

The title of this week's Tip is **"We Grow What We Eat"**.

No, this is not about each of us starting a backyard garden and literally growing what we eat - although that would probably be a good idea for most of us. **I'm actually talking about the bacteria that we "grow" in our intestine.**

Most of you probably already know about the concept of "good" and "bad" intestinal bacteria. Evidence **suggests that the "bad" intestinal bacteria and yeast can compromise our immune system.**

There is also evidence that they can create a "leaky gut" (you can think of this as knocking holes in our intestinal wall that allow partially digested foods to enter the circulation where they can trigger inflammation and auto-immune responses).

And they appear to convert the foods that we eat into cancer causing chemicals which can be absorbed into the bloodstream.

The list goes on and on...

The "good bacteria" are thought to crowd out the "bad" bacteria and prevent many of the problems they cause.

For years we have thought of "bad" bacteria and yeast as originating from undercooked or poorly washed foods that we eat and the "good" bacteria as originating from foods like yogurt and probiotic supplements.

But most of us have not thought that the kinds of foods we choose to eat on a daily basis can affect the kinds of bacteria we "grow" in our intestine - until now.

You've heard for years that "We are what we eat". Well it now appears that we also "grow what we eat".

I'm referring to a recent study by G. D. Wu et al (Science, 334: 105-108, 2011).

Previous studies have shown that people from all over the world tend to have one of two distinct populations in their intestines - Bacteroides or Prevotella. [Don't let the specialized scientific terminology scare you. These are just the names given to two distinctive populations of intestinal bacteria].

What this study showed was that people who habitually consumed high-fat/low-fiber diets (diets containing predominantly animal protein and saturated fats) tended to have the Bacteroides bacteria in their intestine, while people who habitually consumed low-fat/high-fiber diets (diets that are primarily plant based and are high in carbohydrate and low in meat and dairy) tended to have the Prevotella bacteria in their intestine.

And surprisingly this appears to be independent of sex, weight and nationality.

At this point in time we don't know the health benefits and risks associated with a Bacteroides versus a Prevotella grouping of intestinal bacteria.

However, now that do we know that we "grow what we eat" there are numerous studies ongoing to define the benefits and risks associated with each type of bacterial population.

Stay tuned! I'll keep you updated as more information becomes available.

To Your Health! Dr. Stephen G Chaney