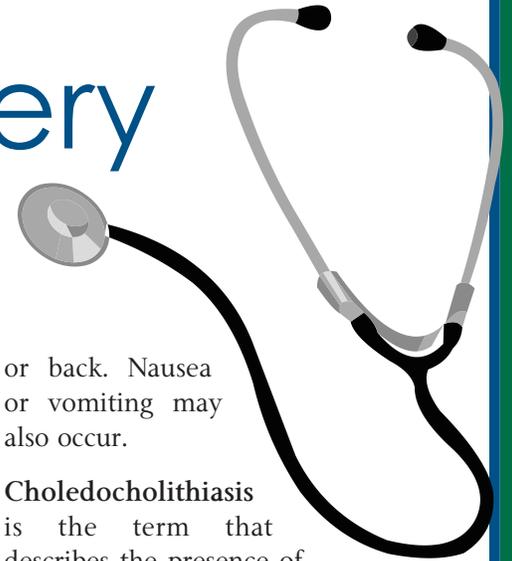
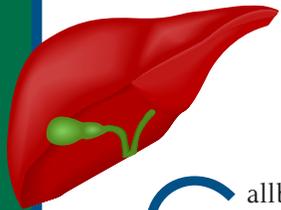


ON TRACK WITH BARIX

Support to Keep You On Track With a Healthful Lifestyle

Weight Loss Surgery & Gallstones



Gallbladder disease is common. 10-20% of U.S. adults have gallstones. These can exist with or without symptoms. Those who have weight loss surgery may be at greater risk for gallbladder disease due to a decreased dietary intake and rapid weight loss. Your bariatric surgeon can help you understand your individual risk for gallbladder disease following surgery and which preventative or treatment options best suit your situation. As a partner in your healthcare management, prepare yourself with a good basic understanding of the disease, risks, and treatment options before talking with your surgeon.

Let's start with a very basic review of the gallbladder and its function. The gallbladder is found just under the liver. It is a small sac which stores bile that has been produced in the liver. When food or beverages containing fat are consumed, the gallbladder contracts to release bile into the small intestine. Bile brings the fat into suspension with water so that enzymes can work on it to break it into smaller components that can be absorbed and utilized by the body. Bile moves from its storage sac (the gallbladder) to the small intestine through tubes that are called the cystic duct and the common bile duct.

GALLBLADDER DISEASE TERMINOLOGY

Gallstones are rocklike formations that occur inside the gallbladder. The stones form when there is an imbalance or change in the composition of the bile produced by the liver.

Cholelithiasis is the medical term that describes the presence of gallstones in the gallbladder.

Asymptomatic Cholelithiasis is the presence of gallstones without any symptoms. 60–80% of gallstones are asymptomatic.

Gallbladder sludge is crystallization of bile without the formation of stones. It can be a step in the formation of stones or just exist without gallstones.

Cholecystitis is the inflammation of the gallbladder that occurs when gallstones block the cystic duct leading from the gallbladder to the small intestine.

Biliary colic is the pain that occurs when the gallbladder contracts in response to a meal and the bile is restricted by a stone blocking the cystic duct. It usually begins within an hour of eating and may last for 1-5 hours. The pain is in the right upper quadrant and can radiate to the right shoulder

or back. Nausea or vomiting may also occur.

Choledocholithiasis is the term that describes the presence of a stone in the common bile duct.

Cholecystectomy is the removal of the gallbladder.

Ursodiol (Actigall)/**Chenodiol** (Chenix) are drugs that have the potential to dissolve cholesterol gallstones ((80% of stones are this type). The downside to these medications is that it may take years for gallstones to completely dissolve and they may come back if the medication is discontinued.

The rapid weight loss from dieting or following bariatric surgery increases gallstone formation. If you have not had your gallbladder removed prior to pre-admission testing (about 2 weeks prior to bariatric surgery), an ultrasound will be performed to identify the presence of any gallstones or sludge. If gallstones are detected, the surgeon will discuss treatment options. Treatment may include laparoscopic removal of the gallbladder prior to bariatric surgery, laparoscopic removal of the gallbladder at the time of bariatric surgery, open

gallbladder removal and bariatric surgery performed at the same time, or medications that dissolve gallstones and prevent the formation of new gallstones. Sometimes the surgeon will recommend no treatment.

You may wonder why the gallbladder isn't just routinely removed at the time of bariatric surgery, eliminating the need for possible future surgery. First, any surgery (even a simple cholecystectomy) poses some risks. Second, only 8% of gastric bypass patients¹ and a smaller percentage of adjustable gastric band patients will develop symptomatic gallstones requiring further treatment within the first 21 months following bariatric surgery. If all gallbladders were removed at the time of bariatric surgery, 92% or more of bariatric surgery patients would have it removed needlessly. And third, without a properly functioning gallbladder, there may be increased intolerance to certain foods.

If you and your surgeon determine that having your gallbladder removed is the best course of treatment, you may experience varying symptoms with the consumption of specific foods without a gallbladder. Without a gallbladder present, the liver continues to make bile. The bile is no longer released in response to consuming foods or beverages with fat, but is instead released in a slow continuous trickle into the intestine. Some people have trouble with high fat foods, whole grain breads and cereals, gas-producing vegetables (beans, broccoli, cabbage, cauliflower, Brussels sprouts), alcohol, dairy products, caffeine, and spicy foods. Consuming these may result in bloating, gas and/or diarrhea. Tolerance to specific foods after a cholecystectomy varies from person to person and usually improves over time.

1: Surg Obes Relat Dis. 2007 Jul-Aug; 3(4):456-60. Epub 2007 Apr 1

RECIPES

SLOW COOKER CREAMY CHICKEN & VEGGIES

- 2 pounds boneless, skinless chicken breast
- 1/2 teaspoon salt
- 1/8 teaspoon pepper
- 1 tablespoon olive oil
- 1 pound small red potatoes, halved
- 8 oz baby carrots
- 1/2 cup chopped onion
- 1 garlic clove, minced
- 7 oz low sodium chicken broth
- 1/2 cup fat free sour cream
- 1 1/2 tablespoon Dijon mustard
- 1 1/2 tablespoon Splenda
- 1 1/2 tablespoon flour
- 1/2 teaspoon dried thyme leaves

Sprinkle chicken with salt and pepper. Heat olive oil in large skillet and brown chicken. Place potatoes, carrots and onions in slow cooker. Top with chicken and pour chicken broth over all. Cover and cook on low for 8 hours.

In a small bowl combine fat free sour cream, mustard, Splenda, flour, pepper and thyme until well blended. Stir into crockpot mixture and turn heat to high. Cook for 15–20 minutes, stirring occasionally until thickened. Makes eight servings.

NUTRITION INFORMATION PER SERVING: 339 calories, 37 grams protein, 7 grams fat, 26 grams carbohydrate, 340 mg sodium

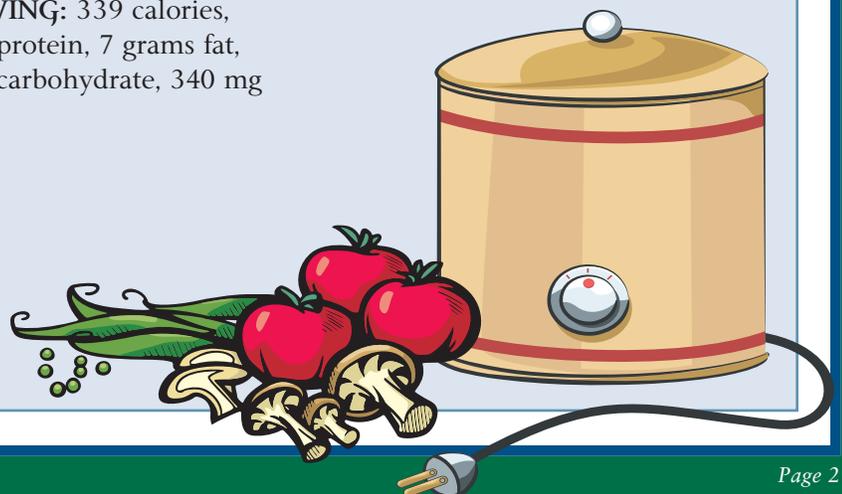
ORANGE PORK ROAST

- 3# lean pork shoulder roast
- 1 onion, chopped
- 6 oz frozen 100% orange juice concentrate
- 1 teaspoon salt
- 1/4 teaspoon pepper
- 2 tablespoons flour
- 2 tablespoons cold water

Place chopped onion in the bottom of slow cooker. Sprinkle salt and pepper on roast and place on top of onions. Add orange juice concentrate. Cover and cook on high for 3 hours then reduce heat to low and cook for another 3 hours.

Remove roast and onions from slow cooker and place in a warm oven. Skim fat from the juices remaining in the slow cooker. Mix the flour and water together in a shaker cup and add to the slow cooker. Turn to high and stir until thickened. Serve with roast and onions. Makes 8 servings.

NUTRITION INFORMATION PER SERVING: 360 calories, 36 grams protein, 19 grams fat, 11 grams carbohydrate, 336 mg sodium



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RECONSTRUCTIVE SURGERY

To receive a **FREE RECONSTRUCTIVE SURGERY GUIDE**, call 800-282-0066 or send us an email at rc@barixclinics.com with your name and contact information. Our reconstructive surgery program is currently performed at our centers in Michigan, Ohio, and Pennsylvania. *Call us today for more information!*

OTHERS CARE PLEASE SHARE

Please tell us about the lives that have changed because you shared your weight-loss story. Submit your story to http://www.barixclinicsstore.com/share_your_story.html. What you have to say may be printed in this publication or on our website and can serve as inspiration to all.

QUESTIONS ABOUT FINANCING YOUR SURGERY?

Call a **Barix Patient Service Representative** at 800-282-0066

IT WORKED FOR ME

Many patients are finding a way to combine fun and fitness with Wii Fit. The balance board reads your movements and brings them to life on the screen. It can also weigh you and calculate your BMI. You can set goals, chart your daily progress and determine your Wii fitness age. Wii Fit includes four training modes and more than 40 exercises designed to improve balance and fitness. The Wii Console costs about \$250, the Wii Fit program and balance board is about \$90.00 and the remote controller is about \$40.00. You may want to put Wii Fit on your holiday list. It is a gaming system and fitness system that the entire family can enjoy.

“Motivation
is what gets you
started. **Habit** is
what keeps you
going.”

Jim Rohn

IN THE NEWS

It's really is true; breakfast is the most important meal of the day. Wayne Campbell from Purdue University authored a study that indicates eating more protein in the morning helps create a sense of feeling full throughout the day and may help people to lose weight. The study participants who ate a breakfast containing high quality protein from sources such as eggs and lean Canadian bacon were the most effective at producing a prolonged sense of fullness. Only 46% of Americans eat breakfast 7 days a week.

CONSIDERING SURGERY

One of the ways to be best prepared for surgery is to attend a Barix Support Group meeting prior to surgery. You will have an opportunity to talk with others who have been in your shoes. You can attain a greater comfort level with the decision to have surgery. You will see what it takes to be successful. You will see that people are not perfect and some don't make healthful choices all of the time. You will be able to talk with people who really understand your feelings. Log onto www.barixclinicsstore.com to find a group near you.

REWARD YOURSELF

This month, you could earn a **SPECIAL GIFT** for your “It Worked For Me” tips or recipes! Just submit as many recipes and “It Worked For Me” tips as you like. The most original and creative will be awarded a special gift from our online store. Include your name and contact info with your entry — make sure your recipes follow Barix nutritional guidelines. Tips must be submitted by November 30, 2008. Please send comments, ideas, recipes and “It Worked For Me” tips to Deb Hart, RD, LD at dhart@foresthealth.com.

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