



WEBINAR Q&A: GUT MICROBIOME ASSESSMENT AND ENDOCRINE IMPLICATIONS

Attendee Questions	Answers from Dr. Julia Malkowski
<p><i>If you take precursors to serotonin can it initiate diarrhoea symptoms?</i></p>	<p>Yes, gastrointestinal disturbances such as flatulence, heartburn, diarrhea and constipation may occur. Please consult with your high-quality supplement provider.</p>
<p><i>What are your thoughts on serum zonulin vs faecal zonulin?</i></p>	<p>The serum zonulin test directly determines the circulating levels of zonulin (antigen) that instigates a cascade of events resulting in large gaps between enterocytes. Such gaps permit the unregulated influx of macromolecules from the gut lumen. The zonulin test supplants the now-dated lactulose/mannitol "sugar challenge" (L/M) test. Definitive research has yet to be published regarding a correlation between fecal ZFP levels and the results of the lactulose mannitol test.</p>
<p><i>Why are SSRIs are often associated with GIT adverse effects ?</i></p>	<p>There exists a high level of serotonin in gastric and intestinal mucosal enterochromaffin cells. The common side effects include abdominal cramping, nausea, and diarrhea. SSRIs have been shown to moderately increase the risk of upper GI bleeding.</p>
<p><i>How does B5 help in mucous membrane support?</i></p>	<p>B vitamins are a food source for intestinal bacteria, which also excrete B vitamins. Pantothenic acid supports acetylcholine. One potential mechanism of action stated an acetylcholine receptor agonist exerts protective effects on intestinal epithelial barrier dysfunction; https://link.springer.com/article/10.1007/s10753-019-01096-w</p>
<p><i>Why is gluten eliminated when restoring gut mucosal barrier?</i></p>	<p>In many individuals gluten increases intestinal permeability. When exposed to the protein in gluten, gliadin, zonulin receptor-positive IEC6 and Caco2 cells release zonulin in the cell medium with subsequent zonulin binding to the cell surface. This leads to rearrangement of the cell cytoskeleton, loss of occludin-ZO1 protein-protein interaction, and increased intestinal permeability.</p>
<p><i>Is the ACES questionnaire and how to rate the scores on the website?</i></p>	<p>The ACES questionnaire may be accessed via a variety of sources including www.acesaware.org, https://americanspcc.org/take-the-aces-quiz/, and the CDC. The higher your ACE score the higher your chance of suffering from a range of psychological and medical problems like chronic depression, cancer, or coronary heart disease. A score of 4 or more significantly increases the likelihood of chronic pulmonary lung disease 390%; hepatitis, 240 %; depression 460 %; and attempted suicide, 1,220 %.</p>
<p><i>If a patient presented with high bacillus (4+) and had severe neurological problems - Autism. Could the bacillus be influencing this due to the Catecholamines influence on neurotransmitters - dopamine etc?</i></p>	<p>At this juncture, there is insufficient evidence to say this is a significant factor, although the mechanism of action with regards to neurotransmitters is possible. A neurotransmitter test would provide more clinical insight.</p>
<p><i>On slide 5, 3 essential bacteria discussed at the beginning of the presentation: One of those bacteria – Phascolarctobacterium (Phyla) wasn't mentioned (as far as I could see), and I wondered why?</i></p>	<p>Phascolarctobacterium are in the Firmicutes phylum. Phascolarctobacterium can produce short chain fatty acids, including acetate and propionate, and may be associated with metabolic effects and mental state of the host. Patients diagnosed with major depressive disorder had increased levels of these species. Decreased levels of Phascolarctobacterium were found to be associated with Crohn's disease, ulcerative colitis and Alzheimer's disease. Consumption of cruciferous vegetables, such as broccoli, increases the abundance of Phascolarctobacterium in the gut.</p>