

Swallowing Food Whole: Associated Risks and Signs



Frequently Asked Questions (FAQ)

What does it mean to “swallow food whole”?

When your child swallows food whole, he is not efficiently chewing the food before swallowing it. Children who swallow food “whole” may *look* as though they are chewing, but instead of chewing with their back teeth they are often mashing the food between their tongue and the roof of their mouth. This inefficient manipulation results in food being swallowed more or less “whole.”

Think about what you do when you take a bite of a cookie: you bring the bite (also known as a “bolus” of food) over to one side of your mouth and then to the other side as you are chewing it. The bolus is then organized, held on the middle of your tongue, and swallowed. To get a feel for what it’s like to inefficiently or inadequately manipulate a cookie, try this: as you take a bite, don’t let it go to the side of your mouth. Instead, actively use your tongue to mash it against your hard palate (roof of your mouth). Look in the mirror and notice how active your jaw looks as your tongue tries to mash the cookie. Notice how much it looks like you are chewing, even though you are not. When you have the cookie as “mashed” as you can, swallow it. How did that feel?

It’s difficult to observe this kind of “chewing” in children, because it’s typically done with closed lips and, as you saw with your own experiment, the jaw moves as though it’s chewing. Chewing food with closed lips requires a rather mature skill level, which typically does not emerge until the age of 3 and it certainly is not mastered until much later. That is why you are constantly asking your older children to chew with their mouth closed. Use your child’s age as a reference point: If your child is 3 or younger, she should be chewing with her mouth open.

How can I tell if my child is at risk?

- Your child is younger than 3 years, but “chews” with her mouth closed
- Your child chokes or gags while eating
- Your child winces during swallowing
- You can identify whole foods in your child’s diaper or vomit
- Your child is constipated
- Your child fails to maintain his weight despite eating age-appropriate amounts of food
- Your child stuffs her mouth full of food while eating and often needs reminders from you to slow down and take smaller bites

I think my child is not chewing. Now what should I do?

If you suspect your child is not chewing adequately or is swallowing food whole, discontinue table foods or solids and give your child puree consistencies to reduce the risk of choking and airway obstruction. Let your doctor know immediately so you can be referred to a speech-language pathologist specifically trained in pediatric feeding/swallowing disorders (dysphagia) in order to evaluate your child’s feeding skills. They will initiate oral sensori-motor feeding therapy, which will help your child learn the skills necessary for chewing and safe swallowing.

What medical problems can result from swallowing food whole?

Problems associated with swallowing food whole include **airway obstruction and choking, gastrointestinal difficulties, inadequate nutrition, and constipation.**

Airway Obstruction and Choking: The most serious medical problem is airway obstruction, which can result in death by choking. According to *the Journal of Pediatric Health*, children between 1-3 years are the most vulnerable — 90% of all choking deaths occur before the age of 5 years. To reduce the immediate risk of death by choking (especially if you suspect your child swallows food whole), reduce textures to a puree consistency and obtain guidance. Specific examples of foods to avoid include nuts, raw carrot sticks, pieces of raw apple, celery sticks, corn chips, grapes, popcorn, gristly meats and hot dogs.

Gastrointestinal Difficulties: The first stage of digestion begins with the breakdown of the food by chewing. During chewing, the food is mixed with enzymes in your mouth which further aid in digestion. When food is swallowed whole or inadequately chewed, this first stage of digestion is bypassed. A large range of gastrointestinal difficulties, which are beyond the scope of this paper, may result.

Lack of Adequate Nutrition: When food is swallowed whole or isn't efficiently chewed, it's harder for the body to adequately absorb the nutrition. When the body cannot appropriately digest the food, undernutrition or malnutrition can result.

Constipation: When food hasn't been efficiently digested, it travels through the body and reappears intact. When pieces of whole food appear in your child's diaper, it often indicates that he is not efficiently chewing his food. Constipation or straining with bowel movements can result from swallowing food whole or incompletely chewed.

Won't my child learn to chew with time?

Most children who swallow food that is inadequately manipulated learn to swallow increasingly larger boluses with time. Their gag reflex becomes more desensitized and they are able to swallow larger sizes of unchewed food with less effort. When your child's gag reflex is desensitized, she is at significantly greater risk for airway obstruction. As children who swallow food whole get older, they may also learn compensatory swallowing patterns, which can result in a variety of complications including changing the alignment of their teeth. Children who swallow food whole or inadequately manipulated need oral-sensori-motor therapy to teach them how to chew appropriately and where to place their tongue when they swallow. This often includes a period of time in which the gag reflex is re-trained in order to protect the airway.

What can happen if my child doesn't receive therapy?

Some children may continue to swallow food whole or incompletely chewed without severe medical complications. These children may be labeled "picky eaters", presenting with food selectivity as a result of swallowing difficulties. They often have constipation or hard stools and nutrition is often a concern. Unfortunately, many will eventually have an episode of airway obstruction, which brings attention to the underlying problem.