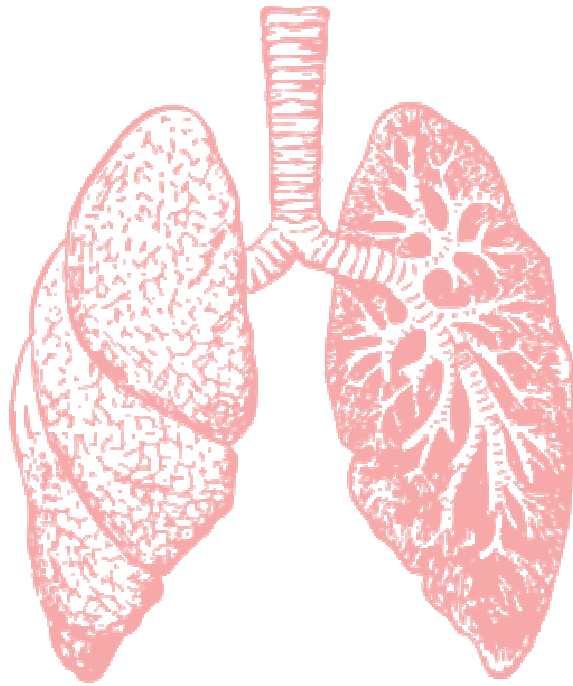


CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) MANAGEMENT



Holy Cross Hospital

4725 N Federal Highway Fort Lauderdale, Florida 33308

TEL: 954-771-8000

Thank you for choosing Holy Cross as your health care provider.

Holy Cross Hospital provides health care to everyone without regard to age, race, religion, veteran status, color, sex, national origin, physical or emotional disability or sexual orientation.

What is COPD?

COPD, short for Chronic Obstructive Pulmonary Disease, is a progressive lung disease that includes emphysema and chronic bronchitis. Patients with COPD have a hard time getting enough air in and out of their lungs. Less oxygen gets into the body's tissues and it is harder for the body to get rid of carbon dioxide (the waste gas). As the disease gets worse, people with COPD become short of breath and have a harder time staying active.

How serious is COPD?

About 13 million people have been diagnosed with COPD.

COPD is the third leading cause of death in the United States. It can cause serious long-term disability and early death. Because people do not know the early warning signs of this disease, COPD is often not diagnosed until it is very advanced.

Some people think they are short of breath or less able to do daily activities because they are “just getting old,” but shortness of breath is never normal. Here is some good news: when COPD is found early, the disease can be treated and managed, and you can live a longer, better quality life.

Early Diagnosis

You should see your doctor or clinic if you have any symptoms of COPD, especially if you are over age 45 and you are a current or former smoker. You should also let your doctor know if any of your family members have COPD. Don't wait for symptoms to become severe because valuable treatment time may be lost! **Remember:** early detection of COPD is the key to successful treatment.

Spirometry is an easy test used to measure lung function and diagnose COPD.

COPD Symptoms

- Constant coughing (“smoker’s cough”)
- Shortness of breath when doing everyday activities
- Producing a lot of mucus (also called phlegm or sputum)
- Feeling like you can’t breathe or take a deep breath
- Wheezing

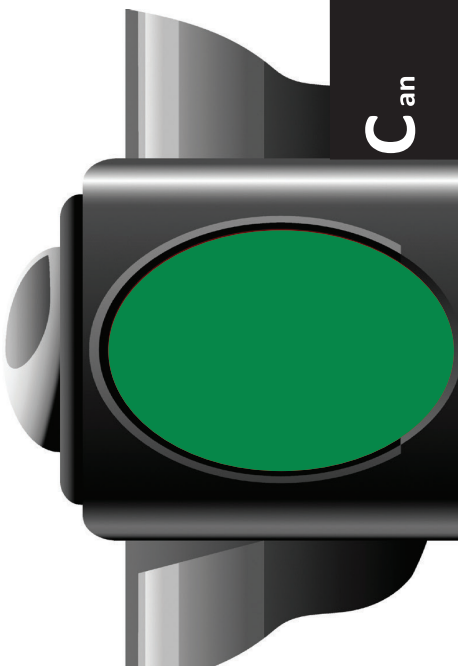
Transition Care Plan						Patient Plan	
Medications-	List names	INH	NEB				
Sama							Short acting take as needed
Saba							
Lama							Long Acting, take twice per day
Laba							
Further review of technique indicated		Y	N				F/U with Clinic Apt :
ICS							Use daily regardless of shortness of breath
Antibiotics							Take as prescribed
Oral Steroids							Take as prescribed
Meds delivered		Y	N				
Patient has Script		Y	N				Fill prescriptions asap
Spirometry Results		Y	N	FEV1=			Apt for PFT:
SECRETION MANAGEMENT NEEDS		Y	N				Practice Huff Coughing Use of Airway Clearance Device 2-3X/ day
PULMONARY REHAB CANDIDATE		Y	N				Attend Pulm Rehab 3x/ week
Pulmonary Rehab Script		Y	N				
SMOKING STATUS		Y	N	WILLING TO QUIT			Clinic Apt: Smoking Cessation Counseling
OXYGEN DME NEEDS		Y	N				Follow prescribed liter flow instructions
SLEEP SCORE				SLEEP TEST INDICATED		Y	Apt for Sleep Study:
BIPAP NEEDS		Y		Orders obtained for DME		N	Wear nightly as ordered while sleeping
FOLLOW UP APPOINTMENTS:							
	PRIMARY CARE MD						APT:
	SPECIALTY DOC						APT:
	COPD CLINIC						APT:

PATIENT NAME: _____ DATE: _____

Post Acute

Patient Name: _____

Date: _____

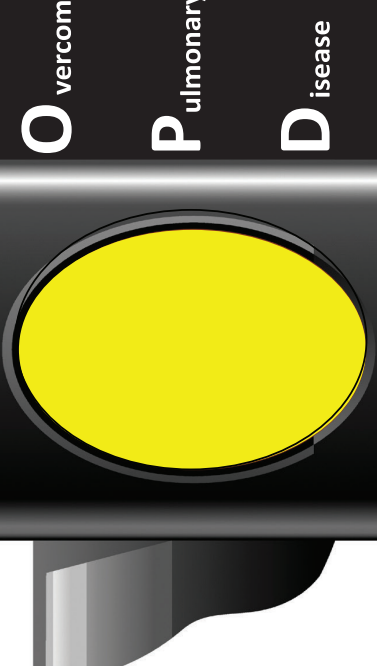


Can
Overcome
Pulmonary
Disease
MY COPD PLAN

My breathing is normal
 My activity level is normal
 My cough and mucus are normal
 My sleeping is normal
 I will use oxygen as prescribed
 My eating and appetite are normal
 I will exercise and eat regularly
 My activity level is normal

I will avoid all inhaled irritants & bad air days
 I will take all medications as prescribed
 I will keep routine doctor appointments
 I will update my plan every 6 months

SAFE ZONE
Your symptoms are under control

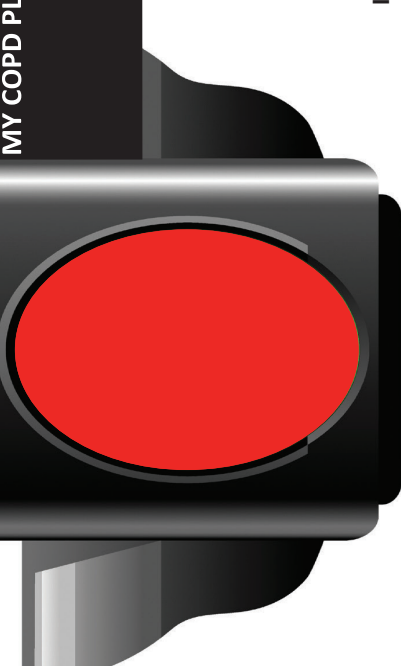


CAUTIONOUS ZONE

I have increased use of rescue medications
 I have a change in color, thickness, odor or amount of mucus
 I am more tired than normal
 I have new or increase in ankle swelling
 I am more breathless than normal
 I feel like I am catching a cold

I will start special medications _____
 with my doctor which includes: _____
 I will take regular medications as prescribed
 I will report these changes to my doctor today

Your symptoms indicate you need an adjustment of your treatment plan
CALL YOUR DOCTOR FOR FURTHER ORDERS



I have disorientation, confusion or slurring of speech
 I have severe shortness of breath or chest pain
 I have a blue color around my lips or fingers
 I have wheezing or tightness at rest

I will call 911 right away
 I will start these special medications*:

DANGER ZONE

Your symptoms indicate that you need to be evaluated by a DR immediately
Call 911 or go to nearest emergency room

COPD NAVIGATOR 954-955-7422

I understand this is MY COPD plan, I understand each zone and how to take care of myself during an exacerbation.

Patient Signature: _____

Your COPD Plan

During your stay, your COPD navigator will discuss your specific plan to help you best manage your disease. This includes your Transition plan and your COPD Action Plan.

A full assessment will be completed, as well as ensuring you have proper follow up after you are transitioned from the hospital.

Before you go home, the COPD Transition Checklist will be discussed with you.

We want to be sure you have all the tools you need to best manage your COPD.

The Transition Checklist will be completed, discussed with you and sent to your primary care Dr. and/or pulmonologist.



COPD symptom management is a collection of activities to keep you active.

Pulmonary Function Testing is a breathing test to measure your lung function and can be done at various times.

6 minute walk test is a test to measure endurance.

Sleep Study is done to identify sleep problems that may contribute to poor health, commonly associated with COPD.

Low Dose Cat Scan testing is done for early recognition of Lung Cancer.

Depression and anxiety are common symptoms associated with chronic conditions and can be treated when recognized.

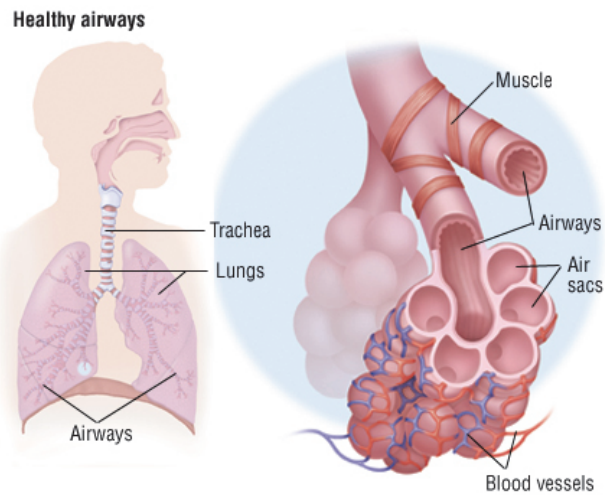
COPD Navigators are your partner for good health

What causes COPD?

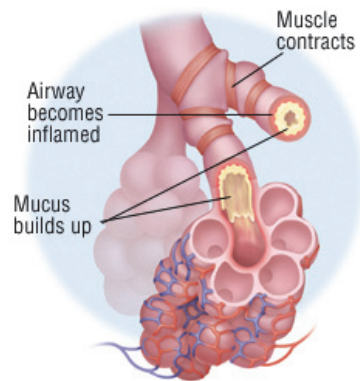
Smoking is the biggest cause of COPD. The poisons in cigarette smoke weaken your lungs' defense against infections, narrow air passages, cause swelling in air tubes, and destroy air sacs.

Pollution in the air and irritating fumes and dusts (especially on the job) can also cause COPD.

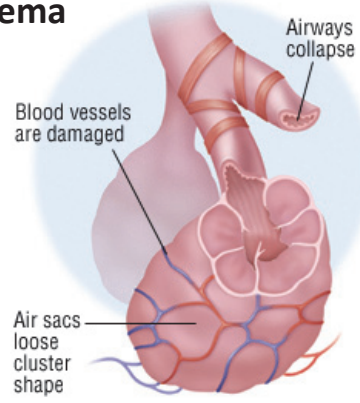
Some people have a rare, inherited form of COPD called alpha-1 (AAT) related emphysema. These people lack a certain protective protein in their blood.



Chronic Bronchitis



Emphysema



How is COPD treated?

- **Medicine** may be prescribed by your doctor. Most people use inhalers to open their airways and reduce swelling. Some medicine is used with a nebulizer, a machine that changes liquid medicine into a fine mist so it can be inhaled deep into the lungs.
- **Oxygen therapy** may be used to help with shortness of breath if your COPD is severe. Oxygen may be needed all day and night, or only part of the time. Make sure you understand how to use oxygen safely.
- **Pulmonary rehabilitation** is a program that teaches you about COPD, how to exercise and how to manage the disease. It also provides support and counseling.
- **Surgery** may be recommended in rare cases, for very severe COPD.

Holy Cross offers a *Pulmonary Rehab* program designed specifically for patients with chronic lung diseases, including COPD.
954-229-7960

Acute

Patient Name: _____ **Date:** _____

COPD ACTION ZONES

Can
Overcome
Pulmonary
Disease
MY COPD PLAN

I have disorientation, confusion or slurring of speech
 I have severe shortness of breath or chest pain
 I have a blue color around my lips or fingers
 I have wheezing or tightness at rest

I will call 911 right away
 I will start these special medications*:

DANGER ZONE
Your symptoms indicate that you need to be evaluated by a DR *immediately*
Call 911 or go to nearest emergency room

I have increased use of rescue medications
 I have a change in color, thickness, odor or amount of mucus
 I am more tired than normal
 I have new or increase in ankle swelling I
 am more breathless than normal
 I feel like I am catching a cold

I will start special medications prearranged with my doctor which includes:
 I will take regular medications as prescribed
 I will report these changes to my doctor today

CAUTIOUS ZONE
Your symptoms indicate you need an adjustment of your treatment plan
CALL YOUR DOCTOR FOR FURTHER ORDERS

My breathing is normal
 My activity level is normal
 My cough and mucus are normal
 My sleeping is normal
 I will use oxygen as prescribed
 My eating and appetite are normal
 I will exercise and eat regularly
 My activity level is normal

I will avoid all inhaled irritants & bad air days
 I will take all medications as prescribed
 I will keep routine doctor appointments
 I will update my plan every 6 months

SAFE ZONE
Your symptoms are under control

I understand this is MY COPD plan, I understand each zone and how to take care of myself during an exacerbation.
Patient Signature: _____

COPD NAVIGATOR 954-955-7422

Living with COPD

Lifestyle changes

People living with COPD face physical and emotional challenges. If you have COPD, you can take steps to cope with the changes this disease brings.

- **Don't smoke.** If you are a smoker, there are many ways to get help with quitting. Talk to your doctor about products and medicines to help you quit. Ask your family and friends to support you and help you manage your COPD by not smoking in your house or anywhere near you. And join a quit-smoking class, like the American Lung Association's **Freedom from Smoking course** offered by Holy Cross Hospital
- **Avoid dust and fumes.** Stay indoors on bad air days.
- **Prevention through vaccination.** Get your Pneumonia vaccine as well as your annual flu vaccination as a way to combat illness and stay healthy.
- **Wash your hands often.** Avoid being around people who have colds or the flu.
- **Eat a well-balanced diet** and maintain your ideal body weight.
- **Stay active.** Ask about exercises to help you get stronger and breathe easier.
- **Be proactive.** Your COPD treatment may involve several doctors, especially if you have other health issues. It is important to communicate clearly with your entire health-care team. Prepare questions for your doctors before your visit. Be sure you understand what your doctors are telling you. Share any concerns you have. And carefully follow your doctor's orders.

Get emotional support.

Taking care of your emotional health is key to managing your COPD.

- Family, friends, co-workers, and your health-care team can give you support in many ways. Ask for help with chores or errands. Talk about your feelings when you feel sad or anxious.
- Support groups can be a great place to share your thoughts with others who understand what you're going through. Join a COPD support group. The American Lung Association has Better Breathers Clubs all around the country (learn more at www.lung.org), and a free online support community at connection.lung.org.



Preventing COPD

If you are concerned about getting COPD, you can take these steps to protect yourself.

1. **If you are a smoker, STOP SMOKING.** Quitting is the single most important thing you can do to live a longer, healthier life. We at Holy Cross are here to help you quit (and stay quit!)
2. **If you don't smoke, don't start.** Smoking causes COPD, heart disease, and lung cancer.
3. **Avoid exposure to secondhand smoke.** Make your home smoke-free! You'll protect not only yourself, but your family, too. Learn about your rights to a smoke-free environment at work and in public places at www.lung.org/stop-smoking.
4. **Be aware of other dangers.** Protect yourself from chemicals, dust and fumes at home and at work.
5. **Help fight for clean air.** Work with others in your community to help clean up the air you and your family breathe.

Pulmonary Rehab Program

Holy Cross's Pulmonary Rehab Program is specially designed to help patients living with chronic lung conditions, including COPD, improve their day-to-day lives and maximize their independence through exercise and educational programs.

Phase I

Education and initial rehabilitation for inpatients during their stay at Holy Cross Hospital

Phase II

Intensive exercise and education program that takes place in Holy Cross Cardiopulmonary Rehab gym. Consists of 36 classes over 18 weeks. Each class is an hour and a half and includes pulmonary education along with exercise.

Phase III

Phase III is a way to stay involved with the program with supervision and maintain your progress.



How do I get started with Pulmonary Rehab?

To participate in Pulmonary Rehab, all patients must first receive a doctor's referral. Common referral diagnoses include COPD, asthma, emphysema, chronic bronchitis, interstitial lung disease, ARDS, and lung transplantation.

What are the components of Pulmonary Rehabilitation?

Exercise Training:

Upper body: Strengthening arm and shoulder muscles provides support to the rib cage, which leads to improved breathing. Increased upper body strength and endurance also helps make everyday tasks (such as lifting items, taking a bath or shower, or carrying groceries) easier.

Lower body: Lower body exercises strengthen leg muscles making it easier to move and stay active for extended periods of time. This improvement in ease of movement provides many patients with the motivation they need to continue an exercise program, helping patients feel better about themselves and better control their symptoms.

Ventilatory muscle training: Strengthening respiratory muscles reduces breathing problems and makes exercising easier. While this training is not recommended for everyone, it has been found to be very helpful in patients with COPD.

Education:

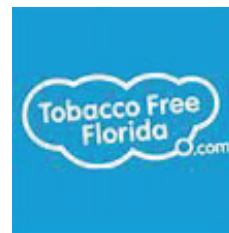
Educational programs are an important part of Pulmonary Rehabilitation, helping the patient better understand his or her body, disease, and ways to improve quality of life. Holy Cross' Pulmonary Rehab covers a range of topics, including how the lungs work, information about COPD and other chronic lung diseases, understanding the use of oxygen therapy and breathing retraining. Since smoking is a primary risk factor for COPD, the educational component includes sessions and counseling to help patients quit smoking.

Each component helps patients improve their strength, knowledge, mental wellbeing, and overall quality of life.

Does Holy Cross offer pulmonary function testing?

Yes, we do! Our sophisticated testing system provides vital information about lung function, including overall volume, how well your lungs move air in and out, and blood oxygen saturation. Testing is available on an outpatient basis by referral.

Quit Your Way



Tobacco Free Florida has the tools and resources you need, like free nicotine patches, to help you do just that.

Classes: Personal, small-group format

Meet: Every 2nd Monday of the month

Holy Cross Hospital

Sister Innocent Conference Center
Rm D

6:00 pm—8:00pm

The 2 hour seminar will provide you with all the tools you'll need to establish your own quit plan.

FREE nicotine replacement patches, gum, and lozenges.

Call 954-262-1580 to register

Free parking.

Benefits of quitting cigarettes:

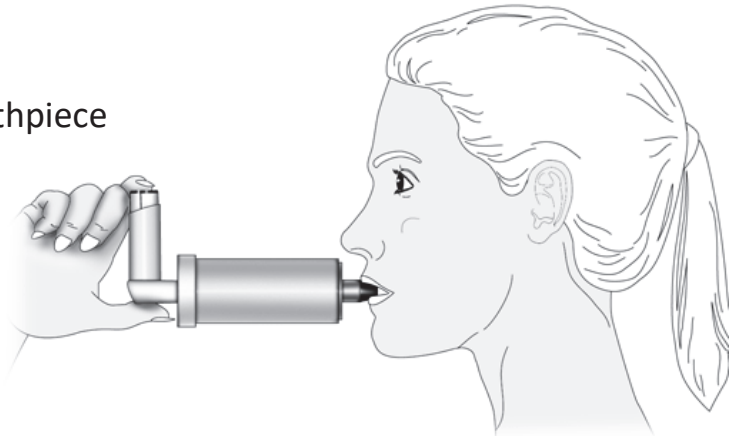
1. Reduce your risk of cancer, heart attack, heart disease, and stroke
2. Avoid getting sick, especially from respiratory diseases
3. Lower your blood pressure
4. Increase your energy
5. Save money
6. Make your skin, teeth and nails look younger and healthier
7. Improve the smell of your clothes, hair, car and house
8. Protect your family from second-hand smoke



It's a fact: smoking makes you sick. According to the Centers for Disease Control and Prevention, smoking is the Number 1 cause of premature death in America.

How to use your MDI* with a Spacer

1. **Remove** the caps
2. **Shake** the MDI*
3. **Assemble** the MDI* mouthpiece in the spacer
4. **Breathe** in deep and let it back out
5. **Seal lips** around the spacer device mouthpiece
6. **Depress** the MDI* into the spacer
7. **Breathe** in slowly and deeply
8. **Hold your breath** for 5-10 seconds
9. **Breathe out**
10. **Wait 30 seconds** if second dose is required
11. **Replace caps** when done



How to use your Diskus

1. **Open** the Diskus
2. **Slide** the lever
3. **Breathe out**
4. **Tilt chin up slightly**
5. **Seal lips** around the mouthpiece
6. **Breathe in** quickly and deeply
7. **Hold your breath** for 5-10 seconds
8. **Breathe out**
9. **Close** the Diskus



MDI* - Metered Dose Inhaler Advair HFA, Atrovent HFA, Combivent, Proventil HFA, Dulera

Fire Safety

- **NEVER** use or store oxygen in a confined space such as a cabinet or closet.
- **DO NOT** use petroleum-based ointments or lotions in or around your nose, such as Vaseline, Vicks, Chap stick, etc. Oxygen can react violently with these oily substances and can cause burns.
- Keep all oxygen equipment at least **15 feet from any type of open flame**. Take care to avoid open flames while using oxygen, including matches, fireplaces, barbeques, stoves, space heaters, candles, etc.
- **DO NOT SMOKE** within 15 feet of the oxygen set-up or an oxygen patient.
- Avoid using electrical appliances that produce sparks, such as electrical heaters, electric razors, hair dryers, friction toys, remote toy cars, etc.
- Use of a smoke detector and fire extinguisher is highly recommended when using oxygen in the home.
- Plan an evacuation route for you and your family in the event of a fire

Oxygen Storage and Handling

- Oxygen tanks should be stored in a stand or cart to prevent tipping and falling. Store extra, unsecured tanks by placing them flat on the floor. Do not allow tanks to stand or lean in an upright position while unsecured.
- **DO NOT** store oxygen systems in unventilated areas such as closets or cabinets.
- **NEVER** drape clothing over oxygen systems.
- **DO NOT** store oxygen systems near heat or ignition sources.
- **DO NOT** store oxygen systems in the trunk of your car.



Concentrator Safety

- Concentrators are electrical devices that should only be plugged into a properly grounded or polarized outlet.
- **DO NOT** use extension cords.
- **DO NOT** use multi-outlet adaptors such as power strips.
- Avoid using power sources that create heat or sparks.
- Use a power supply or electrical circuit that meets or exceeds the amperage requirements of the concentrator



Liquid Oxygen Safety

- Avoid direct contact with liquid oxygen as it can cause severe burns due to its extremely cold temperature.
- Avoid touching any frosted or icy connectors of either the stationary reservoir or portable unit.
- Avoid contact with any stream of liquid oxygen while filling portable units.
- Keep the portable unit in an upright position. Do not lay the unit down or place on its side.



Small portable unit (left) and large stationary unit (right)

SMOKING WHILE USING OXYGEN IS EXTREMELY DANGEROUS

COPD Nutrition Therapy

Sometimes the symptoms of COPD—shortness of breath, coughing, chest discomfort, fatigue—and the various treatments can make it hard for you to eat enough.

Nutrition therapy may help you select nourishing foods and drinks each day.

Meal Planning Tips

The aim of nutrition therapy is to help maintain or restore your nutritional wellbeing, including your weight. Ask your registered dietitian (RD) for more ideas specifically for you and your lifestyle.

1. Eat whenever you are hungry. Sometimes having your first meal in the morning works best. Sometimes late afternoon or early evening is best.
2. Divide your daily foods into 5-6 small meals, or into 5-6 large snacks.
3. Drink enough fluids, including water, throughout the day and evening.
4. Drink high-calorie, high-nutrient beverages. Drink milkshakes, whole milk, fortified milk (powdered nonfat milk added to fluid milk), flavored milk, and commercial nutritional products.
5. Freeze beverages into popsicles or ice cubes.
6. Use nutritional beverages in cooking and baking, and on cereals.
7. Enjoy milk-based, or cream-based, soups.
8. Choose foods high in calories. Add healthy oils, cream cheese, margarine, butter, and nut-butters to foods. Use regular cheeses, salad dressings, dips, sour cream, ice cream and cold cuts. Select yogurt and cottage cheese made from whole or 2% milk.
9. Choose foods high in protein (eggs, milk, cheese, yogurt, meats, poultry, fish, nuts, and beans.)
10. Choose foods with fiber (whole grains like breads, pasta and rice.) Eat fruits and vegetables with skins or seeds, like sweet potatoes with skin, tomatoes, grapes, and blueberries.
11. Choose foods with vitamins and minerals—use colorful, fresh fruits and vegetables, rather than the ones that are overcooked or refined.

12. Use enriched grains and fortified processed foods.
13. If prescribed, take medical food supplements, and use supplemental oxygen around mealtimes.

Keep in Mind:

1. Variety, color, and texture are all important. Choose foods you especially like.
2. Portions can vary. Sometimes 1-2 tablespoons is enough to start, especially if your appetite is reduced.
3. Purchase and prepare foods ahead of time. Eat some, and freeze some (in trays) for other days.
4. Let others (family, friends, neighbors) help with shopping, preparation, and clean up.
5. Enjoy the company of others at mealtimes. Eat out—many restaurants have space accommodating sections (for oxygen tanks) and friendly, experienced staff.
6. Eat in pleasant, calm, and cheerful surroundings.
7. Eat slowly and chew foods well. Savor aromas and flavors.

Not Recommended Foods:

Foods low in nutrients and calories are of little help to you. And they can fill you up so you feel bloated and uncomfortable. Some examples are:

Light or diet foods, like diet sodas

Plain beverages (plain coffee, tea, punch)

Bottled or canned clear drinks (teas, sodas)

Clear soups, like broth



COPD Nutrition Therapy

Sample 1-Day Menu

Breakfast	2 scrambled eggs 1 tablespoon butter 2 slices whole wheat toast 6 oz. orange juice
Morning Snack	1/2 cup instant pudding
Lunch	1/2 cup tuna salad 6 wheat crackers 2 canned peach halves 2 tablespoons cottage cheese 4 walnut halves
Afternoon Snack	1/2 cup apple juice (for smoothie) 1 banana (for smoothie) 1/2 cup frozen strawberries (for smoothie) 1/4 cup fat-free dry milk (for smoothie)
Evening Meal	3 oz. ground beef patty 1/4 cup gravy 1 baked potato 1 tablespoon butter 1/2 cup broccoli 1 tablespoon melted cheese (for broccoli) 2 slices whole wheat bread
Evening Snack	1/2 cup ice cream

Daily Breathing Exercises

This program teaches a convenient, 15-minute routine of breathing exercises to start your day. These exercises reinforce proper breathing patterns, promote general relaxation, improve general flexibility, and help remove secretions.

Note: When doing these exercises, breathe out through **pursed lips** as you move. Keep a proper sitting posture while doing these exercises. It is important to do these exercises **every morning!**

Breathing Exercises Routine

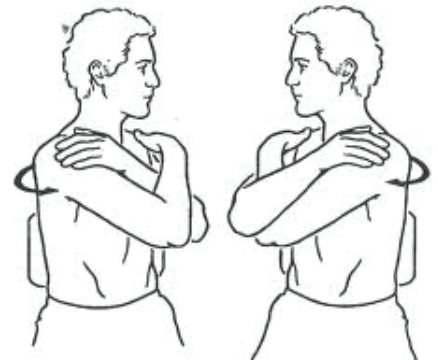
1. Diaphragmatic breathing

- a. Sit in a relaxed position, with your hands on your stomach.
- b. Breathe in through your nose and feel your hands move outward.
- c. Breathe out twice as long through pursed lips and feel your hands move inward.
- d. Repeat 10 times.



2. Trunk Rotation

- a. Sit with your arms crossed in front of you, at chest level. Breathe in.
- b. Breathe out, turning your trunk to the right.
- c. Breathe in, turning to the front again.
- d. Breathe out, turning your trunk to the left.
- e. Repeat five times for each side. Keep your shoulders relaxed!



3. Elbows back

- Sit with your arms crossed in front of you, at chest level. Breathe in.
- Breathe out as you pull your elbows out and back.
- Pause and breathe in.
- Breathe out and return your arms to the starting position.
- Repeat 10 times. Keep your shoulders relaxed!



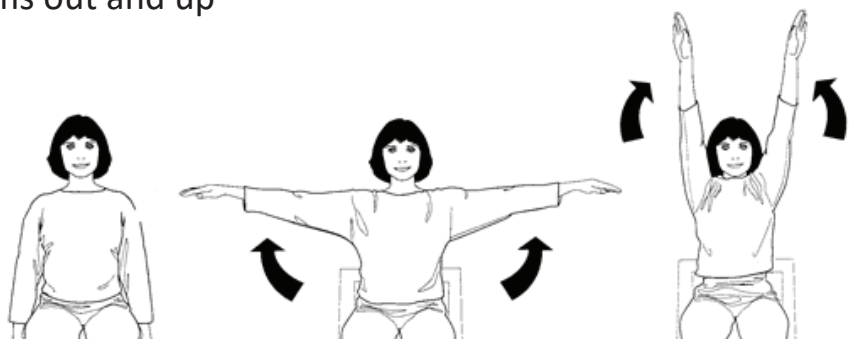
4. Reach to the Ceiling

- Sit with your shoulders relaxed. Breathe in.
- Breathe out as you raise one arm forward and up towards the ceiling.
- Pause and breathe in.
- Breathe out and lower your arm back down.
- Repeat with your other arm.
- Repeat five times for each arm.



5. Windmill

- Sit in a relaxed position with your arms crossed on your lap. Breathe in.
- Breathe out while raising your arms out and up towards the ceiling.
- Pause and breathe in.
- Breathe out while lowering your arms back to your lap.
- Repeat five times.



6. Thigh strengthening

- a. Sit with your shoulders relaxed. Breathe in.
- b. Breathe out as you straighten one leg, keeping your toes pointed up towards the ceiling.
- c. Pause and breathe in.
- d. Breathe out slowly and lower your foot to the floor. Don't let your leg drop!
- e. Repeat with the other leg.
- f. Repeat five times with each leg.



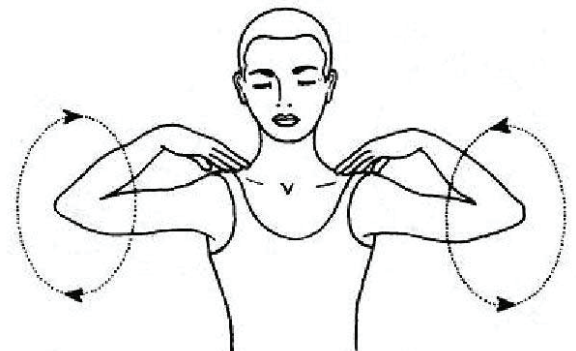
7. Shoulder shrugs

- a. Sit with your shoulders relaxed. Breathe in.
- b. Breathe out as you raise your shoulders up towards your ears.
- c. Pause and breathe in.
- d. Breathe out and lower your shoulders back down.
- e. Repeat ten times. Keep your shoulders relaxed!



8. Shoulder circles

- a. Sit with your hands on your shoulders. Breathe in.
- b. Breathe out while moving your elbows forward, up, back and down in a circular motion.
- c. Pause and breathe in.
- d. Breathe out and move your elbows in the opposite direction (back, up, forward, down.)
- e. Repeat five times in each direction. Keep your shoulders relaxed!



9. Foot treading

- Sit with your shoulders relaxed.
- Pump your toes and heels up and down. Breathe continuously through pursed lips.
- Continue for one minute.



10. Diaphragmatic breathing

- Sit in a relaxed position, with your hands on your stomach.
- Breathe in through your nose and feel your hands move outward.
- Breathe out twice as long through pursed lips and feel your hands move inward.
- Repeat 10 times.

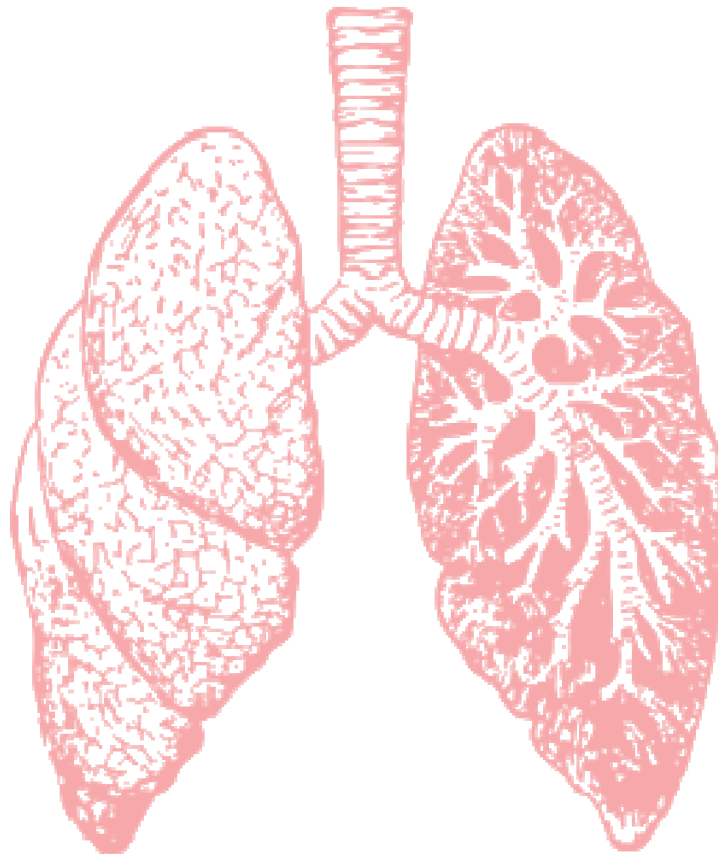


You have completed your daily breathing exercises.

Great job!

	NOTES:

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*Can
Overcome*

*Pulmonary
Disease*