



Narodowe Centrum Edukacji Żywieniowej



PEPTIC ULCER DISEASE

Peptic ulcer disease is characterised by the formation of gastric or duodenal ulcers, i.e. a break in the mucous membrane reaching down to the muscular layer. It is a chronic condition, which means that after an asymptomatic phase that can last from several weeks to even several months, relapses occur. Ulcers tend to form in the same site. The most common symptoms include pain or discomfort in the upper region of the abdomen occurring at night or early in the morning. Pain can also be felt 1 to 3 hours after a meal.

The most common causes of peptic ulcer disease are:

- Helicobacter pylori infection,
- non-steroid anti-inflammatory drugs (NSAIDs)

Less common causes include:

- non-specific inflammatory bowel disease (e.g., Crohn's disease),
- complications following cancer treatment (due to chemotherapy, radiation),
- stress (mainly in intensive care units).

Diet

Diet supports pharmacological treatment of peptic ulcer disease and may alleviate its symptoms. Modification of diet is especially recommended in the exacerbation phase and consists in introducing easily digestible diet and eliminating products and foods that are poorly tolerated. The role of bland diet is to bring relief to the digestive track by facilitating the digestion and absorption of nutrients. In the remission phase, bland diet should be expanded to ensure that the rules of healthy eating are applied, taking into account the individual tolerance of particular products. Diet should always be adapted to the individual needs, as the symptoms of the disease can vary greatly. Therefore, consider consulting a dietitian who will help change your eating habits.



Key nutritional guidelines

- 1 Eat 5 to 6 meals a day at regular intervals, i.e. every 2 to 3 hours. Do not skip breakfast. Have your last meal 2 to 4 hours before bedtime.
- 2 Eat in quiet atmosphere without rush, at a table. Avoid watching television or reading a newspaper at the same time. Chew your food well.
- 3 To bring relief to your digestive track, apply the right methods of food preparation, such as cooking or steam-cooking, stewing without pre-frying, baking in foil, parchment paper or heat-resistant dish, without any added fat.
- 4 Eat food at moderate temperature not to irritate stomach walls and avoid eating hot and cold food.
- 5 Eliminate products that are rich in fiber, accumulate in your stomach for a long time, trigger stomach acid secretion, accelerate bowel peristalsis and cause flatulence, such as fatty and smoked products, fried food, legumes, alcohol.
- 6 Avoid too much salt and hot spices, as they may irritate the mucous membrane in your stomach.
- 7 Limit the amount of whole grain products in your diet, as well as raw vegetables and fruit, adapting it to your individual level of tolerance.
- 8 Apply methods that improve fiber tolerance:
 - eat peeled vegetables and fruit, and remove seeds,
 - separate and remove hard and fibrous parts of plants (e.g. from beans, asparagus or turnip),
 - extend cooking time,
 - grind down by blending or mashing.
- 9 Drink at least 1.5-2 L of fluids daily (besides water contained in your meals and products). During the exacerbation phase, quit drinking strong coffee and tea.
- 10 On the other hand, during remission phase, gradually expand your diet by introducing products one by one and in small quantities to see how your body responds to them. If symptoms re-occur, eliminate the problematic product again.



Physical activity

- 1 Adapt your physical activity to the level of your abilities and comfort. Remember that simple activities, such as walking, climbing stairs, active housework, activities with children, are also beneficial.

Other elements of lifestyle

- 1 Eliminate alcohol from your diet. Alcohol may irritate the gastric mucosa and stimulate stomach acid production.
- 2 Quit smoking. Smoking makes ulcer wound healing more difficult and increases the risk of relapse. In addition, smoke irritates the gastric mucosa.
- 3 Stress intensifies peptic ulcer disease symptoms. If you are under stress, learn how to manage it effectively. Some relaxation techniques based on mindfulness and meditation may help, as well as









References:

1. Lange E., Włodarek D. (red.): Współczesna dietoterapia. Wydawnictwo Lekarskie PZWL, Warszawa, 2023.
2. Grzymisławski M. (red.): Dietetyka Kliniczna. PZWL, Warszawa, 2021.
3. Mach T., Zwolińska-Wcisło M., Palka M.: Zasady postępowania w dyspepsji, chorobie wrzodowej i infekcji *Helicobacter pylori*. Wytyczne Kolegium Lekarzy Rodzinnych w Polsce oraz European Society for Primary Care Gastroenterology (ESPCG). Kolegium Lekarzy Rodzinnych w Polsce, Kraków, 2016.



Recommended and not recommended products in peptic ulcer disease

Remember that the overall profile of your diet, the composition of individual meals and the quality of individual products are all important aspects. The products listed as recommended should be well tolerated. However, if you experience any discomfort after their consumption, some of these foods should also be eliminated from your diet. Not recommended products are generally considered difficult to digest, but those that have high nutritional value and are well tolerated by your digestive system are worth including in the diet.

Group of products	Recommended	Not recommended
Vegetables 	<ul style="list-style-type: none"> peeled and thermally processed vegetables (cooked/baked): carrots, parsley root, beetroot, pumpkin, baby marrow, zucchini, baked bell peppers (peeled), broccoli, spinach, young green beans, sugar snap peas raw: green lettuce, grated carrot with apple (carrots can be blanched), peeled tomato, chicory, brined pickles 	<ul style="list-style-type: none"> onion, leek, garlic cabbage, cauliflower, Brussels sprouts, radish raw cucumber, unpeeled bell pepper canned and in vinegar other pickled foods mushrooms
Fruit 	<ul style="list-style-type: none"> peeled, pureed and/or thermally processed fruit (cooked/baked): apple, pear, peach, banana, lingonberries, blueberries, apricots, mango, melon 	<ul style="list-style-type: none"> raw fruit: lemons, oranges, tangerines, grapefruit, limes, plums, cherries, sweet cherries, grapes, pears, currants small seed fruits, e.g. raspberries, figs, strawberries dried, candied, in syrups
Grain products 	<ul style="list-style-type: none"> bakery products: white bread, rusks fine-grained groats: millet, semolina, couscous, corn grits, fine barley, quinoa, amaranth white rice light pasta: wheat pasta, rice noodles instant oats, rice flakes, millet flakes corn crisps, rice wafers refined wheat flour, corn flour, rice flour, potato starch 	<ul style="list-style-type: none"> bakery products: whole grain bread, pumpernickel cereal flakes: rolled oats, barley flakes, spelt flakes, rye flakes wheat, rye and oat bran coarse-grained groats: bulgur, buckwheat, hulled barley rice: brown, wild, red whole grain pasta confectionery breads sweetened breakfast cereals, Muesli wholemeal, rye flour
Potatoes 	<ul style="list-style-type: none"> boiled, baked in foil (without added fat) 	<ul style="list-style-type: none"> served with fatty additives like cream or butter (e.g. puree) fried French fries, chips fried potato pancakes
Milk and dairy products 	<ul style="list-style-type: none"> milk up to 2% fat natural dairy products (sugar-free), up to 2% fat: yogurt, kefir, buttermilk, skyr, cottage cheese, soured milk skimmed and semi-skimmed curd cheese mozzarella light natural curd cheese 	<ul style="list-style-type: none"> whole milk condensed milk cream sweetened fruit yogurts/fromage frais, dairy desserts full-fat curd cheese processed cheese, soft cheese e.g. brie, camembert or roquefort feta cheese
Eggs 	<ul style="list-style-type: none"> soft-boiled eggs, poached eggs steamed scrambled eggs omelette fried without fat or with a small amount of fat 	<ul style="list-style-type: none"> hard-boiled eggs eggs fried in a large amount of fat, e.g. butter, bacon, lard eggs with mayonnaise or fatty sauces
Meat and meat products 	<ul style="list-style-type: none"> lean skinless meat, e.g. veal, chicken, turkey, rabbit moderate amounts of lean beef and pork (mid loin, tenderloin) lean cold cuts, preferably home-made, e.g. tenderloin, cooked ham, poultry cold cuts, roasted mid loin, roasted turkey/chicken breast 	<ul style="list-style-type: none"> fatty meats, e.g. beef, pork (ribs, chuck steak, ham hock), mutton, goose, duck fatty cold cuts e.g. gammon, salami, bacon, spam canned meat, offal cold cuts, e.g. brawn, pâtés, hot dogs, kabanos sausages, sausage, blood sausage
Fish, fish products and seafoods 	<ul style="list-style-type: none"> lean or fatty sea fish and freshwater fish, e.g. cod, sole, hake, blue grenadier, zander, bream, pike, perch, mackerel, salmon, halibut and carp 	<ul style="list-style-type: none"> fish in oil, e.g. herring smoked fish canned fish breaded fish fingers

Recommended and not recommended products in GERD

Group of products	Recommended	Not recommended
Legumes and legume products 	<ul style="list-style-type: none"> unsweetened soy drink natural soy yogurt natural tofu 	<ul style="list-style-type: none"> all, e.g. soybeans, chickpeas, peas, lentils, beans, broad beans legume spreads soy flour legume pastas (e.g. from beans or peas)
Fats 	<ul style="list-style-type: none"> plant oils: olive oil, canola oil, linseed oil butter and clarified butter mixtures of butter with vegetable oils with no palm oil soft margarines 	<ul style="list-style-type: none"> lard, сало (slanina) hard margarine (blocks) tropical oils: palm, coconut
Nuts and seeds 	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> nuts, e.g. walnuts, hazelnuts seeds (e.g. pumpkin, sunflower) salted, in chocolate, in caramel, honey, sprinkled, breaded, in chips
Sugar, sweets and salty snacks 	<p>In moderate quantities:</p> <ul style="list-style-type: none"> home-made yeast cake/apple pie kissels, jellies, unsweetened pudding sponge cakes, rusk, Challah low-sugar seedless fruit jams honey dark chocolate, at least 70% cocoa, in moderate quantities 	<ul style="list-style-type: none"> sugar, glucose-fructose syrup, fructose high-sugar confiture and jams milk and white chocolates, chocolate products sugar-free candies and unsweetened gums containing sugar alcohols such as sorbitol, mannitol and xylitol salty snacks ice-cream cream cakes, pies, cakes, chocolate bars, whipped cream, doughnuts, Angel wings candies, halva
Beverages 	<ul style="list-style-type: none"> still mineral water weak black, green or fruit tea vegetable broth herbal infusions cereal coffee, decaffeinated coffee kompots unsweetened plant drinks (e.g. from rice, oats or almond) 	<ul style="list-style-type: none"> natural coffee sparkling water flavoured 'waters' fruit juices and nectars sweet soda and non-carbonated drinks with added sugar/glucose-fructose syrup/fructose energy drinks alcohol drinks
Spices and sauces 	<ul style="list-style-type: none"> herbal pepper ginger, cinnamon, vanilla, cloves, caraway, allspice, saffron herbs, e.g. parsley, dill, lovage, marjoram, thyme, oregano, tarragon, basil, herbs de Provence, lemon balm, rosemary sweet paprika lemon juice, lime juice 	<ul style="list-style-type: none"> bouillon cubes salt (e.g. table salt, Himalayan salt, sea salt) spice mixtures containing large amounts of salt liquid spices to enhance flavour ready-made sauces mayonnaise hot spices: garlic, onion, pepper, chilli peppers/hot paprika mustard, horseradish, vinegar
Dishes 	<ul style="list-style-type: none"> soups based on weak vegetable or lean meat broths, cream soups meat and fish prepared using the recommended cooking methods instant oatmeal rice, groats and pasta from the recommended column, slightly sticky potato dumplings, Silesian potato dumplings, drop dumplings (boiled in water), water-boiled dumplings stuffed with lean meat or curd cheese, pancakes fried without oil 	<ul style="list-style-type: none"> soups based on fatty meat broths soups and sauces thickened with roux fast foods, e.g. fries, hamburgers, hot dogs, kebab, toasted open-faced sandwiches, pizza ready-made foods in jars, breaded breaded meat and fish ready-made food products in breadcrumbs, fatty sauces instant meals, e.g. sauces, soups
Technological processing of food 	<ul style="list-style-type: none"> boiling, steaming grilling (electric grill, grill pans, using special trays for meals prepared in charcoal/garden barbecues) baking in foil, parchment paper or under a cover without fat* no-fat frying* stewing without pre-frying <p>* Avoid using fat when preparing meals. However, small amounts of vegetable fat occasionally, e.g. olive oil or canola oil, are acceptable.</p>	<ul style="list-style-type: none"> deep frying stewing with prior deep-frying baking in large amounts of fat breeding

Quality menu ideas in peptic ulcer disease

BREAKFAST:

Soft-boiled eggs with vegetables and bread

- eggs
- olive oil
- lettuce
- wheat roll
- peeled tomatoes

LUNCH :

Oatmeal with baked apple

- instant oat flakes
- apple
- natural yogurt
- cinnamon

DINNER:

Pumpkin cream soup

- light poultry stock
- chicken
- pumpkin
- potatoes
- carrot
- parsley root
- parsley
- puff croutons

DINNER:

Baked cod in lemon sauce with rice and stewed zucchini

- cod fillet
- white rice
- zucchini
- natural yogurt
- lemon juice, dill



AFTERNOON SNACK:

Semolina with apricot mousse

- farina
- soy drink
- honey (optional)
- apricot (ripe)

SUPPER:

Tofu and beetroot paste sandwich with lettuce

- white wheat bread
- lettuce
- tofu and beetroot paste (natural tofu, cooked beetroot, olive oil, lemon juice, pepper, thyme)