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Gastroesophageal Reflux

Gastroesophageal reflux (GE reflux), regurgitation or spitting up is the effortless spitting up of one or two mouthfuls of stomach contents. Formula or breast milk just rolls out of the mouth, often with a burp. It usually happens during or shortly after feedings.

Reflux is very common in an infant's first 9 months of life. It begins in the first weeks of life and by 9 months of age, most reflux has decreased or has stopped. The reasons for this are probably because the baby is old enough to sit up and/or is now eating solid foods.

Will GE Reflux Hurt My Baby?

Spitting up is harmless as long as your infant's spitting is not associated with pain and/or weight loss. If acid from the stomach gets into your baby's esophagus, it may cause burning (like heartburn in adults). This is referred to as esophagitis and requires medical treatment.

Babies with this type of reflux with esophagitis will cry after feeds, feed poorly and may lose weight. The crying spells may not always be associated with spitting.

What Causes GE Reflux?

Reflux occurs when stomach contents move backwards into the esophagus. Under normal conditions, a muscle at the entrance to the stomach (lower esophageal sphincter muscle), closes and prevents food from re-entering the esophagus when the stomach contracts to push food out of the stomach. When this muscle does not function properly, reflux occurs. In most babies, this muscle regains its normal function, and reflux stops.

Are There Other Problems Associated With Reflux?

Some infants also have a delay in their ability to empty food from the stomach into the small intestine. This may be due to reduced stomach contractions, which slows movement of stomach contents, or to intermittent spasms of the pylorus, which is the muscle that controls food passing out of the stomach into the small intestines.

Infants prone to this condition often have episodes of large volume, forceful or "projectile" vomiting, which can occur up to several hours after a meal.

Treatment Suggestions

Feed smaller amounts

Overfeeding always makes spitting up worse. If the stomach is filled to capacity, spitting up is more likely.

Give your baby smaller amounts (at least 1 ounce less than you have been giving). Your baby does not have to finish a bottle. Spread the feedings out at least 3½ hours from the beginning of one feeding to the beginning of the next feeding.

Position your baby properly during feeds

For bottle-fed babies, sit your baby as upright as possible and keep the bottle as level as possible (horizontally) just enough to keep the nipple filled with milk. As your baby empties the bottle, keep the nipple just filled with milk by tilting the bottle more upward.

If you are using a bottle with a disposable bag, stop the feeding after several ounces, take off the nipple, squeeze out the air in the bag and reattach the nipple. This will decrease the air your baby swallows and decrease spitting.

For breast-fed babies, sit your baby more upright and position yourself in such a way as to decrease your milk flow (on your side or lying back more). If you are engorged before a feeding, try expressing a little milk before putting your baby to the breast. This will decrease the air your baby swallows and decrease spitting.

Burp your child to reduce spitting up

Burp your baby two or three times during each feeding. Do it when he/she pauses and looks around. Do not interrupt his/her feeding rhythm for burping. Keep in mind that burping is less important than giving smaller feedings and avoiding tight diapers.

Burping is a function of how much air your baby swallows. The more your baby is lying back and the higher the bottle is positioned, the more air your baby will swallow, resulting in more spitting.

In addition, babies who swallow more air, also tend to have more gas. This may be caused by the swallowed air becoming trapped below the milk in the stomach and traveling through your baby's intestinal system. Eventually your baby will pass this air through their rectum.

Keep your child in a vertical position after meals

After meals, try to keep your baby in an upright position in an infant seat for 1-2 hours.

Use a proper sleep position

Most infants with spitting up can sleep on their back, the position recommended by the American Academy of Pediatrics to reduce the risk of SIDS. Another option for severe reflux is sleeping on the right side, using a wedge to prevent your baby from rolling over onto the stomach.

Avoid pressure on your child's abdomen

Keep diapers fastened loosely. Tight diapers can put added pressure on your baby's stomach. Do not let people hug your child or play vigorously with him/her right after meals.

Add rice cereal to the bottle

If the above suggestions do not help, rice cereal can be added to your baby's bottle. Start with 1 teaspoon per ounce of formula and slowly increase it to 3 teaspoons per ounce of formula. Thickening feeds helps to thicken the stomach's contents that may decrease the degree of vomiting.

Avoid giving too much cereal

Too much cereal may decrease your baby's milk intake, resulting in a less balanced diet. In other cases, some babies may become over weight if given too much cereal.

When Are Medicines Used To Treat Reflux?

If the degree of vomiting is causing your baby discomfort (esophagitis), respiratory problems (wheezing or coughing), or there is a decreased weight gain, medical treatment is usually indicated.

Zantac (Rantidine) is a prescription medication used to reduce stomach acid production in an effort to reduce esophagitis. Proton Pump Inhibitors (Prevacid-Axid) are another class of medicines that are used when Zantac does not provide enough relief.

Simethicone (Mylicon-Gas-X) drops (over the counter) can be used to help reduce gas. It comes with a dropper with markings of 0.3 and 0.6 cc. Use 0.3-0.6 cc before or after each feeding. This medicine works by dispersing gas. If giving before a meal doesn't help, try after meal.

Cleaning up mess

A common concern is clothing stains from milk spots. Use the powdered formulas as they stain the least.

Follow these suggestions:

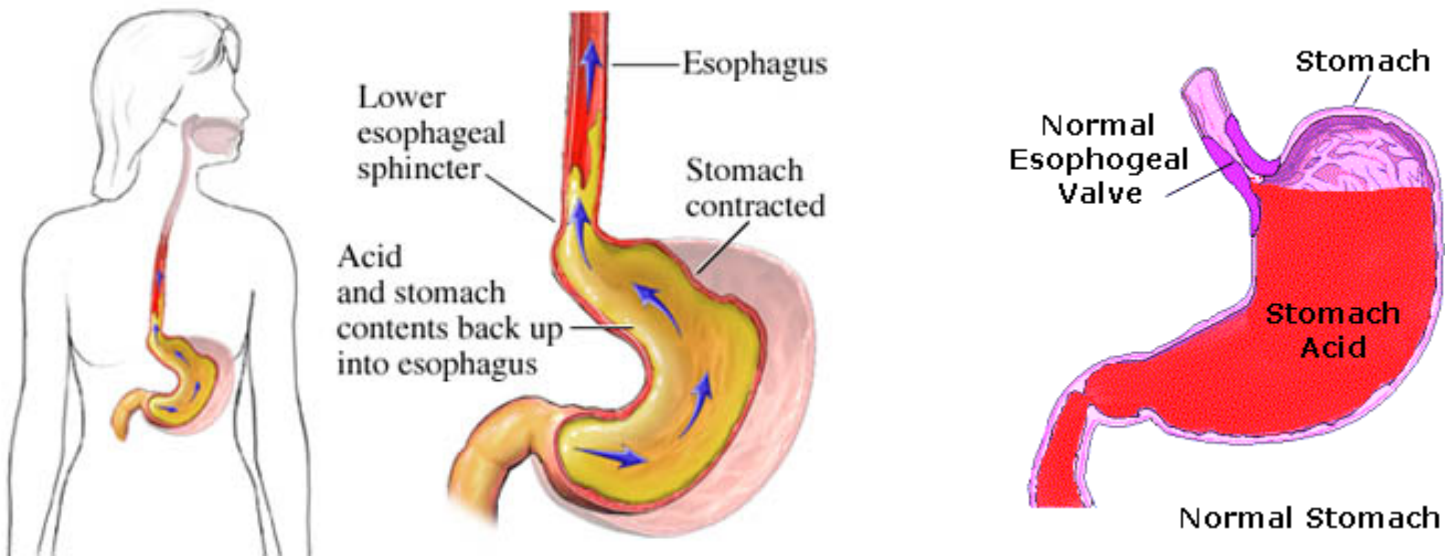
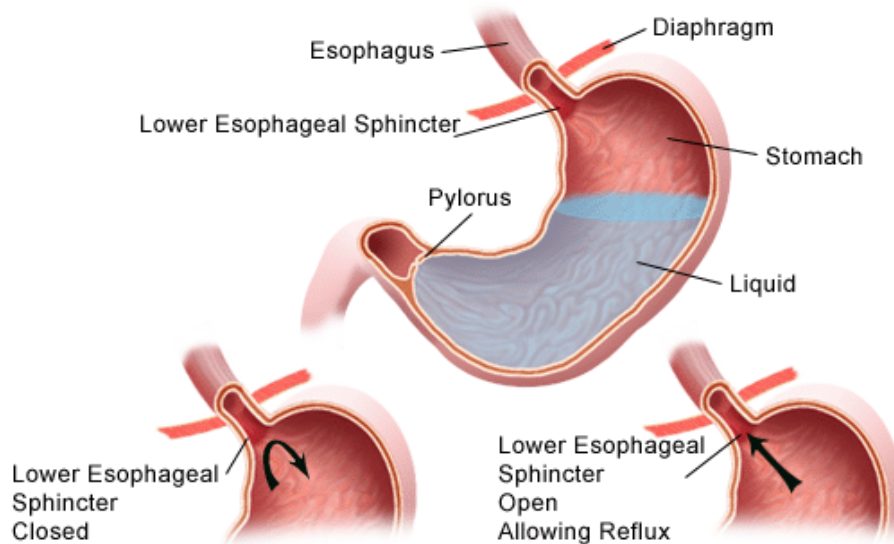
- Never wear your best clothing when feeding the baby.
- Never burp the baby in the living room or when sitting on a neighbor's new sofa.

- Never burp your baby on the way out to a formal affair.

Call our office if:

- Any blood is seen in the spit-up material.
- The spitting up causes your child to choke, cough, or wheeze.
- Your baby seems to be in pain after spitting up.
- You think your baby is not gaining weight.
- Your baby does not seem to improve with the above suggestions or you have other concerns or questions.

Gastroesophageal Reflux



Foods To Avoid With Gastroesophageal Reflux

<u>Food Group</u>	<u>Foods To Avoid</u>
Fruit	<ul style="list-style-type: none"> • Orange juice, Tomato • Lemon - Lemonade • Grapefruit juice - Cranberry juice

Vegetables	<ul style="list-style-type: none"> • Mashed potatoes, French fries • Onion, raw
Meat	<ul style="list-style-type: none"> • Ground beef, chuck, Marbled sirloin • Chicken nuggets, Buffalo wings
Dairy	<ul style="list-style-type: none"> • Sour cream, Milk shake, Ice cream • Cottage cheese, regular
Grains	<ul style="list-style-type: none"> • Macaroni and cheese, Spaghetti with sauce
Beverages	<ul style="list-style-type: none"> • Liquor/Wine • Coffee or Tea, decaffeinated or regular
Fats / Oils	<ul style="list-style-type: none"> • Salad dressing, creamy, oil & vinegar
Sweets / Desserts	<ul style="list-style-type: none"> • Butter cookie, high-fat, Brownie, Chocolate • Doughnut, Corn chips, Potato chips, regular

Safe Foods For The Acid Reflux Diet

<u>Food Group</u>	<u>Foods With Little Potential to Cause Heartburn</u>
Fruit	<ul style="list-style-type: none"> • Apple, fresh, Apple, dried, Apple juice, Banana
Vegetables	<ul style="list-style-type: none"> • Baked potato, Broccoli, Cabbage, • Green beans, Peas, Carrot
Meat	<ul style="list-style-type: none"> • Ground beef, extra-lean, Steak, London Broil • Chicken breast, skinless, Fish, no added fat • Egg whites, Egg substitute
Dairy	<ul style="list-style-type: none"> • Cheese, feta or goat, Cream cheese, fat-free • Sour cream, fat-free, Soy cheese, low-fat
Grains	<ul style="list-style-type: none"> • Bread, multi-grain or white, Cereal, bran or oatmeal • Corn bread, Graham crackers, Pretzels, Rice cakes • Rice, brown or white
Beverages	<ul style="list-style-type: none"> • Mineral water
Fats / Oils	<ul style="list-style-type: none"> • Salad dressing, low-fat
Sweets / Desserts	<ul style="list-style-type: none"> • Cookie, fat-free, Jelly beans, Red licorice • Potato chips, baked

