

Spitting Up & Reflux in the Breastfed Baby

My baby spits up – is this a problem?

Spitting up (also called reflux) is normal in babies. Most young babies spit up sometimes, since their digestive systems are immature, making it easier for the stomach contents to flow back up into the esophagus (the tube connecting mouth to stomach).

Babies often spit up when they get too much milk too fast. This may happen when baby feeds very quickly or aggressively, or when mom's breasts are overfull. The amount of spitup typically appears to be much more than it really is. If baby is very distractible (pulling off the breast to look around) or fussy at the breast, he may swallow air and spit up more often. Some babies spit up more when they are teething, starting to crawl, or starting solid foods.

A few statistics (for all babies, not just breastfed babies):

- Spitting up usually occurs soon after baby eats, but it may also occur 1-2 hours after a feeding.
- ½ of all 0-3 mo old babies spit up at least once a day.
- Spitting up usually peaks at 2-4 months.
- Many babies outgrow spitting up by 7-8 months.
- Most babies have stopped spitting up by 12 months.

If your baby is a 'Happy Spitter' --gaining weight well, spitting up without discomfort & reasonably content --spitting up is a laundry & social problem rather than a medical issue.

Some causes of excessive spitting up

- Breastmilk oversupply or forceful let-down (milk ejection reflex) can cause reflux-like symptoms, and usually can be remedied with simple measures.
- Food sensitivities can cause excessive spitting. The most likely offender is cow's milk products (in baby's or mom's diet). Other things to ask yourself: is baby getting anything other than breastmilk - formula, solids (including cereal), vitamins (fluoride, iron, etc.), medications, herbal preparations? Is mom taking any medications, herbs, vitamins, iron, etc.?
- Babies with Gastroesophageal Reflux Disease (GERD) usually spit up a lot (see below).
- Although seldom seen in breastfed babies, regular *projectile vomiting* in a newborn can be a sign of pyloric stenosis, a stomach problem requiring surgery. It occurs 4 times more often in boys than in girls, and symptoms usually appear between 3 and 5 weeks of age. Newborns who projectile vomit at least once a day should be checked out by their doctor.

Gastroesophageal Reflux Disease (GERD)

The small percentage of babies with Gastroesophageal Reflux Disease experience severe discomfort and other complications due to reflux. These babies have been termed by some as 'Scrawny Screamers' (as compared to the Happy Spitters). There seems to be a family tendency toward reflux. GERD is common in preemies (due to their immaturity) and in babies with other health problems. GERD usually improves by 12-24 months.

Following are **symptoms of GERD** -- there are varying degrees and need your doctor's involvement to diagnose:

- Frequent spitting up or vomiting; discomfort when spitting up. Some babies with GERD do not spit up – *silent reflux* occurs when the stomach contents only go as far as the esophagus and are then re-swallowed, causing pain but *no* spitting up.
- Gagging, choking, frequent burping or hiccoughing, bad breath.
- Baby may be fussy and sleep less due to discomfort.

Warning signs of *severe reflux*:

- Inconsolable or severe fussiness or crying associated with feedings.
- Poor weight gain, weight loss, or failure to thrive. Difficulty eating. Breast/food refusal.
- Difficulty swallowing, sore throat, hoarseness, chronic nasal/sinus congestion, chronic sinus/ear infections.
- Spitting up blood or green/yellow fluid
- Sandifer's syndrome: Baby may 'posture' and arch the neck & back to relieve reflux pain--this lengthens the esophagus and reduces discomfort.
- Breathing problems: bronchitis, wheezing, chronic cough, pneumonia, asthma, aspiration, apnea, cyanosis.

GERD may cause babies to either *undereat* (if they associate feeding with the after-feeding pain, or if it hurts to swallow) or *overeate* (because sucking keeps the stomach contents down in the stomach and because mother's milk is a natural antacid).

Current information on reflux indicates that testing or treatment for reflux in babies younger than 12 months should be considered only if spitting up is accompanied by poor weight gain or weight loss, severe choking, lung disease or other complications. Per Donna Secker, MS, RD in the article *Gastroesophageal Reflux Disease*, "The infant with significant reflux who seems to be growing well and has no other significant health problems benefits most from little or no therapy."

When GERD is suspected, many doctors first try a trial of various reflux medications (without running tests), to see if the medications improve baby's symptoms. If testing is done, a 24-hour pH probe study is the current "gold standard" for reflux testing in babies; this is an invasive procedure where a tube is placed down baby's throat to measure the acid level at the bottom of the esophagus. A barium swallow (upper GI) is not so invasive (baby swallows a barium mixture, then an x-ray is taken) but is not really effective for diagnosing reflux in babies, since most babies will reflux when given barium. An upper GI will not identify whether baby's stomach contents are higher in acid or if there has been any esophagus damage due to reflux, but it will show if there are any blockages or narrowing of the stomach valves that may be causing or aggravating the reflux.

Breastfeeding Tips

- Aim for frequent breastfeeding. Smaller, more frequent feedings are easier to digest.
- Try positioning baby in a semi-upright or sitting position when breastfeeding, or recline back so that baby is above and tummy-to-tummy with mom. Ensure good latch to minimize air swallowing.
- For fussy, reluctant feeders, try lots of skin to skin contact, breastfeeding in motion (rocking, walking), in the bath or when baby is sleepy.
- Allow baby to completely finish one breast (by waiting until baby pulls off or goes to sleep) before you offer the other. Don't interrupt active suckling just to switch sides. Switching sides too soon or too often can cause excessive spitting up. For babies who want to breastfeed very frequently, try switching sides every few hours instead of at every feed.
- Encourage non-nutritive/comfort sucking at the breast, since non-nutritive sucking reduces irritation and speeds gastric emptying.
- Avoid rough or fast movement or unnecessary jostling or handling of your baby right after feeding. It's often helpful to burp in between breasts and after the feeding.

What can I do to minimize spitting up/reflux?

- **Breastfeed!** Reflux is less common in breastfed babies. In addition, breastfed babies with reflux have been shown to have shorter and fewer reflux episodes and less severe reflux at night than formula-fed babies. Breastfeeding is also best for babies with reflux because breastmilk leaves the stomach much faster (so there's less time for it to back up into the esophagus) and is probably less irritating when it does come back up.
- The more relaxed your infant is, the less the reflux.
- Eliminate all environmental tobacco smoke exposure, as this is a significant contributing factor to reflux.
- Reduce or eliminate caffeine. Excessive caffeine in mom's diet can contribute to reflux.
- Allergy should be suspected in all infant reflux cases. According to a review article in *Pediatrics* [Salvatore 2002], up to half of all GERD cases in babies under a year are associated with cow's milk protein allergy. The authors note that symptoms can be similar and recommend that pediatricians screen all babies with GERD for cow's milk allergy.
- Positioning:
 - Reflux is worst when baby lies flat on his back.
 - Many parents have found that carrying baby in a sling or other baby carrier can be helpful.
 - Avoid compressing baby's abdomen - this can increase reflux and discomfort. Dress baby in loose clothing with loose diaper waistbands; avoid "slumped over" or bent positions; roll baby on his side rather than lifting legs toward tummy for diaper changes.

- Recent research has compared various positions to determine which is best for babies with reflux. Elevating baby's head did *not* make a significant difference in these studies. The positions shown to significantly reduce reflux include lying on the *left side* and *prone* (baby on his tummy). Placing the infant in a prone position should only be done when the child is awake and can be continuously monitored. Prone positioning during sleep is almost never recommended due to the increased SIDS risk.
- Although recent research does not support recommendations to keep baby in a semi-upright position (30° elevation), this remains a common recommendation. Positioning at a 60° elevation in an infant seat or swing has been found to increase reflux compared with the prone (tummy down) position.
- If your child is taking reflux medications, keep in mind that dosages generally need to be monitored and adjusted frequently as baby grows.

What about thickened feeds?

Baby cereal, added to thicken breastmilk or formula, has been used as a treatment for GER for many years, but its use is controversial.

Does it work? Thickened feeds *can* reduce spitting up, but studies have not shown a decrease in reflux index scores (i.e., the "silent reflux" is still present). Thickened feeds have been associated with increased coughing after feedings, and may also decrease gastric emptying time and increase reflux episodes and aspiration. Note that rice cereal will not effectively thicken breastmilk due to the amylase (an enzyme that digests carbohydrates) naturally present in the breastmilk.

Is it healthy for baby? If you do thicken feeds, monitor baby's intake since baby may take in less milk overall and thus decrease overall nutrient intake. There are a number of reasons to avoid introducing cereal and other solids early. There is evidence that the introduction of rice or gluten-containing cereals before 3 months of age increases baby's risk for type I diabetes. In addition, babies with GERD are more likely to need all their defenses against allergies, respiratory infections and ear infections – but studies show that early introduction of solids *increases* baby's risk for all of these conditions.

The breastfeeding relationship: Early introduction of solids is associated with early weaning. Babies with reflux are already at greater risk for fussy nursing behavior, nursing strikes or premature weaning if baby associates reflux discomfort with breastfeeding.

Safety issues: *Never* add cereal to a bottle without medical supervision if your baby has a weak suck or uncoordinated sucking skills.

See www.kellymom.com/babyconcerns/reflux.html for additional information and references.