**Gall-bladder and Gallstones**

### Symptoms

The gall-bladder stores and concentrates bile produced by the liver, until it is needed for the digestion of fats during a meal. The reservoir contracts and expels its contents into the narrow passageway of the global-bile duct and finally into the intestinal canal. Bile not only digests fats, but contains the wastes eliminated by the liver as it breaks down substances like drugs, hormones and proteins, and builds others.

Gallstones are the most common gall-bladder problem, capable of causing *colics* and *jaundice*. Stones in the gall-bladder usually go undetected for a long time, but once a larger stone passing through the global bile duct becomes lodged, it can cause intense *pain*, appearing as a sharp *cramp* just under the right ribcage, which recurs and subsides. In some cases, the pain will shoot into the right shoulder or back often there is accompanying *nausea* and *fever* with *chills*.

Not all lodged gallstones cause colics however. If the gallstones remain blocking the bile flow, jaundice results instead, causing yellow and itchy skin. The backup may cause the gall-bladder to inflame. The resulting infection causes aching under the right ribcage, *indigestion*, nausea and fever. A blockage near the end of the global-bile duct is the most frequent cause of an acute *pancreatitis*.

Bloating and pressure under the right ribcage are indications of liver and gall-bladder trouble and possible stone development. Mild symptoms of indigestion, gas and bloating from eating rich, oily or creamy foods high in fat content are often a sign of inadequate bile. This digestive trouble affects the absorption of all foods and hinders the assimilation of the fat-soluble vitamins A, D, E and K in particular. Pinching or aching just under the right ribcage, aching between the shoulder- blades, and a lasting bitter taste in the mouth are other signs of gall-bladder or liver trouble.

### Causes

Gallstone colics most typically occur after eating rich, fried foods, coffee or legumes. Most gall-bladder trouble is associated with a poor diet and a sluggish liver. When too little bile is produced, stones are more likely to form. Also, the longer bile remains in the gall-bladder, the thicker it becomes, increasing the likelihood of stones. Eating foods that stimulate the gall-bladder, such as the essential fatty acids, prevents the development of stones. These acids support the transport of cholesterol, and stimulate bile when production and release are poor. For this reason, the consumption of fats should be limited to natural, cold-pressed oils high in essential fatty acids, such as flax seed oil. Diets low in fiber and high in cholesterol from meat sources in particular are crucial in the development of cholesterol stones. Lack of fiber is a problem in the North American diet because so many products are refined-from white rice and pasta to white flour and breads.
Nutrition

The typical Western diet, low in fiber and high in animal fats, inhibits the absorption of bile acids by the liver. A poor diet also increases the occurrence of cholesterol and the formation of stones in the gall-bladder. A high-fiber diet is the key to the prevention of gallstones. Especially beneficial is water-soluble fiber, such as the pectin found in apples and carrots or the gums found in oat bran and dried beans. Water-soluble fiber binds cholesterol and harmful agents such as deoxycholic acid in the intestine and aids in their elimination. Deoxycholic acid, produced from bile acids by bacteria in the intestine, contributes to gallstone formation because it reduces the solubility of cholesterol. Avoid solid food for two days and drink distilled or spring water only. Then, add beetroot juice and apple juice for three days. Slowly start on solid foods, beginning with shredded raw apples and raw grated beet salad made with one tablespoon of fresh lemon juice and one tablespoon of olive oil. Avoid the intake of animal fat or artificially hardened fats such as margarine, shortening and the fats found in most processed foods, which stress the liver and gall-bladder. Gallstones are composed mostly of animal fat and cholesterol. Also, limit milk and milk products as the casein in dairy foods promotes gallstone formation. Good alternative protein sources to meat and milk are soy bean products such as tofu, as well as beans, lentils and whole grains. Soy bean products contain lecithin which helps reduce the risk of gallstones by keeping cholesterol and fats emulsified. Olive oil, which contains mono-unsaturated fatty acids, and nut and seed oils like flax seed or walnut oil, which contain the poly-unsaturated essential fatty acids, are beneficial to the gall-bladder. Use them daily on salads or in dishes like mashed potatoes. The fatty acids in these oils stimulate bile flow to flush out small stones and stimulate the production of the digestive enzyme lipase needed for fat metabolism for constipation take flax seed followed by 3/4 cup of olive oil. Artichokes and rhubarb stimulate bile flow and help heal gall-bladder inflammation. Bitters from lettuce, endive and chicory also stimulate bile flow.

Food allergies can cause gall-bladder disorders. Allergic inflammation causes swelling of the global-bile ducts, preventing bile from leaving the gall-bladder and setting the stage for infection and gallstone formation. Eggs are the most common allergen affecting the gall-bladder, followed by pork, onion, fowl, milk, coffee and citrus fruits.

Nutritional Supplements

Since the liver detoxifies via the production of bile, supplements should offer support to the liver and gall-bladder. Along with an improved diet, supplements help to prevent further attacks.

Vitamin E is an antioxidant which protects essential nutrients and is useful to help resolve gall-bladder disturbances. Lecithin is an essential ingredient in bile and emulsifies fatty substances. Lipotropic factors help prevent fats from depositing in the liver. The amino acid methionine and the B vitamins choline and inositol are all lipotropic factors necessary for lecithin formation. Vitamin C prevents stone
development because it plays a part in binding cholesterol in the bile juice and reducing blood-cholesterol levels. A lack of vitamin C also contributes to gallstone development.

**Daily Dosages**

- Vitamin E, with mixed tocopherols, 400 IU
- Lecithin, 3 tbsp. three times daily
- Lipotropic combination supplement, as recommended on the label
- Vitamin C, with bioflavonoids, 1,000 mg three times daily

**During a gall-bladder inflammation:**

Large amounts of vitamins C and E are necessary to reduce the effects of toxins on the body. These are also essential to the immune system and the mucous membranes.

- Vitamin C, with bioflavonoids, 1,000 mg hourly for several hours, then reduce to every few hours. If *diarrhea develops, reduce the dosage, as the vitamin C is no longer being absorbed.
- Vitamin E, with mixed tocopherols, 400 IU two to three times daily

**External/Physical Therapies**

Get an accurate diagnosis by a health practitioner before attempting any self-help therapies.

- With a gall-bladder colic, fast, keep warm and rest in bed.
- For an acute attack, apply hot compresses on gall-bladder, back and right shoulder blade.
- For colic and a chronic gall-bladder condition, apply hot flax seed compresses on liver area.
- For inflammation, apply cold milk wraps.
- Sitz-baths help to decongest and detoxify the intestinal tract.
- Detoxify liver and colon.
- Use a coffee enema for nausea, pain and fever.
- For an acute inflammation with severe colicky pain, jaundice and floating stools, see doctor before applying any compresses.

**Reflexology**

- Can often help clear blockages.

**Other Suggestions**
- Do not overeat. It is important to drink plenty of water (six to eight glasses daily).
- Laser therapy is now available for those who do not want surgery. The laser pulverizes the gallstones, which are then easily flushed out with the bile flow.

**Available Brand Name Products: Nutritional Supplements**

- Flax Oil (Flora)
- Flax-O-Mega 1000 mg (Flora)
- Udo’s Choice: Ultimate Oil Blend (Flora)
- Udo’s Choice: Ultimate Oil Blend Capsules (Flora)
- Pure E w/40% mixed tocopherols (Klaire Laboratories)
- Flax Seed Oil 1000 mg (Natural Factors)
- Flax Seed Oil Liquid (Natural Factors)