Eosinophilic Esophagitis (EoE)

What is eosinophilic esophagitis?
Eosinophilic esophagitis (EE-oh-sin-oh-FILL-ick ee-SOFF-uh-JITE-us) is often called EoE (EE-oh-EE). It is a type of allergy that causes the tissue of the esophagus to become inflamed and swollen. A swollen esophagus can make eating and swallowing difficult. EoE is a chronic condition. This means it is treatable, but usually comes back when treatment is taken away.

How common is pediatric EoE?
EoE is a rare disease, but it has become much more common in the past 10 years. It is often diagnosed in childhood. About 3 in every 1,000 children in Utah have EoE. The increase in EoE mirrors the recent rise in food allergies, asthma and eczema. All of these conditions tend to go together.

What causes EoE?
Children with EoE have high numbers of eosinophils (a type of white blood cell) in the esophagus tissue. A healthy esophagus has zero eosinophils. When eosinophils break open, it can make the esophagus tissue swollen and angry.

Eosinophils swim into the esophagus tissue due to a delayed type of food protein allergy. It’s hard to find the foods causing this reaction, because symptoms occur only weeks to months after repeated food exposures. This is different from traditional food allergies, such as a peanut allergy, where symptoms occur immediately after eating. Regular allergy tests, such as skin pricks or blood testing, are not good at identifying the food allergies that cause EoE.

EoE does run in families, and many adults don’t know they have EoE. Adults with EoE often complain of choking on tough foods like meat. Some may have needed their esophagus dilated (stretched).

What are the symptoms of EoE in children?
EoE symptoms vary by age. Because EoE symptoms are different for each child, early evaluation is important. The most common symptoms by age group are listed below.

<table>
<thead>
<tr>
<th>Ages</th>
<th>Symptoms</th>
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<tbody>
<tr>
<td>Infants and toddlers</td>
<td>Refusing food, picky eating, not gaining weight, vomiting</td>
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<tr>
<td>Early school age</td>
<td>Slow eating, low appetite, abdominal pain, nausea, vomiting</td>
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<tr>
<td>Pre-teens and teens</td>
<td>Trouble swallowing (food gets stuck in the esophagus or feels like it’s stuck)</td>
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How is EoE diagnosed?
The only way to know for sure if your child has EoE is an endoscopy. During an endoscopy, a pediatric gastroenterologist (GI doctor) puts a camera into your child’s esophagus. Your child will be sedated during the procedure. The camera is a soft, bendable tube with a light so the doctor can take pictures of the tissue. The doctor will also take small pieces of tissue (called biopsies) from the inner lining of the esophagus to look at under the microscope.
The endoscopy pictures and biopsies allow the doctors to diagnose EoE or tell you if there are other problems causing your child’s symptoms, such as reflux or an infection.

**How is EoE treated?**

EoE has three treatment options, which are often used together:

**Diet changes**

Your child’s healthcare provider may recommend avoiding certain foods for a while. This may mean stopping several foods at first and then slowing adding one food back at a time. The most common foods that trigger EoE include:

- Milk
- Soy
- Eggs
- Fish and shellfish
- Peanuts and tree nuts
- Wheat

Meat can also be a problem for children with EoE. Tracking your child’s symptoms can help you find which foods are affecting your child.

**Proton pump inhibitor acid blocker**

Your child may benefit from a certain type of acid blocker called a proton pump inhibitor. This medicine lowers stomach acid, which can make the esophagus sore. This medicine also prevents eosinophils from going into the esophagus. Other acid blocker types are not effective in treating EoE.

**Swallowed steroids**

Your child’s healthcare provider may prescribe an asthma medication. Instead of inhaling the medicine, your child swallows it to coat the esophagus. Swallowed steroids do not often cause side effects, because the medicine only touches the inner esophagus. Very little goes into the bloodstream.

The main risk of swallowed steroids is an esophagus infection. Listen to your child’s healthcare provider’s instructions to give your child this medicine correctly.

**What can happen if EoE isn’t treated?**

Young children with EoE may not receive enough nutrition if EoE is not treated. They may forget how to eat normally and may need a feeding tube to get the nutrients they need.

Older children with EoE may have a scarred and narrowed esophagus, which causes food to get stuck. A complete food blockage can be a medical emergency. It needs to be removed immediately by a medical professional so your child can breathe.

**When should I call a doctor?**

Call your child’s pediatric gastroenterologist if your child has EoE and is having trouble or pain when eating or swallowing.

Get emergency care if your child feels food or pills are stuck in their esophagus and won’t go down.