Strong intestinal and abdominal muscles are one component of healthy bowel function.

When these muscles are toned, the colon can function optimally. It is the job of the colon to extract water from liquid waste, to form stools, and eliminate stools. The colon accomplishes these jobs using the intestinal muscles. If tone in these muscles is poor, the health of the colon is compromised. Constipation is likely because stools are not formed well when intestinal motility is slow.

The text below describes the function of the intestinal muscles in more detail and explores their role in maintaining regularity and healthy colon function.

Can Fruit-Eze™ Tone Intestinal Muscles?
Yes. Fruit-Eze™ pure fruit regularity blend helps the body to produce well formed stools of good texture and volume. These well formed stools help to exercise and tone intestinal muscles. Toned intestinal muscles help to promote regularity.

How Do These Muscles Affect Regularity and Intestinal Motility?
Strong intestinal muscles promote regularity. When strong, these muscles can function efficiently.

Intestinal muscles accomplish the following:
- Advance liquid waste and stool through the colon
- Aid in fluid extraction
- Form a stool with good texture and volume that is soft & flexible
- Respond to neural and reflexive stimulus
- Eliminate stools

If intestinal muscle tone is poor, intestinal motility is slowed. Slow intestinal motility affects regularity. In the colon, when intestinal motility is slow, stool remains too long in the colon. This becomes a problem because the colon, which has no memory, continues to extract water from stools even after they are formed. This can cause stools to dry out, become hard and difficult to pass. As a result, constipation or irregularity is likely to occur.

Are the Colon Muscles Sensitive?
Yes. These nerves that direct the action of these muscles are sensitive to external influences. These influences can either positively, or negatively affect muscular action.

The colon may be sensitive to the following external influences:

**Exterior touch or pressure** You actually can promote bowel activity with an abdominal massage. To practice this massage, start by placing the palm of your hand on the lower right side of your abdomen. Moving in a clockwise direction, slowly move your palm up your right side, then across your abdomen (from the right to the left), then down your left side and across the abdomen to the lower right side again. Repeat this circular motion several times.

Tight fitting clothing may unintentionally stimulate these intestinal muscles. Loose fitting clothing may help to avoid over stimulation of these muscles.

**Medications** Colon muscles are sensitive to medications that can slow down or increase muscular contractions in the colon.

**Psychological Factors** Anxiety, stress and depression can also affect the colon muscles. The tension and/or chemical reactions that can accompany these events, may interfere with the normal pace of muscular actions. Muscular contractions may increase, decrease, or alternate between the two.

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How Do Intestinal Muscles Work?

The colon wall is made of an exterior layer and an interior layer of muscles: These muscles work together to help the colon to function. These muscles are:

**Exterior Muscle** (taeniae coli): This muscle is separated into three smooth flat bands that run the length of most of the colon. These muscles extend and retract like a rubber band. Contractions of these muscles gather up the colon forming haustra (multiple rounded pillow like pouches that give the colon its unique puckered appearance).

**Interior Muscle**: This muscle wraps around the colon. It distends and contracts the colon wall (and the haustra) in an action that is similar to opening and closing a fist.

There are four muscular actions in the colon:

1. **Haustral Churning**: Haustra relax and distend to fill up with waste, then contract, squeezing the waste into the next haustrum. Watery fluids are absorbed, and particles of waste are advanced, creating larger masses as they move along.

2. **Peristalsis**: Contractions in the interior and the exterior muscles produce a wave like motion to move waste along the length of the colon. Stools take form and solidify.

3. **Mass Peristalsis**: Stools are forced into the sigmoid colon and the rectum by a strong peristaltic wave. Food in the stomach triggers a reflex in the middle of the transverse colon (near the belly button) to produce mass peristalsis. This is part of what causes the urge to “go” (to move the bowel) after a meal.

4. **Defecation**: Stools are eliminated by contractions in the sigmoid colon and rectum. This movement is aided by intentional (but gentle) abdominal effort.

What Causes Slow Intestinal Motility?

There are a number of factors that can cause intestinal motility to slow down. Some of these factors are listed below. There may be others:

- Excessive bed rest (illness, depression, recovery, etc.) reduces muscle tone.
- Lack of daily exercise. Muscle tone is gradually lost without regular physical activity.
- Inadequate fiber and fluid intake. Without fiber and fluids, stools cannot swell to sufficient mass. Poorly formed stools do not exercise colon muscles.
- Laxative Use. The purgative action of stimulant laxatives can rush the bowel, skipping over the normal muscular action of the colon. The muscles may not get their regular “exercise”. With fiber laxatives there is a risk that blockages may form if they are not taken with adequate amounts of water. Avoid laxative use unless directed otherwise by your doctor.
- Certain Medications. Medications that relax muscles can also relax the intestinal muscles. Medications that reduce pain interfere with signals to the brain that control the normal peristaltic (muscular) activity of the colon. Other medications that can slow stool transit include antacids, anticholinergics, some antihypertensives, iron salts and some antidiarrheals.
- Chronic Diarrhea. Loosely formed stools do not maximize the extension and contraction of colon muscles.
- Certain disorders and diseases are characterized by low intestinal motility.
- Neurological damage or reduced neurological stimulation can interfere with colonic motility.
- Surgery can cause a temporary paralysis of the intestines.
- Mechanical problems such as an obstruction can interfere with motility.
- Changes in levels of certain substances in the brain, such as serotonin, may interfere with intestinal motility.
- The process of aging may include reduced intestinal motility for some individuals.

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Can I Strengthen My Intestinal Muscles and Colonic Reflexes?

Yes. You can strengthen and maintain tone in your intestinal muscles. For best results, practice the suggestions below:

1. **Exercise daily.** Five minutes of simple daily exercise such as walking, leg lifts, or climbing stairs can help to tone muscles. If confined to bed, physical therapy including leg lifts and knee bends will also tone these muscles.

2. **Increase fluid and dietary fiber intake.** Intestinal muscles are exercised and toned around well formed stools that fluids and a high fiber diet can produce. Tone is not maintained when fluid or fiber intake is inadequate.

3. **Avoid laxative use.** The purgative action of laxatives can rush the bowel, skipping over the normal muscular action of the colon. The muscles may not get their regular "exercise". Avoid laxatives unless directed by a doctor.

4. **Respond to the defection reflex.** Responding whenever the urge to "go" occurs, helps maintain colonic reflexes. Ignoring the urge can break these reflexes down.

Can Fruit-Eze™ Help?

Yes. Fruit-Eze™ pure fruit regularity blend is a good source of fiber. Fiber can help you to produce well formed stools that can help to exercise and maintain intestinal muscle tone. Good intestinal tone promotes regularity.

Achieve regularity, avoid constipation, avoid constipation leading to impaction and avoid chronic laxative use with Fruit-Eze™ pure fruit regularity blend.

*Article by Carole Engel
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Fruit-Eze™ pure fruit regularity blend is a good source of fiber. It helps your body to produce well formed stools & helps you to *Get Going...Naturally™.*

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