineapple-Coconut 	<ul style="list-style-type: none"> 1-2 bottles in patients eating 75-100% of usual intake Combined with 1 bottle of another ONS in patients eating 50-75% of usual intake
		

Product	Product features	Recommended dose per day
Fresubin 5 kcal Shot	<ul style="list-style-type: none"> Low volume, high-caloric ONS based on fat: 120 ml bottle contains 600 kcal For patients with low volume tolerance 	<ul style="list-style-type: none"> 3-4 x 30 ml shots per day
		
Fresubin 3.2 kcal DRINK	<ul style="list-style-type: none"> Low volume high-caloric, high protein ONS: 125 ml bottle contains 400 kcal and 20 g protein Flavours: Vanilla-Caramel, Hazelnut, Mango 	<ul style="list-style-type: none"> 1 bottle in patients eating 75-100% of usual intake 2 bottles in patients eating 50-75% of usual intake
		
Fresubin 2 kcal Crème	<ul style="list-style-type: none"> Semi-solid spoonable ONS with a creamy consistency High in calories and protein: 250 kcal and 12.5 g protein per 125 g cup Flavours: Chocolate, Vanilla, Wild Strawberry, Cappuccino, Praliné 	<ul style="list-style-type: none"> 1-2 cups in patients eating 75-100% of usual intake 3-4 cups in patients eating 50-75% of usual intake
		
Survimed OPD 1.5 kcal DRINK	<ul style="list-style-type: none"> Designed for easy absorption, high in energy and high in hydrolysed protein: 300 kcal and 15 g of Protein per 200 ml bottle. Flavour: Cappuccino 	<ul style="list-style-type: none"> 1-2 bottles in patients eating 75-100% of usual intake 3-4 bottles in patients eating 50-75% of usual intake
		



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