# History of M'Kenna

## Who is M'Kenna?

M'Kenna was born in Oklahoma and soon moved to West Texas. She attends a small rural school and is active in all sports and her local FFA (Future Farmers of America) chapter. In the summers, she works for her family business cleaning new houses that her dad has built. She has one younger brother who will be in the 8th grade. M'Kenna will be a sophomore this year and will get her driver's license in September.

### What happened when M'Kenna got sick?

Around the time that M'Kenna turned 13, she started to get really sick. M'Kenna had always been healthy, so this was unusual for her. She complained of constant stomach pain, diarrhea, and vomiting, especially after eating. She started to lose weight quickly, and she and her parents were worried. She also struggled to run cross country and to play basketball, her favorite sport. M'Kenna didn't have energy to keep up in basketball practice and had to sit out from cross country meets.

While M'Kenna had an average weight and height most of her life, her weight dropped a lot in just a few months. The photograph on the left was taken in late August just as school began. The photograph on the right is just a few months later in November. While M'Kenna tried to eat healthy foods, eating only made her feel sick.



### What made her sick?

M'Kenna's doctor collected evidence from M'Kenna and from medical tests to diagnose her problem. Blood tests revealed that M'Kenna could have celiac disease.

A person with celiac disease has an immune response when they eat foods with a protein called gluten in the food. Gluten is found in foods with wheat and other grains but is also a common ingredient in many other foods). The immune response causes damage to the lining of the small intestine, flattening the villi, which are important for absorbing nutrients from food. The disease can become very serious because the person cannot get enough nutrients from food and risk using all their stored nutrient sources.

Name:



M'Kenna's doctor did an endoscopy exam to look at the villi in her small intestine. The doctor found, "decreased folds and flattening of the villi in the beginning and middle of the small intestine." The endoscopy exam confirmed that M'Kenna did have celiac disease. The only known treatment to help someone like M'Kenna is to avoid gluten and all foods that may contain gluten.

#### How is M'Kenna now?

M'Kenna was prescribed a gluten-free diet. The doctor said that if she avoided gluten that her small intestine would heal, and over time it did heal. M'Kenna's abdominal pain, vomiting, and diarrhea stopped, she regained weight. M'Kenna is now of an average weight and height again. She also regained energy to participate in the sports she enjoys like basketball. M'Kenna still sees her doctor for regular blood tests to make sure she is keeping gluten out of her food. If M'Kenna ever eats something with gluten, she can tell quickly because her symptoms return.

- 1) What was the underlying cause of M'Kenna's symptoms?
- 2) Now that you have learned more about M'Kenna, what questions do you still continue to have about her illness and symptoms?
- 3) What questions do you still continue to have about how her body compares to a healthy body?
- 4) What questions now have about the human body?