## **DIET FOR GALLSTONES**

Gallstones mainly form when bile contains too much cholesterol: the latter accumulates and forms more or less large crystals that risk blocking the gallbladder. Note: hypercholesterolemia does not predispose to gallstones.

An excess of bilirubin (a pigment produced when red blood cells are destroyed) or the failure to empty the gallbladder can also cause the formation of crystals and trigger symptoms such as severe pain on the right side, stomach ache, nausea, vomiting, or dark urine.

Several factors can increase the risk of developing gallstones, such as a diet rich in fats and sugars, obesity, pregnancy, hormonal, metabolic, or liver disorders, and a positive family history of gallstones.

To prevent the formation of gallstones, it is necessary to take care of the liver. To do this, choose a healthy and balanced diet, rich in fresh fruits and vegetables:

• Consume foods rich in dietary fiber such as fruits (plums, figs, raspberries, etc.), fresh vegetables (artichokes, cabbages, eggplants, parsnips, etc.), legumes (lentils, chickpeas, beans, etc.), and whole grain foods (oats, quinoa, barley, etc.) which promote healthy digestion and help reduce cholesterol levels in bile.

• Opt for lean protein sources, such as skinless chicken, fish, low-fat dairy products, and plant-based protein sources.

• Prefer healthy fats found in avocado, nuts, seeds, fatty fish (herring, mackerel, sardines, etc.), and vegetable oils (such as olive oil and rapeseed oil).

• Do not hesitate to add herbs or spices such as basil, tarragon, chives, fennel, rosemary, thyme, curry, turmeric, cardamom, or even cumin.

According to some studies, magnesium may help prevent gallstones in the long term. Choose leafy green vegetables, pumpkin and sunflower seeds, almonds, cashews, bananas, etc.

To prevent gallstones in the long term, it is better to avoid certain foods that may increase cholesterol concentration in bile, promoting the formation of gallstones.

• Foods rich in saturated fats found in fatty meats, high-fat dairy products (including cheeses), and fried foods.

• Foods high in added sugars, such as sugary drinks, sweets, candies, and baked goods.

• Processed or ultra-processed foods, such as industrial snacks or ready-made meals, which are often high in saturated fats, added sugars, and additives.

 $\cdot$  Foods rich in salt, which can cause fluid retention and increase the risk of gallstone formation.

• Products made with refined grains (such as white bread, white pasta, white rice, etc.) that can cause rapid fluctuations in blood sugar and contribute to metabolic problems.

 $\cdot$  Spicy foods, hot sauces, and strong seasonings may irritate the gallbladder and worsen symptoms.

It is not necessary to completely avoid cholesterol-rich foods (such as eggs, offal, shellfish, and fatty meats).

Good hydration is essential to facilitate the elimination of any small stones. Consider drinking at least 1.5 liters of plain water per day throughout the day. In addition, fresh fruit juices rich in fiber and antioxidants help prevent the formation of stones. Some herbal teas may have beneficial properties and soothe the gallbladder, particularly chamomile, rosemary, and milk thistle infusions. Excessive consumption of certain beverages can indeed complicate the work of the gallbladder.

Excessive alcohol consumption can irritate the gallbladder and increase the risk of gallstone formation. Moreover, alcohol can impair liver function, which may also affect the production and flow of bile. Caffeine consumed in large quantities can also stimulate bile production and increase the risk of gallstone formation. Sugary drinks, especially those with added fructose, can contribute to the formation of crystals in the gallbladder. Energy drinks, often rich in caffeine and sugar, should be limited for the sake of the gallbladder and overall health, just like sodas, especially those with added sugars or artificial sweeteners.

In case of confirmed gallstones or micro-gallstones, avoid eggs and their derivatives (custard ice cream, mayonnaise, custard croissants, egg pasta, etc.) and foods rich in saturated fats.