## GASTROESOPHAGEAL REFLUX DISEASE

Gastroesophageal reflux disease (GERD) is caused by frequent backflow of food and acid into the esophagus (a tube connecting the mouth with stomach). This can occur in healthy people occasionally but is a frequent problem in those with GERD. Stomach contents are normally prevented from moving to the esophagus by the esophageal sphincter (a valve-like ring of muscle at the end of the esophagus). When this muscle relaxes and allows reflux or is generally weak, GERD may occur. GERD can affect people of any age or sex.

#### SYMPTOMS OF GERD

Because reflux from the stomach consists of acid, a main symptom of GERD is frequent heartburn or acid indigestion and a bitter acid taste in the mouth. If stomach fluid reaches the larynx (breathing tube), coughing spells also develop. These symptoms of GERD can be aggravated by certain foods such as chocolate, citrus fruits, spicy and tomato-based foods, caffeine, and alcohol or by eating just before going to bed. Heart attack and stomach ulcers may mimic heartburn.

#### **RISK FACTORS FOR GERD**

- Obesity 
  Pregnancy 
  Cigarette smoking
- Hiatal hernia

A hiatal hernia may weaken the lower esophageal sphincter and cause reflux. This occurs when the upper part of the stomach moves up into the chest through a small opening in the diaphragm (the muscle separating the stomach from the chest) and may contribute to retention of acid and other contents above this

opening. These substances can reflux easily into the esophagus. Many otherwise healthy people age 50 and over have a small hiatal hernia. Hiatal hernias usually do not require treatment. However, treatment may be necessary if the hernia is in danger of becoming strangulated (twisted in a way that cuts off blood supply, i.e., paraesophageal hernia) or is complicated by severe GERD or esophagitis.

#### **COMPLICATIONS OF GERD**

Chronic GERD may lead to

- Esophagitis (inflammation of the esophageal lining)
- Narrowing of the esophagus due to scarring
- Ulcers in the esophagus
- Barrett esophagus (change in the cells of the esophageal lining, with an increased risk of cancer)

#### TREATMENT

Persistent symptoms of GERD may require treatment. Your physician may recommend lifestyle changes such as smoking cessation, avoiding certain foods (fatty foods, chocolate, mint, caffeine, citrus, tomato, alcohol), losing weight if necessary, and eating not later than 3 hours before going to sleep or lying down. Also, he or she may start you on a medication that diminishes production of acid in the stomach, such as H2 receptor antagonists or proton pump inhibitors.

#### PROGNOSIS

GERD symptoms usually resolve completely or almost completely within weeks of treatment. However, GERD is a chronic disease and may require lifelong treatment to prevent recurrence of symptoms or development of Barrett esophagus or cancer.

Relaxation of esophageal Esophagus, sphincter allowing reflux Diaphragm Esophagus Stomach Hiatal hernia Diaphragm Reflux Contraction of idic stomac esophageal ontents sphincter Individual with hiatal hernia and GERD Healthy individual

# Stomach Acid Reflux What Can I Eat?

#### Stomach acid reflux is a common problem.

Your doctor may recommend that you avoid foods and drinks that are known to make stomach acid reflux worse. These include fatty foods, alcohol, chocolate, caffeinated drinks (such as coffee, tea, soda), peppermint, spearmint, and spices. If you are overweight, dieting may also help.

It's alright to drink cranberry juice, apple juice diluted with water and herbal teas (except peppermint and spearmint). Drink lots of water.

**Coffee Substitutes:** Postum; Coffree (Swiss blend of chicory, figs, wheat, malted barley & acorns)

#### Foods & Drinks to Avoid

- 1 Fatty foods
- 2 Alcohol
- 3 Chocolate
- 4 Coffee, tea, caffeinated soft drinks (decaffeinated coffee still has some caffeine)
- 5 Peppermint & spearmint
- 6 Spices & vinegar
- 7 Citrus fruits & juices
- 8 Tomatoes & tomato sauces

#### **Other Anti-Reflux Measures**

- 1 Don't eat or drink for 2 hours before going to bed
- 2 Avoid lying down after meals
- 3 Elevate the head of your bed 6 inches (Use a bed wedge from any surgical supply store)
- 4 Don't wear tight clothing around your abdomen
- 5 Avoid straining, weight lifting, prolonged bending, constipation
- 6 Lose weight (if you are overweight)

Since the likelihood of reflux is increased after a meal, it is important to avoid eating or drinking for 2 hours before going to bed, except for taking any medicine prescribed by your doctor. Remember to avoid lying down after any meal.

### AVOID

#### Acid Fruits To Avoid:

Orange Grapefruit Pineapple Pomegranate Tomato Lemon/Lime Sour Apple Sour Grape Sour Peach Sour Plum

#### Sub-Acid Fruits To Avoid:

Fresh Fig Pear Sweet Cherry Papaya Mango Cherimoya Sweet Peach Sweet Apple Apricot Sweet Plum Huckleberry Mangosteen

#### Spicy Meals In These Restaurants:

Japanese Mexican Thai Chinese Indian Some Italian

Dairy Products (Cause excess mucus, refrain)

Many Individuals Are Sensitive To: Cucumbers Scallions Onions Radishes Leeks

#### Reflux-ACCEPTABLE Foods (If cooked with mild herbs)

Meats

All Tenderloin, Flank, T-Bone & Porterhouse Steak Rib & Rump Roast Liver Veal Chicken Capons & Cornish Hens Turkey Loin Pork Chops Pheasant Quail Venison

#### Fish

Sole Halibut Monk Tuna Bass Smoked Fish Salmon Flounder Haddock Lobster Mackerel Perch Pike Shad Scallops Shrimp Trout

#### Potatoes

All Red, White, Sweet & Yams (No canned potatoes)

#### Rice

All White, Brown & Gourmets

#### Soups

All non-tomato, use with discretion (Creamed soups may cause excess mucus and/or reflux disorders)

#### Pasta

Pesto Sauce, Garlic & Oil White Clam Sauce only

#### **Vegetables & Starches**

Beets Carrots Eggplant (Grilled or sautéed only) **Kidney Beans** Lima Beans String Beans Spinach Artichokes Asparagus **Brussel Sprouts** Cauliflower **Buttercup Squash** Acorn Squash **Butternut Squash** Delicata Squash Zucchini Squash (Both yellow and green) **Gourmet Squash** Broccoli Parsnips Wax Beans Brocco Flower

#### **Sweet Fruits**

Bananas Dates Figs Raisins Thompson & Muscat Grapes Prunes Persimmons Melons Strawberries Raspberries Blueberries Blueberries Sun-Dried Pears

#### Herbs & Seasonings

**Basil Leaves Bay Leaves** Chervil Leaves Chives **Cilantro Leaves** Dill Weed Marjoram Oregano Leaves (Mediterranean) **Parsley Flakes** Rosemary Sage Savory **Tarragon Leaves** Thyme Garlic Soy Sauce White Pepper