

Why an energy and protein-enriched diet?

During illness or medical treatment a higher amount of energy (fuel) and protein (building body tissue) intake is necessary to prevent or stabilize unintentional weight loss, curing major wounds and/or operations and recovery in general. The intake of food and beverages can be reduced due to symptoms such as, pain, decreased appetite, altered taste and smell, e.g. This together can lead to (the risk) of malnutrition. In this leaflet you can find practical information on how to achieve an optimal protein and energy intake.

Malnutrition

Malnutrition is a common problem during hospital admission. About one in three patients show an increased risk of malnutrition. When food intake is decreased due to illness, loss of appetite and/or surgery, you will unintentionally lose weight. This loss of body weight mainly consists of muscle mass which further increases the risk of malnutrition. Malnutrition negatively affects illness as recovery decreases, an infection risk increases and overall physical function can decline. This can even result in a longer hospital stay. Malnutrition can also occur in overweight people. A diet with sufficient protein and energy is important to prevent or treat malnutrition and improve recovery!

Your body weight

Keeping track of your weight is a good tool to determine if you are eating enough. During illness and treatment it is important not to lose (further) weight. Sometimes it is necessary to gain the weight that you lost. You can monitor your weight by weighing yourself once or twice a week in the morning before breakfast. Always try to weigh on the same scale and at the same time. Write down your weight so you know if your weight changes. If the weight decreases, contact your doctor or dietician. Keep in mind that gaining weight takes time. The dietitian can tell you what is a feasible goal for you at that moment.

Exercise

In addition to a protein-rich diet, exercise is an important part of the treatment of malnutrition. When you are ill most of the time you move less and therefore you use less muscles than usual. This leads to muscle breakdown. Building muscles takes a lot of time. That is why it is important to prevent muscle loss as much as possible. Therefore it is important that you exercise daily when possible. Exercise means any form of effort. Below are some tips:

- Walk regularly. When you are less mobile try to walk a bit through the house. You can also walk with a tool, such as a walking stick or walker.
- Take the stairs instead of the elevator as much as possible or go for a bike ride.
- In general. Start with a few minutes of exercise a day and try to extend the movement every day up to half an hour a day.
- Make sure to spread your exercise evenly throughout the day. Alternate moments of movement with moments of rest.
- For guidance in the field of movement, you can contact a physiotherapist or specialized gym.

Protein

Proteins are the building blocks for your body. They are necessary for building and maintaining muscles and recovery. Proteins are mainly found in meat, fish, vegetarian meat substitutes, egg, cheese, dairy products, nuts and legumes. Weight loss, illness, surgery and wounds require extra protein for recovery. It is important to distribute the proteins evenly throughout the day to support muscle building. The dietitian can tell you what your personal protein requirement is.

Energy

Energy (calories) is the fuel for your body. Among other things, energy is necessary to move and to keep the body warm. In case of illness, your body works extra hard on recovery and you will need extra energy. Energy is mainly supplied by carbohydrates (sugars and starch) and fats. Proteins also provide energy, but proteins are mainly used as building material instead of fuel.

The dietitian

The dietitian is the expert in the field of nutrition. You may have a different diet or a food allergy. Try to combine the advices given below with your own diet as much as possible. If you have any problems or questions, you can ask your doctor for a referral to a dietitian. This may also be necessary if you continue to lose weight while following the advice.

General advice

The following advice can help you eat enough:

- Try to eat frequent meals: eat at least six times a day.
- Use as many full-fat products as possible, such as full-fat yogurt, full-fat milk, and full-fat cheese (48+).
- Use no lean, diet or light products.
- Drink 1.5 – 2 liters per day. Coffee, tea and water do not provide energy and proteins. Instead, use full-fat dairy products, lemonade syrup or fruit juice.
- Use plenty of butter or margarine on your bread.
- Take your time eating and eat slowly.
- Try to eat in a quiet environment.
- Cook several batches and freeze what's left.

Advice for eating problems

Read here our advice for loss of appetite, dry mouth, chewing or swallowing problems, nausea, a feeling of fullness or change in taste and view the example of a protein and energy rich menu.

Decreased appetite

Eat small portions spread over at least six times a day.

Take a cup of broth half an hour before a meal to stimulate the appetite.

Take the dessert half an hour to an hour after the hot meal or during the evening.

Dry mouth

Take small sips of water regularly.

Use butter, cream, gravy and sauces with the hot meal.

Chew chewing gum or suck on an ice cube or drink soda.

Use fresh and sour products, such as pickles, pickled onions, apple, orange, tomato, cucumber, pineapple, buttermilk and yogurt.

Chewing or swallowing problems

Chop the food finely or grind it fine with a blender or food processor.

Use soft fruits, such as banana, pear and peach. Make a smoothie out of this.

Boil potatoes and vegetables well. Choose soft vegetables, such as carrots and cauliflower.

Add plenty of cream, gravy or sauce.

Use liquid products. Consult your dietitian for information on liquid nutrition with enough protein and energy.

Nausea

Prevent an empty stomach by eating small foods regularly (at least six times a day).

Use cold foods, such as cold cuts, instead of a piece of meat with the hot meal.

If you don't like the hot meal, have a sandwich or a salad instead.

Avoid strong-smelling products, such as onion and garlic.

Drink enough.

Fullness

Eat small portions spread over at least six times a day. Only take products that are high in protein and energy.

Liquid food (containing protein and energy) can sometimes make you feel less full.

Do not eat and drink at the same time.

Take the dessert half an hour to an hour after the hot meal or during the evening.

Taste change

Medication or treatment can change your taste.

Try different foods. Some things that you didn't like before you might like now.

Drink enough.

Provide good oral care.

Advice per eating moment

Below you will find tips to vary with per meal time.

Bread meal

Take at least one, but preferably several slices of bread.

Also take currant bread, rye bread or nut bread. Instead of a slice of bread, you can also vary with cheese-onion bread, a bagel, a bake-off bread, a currant bun, a soft bun, a muesli bun, a sweet roll or a (ham-cheese) croissant.

You can replace one slice of bread with two crackers or two rusks with butter and cold cuts or cheese. Spread your bread generously with butter or margarine.

Spread the bread generously with double toppings. For example, combine two types of toppings, such as cheese with salami, peanut butter with sprinkles or ham with cheese spread.

As a variation on bread, try a French toast, sandwich, pancake, sausage roll or a well-filled meal soup. Take a full dairy product with every bread meal, such as full-fat (chocolate) milk, full-fat cottage cheese, full-fat yogurt, sweetened yogurt drink, full-fat custard or (ready-to-eat) porridge.

Put some extra ingredients on or with the sandwich, such as:

A boiled or fried egg, omelette or scrambled egg.

Fish, such as salmon, sardines, herring, tuna.

A salad, such as egg salad, chicken curry salad, tuna salad, meat salad, salmon salad or Russian salad.

A warm snack, such as croquette, frikandel, frankfurters, hamburger, bami slice, nasibal, croquette or portion of bitterballen.

Chicken or veal ragout.

Hot meal

Meat, fish or variety

A protein-rich meal contains at least one serving (100 grams) of meat, fish, chicken, egg or a variation, such as:

(cream) cheese, mozzarella, ricotta, feta or brie.

Ready-to-eat vegetarian substitutes, such as Vales, Tivall, Quorn or soy cubes.

Tofu or tempeh.

Unsalted nuts or legumes.

For variation, use cold meat or fish or chicken.

Potatoes, rice, pasta and legumes

As an alternative to boiled potatoes you can also think of:

Mashed potatoes prepared with whole milk, unwhipped cream, a lump of butter, margarine or oil.

Baked or fried potatoes.

Brown rice, rice with nuts or white rice.

Pasta, such as macaroni, spaghetti, or stuffed pasta;

Mi or Mihoen.

Brown or white beans, lentils or capuchins.

Tarly.

Couscous.

Tacos or wraps.

Quinoa.

Vegetables

Frozen vegetables, canned or potted vegetables can be used as an alternative to fresh vegetables.

Finish cooked vegetables with a lump of margarine, butter, oil or a sauce.

Fry vegetables in oil or butter.

Raw vegetables give early saturation. Do not use raw vegetables often.

Add grated cheese, ham or nuts to the vegetables, if desired. This fits, for example, with chicory, leek, endive and cauliflower.

Gravy or sauce

Add gravy or sauce to vegetables or meat.

You can think of ready-made sauces, such as peanut sauce, cocktail sauce, garlic sauce, cream sauce, mushroom sauce, curry sauce, mayonnaise or ketchup.

Dilute the gravy as little as possible with water.

Add extra cream to the gravy or sauce.

Alternatives to the hot meal

If you have little energy or time to cook yourself, there are a number of ways to get a hot meal.

Cook for two or three days and use the freezer.

Ask family or friends to cook for you.

Eat a ready to eat meal. Supermarkets sell ready-to-eat meals.

Butchers often sell chilled meals. Preferably choose a meal with meat, fish or a vegetarian variation.

Have dinner with family, friends or at the care center or nursing home nearby.

Have meals delivered at home by meal services, such as Tafeltje Dekje, Mealservice.nl, Apetito, De DiepvriesMan, Bofrost, Lekker Thuis or 5ersa an Tafel.

As a change to the meal, you can also eat a rich/meal soup or salad. Preferably choose a salad with chicken, fish or a vegetarian variation like nuts and legumes.

If you opt for soup, choose a soup that contains vegetables, legumes, meat and/or a binding agent. If desired, add unwhipped cream to the soup.

Dessert

You can also take the dessert half an hour or an hour after the hot meal.

Add honey, sugar, sweet sauce or (un)whipped cream to your dessert.

For dessert, use for example:

Full-fat yogurt or cottage cheese.

Full custard.

Pudding.

Fruit yogurt, preferably sweetened with sugar.

Ice cream.

Full Bulgarian, Greek and French yogurt.

Chocolate mousse.

Applesauce, compote or fruit. Don't choose this too often. These products contain almost no protein.

Snacks

It is important to have a snack at least three times a day. Some snacks contain a lot of protein. Other snacks contain less protein or no protein. Choose a snack with a lot of protein at least twice a day.

High protein snacks (5 grams or more):

A block of cheese (48+) or a slice of cold cuts or sausage.

Sandwich, cracker, rusk or toast with a meat or fish salad, cheese or cold cuts.

Warm snacks, such as croquette, frikandel, hamburger, bami slice, nasibal, croquette, (mini) spring roll, pizza (sandwich) or a portion of bitterballen.

Sausage roll, sausage roll, cheese roll or frikandel sandwich.

A bifi sausage.

(unsalted) Nuts or peanuts.

A pudding bunl.

A currant bun or muesli bun.

A bowl of full-fat yogurt or full-fat cottage cheese. You can add cruesli, muesli, cornflakes, (un)whipped cream, sugar or honey

Snacks with little or no protein (less than 5 grams):

Pretzels or chips, possibly with a dip.

Russian salad.

Gingerbread with margarine or butter.

Cookies.

Chocolate, bonbons and fudge.

Pastry, cake, muffin, donut, "appelflap" or cream puffs.

Ice.

Fruit, possibly with sugar and/or whipped cream.

A bowl of full custard.

Drinks

Choose one or more drinks per meal. Preferably do not use lean or light products. Preferably take a dairy product, because dairy products contain protein Try to drink 1.5 -2 liters per day. You may only use alcoholic beverages in consultation with your attending physician. . You can think of the following drinks:

Whole milk, whole chocolate milk.

Drinking yogurt sweetened with sugar.

Coffee with sugar and/or clotted cream and/or full-fat (coffee) milk.

Cappuccino or Wiener coffee.

Tea with sugar and/or milk.

Ice Coffee, fruit juice, soft drink, lemonade syrup.

A ready-made milkshake (available at the supermarket, snack bar or fast food restaurant).

Smoothie made from fruit with full-fat yogurt, full-fat milk or whipped cream. Add sugar or honey if desired.

Other protein-rich products

In the supermarket you can also buy special products with a lot of proteins. These products are not reimbursed by the health insurer. Some examples are:

Building blocks® and Easy to eat®. Building blocks® are small protein-rich pastries and Easy to eat® is a protein-rich mousse. Both products are available in different flavors. You can buy these products at the Jumbo. They can be found in the freezer compartment. You can find out where to buy this product near you at www.innopastry.com.

Melkunie Breaker High Protein®. This is a protein-rich yogurt in a squeeze package.

Vifit Protein®. This is a protein-rich drinking yogurt in a 330 ml package.

Arla Protino®. This is a fresh dairy drink in a bottle (125 ml). You can order this product online at Albert Heijn.

Melkunie milkshake®. This is a milk drink in a bottle (200ml).

Skyr. A yogurt that originally comes from Iceland.

In the table below you can see how much protein is in different protein-rich products.

		Protein in (grams) per product.
Meat	100 grams	20
Fish	100 grams	18
Beans, brown/white 1 serving spoon	60 grams	5
Egg 1 piece	50 grams	7
Cheese for 1 slice	20 grams	5
Nuts and peanuts 1 handfull	20 grams	5
(Chocolate) milk 1 glass	150 ml	5
Yogurt drink 1 glass	150 ml	4
Yogurt 1 bowl	150 ml	6
Porridge 1 dish	150 ml	5
Custard 1 dish	150 ml	4
Cottage cheese 1 dish	150 ml	11
Skyr 1 dish	150 ml	14-16
Vifit Protein® 1 bottle	330 ml	17
Arla Protino® 1 bottle	125 ml	14
Building block® 1 pastry	58 grams	8
Easy to eat® 1 pastry	58 grams	8
Starbucks iced coffee®	220 ml	6 AH/Jumbo
Chocomel vol®	200 ml	6.6 AH/COOP/Jumbo
Melkunie High protein breaker®	100 ml	5.7 AH/COOP/Jumbo
Melkunie Protein quark®	100 gr	10 AH/COOP/Jumbo
Melkunie milkshake®	100 ml	4 AH/COOP/Jumbo
Melkunie Protein shake®	100 ml	9 AH/COOP/Jumbo
Vifit good morning®	200 ml	7 AH/Jumbo
Kips mini skewers®	20 gr	5 AH
Clif Bar®	68 gr	9 AH/Jumbo
power bar 30% protein plus®	55 gr	16 AH/Jumbo
Eat natural super granola protein®	100 gr	18.4 AH/COOP/Jumbo
The protein ball®	45 gr	7 AH
Nature valley protein®	100 gr	26 AH
Breyers delight ice cream®	100 gr	4 AH/Jumbo
Eat natural protein packed bar®	45 gr	11 AH/COOP/Jumbo
RAW Organic Food Henna protein powder®	10 gr	5 COOP
Lindahls Kvarg®	150g	16.5 Jumbo
Geska Swiss cheese sprinkles®	20g	12,6 AH/Jumbo

When normal nutrition is not adequate

Sometimes it is not possible to maintain your body weight with normal foods. It may be necessary to use medical nutrition. Medical foods contain extra energy and protein. Medical foods are, for example, oral nutritional supplements or tube feeding (liquid food that is fed directly into the stomach by a feedingtube).

Oral nutritional supplements(drinkvoeding)

Oral nutritional supplement are beverages in a 125 ml or 200 ml bottle. Oral nutritional supplement contain energy, protein, vitamins and minerals. There are different types of them with different flavors, some based on milk, yogurt based, juice based and soup based. Oral nutritional supplements can be used as a supplement or as a complete food intake. Do you want to use oral nutritional supplements? Always ask your doctor or dietitian first.

Nutrition after recovery

Once you have recovered and/or regained your body weight, you can continue to eat healthy foods. It is then often no longer necessary to use full products and to eat extra. Try to maintain your usual body weight with a healthy diet.

Example of a protein and energy rich menu

This menu is an example of how you can compose your menu. Variation is important. The menu contains about 2000 kilocalories and a maximum of 85 grams of protein. This is not enough for everyone. The dietitian can tell you what you need.

Breakfast

1 slice of bread generously spread with butter or margarine and double covered with cold cuts and/or cheese (48+)
1 cup or dish (150 ml) of a full-fat dairy product

In between

1 glass of tea/coffee with sugar and/or milk, fruit juice, lemonade syrup, soft drink and/or a full dairy product
1 slice of gingerbread with butter/margarine and/or 1 portion of fruit

Lunch

2 slices of bread generously spread with butter or margarine and double covered with meat products and/or cheese (48+)
1 cup or dish (150 ml) of a full-fat dairy product

During the afternoon

1 glass of tea/coffee with sugar and/or milk, fruit juice, lemonade syrup, soft drink and/or a full dairy product
2 cubes of cheese, 2 slices of cold cut meat or an egg

Hot meal/diner

1 portion of meat, fish or meat substitute (100 grams)
fried in butter, liquid margarine or oil
3-4 small potatoes or serving spoons of pasta, rice or variety
3-4 serving spoons of vegetables with a sauce or a lump of butter
1 cup or dish (150 ml) of a full-fat dairy product

During the evening

1 glass, tea/coffee with sugar and/or milk, fruit juice, lemonade syrup, soft drink and/or full dairy product
1 handful (20 grams) unsalted nuts of your choice