When inhaling, the patient should remove the Lung FLuTe® slightly toward the floor.

Proper use of the LUNG FLuTe®

When the patient blows out through the Lung FLuTe®, he/she will hear the reed inside the Lung FLuTe® make a fluttering noise as it moves. The patient should concentrate on making this sound. The patient should let the Lung FLuTe® do the work.

Stage One: Secretion Loosening and Mobilization

The patient should hold the LUNG FLuTe® pointing down, as shown in Figure 2, inhale a little deeper than normal, place his/her lips completely around the mouthpiece, and gently blow out through the LUNG FLuTe® so it blows out a candle as the patient blows. He/she should hold the mouth inside the LUNG FLuTe® make a fluttering noise as it moves. The patient should concentrate on making this sound. The patient should let the Lung FLuTe® do the work.

Stage Two: Secretion Elimination

The patient should then remove the mouthpiece from his/her mouth, quickly inhale again, put the mouthpiece back in his/her mouth, and blow gently through the LUNG FLuTe®. The patient should then remove the mouthpiece again and wait 5 seconds, taking several normal breaths. Proper use of the LUNG FLuTe® is important to achieve adequate results. It is suggested that the patient complete 20 sets of 2 blows each. Individual results may vary (See Section 3).

Remind the patient only needs to blow through the mouthpiece with as much force as they would to blow out a candle. They should not force a cough or use their diaphragm or stomach muscles to try to force out more air.

The patient may notice thinned secretions collecting at the back of his/her throat for several hours after the session. This is normal. A drink of water can prevent minor throat irritation.

Recommended length of a session

A session should range between 5 to 10 minutes, depending on the patient’s pulmonary condition.

Important Tips

• When inhaling, the patient should remove the LUNG FLuTe® from his/her mouth.
• Pointing the Lung FLuTe® slightly toward the floor may make it work more efficiently.
• To avoid dizziness or shortness of breath while using the LUNG FLuTe®, he/she should take more time between each set of two blows.

Product Performance Data

- Frequency: 16-25Hz
- Minimal flow rate: 128.4 L/min
- Minimal pressure: 1.0 cm H2O
- Output sound: 68 dBA
- Pressure resistance: 1.0 cm H2O

- Measured with a standard General Radio 1933 Precision Sound Level Meter. OSHA limit over a 15 min. interval is 115dBA

Bibliography

GETTING THE MOST BENEFIT FROM THE LUNG FLUTE®
Although your healthcare professional may have trained you in the use of the LUNG FLUTE®, these instructions for use will assist you in using this device. Using the LUNG FLUTE® on a regular basis in a manner that is comfortable for you will provide you with benefits that will help you breathe easier. If you have any questions about the LUNG FLUTE® or these instructions, contact your healthcare professional for assistance.

THE LUNG FLUTE® CLEARS SECRETION BUILD UP
In many chronic cardiopulmonary conditions there is a build-up of secretions in the airways. Bronchial hygiene therapy with the LUNG FLUTE® can help clear these secretions so they can be swallowed or coughed up.

PROPER USE OF THE LUNG FLUTE®
Proper use of the LUNG FLUTE® is important for successful therapy. Although the technique presented here works well for most users, “individualizing” the technique for your specific condition may be necessary in order to obtain the best results. Please meet with your healthcare professional for complete personal training before beginning your LUNG FLUTE® therapy. Continue to review your technique on a regular basis, especially if you are not getting the expected results or if you notice a change in how your therapy is progressing.

PREPARING FOR YOUR LUNG FLUTE® THERAPY
1. You may want to have a glass of water available to drink after your therapy session. Before you begin, think about what you will be doing, how you are feeling, and the goals of the therapy. Visualize your airways being vibrated by acoustic waves, and secretions being loosened and mobilized along with your exhaled air to progressively larger airways, where they can be coughed up.
2. Get into a relaxed position. Sit up straight so that your back is not touching the back of the chair. Tilt your head slightly downward so your throat and windpipe are wide open (see Figure 2, left). This causes acoustic vibrations, which thin and loosen secretions deep in your lungs and results in the secretions moving progressively up your airways until they collect at the back of your throat.
3. The Lung FLUTE® works.
When you blow gently into the LUNG FLUTE® in a series of repetitions, your breath moves the reed inside (see Figure 2 below). This causes acoustic vibrations, which thin and loosen secretions deep in your lungs and results in the secretions moving progressively up your airways until they collect at the back of your throat.

A NOTE ABOUT ACOUSTIC WAVE TECHNOLOGY
The acoustic waves produced by the LUNG FLUTE® cannot be heard by human ears. The only sound you will hear is the fluttering of the reed when you exhale through the LUNG FLUTE® mouthpiece. You will not feel any vibration of the LUNG FLUTE® during operation.

STAGE ONE: SECRETION LOOSENING AND MOBILIZATION
Hold the LUNG FLUTE® in your right hand and position it so that you can look at the mouthpiece when you exhale. **Stage One: Secretion Loosening and Mobilization**

1. Stage One: Secretion Loosening and Mobilization
Hold the LUNG FLUTE® in your right hand and position it so that you can look at the mouthpiece when you exhale. Hold the mouthpiece of the LUNG FLUTE® into your lungs. The acoustic waves produced by your breath help loosen secretions and reduce inflammation in your airways.

2. Hold the Lung FLUTE® in a horizontal position and place the mouthpiece in your mouth. The pressure resistance of the LUNG FLUTE® is 1.0 cm H2O.

3. The acoustic waves produced by your breath help loosen secretions and reduce inflammation in your airways.

4. Hold the LUNG FLUTE® in your right hand and position it so that you can look at the mouthpiece when you exhale. Hold the mouthpiece of the LUNG FLUTE® into your lungs. The acoustic waves produced by your breath help loosen secretions and reduce inflammation in your airways.

5. Hold the LUNG FLUTE® in a horizontal position and place the mouthpiece in your mouth. The pressure resistance of the LUNG FLUTE® is 1.0 cm H2O.

6. Hold the LUNG FLUTE® in your right hand and position it so that you can look at the mouthpiece when you exhale. Hold the mouthpiece of the LUNG FLUTE® into your lungs. The acoustic waves produced by your breath help loosen secretions and reduce inflammation in your airways.

7. Hold the LUNG FLUTE® in a horizontal position and place the mouthpiece in your mouth. The pressure resistance of the LUNG FLUTE® is 1.0 cm H2O.

8. Hold the LUNG FLUTE® in your right hand and position it so that you can look at the mouthpiece when you exhale. Hold the mouthpiece of the LUNG FLUTE® into your lungs. The acoustic waves produced by your breath help loosen secretions and reduce inflammation in your airways.

9. Hold the LUNG FLUTE® in a horizontal position and place the mouthpiece in your mouth. The pressure resistance of the LUNG FLUTE® is 1.0 cm H2O.

10. Hold the LUNG FLUTE® in your right hand and position it so that you can look at the mouthpiece when you exhale. Hold the mouthpiece of the LUNG FLUTE® into your lungs. The acoustic waves produced by your breath help loosen secretions and reduce inflammation in your airways.

11. Hold the LUNG FLUTE® in a horizontal position and place the mouthpiece in your mouth. The pressure resistance of the LUNG FLUTE® is 1.0 cm H2O.

12. Hold the LUNG FLUTE® in your right hand and position it so that you can look at the mouthpiece when you exhale. Hold the mouthpiece of the LUNG FLUTE® into your lungs. The acoustic waves produced by your breath help loosen secretions and reduce inflammation in your airways.

A NOTE ABOUT ACOUSTIC WAVE TECHNOLOGY
The acoustic waves produced by the LUNG FLUTE® cannot be heard by human ears. The only sound you will hear is the fluttering of the reed when you exhale through the LUNG FLUTE® mouthpiece. You will not feel any vibration of the LUNG FLUTE® during operation.

STAGE TWO: SECRETION ELIMINATION
Once you have worked up to the required number of 2-blow repetitions, the LUNG FLUTE® has thinned and loosened your secretions. Wait five minutes after your session for secretions to collect at the back of your throat. Several minutes of coughing should bring up most of the secretions.

If you notice thinning secretions collecting at the back of your throat for several hours after your session, this is normal. A drink of water can help prevent minor throat irritation.

STAGE THREE: SECRETION MOBILIZATION
Depending on your condition, you may wish to extend a session to the point of discomfort. Late afternoon/evening sessions are recommended. To avoid becoming overly tired from therapy, it is better to add a session rather than extending a session to the point of discomfort.

THE LUNG FLUTE® IS A DEVICE USED TO HELP LOOSEN, MOBILIZE, AND ELIMINATE SECRETIONS FROM YOUR AIRWAYS. IT CONSISTS OF A MOUTHPIECE AND A REED INSIDE A HORN (SEE FIGURE 2 ABOVE).

RECOMMENDED LENGTH AND FREQUENCY OF SESSIONS
Your healthcare professional will advise you on how often you should use the LUNG FLUTE® and how long each session should last. Generally, morning and late afternoon/evening sessions are recommended.

The average session lasts 5 to 10 minutes, depending on the severity of the pulmonary condition. To avoid becoming overly tired from therapy, it is better to add a session rather than extending a session to the point of discomfort.

Important Tips

- When inhaling, remove the LUNG FLUTE® from your mouth.
- Pointing the LUNG FLUTE® slightly toward the floor may make it work more efficiently.
- To avoid dizziness or shortness of breath while performing 3 “huff” coughs after each 5 sets of 2 blows, you may wish to perform only a few repetitions of 2 blows, one or two times a day, until you are able to do more. After several sessions, you should be able to determine for yourself the appropriate number of 2-breath repetitions needed to adequately clear secretions.
- Remember, you only need to blow through the mouthpiece with as much force as you would to blow out a candle. Do not force a cough or use your diaphragm or stomach muscles to try to force out more air.