

## Constipation in Children with Down Syndrome

About 1/3 of all people with Down Syndrome have problems with constipation.

Some of the reasons that they are constipated include: poor diet, not drinking enough fluids, not getting enough exercise, poor muscle tone making it hard for them to poop, low thyroid, Hirschsprung's disease, and celiac disease.

### Constipation is common during three specific time periods

- In babies when they start eating cereals and solid food, usually after they are four to six months old.
  - Newborns with DS and constipation should be checked to find the cause. Are they eating enough, is their thyroid working well, do they have poor muscle tone, is their gut working right or do they have a physical problem with it.
  - Babies WHO ARE FORMULA FED tend to have hard, difficult to pass poop. Babies should be diagnosed with constipation by the kind of poop they have, not how often they actually go, ESPECIALLY BREAST FED INFANTS.
  - Constipation is more common in formula fed babies.
  - Babies don't usually need a laxative AND MAY DEVELOP A DEPENDANCE ON THE LAXATIVE.
  - Parents can give a baby a mixture of fruit juice and water (1 part juice, 3 parts water), 1 ounce two times a day. The water needs to be boiled and then cooled. Cooled, boiled water is also an option.
- Toddlers
  - Especially during toilet training - which lasts from ages two to six .
  - Diet, having painful poops and the child getting more independent are all things that can cause more constipation.
  - A child can start a cycle of not pooping when having a poop is so painful that they don't poop. This causes the poop to get larger and harder stools and makes the poop even more painful when it finally does pass. This is called a pain retention cycle. If babies are treated for painful poops early, then older kids may not have as many problems.
  - Communication to prevent this behavior is key. Using signs and pictures may be useful.
  - A high-fiber diet, giving more fluids, early use of fruits/fluids, starting to use MiraLAX and lactulose can help stop constipation at this stage.
- School Age
  - When school starts, for five to seven-year olds, and many children with DS will avoid the bathroom, need additional support, and/or be limited in fiber and overall nutrition in their school lunches.

## Keys to preventing constipation

1. Five to six grams of fiber plus their age (in years) per day. For example, a six-year-old should have 11 to 12 grams of fiber each day.
2. Six to eight-ounce glasses of water per day.
3. Serve raw fruits and vegetables with skin on. Dried fruits, such as raisins, prunes, figs, and high-fiber grains/cereals products are also helpful.
4. Avoid constipating foods – bananas, most high fat and processed foods, and most dairy products (including cheese, yogurt, and ice cream – but offer an alternative source of calcium if limiting dairy products because of constipation).

## Medication to treat constipation –

MiraLAX is A fiber polymer rather than an active laxative.

- Dosage – 1 mg/kg, must be adjusted to provide the necessary fiber for regular BMs or stools. Once the constipation is managed, slowly decrease how much MiraLAX you give. This will keep the constipation from coming back. Many children with DS need to be on this MiraLax fiber for months or even years.

Treating constipation often takes months, if not longer to be successful. If a child with DS doesn't show progress with treatment, talk to your pediatrician about having your child see a pediatric gastroenterologist.