

understanding your condition

Asthma

Receiving a medical diagnosis, such as asthma, may be overwhelming and scary. Learning about the condition, and how to cope with it, can make it more manageable.

Condition Introduction

Asthma is a common, chronic inflammatory condition that affects both children and adults. With asthma, the lining of the airways in the lungs become narrowed and inflamed, making the lungs more sensitive to certain substances, sometimes called asthma “triggers”.

Triggers include environmental factors like air pollution, pet dander, exercise, stress, weather changes, tobacco smoke or even certain foods or food additives.

Asthma can cause a variety of symptoms including wheezing, chest tightness, shortness of breath and coughing. There are three major types of asthma, allergic, non-allergic and eosinophilic asthma. Allergic asthma is caused by exposure to an allergen, such as mold or a food additive. Non-allergic asthma is triggered by illness, exercise, weather and airborne irritants. Eosinophilic asthma is a severe type of asthma caused by the overabundance of eosinophils, a type of white blood cells. The presence of eosinophils in the airways and lungs can lead to inflammation and swelling.

Although there is no cure for asthma, there are a variety of treatment options available that can help minimize symptoms and improve quality of life.

Symptoms

Asthma symptoms may vary in frequency and severity from person to person. Some may have a mild form of asthma, with occasional, brief shortness of breath, while others may have more severe attacks with a chronic cough and wheezing.

To better understand your condition, it's important to discuss with your healthcare provider what symptoms you're experiencing, including how often, and how severe. See below for more details on common symptoms and severe symptoms:

Most Common Symptoms

- Coughing, especially at night, when laughing or during exercise
- Wheezing (a whistling sound in the chest when breathing)
- Production of sticky phlegm
- Chest tightness
- Shortness of breath

Severe Symptoms

- Severe shortness of breath
- Severe chest tightness
- Inflammation throughout the body, including the nose and GI tract

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How Nutrition is Affected by Asthma

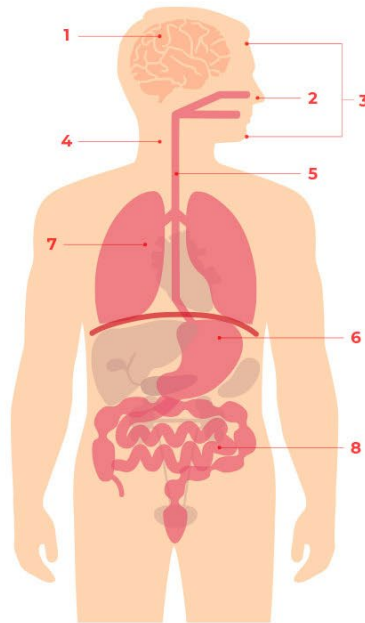
Sometimes asthma symptoms can be brought on by the foods you eat. To better manage your symptoms and keep track of your diet, download our *Food and Symptom* tracker. To better understand this disease, your symptoms, and how nutrition is affected, **see the table below for more details.**

Understanding Symptoms and How Nutrition is Affected by Asthma	
General Overview	How Nutrition is Affected
<ul style="list-style-type: none"> • Asthma is a chronic inflammatory disease that mainly affects the airways of the lungs. The lungs become irritated and swollen (inflamed). • When the lungs are inflamed, the muscles around the airway can tighten making the airway smaller and making it more challenging to breathe. • Challenges with breathing can cause shortness of breath, wheezing, tightness in the chest and coughing. • Eosinophilic asthma, a type of severe asthma, causes an increase in white blood cells. High white blood cell counts increase inflammation in the body and increase the severity of asthma symptoms. • Severe asthma can also lead to a stuffy nose, nasal drainage, nasal polyps, loss of smell and chronic sinus infections. • It's estimated that about 25.7 million people in the United States suffer from asthma. In young children, the risk of developing asthma is greater in boys than girls. • In adults, the risk of developing asthma is greater in women than men. • Asthma can range in severity, so treatment should be individualized to the patient. • Asthma triggers vary per person. Common triggers include animal dander, dust mites, mold, smoking, pollen and exercise. Even food allergies can trigger asthma flares in some people. 	<ul style="list-style-type: none"> • Difficulty breathing can make it challenging to carry on everyday activities, such as grocery shopping, cooking or exercising. This can lead to poor nutrient intake and potential weight gain. • Shortness of breath can make it difficult to stand for longer periods of time making it hard to prepare meals. It can also make it challenging to eat a meal. This can lead to poor nutrient intake. • Smell and taste are very much connected. Inflammation in the nose, increased nasal drainage and loss of smell can make it difficult to taste food as well. This can lead to a lack of desire to eat and low nutrient intake. • Asthma can affect sleep health, making it difficult to achieve the recommended 7-8 hours of sleep each night. Research shows people who sleep less than 6 hours per night are more likely to consume a diet rich in simple carbohydrates which, over time, can lead to weight gain and poor nutrient intake. • Severe asthma can cause inflammation throughout the body, including the GI tract. When the GI tract becomes inflamed, this can lead to stomach discomfort, pain, nausea and vomiting. These side effects can make it challenging to eat and lead to poor nutritional intake.

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How Asthma Affects the Body

To better understand how this disease affects the body, **see below for more details.**



- 1. Brain:** Having asthma increases the risk for a variety of mood changes, including anxiety, depression and panic disorders.
- 2. Nose:** Asthma can cause allergic rhinitis, inflammation of the mucus membranes in the nose caused by the immune system's reaction to an allergen, like dust or mold. Allergic rhinitis causes stuffiness, runny nose and sneezing. Asthma can increase the risk of nasal polyps, small growths on the lining of the inside of the nose or sinus cavities. Nasal polyps are not cancerous and usually painless. They can cause a runny or stuffy nose, postnasal drip, loss of taste/smell, headaches, sinus pressure, itchy eyes and sneezing.
- 3. Face:** *Allergic sinusitis* is the inflammation of the mucus membranes in the sinuses. Allergic sinusitis can cause a runny nose, facial pain and pressure, congestion, lowered ability to smell, bad breath and a cough with mucus.
- 4. Throat:** Obstructive Sleep Apnea (OSA) is common in those with asthma. OSA causes interruptions in breathing during sleep due to relaxation of muscles and structures in the mouth, throat and nose, obstructing airflow. OSA can put a person at higher risk for high blood pressure, heart attack and stroke.
- 5. Esophagus:** Eosinophilic Esophagitis (EoE) occurs when the esophagus becomes inflamed due to the presence of eosinophils, a type of white blood cell. This chronic allergic condition causes damage to the esophagus and may make eating difficult or painful. Those with EoE commonly have other allergic diseases, like asthma.

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- 7. Lungs:** During an asthma attack, the airways contract and become smaller. The tissues lining the airways may also become inflamed and release mucous, causing more narrowing and breathing problems. For those with eosinophilic asthma, the eosinophils in the lungs may release additional substances, which can constrict the airways even more.
- 8. GI Tract:** Eosinophilic Gastroenteritis (EGE) occurs when the presence of a certain type of white blood cell, eosinophils, cause inflammation and injury to the stomach and small intestine. Symptoms of EGE may include heartburn, abdominal pain, nausea, vomiting, diarrhea and bloating. EGE occurs more often in those who have other allergic conditions, like asthma.