

MRN: Patient Name:

(Patient Label)

## **AFTER YOUR LINX® PROCEDURE**

LINX® is a surgery used to treat acid reflux or gastroesophageal reflux disease (GERD). During this procedure, a flexible ring of magnetic beads is placed around the lower part of the esophagus to create a valve that prevents stomach acid from flowing backwards into the esophagus. To learn more about LINX® before your procedure, visit uclahealth.org/esophageal-center/linx





### What to Expect After Surgery

#### Weeks 1 - 2

The first couple of weeks after surgery you might find that food goes down well and you might not have any symptoms.

#### Weeks 3 - 8

A few weeks after surgery, a scar normally forms around the LINX® device as you heal and prevents it from sliding up or down. During this time, you might experience the symptoms listed below because the area is swollen. The swelling can make the food or liquid not go down as easily as before. As you heal and the swelling decreases, your symptoms should improve.

- Difficulty swallowing
- Hiccups
- Regurgitation
- Spasm or chest tightness / pressure
- Heartburn

In the sections that follow, you will learn how to eat and take care of yourself after your LINX® procedure.

## **How to Eat After Surgery**

### Physical Therapy for the Esophagus: Swallow Something Every Hour

The most important thing you can do during recovery is eat. This will activate the LINX® band right away, allowing it to open and close with the passing of food, and help keep the scar tissue flexible so that the LINX® device continues work properly. You might feel uncomfortable while eating/drinking, but this is an important part of your recovery.

You are encouraged to start eating soft foods the day of surgery. The day of surgery eat foods that are moist, soft-textured, and overall easy to chew and swallow. Examples of soft foods on page 3.



You can resume your regular diet the day after surgery if tolerated. It is acceptable to continue to eat soft foods, **but do not eat only pureed foods or liquids**. Cut foods into small pieces, make them moist, eat slowly, and take small bites of food, chewing eat bite thoroughly.

In addition to eating 4 - 6 small meals per day, be sure to swallow a few tablespoons of yogurt consistency or thicker foods every hour while you are awake for the first 4 - 6 weeks after surgery.

To minimize discomfort and to maximize healing go **SLOW**.

- Small Drink small sips of warm liquids before starting a meal and eat small bites slowly. Large bites are likely to have a harder time going down, and are more likely to lead to spasms or hiccups.
- Longer Take your time during meals. If food or liquids get stuck, wait at least 1 minute between bites.
- Often Eat often. Eat 4-6 small meals per day and at least 1 tablespoon of yogurt consistency or thicker foods every hour while you are awake.
- Warm Drink warm liquids to relax the muscles of the esophagus if you experience spasms and to keep things moving. Taking small sips frequently helps prevent dehydration.

### **Swallowing and Medications**

Take your normal prescription medications. It is sometimes helpful to take them with yogurt or applesauce instead of water. If you are still having problems swallowing them, check with your pharmacist to see if you can crush or break them. Hold off on taking large vitamins or supplements until you are swallowing without difficulty.

# What to Know About Common Symptoms That Can Occur After LINX®

**Hiccups** are most often caused by fluid and/or food that has not passed out of the esophagus. Typically, they will stop in a few minutes. Wait until the hiccups have passed before continuing to eat or drink.

**Spasm** (chest tightness that can take your breath away) can occur during the recovery period. Typically, this will last a minute or so. Spasm is most often due to food getting stuck in the lower esophagus, but it can also occur on its own. Although it can be very uncomfortable, it is NOT serious. As time goes by it will happen less often and will be less severe. If after 4 weeks you are having spasms every time you eat, please make an appointment to see your surgeon, or contact the office by phone or patient portal.

**Heartburn** is a common symptom after surgery. It is very unlikely this is due to reflux. Heartburn can occur with esophageal irritation of any type including surgery – not just acid reflux. Heartburn can also occur after drinking acidic liquids like lemonade that don't clear right after swallowing.

**Regurgitation** during the recovery phase is reflux of fluid within the esophagus, and not from the stomach. Don't be alarmed if this happens, it should get better as the swelling goes down and swallowing improves. Saliva or liquid regurgitation usually happens because fluid is building up in the esophagus. Saliva can build up between meals and before going to bed. Eating 1-2 saltine crackers between meals and before bed will help absorb the saliva so the esophagus can push it through the LINX device. It is very unlikely that you will need medication for acid reflux after surgery. In the future, if a provider wants to prescribe reflux medications for you, or you are concerned your reflux is back, please inform your surgeon. A pH test to check for reflux is strongly recommended before starting anti-reflux medication after surgery.

### **Air Travel and MRI**

- LINX® should not affect airport security. Keep your implant card with you just in case.
- If needed, you can undergo magnetic resonance imaging (MRI) up to 1.5 Tesla.

### **Soft Foods**

Soft foods are moist, soft-textured, and overall easy to chew and swallow. Foods that are hard or crunchy are avoided during this stage. Most foods that are harder can be chopped, moistened, and/or cooked longer to help them become softer and easier to eat and tolerate.

Food Group	Foods Recommended	Foods to Avoid During This Stage
Breads, cereals and other starches	Soft white or wheat bread without seeds, dried fruit, nuts or crust Tortillas Hot cereals like oatmeal, Cream of Wheat/Rice® Cold cereals if soft once soaked in milk Pancakes and muffins Soft pasta, soft rice, polenta Potatoes, yams and sweet potatoes without skins	Breads containing nuts, seeds or dried fruit Tough or crusty-top breads like French or baguette Cereals containing dried fruit or nuts Cereals that do not soften when soaked in milk Potatoes and similar starchy vegetables with skins Pasta or rice that is hard or "Al dente"
Vegetables	Well-cooked, soft vegetables without seeds or skins (mashed potato, squashes) Finely chopped cooked greens	All raw vegetables Cooked vegetables with skins and/or seeds
Fruits	Applesauce, ripe soft banana, canned soft fruit or soft fruit cups Mashed avocado	Unripe fruit with seeds and skins
Plant-based protein sources	Mashed beans, lentils and other legumes Hummus Soft or firm tofu Creamy nut butters Nut-based, oat or coconut milk yogurt	Nuts and seeds Crunchy nut butters Cooked or canned beans in the whole form Extra firm tofu
Meats and other animal-based protein sources	Ground or chopped, moist meats or poultry (chicken salad) Flaked fish without bones (tuna salad) Eggs or egg substitutes (egg salad) Soft cheeses (ricotta, cottage) Greek yogurt	Whole cut, tough, stringy meats, poultry and fish Hot dogs and sausages
Oils	Almond oil, avocado oil, canola oil, cashew oil, corn oil, grapeseed oil, olive oil, safflower oil, sesame oil, soybean oil, sunflower oil Butter, soft tub margarine that does not contain trans-fat (melted or blended into foods)	None
Other	Seasonings, ground spices and smooth condiments as tolerated, gravies and sauces, tartar sauce, relish, chopped olives Popsicle® Strained cream soups	Popcorn, potato chips, corn chips Whole pickles Whole olives
Beverages	All	None