

The Gut Brain Axis or “FOOD and MOOD”

For generations we have known that there was a connection between our brain and our gut. We all know about that “gut feeling” or intuition. We know that when we are unhappy for some there is a tendency to do what I call mindless eating. Stress causes indigestion. Irritable bowel syndrome is an example of the disruption of this complex relationship.

It has only been in the last few years that we have recognized the communication between the gut bacteria and the brain through neural, endocrine, immune and hormonal links.

The vagus nerve communicates from the stomach to the brain; the brain signals the gut through nerves and hormones such as cortisol, the stress hormone that influences the immune cells, the smooth muscle cells and enterchromaffin cells that release serotonin.

The microbiota, the gut bacteria, have influence in anxiety and depressive syndromes and now there is great research on the influence it has in autism. Healthy bacteria can tighten up junctions between cells, reducing leaky gut syndrome by preventing pro-inflammatory molecules from being taken in the body. One of the metabolites from these bacteria – short chain fatty acids can stimulate the nervous system and influence memory and learning

Many studies are being done on probiotics to try to identify which bacteria would be the most helpful. .

There is a lot more to discover about this but so far we know that you need to keep your healthy bacteria functioning well. These are some basic things that will help. Look up **Dr Weil’s Ant inflammatory Diet**

- Anti –inflammatory properties of nutrients in fruits, vegetables, whole grains, nuts and oily fish may influence concentrations of brain chemicals that regulate emotions and cognition.

- Omega 3 fatty acids found in fish oil are essential for the integrity of brain cell membranes and how brain cells communicate with each other
- Get adequate Vitamin D , at least 1000iu/day
- Limit **carbohydrates**, especially sugar, refined grains, potatoes
- Eat whole foods low in natural sugar and high in fibre
- Eat regular meals with some protein and healthy fat at each meal (slows digestion and absorption of sugars)
- B vitamins are used to metabolize sugar, we can become depleted of B vitamins if we consume a high sugar diet
- Avoid sugar -Check labels #grams carbs ÷ 4 = # tsp sugar (4 cans/day soda = 30% more likely to develop depressions)
- Avoid artificial sweeteners! They are associated with weight GAIN, stimulate appetite and increase insulin resistance

Stay tuned- there will be lots more about this in the near future!

References

Dr Andrew Weils Ant-inflammatory Diet

The Healthy Mind Cookbook, Big-flavour recipes to Enhance Brain Function, Mood, Memory and Mental Clarity; Rebecca Katz and Mat Edelson Ten Speed Press, Berkeley

The Good Gut, Taking control of your weight, your mood and your long term health ;Justin Sonneberg and Erica Sonnenbeurg, PhDs ,Penguin Press, New York

Brain Maker, The Power of Gut Microbes to Heal and Protect Your Brain- for Life; David Perlmutter, MD; Little, Brown and Company