

Butyric Acid Delivers Powerful Gut Benefits

Just take a minute with me and let the amazement of the body inspire you. I heard this phrase many years ago that “we are fearfully and wonderfully made.” It is so true and the lowly colon is NO exception.

Let’s take a close look at the history of Butyric acid and why it holds so much potential to optimize health of the bowel.

The history goes back to the primary inventor of oral butyrate salts, Dr. Torben Neesby. He developed a process for producing both caprylic acid and butyric acid for oral use back in the early 80’s. He reasoned that the salts from butyrate and caprylic acid are partially absorbed into the bloodstream; however more importantly, as they moved down the gut lining they behaved in a way that acted almost like a “soap” compound.

We know that butyric acid is a member of a class of short-chain fatty acids, SCFAs, that are produced in the bowel by healthy anaerobic bacterial fermentation of NON absorbed dietary fiber. Butyrate is the primary energy source for colonic cells. Butyrate also has strong anti-inflammatory properties that are important for keeping colon cells healthy and has anti-carcinogenic properties. Short -chain fatty acids, particularly butyric acid, have a strong anti-inflammatory effect on the bowel. One study showed it reduced tumor necrosis factor production and pro-inflammatory cytokine expression. Butyrate also reduces the negative effects of lipopolysaccharide by stopping the pro-inflammatory substance that increases NF-kappaB. NF-kappaB acts like an amplifier that ramps up inflammation.

This has some important ramifications for inflammatory bowel disease like Crohn’s disease. Also, recent advances have identified mechanisms which display the anti-tumor properties of short chain fatty acids like Butyrate slows colonic tumor cells and promotes healthy colonic epithelial cells.

Speaking of normalizing cells, ammonia is a by-product of gut dysfunction or dysbiosis. Ammonia, although necessary for various metabolic processes, can be a neurotoxin when in excess. We can test SCFAs via stool analysis, although a clinical trial for 30 days of Butyric acid may be more cost effective.

I think you will agree that helping the gut and controlling inflammation via a simple application SCFAs like butyrate can be very helpful. As always, before you jump into this nutrition application check with your health care provider. Keep your gut healthy and it will keep you healthy. If you need help with any functional medicine needs please call my office at 618-783-2424.