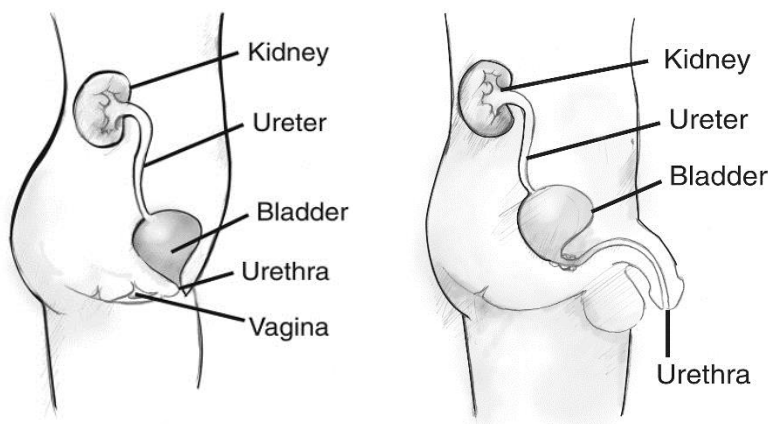




# BLADDER FUNCTION

Urination is a result of coordinated function between the bladder and sphincter. The stretchy bladder muscle stores urine until it reaches capacity and then squeezes to empty. The urethral sphincter stays contracted to hold urine in the bladder until it is full. The sphincter relaxes voluntarily when we urinate.



## What causes children to wet?

### 1. Overactive or unstable bladder

- Urinary frequency and urgency occur if the bladder squeezes to empty prematurely.
- Posturing or “potty dance” observed when the bladder has a spasm.
- Factors such as anxiety, constipation, genetics and diet may worsen an unstable bladder.

### 2. Infrequent voiding

- Purposeful withholding of urine to continue activity.
- Inability to recognize bladder fullness
- Poor fluid intake causes reduced urine production.

### 3. Incomplete emptying

- Inability of sphincter to fully relax during urination.
- Constipation reduces tone of pelvic floor muscles.

### 4. Anatomy

- Neurological problem, such as spina bifida or cerebral palsy
- Structural abnormality of the ureter, bladder, or urethra.



# BOWEL HABITS

Even mild or intermittent constipation can impair bladder function. A good bowel movement is medium in size and soft. Stool should never be painful or difficult to pass.

## Constipation causes:

- Incomplete bladder emptying
- Worsened bladder spasms
- Urinary tract infections

## How do I prevent constipation?

- 1. Encourage a high-fiber diet to fight against constipation**
  - Calculate fiber intake by adding 5 to your child's age.
  - Your child needs a minimum of \_\_\_\_ grams of fiber a day.
  - Review high-fiber food list.
- 2. Adequate fluid intake**
  - Drinking water throughout the day keeps stool soft.
  - Nearly colorless urine indicates good hydration.
- 3. Sit on the toilet 10 to 15 minutes after a meal and try to pass stool**
  - The body has a natural reflex that helps pass a bowel movement after meals.
  - Place a stool under the child's feet if they do not rest comfortably on the floor.
- 4. Daily stool softener such as Miralax and a clean out**
  - Preferred by many children over a high fiber diet, especially picky eaters
  - Dissolves easily, colorless, odorless.
  - Clean out: \_\_\_ capful Miralax in \_\_\_ oz water \_\_\_ times a day. Titrate to keep consistency "soft creamy peanut butter". You may adjust by 1 tsp if needed.
- 5. Avoid excessive dairy intake**
  - Products such as milk, cheese and yogurt in too many servings can cause constipation.
  - Try to keep dairy under 20 oz. daily



# BEHAVIOR BASICS

The first step in achieving a healthy bladder function is improving toileting habits!

- **Urinate often**

- Urinate every 2 ½ -3 hours and whenever the urge arises. Avoid holding!
- Keep a calendar or journal to track bathroom usage and wetting.
- Use a watch with an alarm to remind your child to void and encourage independence.

- **Take time and relax!**

- Many children use the toilet as a pit-stop. Plan on 3 to 5 minutes to urinate.
- Try not to strain or push to empty the bladder
- Pull clothing down well below knees when sitting on the toilet.
- Girls should lean forward after voiding and wipe front-to-back.
- Double voiding can be helpful to ensure the bladder is empty. After you urinate, wait 2-5 minutes and then try again.

- **Encourage**

- Praise your child for his or her efforts!
- Avoid punishment for accidents
- Provide discreet method for child to change clothing.

- **Be patient**

- Understand that accidents still may occur if the bladder squeezes without warning
- It takes time for new behaviors to become habit.



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# DIETARY TRIGGERS

## The 5 C's

**Avoid foods that can irritate the bladder and trigger bladder spasms**

- Caffeine
- Carbonation
- Chocolate
- Citrus
- Excessive Vitamin C



# BLADDER RELAXATION MEDICATION

Anticholinergic medications reduce bladder spasms, which decrease urgency and episodes of wetting. Long acting medication are preferred for better coverage and easy once-daily dosing. Not every medication works well in every individual. Therefore, you may need to trial different medications and different dosages to achieve best results. Bladder relaxation may take up to 4 to 6 weeks to see marked improvement.

## Medications Include:

- Ditropan XL (oxybutynin ER)
- Detrol LA (tolterodine)
- Gelnique (oxybutynin gel)
- Sanctura XR (trospium chloride)
- Levsin (hyoscyamine)
- Oxytrol (transdermal oxybutynin patch)

## Potential Side Effects Include:

- Constipation
- Flushed face
- Drowsiness
- Moodiness
- Dry mouth
- Blurred vision
- Fast heart rate
- Headache
- Nausea
- Rash



## LIST OF HIGH FIBER FOODS

FRUIT	AMOUNT	FIBER (GRAMS)
Apples with skin	1 medium	5.00
Apricot	3 medium	0.98
Apricots, dried	5 pieces	2.89
Banana	1 medium	3.92
Blueberries	1 cup	4.18
Cantaloupe, cubes	1 cup	1.28
Figs, dried	2 medium	3.74
Grapefruit	½ medium	6.12
Orange, navel	1 medium	3.40
Peach	1 medium	2.00
Peaches, dried	3 pieces	3.18
Pear	1 medium	5.08
Plum	1 medium	1.00
Raisins	1.5 oz box	1.60
Raspberries	1 cup	8.34
Strawberries	1 cup	3.98
VEGETABLE	AMOUNT	FIBER (GRAMS)
Avocado	1 medium	11.84
Beets, cooked	1 cup	2.85
Beet greens	1 cup	2.85
Bok choy, cooked	1 cup	2.76
Broccoli, cooked	1 cup	4.50
Brussel sprouts	1 cup	2.84
Cabbage, cooked	1 cup	4.50
Carrot	1 medium	2.00
Carrot, cooked	1 cup	5.22
Cauliflower, cooked	1 cup	3.43
Cole slaw	1 cup	4.00
Collard greens, cooked	1 cup	2.58
Corn, sweet	1 cup	4.66
Green beans	1 cup	3.95
Celery	1 stalk	1.02
Kale, cooked	1 cup	7.20
Onions, raw	1 cup	2.88
Peas, cooked	1 cup	8.84
Pepper, sweet	1 cup	2.62



## LIST OF HIGH FIBER FOODS

VEGETABLE	AMOUNT	FIBER (GRAMS)
Popcorn, air-popped	3 cups	3.60
Potato, baked w/skin	1 medium	4.80
Spinach, cooked	1 cup	4.32
Summer squash, cooked	1 cup	2.52
Sweet potato, cooked	1 cup	5.94
Swiss chard, cooked	1 cup	3.68
Tomato	1 medium	1.00
Winter squash, cooked	1 cup	5.74
Zucchini, cooked	1 cup	2.63
CEREAL, GRAINS, PASTA	AMOUNT	FIBER (GRAMS)
Bran cereal	1 cup	19.94
Bread, whole wheat	1 slice	2.00
Oats, rolled dry	1 cup	12.00
Pasta, whole wheat	1 cup	6.34
Rice, dry brown	1 cup	7.98
BEANS, NUTS, SEEDS	AMOUNT	FIBER (GRAMS)
Almonds	1 oz	4.22
Black beans, cooked	1 cup	14.92
Cashews	1 oz	1.00
Flax seeds	3 tbsp	6.97
Garbanzo beans, cooked	1 cup	5.80
Kidney beans, cooked	1 cup	13.33
Lentils, red cooked	1 cup	15.64
Lima beans, cooked	1 cup	13.16
Peanuts	1 oz	2.30
Pistachio nuts	1 oz	3.10
Pumpkin seeds	¼ cup	4.12
Soybeans, cooked	1 cup	7.62
Sunflower seeds	¼ cup	3.00
Walnuts	1 oz	3.08



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## VOIDING JOURNAL

MONTH:

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY