Adult CF: Lung Health

If you have cystic fibrosis (CF), you need to work closely with your healthcare team. It will help you stay healthier, feel better, and have a better quality of life. It will also slow the decline in your lung function. Your care team may suggest many ways to maintain lung health. These may involve airway clearance therapy (ACT), medicine, nutrition, exercise, and preventing infection.

Airway clearance therapy

ACT helps loosen and clear mucus from your airways, letting you breathe better. It may also lower your risk for infection. There are several different ways to do ACT. Work with your healthcare provider to figure out the best one for you.

ACT often includes certain breathing and coughing techniques. You may also use a special device to loosen mucus. You may wear a vibrating vest. Or you may use a device called a flutter valve. It causes mucus in the airway to vibrate or flutter when you breathe through it.

You may also do chest physical therapy (CPT) to help loosen and clear thick secretions from the lungs. CPT greatly improves lung function. It also lowers the amount of lung damage over time. You will work with a physical therapist to learn how to do CPT. CPT often involves three techniques:

- **Postural drainage.** Placing your body in certain positions can allow mucus to drain.
- **Percussion.** Clapping or pounding on your chest and back may help loosen mucus. You may also use an airway clearance device, such as a vibrating vest, to do this technique.
- **Coughing.** This simple technique can also help remove lung secretions.

Medicine

You may need medicine to prevent or treat lung problems. Many of these are taken with a nebulizer. This device turns medicine into a mist so you can breathe it in. You may need to take:

- Oral, inhaled, or IV (intravenous) antibiotics to prevent or treat lung infections
- Bronchodilators (via a nebulizer or inhaler) to help open airways

- Anti-inflammatory medicines to lessen airway inflammation
- Medicines such as dornase alfa or hypertonic saline to thin secretions

Nutrition

Improving your nutrition can also help with your lung health. It can limit infections and help with other problems linked to CF. You may work with your care team to:

- Change your diet by adding extra calories, salts, and fluids.
- Eat more foods high in antioxidants. These are chemicals that reduce damage from inflammation in the body.
- Take pancreatic enzymes to help you absorb nutrients.
- Take vitamin supplements to replace those you don’t absorb from food.

Exercise

Exercise helps you stay healthier. It improves your overall condition and helps you feel better. It also helps to loosen mucus, which makes it easier to breathe.

- e sure to wash your hands after coughing, sneezing, airway clearance therapy, and spending time in public places.

Preventing Infection

People with cystic fibrosis are at higher risk of lung infections. There are several ways to help prevent infections:

- **Vaccines.** It is important to remain up to date on your vaccines. Talk with your healthcare provider about what vaccines are right for you. This may include the influenza, COVID-19, and pneumococcal vaccines.
- **Handwashing.** Good hand hygiene can help prevent infections from spreading from one person to another. Wash your hands often with soap and clean water for at least 20 seconds. Or use a hand sanitizer with at least 60% alcohol. B

Follow-up care

You should see a healthcare provider who is trained in treating CF every 3 months. If you have a cold or a breathing problem, you may need to see this healthcare provider more often. You can see your regular healthcare provider for minor problems not linked to CF. It's important that all providers are aware of your health condition and recent changes. Update them about new medicines, infections, and routine vaccines. Be sure to keep all follow-up appointments.

When to call your healthcare provider

Call your healthcare provider right away if you have any of these:

- Increased cough or amount of sputum
- Wheezing or shortness of breath
- Decreased appetite
- Fever of 100.4°F (38°C) or higher, or as directed by your healthcare provider

- Chest pain or tightness
- Abdominal pain