Constipation

Constipation occurs when too much moisture is removed from stool causing it to become hard, large, and difficult to pass through the colon and anus. Three medical factors are at work when a child becomes constipated.

1) The wrong diet can create stool that tends to be less moist
2) The longer stool stays in the body the dryer it gets
3) Some factors are genetic

Constipation can cause cramps, anal pain when passing stool, tearing and bleeding of the anus, abdominal distension, and leakage of liquid stool from the anus called **encopresis**. Encopresis is the result of liquid stool passing around the hard stool occupying the rectum. The symptoms of constipation can further exacerbate the problem by making a child fearful of stooling which can lead a child to become a "stool holder". Once **stool holding** begins, the constipation discomfort becomes even more severe and the vicious cycle continues. If this situation is prolonged, the rectum becomes distended and insensitive to the need to stool. Then the child cannot tell when they need to have a bowel movement. This insensitivity leads to worsening constipation and can even cause a child to return to a constipated state soon after a treatment regimen has started to become successful.

Infants commonly strain when stooling. Bowel frequency can change from month to month and often babies may not have a bowel movement for several days **(this is normal)**. As long as they do not experience an unusual amount of discomfort passing stool, and there is no rectal bleeding, and the stool is as soft as peanut butter, it is ok to stool as infrequently as once a week (or sometimes even longer). If the baby is older than one month and needs some help, it is okay to give prune, apple, or pear juice. Give no more than one ounce per day for each month of age from one month up to four months of age.

For example, a two month old baby should receive no more than two ounces of juice per day and a three months old baby should receive no more than three ounces of juice per day. Babies older than four months should receive no more than four ounces of juice per day. A baby who already eats solids can be given pureed plums. If these measures do not help after 2-3 days, please call the office.

For older infants and toddlers, implement the above measures along with cutting back on rice, bananas, dairy, cereals, and bread without much fiber. Increase water and high fiber foods like broccoli, beans, peas, and dried fruits. Stick to offering foods that are varied and healthy. Avoid changing what is offered just to please your child. They will end up having a diet that is monotonous, usually subpar in nutrition, and likely conducive to constipation. Favorites and boycotted foods will come and go. Offer foods you choose 3-5 times per day at the table. Children will eat most foods when they are hungry.

For toilet trained children, also implement a behavior modification regimen that encourages them to slow down and take time to have a bowel movement in a calm, familiar place. Consider having them sit on the toilet distracted by conversation, screen time, reading, or music for five minutes when they wake up and before bedtime. You might choose not to even talk about having a bowel movement. The goal is to slow them down to provide the opportunity to stool. They will eventually start stooling at the offered times.

Make sure your child has enough fiber in their diet. The American Academy of Pediatrics recommends that children between the ages of 2 and 19 should eat their age + 5 grams of fiber each day. For example, a 3-year-old should be eating (3+5) 8 grams of fiber each day. Some high fiber foods include the following: Apples with skin (3.5g), Pears with skin (4.6g), 1 cup of Raspberries (5.1g), 1 stalk of Broccoli (5g), 1 cup of Carrots (4.6g), ½ cup of Kidney Beans (7.4g), ½ cup of Navy Beans (3.1g), and 1 cup of Whole-Wheat Cereal (3g).

If the above methods prove unsuccessful or you need help that is more rapid and easier to achieve, consider giving over-the-counter Miralax powder (polyethylene glycol 3350). For children older than six months, start with two teaspoons of Miralax mixed in food or drink once per day. Miralax has a reputation of being quite safe and easy to administer, as it has no taste. It stays in the colon and prevents the reabsorption of water from the stool. A child will not become dependent on Miralax by using it.

1. Mix 2 teaspoons of Miralax in their food or drink 1-2x/day for 2-4 weeks
    a. If the patient is doing well, stay on this dose
    b. If there is diarrhea then decrease each dose by ¼ to ½ tspn per dose
    c. If there is still constipation then increase each dose by ¼ to ½ tspn per dose
2. Once the patient has been stooling well for 2-4 weeks, try decreasing the dose of their medication by ¼ to ½ teaspoon per dose. If after 1-2 weeks they are doing well, you can decrease the dose of their medication by ¼ to ½ teaspoon per dose again. Repeat this process until the child no longer requires the medication.
3. If your child goes longer than 5-7 days without stooling, you can then use 1 infant's (<1 year) or regular glycerin suppository (>1 year) or pediatric Fleets enema as needed. Try not to overuse suppositories and enemas, as children can become dependent on them.

For stool holders and those with encopresis, treatment success hinges on understanding the dynamics of constipation and being consistent with treatment for a long period of time. Do the above strategies, but titrate a daily Miralax dose for a bowel transit time of less than 36-48 hours. Bowel transit times can be determined by the "corn test". Give corn, carrots or colored foods that can easily be seen in the stool and see how long they take to make it through the gastrointestinal tract. Remember, constipation is fundamentally a result of the stool remaining in the colon too long. We can titrate the Miralax does to shorten the time the stool stays in the colon and prevent the child from having stooling discomfort and hard stools that reside persistently in the rectum.

These concepts are critical as we are trying to:

- Keep the stool soft enough to prevent discomfort for a long enough time period so that the child will "forget" that stooling is unpleasant. Stool holding will stop when they are unafraid to stool. A single painful stool can be quite a setback.
- Restore the proper function and sensation of the rectum to aid in prompting the child as to when to have a bowel movement. The rectum frequently needs to be kept empty and non-distended for several months to allow normal sensory and mechanical function to return. If the rectum becomes distended during treatment, success of treatment is threatened.