CENTRAL CALIFORNIA
HEART AND LUNG SURGERY

After having surgery, you may be experiencing some symptoms you were not expecting at first, but do not worry, your care team at Central California Heart and Lung Surgery have provided this packet to answer some questions and what you can do at home to help make your recovery experience as smooth as possible.

What to Expect After HEART Surgery

Sternal Precautions & Activity:

- Use incentive spirometer at every hour while awake to help you take deep breaths- encouraging lung expansion and prevent possible complications after surgery.
- The goal is to walk 1 mile by the first month after surgery.
- **Do not lift, push, or pull anything that weighs more than 10 pounds when using both arms, no more than 5 pounds when using one arm.**
- After 6 weeks, you may gradually begin to lift heavier items.
- Weight restrictions post open heart surgery:
    - 1 – 4 weeks: Less than 5 lbs
    - 4 weeks: 10 lbs or less
    - 6 weeks: up to 15 lbs
    - 8 weeks: up to 20 lbs
    - 3 months: increase as tolerated

Sleep Disturbance:

Having difficulty sleeping is a common concern of patients. Your body and brain are still recovering from the stress of the surgery. But, do not lose hope, your body will regulate and a normal sleeping pattern will return within a few months of the surgery. If you are experiencing sleep problems like insomnia (the inability to sleep) it may be due to:

- The effects of the anesthesia.
- Discomfort related to healing.
- Change in your daily routine.
- Stress from personal concerns.

Here are some helpful tips you can try:

- If experiencing pain, take your medication 30 minutes from bedtime.
- Apply heat to areas that are sore or painful.
- Arrange pillows for comfort, support, and less muscle strain.
- Avoid daytime napping if possible.
- Sunshine therapy for 30 minutes a day
    - 30 minute exposure to natural sunlight can influence the production of serotonin and melatonin, hormones that affect your mood and sleep regulations.
- Balance activity with rest during recovery.
- Ask your partner for a back rub.
- Have a consistent bedtime routine, by following the same pattern, it will teach your body to relax before sleep.
- You may take melatonin or Benadryl to help.
    - Sleep aids such as **Ambien** are **not recommended** due to increased risk of hallucinations, addiction, delirium, and in some cases, morality.

Try to avoid:

- Avoid caffeine in the afternoon/evenings, including chocolate, coffee, tea, and soda.

Contact your Doctor if the following occurs:

- A change in behavior.
- Lack of sleep is causing problems in your day-to-day living.
- **If the inability to sleep lasts longer than 4-6 weeks, please contact your Primary Care Physician.**

Anxiety and Depression:

You may be experiencing situational anxiety and depression after having surgery. These feelings can be due to the unknown of what is to be expected, lack of independence during the acute recovery phase, or not being able to do simple tasks as easily as before. These feelings should gradually improve within weeks, especially after returning to normal activates.

Here are some helpful tips you can try:	**If anxiety and depression persist every day for more than 2-3 weeks, treatment may be necessary:**
• Get dressed every day. • Go on a daily walk. • Continue your hobbies and social activities you enjoy. Start with limited time and increase depending on how you feel. • Share your feelings with someone you trust. • Get a good night's sleep. • Try to meditate for 10 minutes in a quiet area, focusing only on breathing and any music or sounds playing.	• Contact your Primary Care Physician for appropriate resources. • Cognitive/talk therapy may be beneficial.

If you are having thoughts of suicide, call your physician or local suicide hotline (988 on any phone) right away.

What to Expect After LUNG Surgery

Precautions:

- **Do not lift, push, or pull anything that weighs more than 10 pounds when using both arms, no more than 5 pounds when using one arm.**
- After 6 weeks, you may gradually begin to lift heavier items.
- Be careful how you use your arms.
    - Do **not** let your arms bear your body weight.
    - Do **not** use your arms to lean or prop yourself up.
    - Do **not** raise your elbows higher than your shoulders.
    - Do **not** reach behind your back, bend, or reach to one side, or twist your body.

Pain and Discomfort:

After your surgery, it is common to feel tired for 6-8 weeks. Your chest may hurt and swollen for up to 6 weeks, and may ache or feel stiff for up to 3 months. During this time you may be experiencing some pain and discomfort from the incision made during surgery, causing the area to feel tight, itchy, numb, or tingling.

Here are some helpful tips you can try:	**Try to avoid:**
• Keep area dry and clean. • If experiencing pain, take your medication 30 minutes from bedtime. • Apply a cold compress to numb area and reduce inflammation. • Apply heat to areas that are sore or painful. • Use a fragrance free moisturizer to keep skin hydrated. • Distract yourself from touching the area by reading, listening to music, or practicing relaxation techniques.	• **DO NOT SCRATCH YOUR INCISION**; it will only prolong the healing process. • Swimming. • Hot tubs. • Sauna. • Contact sports. ○ These will be discussed at your first post-op appointment with the Nurse Practitioner.

Contact your Doctor if the following occurs:

- Signs of infections such as pus or bleeding, increased discoloration, pain, and warmth. There could also be an odor.
- If the stitches break or there is severe bleeding in the area.
- Allergic reaction to any creams or dressing, signs may include a rash, itching, burning, redness or discoloration, bumps, or swelling.

If the pain and discomfort lasts longer than 6-8 weeks, please contact our office.

<u>Constipation:</u>

Constipation after lung surgery is caused from different factors like pain medication, reduced activity levels while in recovery, dietary changes, and the effects of anesthesia, which can slow down bowel movements.

Here are some helpful tips you can try:

- Go to the restroom at the same time every day so your body is used to going at the time. But if you feel the need to go, do not push it off.
- Use the restroom 5 to 15 minutes after meals. After breakfast is a goodtime to go, that's when the reflexes in your colon are the strongest.
- Go on a daily walk.
- Stay hydrated! Drink 8 to 10 (8 ounces) cups (2 liters) of liquid daily.
  - You can choose water, prune juice (more effective when warm), soups, and milkshakes, but limit the consumption of caffeine, coffee, and soda.
- Introduce fiber into your diet slowly, consuming about 25-35 grams per day. Eating unpeeled fruits, vegetables, whole grains, and cereal to obtain fiber.
- You can take over-the-counter medication for the constipation:
  - **Docusate sodium (Colace)** – stool softener with few side effects.
  - **Polyethylene glycol (MiraLAX)** – laxative that causes few side effects, take with 8 ounces (1 cup) of liquid. Only take if you are already constipated.
  - **Senna (Senokot)** – stimulant laxative, can cause cramping, best to take at bedtime. Only take if you are already constipated.
  - **If any of these medicine cause diarrhea, stop taking them. You can start again if need to.**

If the constipation lasts longer than 1 week, please contact your Primary Care Physician.

Frequently Asked Questions

This section addresses common questions about what to expect and what activities are safe after your surgery. If you have additional concerns or need further clarification, please contact our office. Your care team is here to support your recovery and ensure you understand your post-operative instructions.

Can I have caffeine?

- Discuss with surgeon.

Can I have alcohol?

- No, it is always best to abstain from alcohol use.

Can I drive?

- Driving can resume 4-6 weeks post-surgery. Discuss with your surgeon.

Can I have sex?

- Discuss with your provider when it is safe to resume sexual activity.

Can I smoke?

- Avoid smoking.

Can I take a shower?

- Shower daily using soap and water. Pat dry with a clean towel after every use.

Can I go back to work?

- Discuss with your provider when it is safe to return to work.

Can I go to school?

- Discuss with your provider when it is safe to return to school.

Can I fly or travel?

- Please contact your doctor before, to get medical clearance to fly. Typically, air travel is ok after 8 weeks post-surgery

More Resources

Undergoing major surgery can be a physically and emotionally challenging experience. As your body heals and adjusts, it's normal to feel overwhelmed or different from how you were before. However, you are not alone. Many others have faced similar journeys and found strength through shared experiences. Below are four support groups—both local and virtual—that can offer community, understanding, and encouragement during your recovery.

Heart

- CMC Stroke Support Group is a support group for caregivers, survivors, and medical professionals affected by stroke.

Lung

- LUNGevity is a non-profit foundation leading the research for lung cancer and online community support for those affected by lung disease. They offer virtual meetings.

- Better Breathers Club is part of The American Lung Association with a location in Fresno to help those living with lung disease to educate, support, and connect with each other. They also offer virtual meetings.

CENTRAL CALIFORNIA
HEART AND LUNG SURGERY

Nutritional Food Guide

Good nutrition plays an important role in making sure your heart and lung are working how they should. Small changes to your diet can greatly improve your health. A well balanced meal with low-sodium intake is vital in doing so.

What is Sodium?

- Sodium is a highly consumed mineral in the United States, it can be found in our proceed foods like canned goods, boxed foods, and frozen meal dinners. Even if we did not salt our foods, we are still consuming too much sodium.
- Sodium, salt, and baking soda are synonyms and mean the same!

Why is over-consuming Sodium bad?

- Heart failure can cause your body to keep the extra sodium, causing fluid retention and your heart to work harder.
- When your heart works too hard, you may develop a shortness of breath, weight gain, and swelling in your abdomen, ankles, and feet.
- It may continue to raise blood pressure levels in those with high blood pressure.

How to Read Food Labels a Guide for Sodium

- **Sodium-Free:** Less than 5 mg per standard serving; cannot contain sodium chloride.
- **Very Low Sodium**: 35 mg or less per standard serving.
- **Low Sodium**: 140 mg or less per standard serving.
- **Reduced Sodium**: At least 25% less sodium per standard serving than in the regular food.
- **Light in Sodium**: 50% less sodium per standard serving than regular food product.
- **Unsalted, without added salt, or no salt added**: No salt added during processing of the food product.
- **Lightly Salted**: 50% less added sodium than normally added; product must state "not a low sodium food" if that criteria is not met.

Guidelines for a Balanced Heart Healthy Meal

- Limit sodium to **2000 milligrams (or 2 grams) per day**. Your health care provider will limit your sodium intake based on your health and the condition of your heart.
- Total fat intake should be less than 30% of daily calories.
- Include fat-free and 1% dairy products, legumes, fish, poultry, and lean meats.
- Include 25 grams of dietary fiber per day.
- Include at least 5 servings of fruit and vegetables per day. More variety means more nutrients and vitamins!
- Include 5 servings of whole grain products including breads, cereals, rice, barley, oats, and pasta

Avoid These Ingredients in Food Labels

• Salt • Sodium propionate • Sodium phosphate • Disodium inosinate • Sodium bicarbonate (baking soda)	• Sodium nitrate • Brine • Sodium caseinate • Meat stock • Sodium	• Sodium benzoate • Baking powder • Monosodium glutamate (MSG)

Ways to Cut Back On Sodium Intake:

Instead of going for the salt shaker first, try substituting it with other seasonings which can add to the natural flavors of food. Cutting back sodium does not mean food has to taste bad; here are some recommendations for your diet to keep your heart healthy and your food tasty!

- Try herbs and spices such as garlic, onion powder, basil, chives, dill, oregano, rosemary, thyme, or ginger.
- Choose packaged and prepared food carefully by reading and comparing food labels.
- Pick fresh and frozen poultry that has not been injected with a sodium solution.
- Pick your condiments carefully, some condiments like soy sauce, ketchup, and other dips are loaded with sodium.
- Combine lower-sodium foods with your regular diet, this way less sodium is consumed and the taste should still remain.
- Grill, braise, roast, sear, or sauté your foods to bring out the natural flavors.
- Control portion size, when you cut calories, you are also cutting your sodium intake.
- At restaurants, you can ask for your food to prepare without extra salt and with any sauces to be provided on the side to use sparingly.
- Use non-topical liquid plant oils like canola, soybean, sunflower, or peanut oil.

Other Facts about Salt and Sodium:

- One teaspoon of salt contains 2300 mg of sodium.
- Sodium is an essential nutrient to the body that controls blood pressure and makes the nerves and muscles work properly but it just takes the right amount.
- Foods labeled with the Heart-Check are marked to show heart-healthy foods in grocery stores.

Alternative Herb seasonings for Salt:

- *Anise seed* – fruit, fruit salad, cake, cookies, bread, fish
- *Basil* – pork chops or roast, meat loaf, rice
- *Bay leaf* – soup, chowder, fish, pot roast
- *Cumin* – meat loaf, hamburger, pot roast, stew, lentil and pea soup, tomato soup, egg dishes, rice, salad dressing, potato salad
- *Curry powder* – lamb, ground beef, rice, fish, pork, veal, dried beans

Low, Moderate, and High Sodium Choices

	Low Sodium Choice (Less than 100 mg/serving)	Moderate Sodium Choices (100-400 mg/serving)	High Sodium Choices (over 400 mg/serving)
Spices, Sauces, and Condiments	• Basil • Bay Leaf • Cinnamon • Dill • Garlic • Oregano • Paprika • Pepper • Thyme • Tomato (fresh or paste) • Vanilla • Vinegar • Dash	• BBQ sauce • Catsup • Chili Sauce • Gravies • Mayonnaise • Mustard • MSG • Prepared salad dressing • Steak sauce • Tomato puree or sauce • Worcestershire	• Salt • Bouillon • Salted marinades, lemon pepper (certain brands) • Salted meat tenderizers • Salt substitute mixes • Salted spices (garlic salt, onion salt, seasoned salt) • Soy sauce • Teriyaki sauce • Baking soda
Cereals and Grains	• Low sodium breads and crackers • Flour • Hot cereals (expect instant) • Matzoth • Noodles • Puffed rice or wheat rice • Shredded wheat • Corn tortillas • Unsalted popcorn • Whole grains • Baked products made without salt, baking soda, or baking powder	• Breads and rolls • Dry cereal • Biscuits • Muffins • Cakes • Cookie • Flour tortillas • Pies • Pastries • Doughnuts • Pancakes • Waffles • Instant cereals, expect grits	• Boxed or packaged commercially prepared spaghetti and pasta dishes • Instant flavored hot cereals • Pretzels • Salted crackers and chips • Salted popcorn
Main Dishes: including Fish, Poultry, and Meat	**Fresh prepared without salt:** • Beef and veal • Fish • Lamb • Poultry • Pork • Dried beans cooked without salt or pork • Eggs	• Fresh shellfish • Salted peanut butter • Bacon • Canned tuna	**Smoked, cured, or pickled:** • Corned beef • Dried meats • Ham • Luncheon meats • Sausage and hotdogs • Frozen dinners • Commercially prepared entrees

	• **Unsalted nuts** • **Unsalted peanut butter**		• **Packaged or canned soups** • **Ramen noodles** • **Salted nuts**
Dairy	• **Cream cheese** • **Gruyere cheese** • **Ricotta cheese** • **Swiss cheese** • **Unsalted cheese** • **Cream** • **Butter or margarine** • **Sherbet**	• **Milk** • **Buttermilk** • **Cheese (except as noted)** • **Custard** • **Ice cream** • **Pudding** • **Yogurt**	• **American cheese** • **Blue cheese** • **Cottage cheese** • **Parmesan cheese** • **Roquefort cheese** • **Processed cheese** • **Processed cheese products**
Beverages	• **Beer, liquor, and wine** • **Carbonated beverages** • **Coffee and tea**	• **Milk** • **Buttermilk**	

Potassium and how it affects Your Diet

Potassium is an important mineral to have in your diet. It is necessary for the nerve and muscle action. Abnormal potassium levels can affect the electrical stability of your heart and nervous system. Too much potassium can also be harmful or even life threatening. If a person has poor kidney functions, then the kidneys cannot get rid of the potassium adequately. Low potassium can also cause problems.

People with heart failure may be on medication which can either raise or lower blood levels of potassium. Other causes of potassium loss: vomiting, diarrhea, extra use of laxatives, and steroid use.

Your heart failure team will monitor the level of potassium in your blood. You may be asked to increase your potassium intake or to limit the amount of potassium you eat, depending on the results of your blood tests.

Below are food options and the amount of potassium in them to better help you decide what you want to eat:

LOW (50–150 mg/serving)	**MEDIUM (150–250 mg/serving)**	**HIGH (250–450mg/serving)**
• **Asparagus** • **Beans, green** • **Beans, wax** • **Bean sprouts** • **Beets, canned** • **Cabbage, cooked** • **Cauliflower** • **Corn** • **Cucumber (half)** • **Onions** • **Peas, canned** • **Zucchini**	• **Beets** • **Broccoli** • **Brussels sprouts** • **Cabbage, raw** • **Carrots (one)** • **Celery (one stalk)** • **Green pea** • **Lentils** • **Lettuce (one cup)** • **Mixed vegetables** • **Peppers, fresh (one)** • **Radishes (five)** • **Rutabagas**	• **Artichokes (one)** • **Beans: kidney, lima, navy, pinto** • **Greens, collard** • **Mushrooms** • **Nuts** • **Parsnips** • **Potato** • **Pumpkin** • **Spinach** • **Split peas** • **Tomato (one)** • **Turnips** • **Winter squash**

		• **Yams**
• **Apples** • **Applesauce** • **Blackberries** • **Cherries (canned)** • **Cranberries (one cup)** • **Cranberry juice** • **Crangrape, cranapple juice** • **Grapes, grape juice** • **Grapefruit (half)** • **Hawaiian Punch (one cup)** • **Kool-Aid (one cup)** • **Lemons, lemonade (one cup)** • **Peaches, canned or nectar (one cup)** • **Plums, canned** • **Raspberries** • **Tang (one cup)** • **Tangerine (one)** • **Watermelon**	• **Apricot nectar** • **Cherries** • **Fruit cocktail** • **Nectarines (one)** • **Peach, fresh (one)** • **Pineapple juice** • **Pineapple, canned** • **Prune juice** • **Rhubarb** • **Strawberries (15)**	• **Apricots (3)** • **Avocado (one-quarter)** • **Banana (half)** • **Figs** • **Oranges (one)** • **Plums (two)** • **Raisins (1/4 cup)** • **Tomato juice** • **V-8 juice**

Dining at Home: Sodium Content of Common Foods

Patients with cognitive heart failure usually need a low-sodium diet. Your doctor will tell you how many milligrams of sodium you can have per day. **Be sure to follow your doctor's directions and read the label.** Many foods may be available in a low-sodium version. Here are some common food items that are probably part of your current diet and how much sodium is in them. **Keep in mind that 1,000 mg = 1 gram**, a healthy heart diet consist of **no more than 2,000 milligrams** of sodium.

Breakfast	**Milligrams of Sodium**
Bacon pork (2 strips)	202
Bagel with 1 oz. cream cheese	283
Bran muffin	168
Coffee, brewed (1 cup)	8
Cornflakes (1 cup) with low-fat milk	361
Doughnut, plain	139
Fried egg, large (1)	162

Lunch	**Milligrams of Sodium**
Cheeseburger, fast food	750
Cheese pizza (1 slice)	261
Chicken noodle soup (1 cup)	1,107
Chicken noodle soup, low sodium (1 cup)	36
Tomato, whole	10
Tuna salad	434
Vegetable beef soup (1 cup)	957

Dinner	Milligrams of Sodium
Beef burrito, fast food	746
Beef or pork chop suey, homemade (1 cup)	1,052
Broiled pork chop	49
Broiled sirloin steak (4 oz)	74
Chicken chow mein, homemade (1 cup)	717
Chili con carne (1 cup)	135
Fettuccine Alfredo, frozen (1 portion)	1,195

Desserts	Milligrams of Sodium
Apple pie (1 slice)	207
Banana	1
Brownie with nuts (1)	50
Cheesecake (1 slice)	189
Fresh strawberries (1 cup)	2
Vanilla ice cream (1/2 cup)	58
Yellow cake with white icing (1 slice)	191

Condiments	Milligrams of Sodium
Barbecue sauce (1/4 cup)	508
Brown gravy (1/4 cup)	31
Butter, regular (1 pat)	41
Butter, unsalted (1 pat)	Less than 1
Italian dressing (1 TBSP)	116
Mayonnaise (1 TBSP)	104
Soy sauce (1 TBSP)	1,029

CENTRAL CALIFORNIA
HEART AND LUNG SURGERY

Financial Information and Support

Understanding your medical bills may be confusing. This section explains the types of charges you may see and your responsibilities as a patient. If you receive an **Explanation of Benefits (EOB)** from your insurance, remember—it is *not* a bill. The EOB shows what services were billed, what your insurance covers, and what portion may be your responsibility. While we will request authorization for your procedure, this does not guarantee full payment. It is your responsibility to verify coverage and benefits with your insurance provider.

The EOB will outline:

- "**Provider Charges**" is the amount your provider bills for your visit.
- "**Allowed Charges**" is the amount your insurance company agrees to pay.
- "**Paid by Insurer**" is the amount your insurance company actually pays.

There are several groups that will need to be paid; these groups will be broken down to show what and who will be billed.

Professional Billing Fees include:	**Hospital / Facility Fees include:**
• Initial consultation – will be billed. • Follow up – billed if needed prior to surgery. • Surgery – insurance will cover their portion and any remaining expenses will be billed to you. • Post-operation Visits (within 90 days of surgery) – no charge. • Subsequent appointment- billed if unrelated to your initial surgery. • Secondary procedure – may include extra hospital and provider charges.	• Admission/Hospital stay- includes rooming, nursing care, and basic services. • Anesthesia, Pathology, and Labs –billed separate from the hospital. • Imaging and Pre-Op Testing– billed by the facility. • Ongoing Lab Work (e.g., INR test) –billed by the lab or facility.

Resources:

If you have billing questions or need financial assistance:

- Visit: https://www.communitymedical.org/for-patients-families/billing-insurance/help-paying-your-bill
- Call: **Patient Financial Services** at (559) 459-3939 or (800) 773-2223 ext. 53939.

For insurance-related questions, you may contact the California Board of Insurance:

- https://www.insurance.ca.gov/

CENTRAL CALIFORNIA
HEART AND LUNG SURGERY

Contact Information

This section will provide all the necessary contact information of our office, Central California Heart and Lung Surgery, and the other medical facilities that we work with.

Central California Heart and Lung Surgery

Website: https://myheartlungs.com/
Address: 729 Medical Center Dr. W. Suite 223, Clovis, CA, 93611
Phone: (559) 449-9990
Fax: (559) 449-9991
Exchange Number to contact Doctor after hours: (559) 221-4573

Clovis Community Medical Center

Website: https://www.communitymedical.org/locations/clovis-community-medical-center
Address: 2755 Herndon Ave. Clovis, CA 93611
Phone: (559) 324-4000

Fresno Heart & Surgical Hospital

Website: https://www.communitymedical.org/locations/fresno-heart-surgical-hospital
Address: 15 E. Audubon Dr. Fresno, CA 93720
Phone: (559) 433-8000

Fresno Community Regional Medical Center

Website: https://www.communitymedical.org/locations/community-regional-medical-center
Address: 2823 Fresno St. Fresno, CA 93721
Phone: (559) 459-6000