**Do We Really Need Our Appendix?**

**By Dr. Ramona Warren**

As a student, one of my favorite classes was anatomy. Learning about the many different organs and body systems, and how they all work together, continues to fascinate me. The human body is an amazing creation and every part is in a particular place for a specific purpose.

Take the appendix, for example. For many years it has been believed the appendix has no real purpose and has become useless and insignificant. Because of this belief, many times the appendix is routinely removed during abdominal surgery, even when the patient isn’t experiencing any problems with it.

According to Dr. William Parker, a researcher and immunologist from Duke University, the appendix is not as expendable as people think. Dr. Parker, along with other researchers at Duke University Medical Center, wrote in the Journal of Evolutionary Biology that the appendix “has been maintained in mammalian evolution for 80 million years or longer.” According to the Duke researchers, over 70 percent of all primate and rodent groups contain species with an appendix. If so many different animals have an appendix, it must have a critical function.

The appendix is a small, finger-like sac, about 3 ½ inches long, that is attached to the right side of the colon. This small appendage plays a role in the immune system of the body. In the early years of life it helps make white blood cells and antibodies. Recently researchers discovered that the appendix also produces and stores good bacteria. If you were to have a severe bout of diarrhea or serious intestinal infection, such as cholera or dysentery, most of your good, “friendly” bacteria would be killed off. The appendix would help to rapidly restore the body’s supply of good bacteria. This replenishment of good bacteria is essential for survival since the majority of the immune system is located in our digestive system. The appendix helps to keep gut flora balanced and the immune system strong.

Good bacteria also aids in the digestion of carbohydrates such as starches, fiber and sugars. The healthy bacteria also help absorb minerals, while also producing vitamins B and K, and other antibodies. It has even proven beneficial in the prevention of allergies.

Many researchers believe that with the improvement of our water and sanitation systems, as well as the ability to easily increase the healthy bacteria in our gut, the appendix is unnecessary. However, many people suffer with gastrointestinal problems due to lifestyle and environmental factors such as chlorinated water, antibiotics, sugar and stress, which all decrease the healthy bacteria and increase the bad bacteria leading to a vulnerable immune system.

According to Dr. Parker from Duke University, the absence of good bacteria can lead to an over-reactive immune system, which may lead to inflammation associated with appendicitis. The imbalance of bacteria in the gut can also lead to an intestinal obstruction, which can then develop into an infection and inflammation of the appendix.

Over 250,000 cases of appendicitis occur in the United States each year, with teenagers and those in their early twenties being most commonly affected. Children under 2 and people over 70 years of age are at a higher risk for a ruptured appendix. Some of the classic symptoms of appendicitis include:

* Pain in your navel and lower right abdomen which becomes more severe over several hours
* After putting pressure on the area, the pain feels worse when you release the pressure.
* Walking, taking deep breaths, coughing, sneezing or other abrupt movements increase the pain
* Nausea and/or vomiting soon after the pain begins
* Abdominal swelling
* Loss of appetite
* A low grade fever
* Diarrhea or constipation with gas
* Inability to pass gas

If you have **ALL** the above symptoms, you should be evaluated immediately by your medical doctor or the nearest emergency room.

According to various studies, there are some steps you can take to reduce your risk of developing appendicitis, including increasing dietary fiber by eating more fresh vegetables, such as green leafy vegetables, cabbage, cauliflower, green beans and Brussels sprouts. One study found that both fresh tomatoes and tomato sauces help decrease the risk of appendicitis. Finally, reducing sugar intake is critical. Sugar is very inflammatory in the body and consuming simple carbohydrates such as breads, cereals, corn, French fries, fruit juices, pancakes, waffles, popcorn, white potatoes, white rice, and sweets can significantly increase the risk of appendicitis.

Our appendix is important to our health, and we need to do our part by making wise choices so we can keep this important part of our anatomy.