

Let's Talk About...

Breathing exercises: Autogenic drainage

Autogenic drainage (AD) is a technique that uses large breaths out (exhalation) to loosen mucus in the lungs. AD means “self-drainage.” Children who have cystic fibrosis or other lung conditions that make it difficult to cough up mucus may benefit from AD.

What is autogenic drainage?

Autogenic drainage is a three-phase breathing technique. Your child will inhale at different lung volume levels and then adjust their exhalation to maximize airflow and move mucus. The aim is to reach high airflows in different areas of the lung. This can help loosen mucus from the bronchial walls and move the mucus from the small to large airways.

The three phases of autogenic drainage include:

- 1 Loosening secretions: Low lung-volume level
- 2 Collecting secretions: Mid lung-volume level
- 3 Evacuating secretions: High lung-volume level

Why does my child need to perform autogenic drainage?

Autogenic drainage helps children, like those with cystic fibrosis, to cough and get rid of mucus in their lungs. It works well for older children who can stay focused and perform all phases of this technique.

How does my child perform autogenic drainage?

Your child can perform autogenic drainage either sitting up or lying down. Have your child follow these instructions:

- Begin breathing at a low lung-volume level.
- Breathe in slowly through your nose using the diaphragm and/or lower chest.
- Hold your breath for 1–3 seconds, keeping the glottis (voice box) open. This helps the lungs fill evenly and allows air to get behind the mucus.



- High-frequency crackles indicate secretions in the smaller airways. Low-frequency crackles indicate secretions in the upper airways. Breathe at each level for 3 minutes.

You may perform autogenic drainage alone or with other airway clearance techniques for a 30-minute airway clearance session.

If you have questions about autogenic drainage, contact your child's healthcare provider.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.


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