### Consider Other Healthy Behaviors

Besides consuming probiotics and prebiotics, we have other ways to nourish our digestive system.

Eat a balanced and varied diet: Enjoy more colorful fruits and vegetables, and add more whole grains to your plate. These changes will increase your intake of fiber, along with other vitamins and minerals. Fiber helps food move through our digestive tract and helps keep us regular. Try to include natural sources of probiotics and prebiotics in your diet, and limit caffeine, alcohol and smoking. These can lead to stomach ulcers, dehydration and heartburn.

Stay hydrated: Water helps lubricate the contents in your digestive tract and reduce constipation.

**Eat small, frequent meals:** Try to eat every three to four hours. Eat slowly and stop eating when you are full. Try not to eat before bedtime because this can increase heartburn. Eating smaller meals won't overload your digestive system and cause indigestion problems.

**Exercise:** Engage in regular physical activity to maintain a healthy body weight. Exercise can keep you regular because it helps the food move through your system, thus reducing constipation.

Manage stress: Make time for relaxation during the day. Turn off the computer, phone and television about an hour before bedtime. The light emitted from these sources has been shown to disrupt or delay sleep. By reducing your stress, you can reduce the occurrence of heartburn, indigestion and gas.



#### Did You Know?

Stress is one of the primary causes of indigestion and other digestion-related problems. Take time for relaxation every day and remember to slow down and enjoy mealtimes.

#### Glossaru:

**Probiotics:** means "for life." Introduces a bacterium into the body.

**Prebiotics:** nondigestible food ingredient that provides food for the "good" bacteria in our body to grow.

**Fermentation:** process of breaking down undigested food residue from the small intestine and converting it to energy. Occurs in the large intestine, or colon.

**Kefir:** a probiotic fermented milk.

**Fiber:** the part of plants that provides structure and allows the plant to stand up. Classified as a carbohydrate but provides no energy because it passes through the digestive system intact. Reduces the risk of constipation and keeps us regular.

(Answers: Probiotics, Prebiotics, Fiber, Walking, Relaxation)

#### More information:

NDSU Extension: www.ndsu.edu/eatsmart

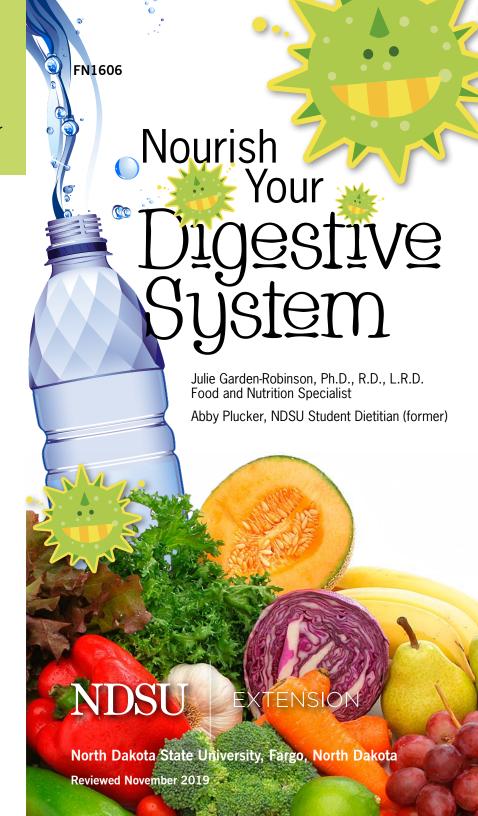
National Institute of Diabetes and Digestive and Kidney

Diseases: www2.niddk.nih.gov/

U.S. Department of Agriculture: www.choosemyplate.gov

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# Have you heard about probiotics and prebiotics?

#### **Bacteria: Our Digestive Helpers**

Our large intestine (colon) is home to 100 trillion "friendly" bacteria. These bacteria help defend us against disease, make certain vitamins such as vitamin K, and help break down extra food residue that remains after digestion in the small intestine. This process is known as fermentation. Our bacteria can become imbalanced due to stress, diarrhea, changes in diet and antibiotics. Consuming fruits, vegetables, whole grains, nuts, probiotics and prebiotics can help our bacteria stay within a healthy balance.

Fact: If we were to weigh all

# Probiotics

Probiotics mean "for life." Probiotics are defined as live organisms that provide health benefits when consumed in adequate amounts.

#### How do they work?

- Produce substances such as lactic acid in the gut. This helps slow the growth of diseasecausing bacteria.
- Compete with disease-causing bacteria for nutrients and space
- **Break down toxins**
- Affect the nerve and muscle function of the gut

#### Sources:

Yogurt (look for the "live and active cultures" seal on food packages)
Kefir

Sour cream Buttermilk Sauerkraut

# Prebiotics

They are a nondigestible food ingredient that benefits the host by helping the "good" bacteria in our colon grow. Prebiotics serve as a food source for the "good" bacteria in your body, allowing the bacteria to go through fermentation. This fermentation allows the bacteria to thrive but also produce gas. The undigested food particles travel to the large intestine, where they stimulate bacterial growth. This increases bowel content, which stimulates the body to excrete the food particles, thus helping us stay regular.

#### Sources:

Raisins Plums Wheat Beans Garlic

# our "friendly" bacteria, it would weigh about 2 to 3 pounds. What about a supplement?

In theory, eating more probiotics and prebiotics should be beneficial, and many people do see better digestive health when including these in their diet. However, the benefits of supplementation are still inconclusive. Too much pro/prebiotics can lead to bacterial overgrowth, which can cause gas, cramping, bloating and abdominal pain — just what these products seek to prevent. Remember the old adage, "All things in moderation."

#### Who shouldn't take pre/probiotic supplements?

Those with suppressed immune function, such as:

HIV/AIDS patients Cancer patients Transplant patients

# Test Your Knowledge

Circle the habits and nutrients that are good for digestive health.

Probiotics Fiber

Prebiotics Smoking

Caffeine

Walking

Magnesium Relaxation

(Answers on back)