

The clinical use of dietary fibre

Robert Morrison

Narrative: Reducing inflammation is a crucial component in managing pain and preventing disease.

Applied Kinesiology (AK) techniques facilitate the detection of intestinal dysbiosis, a primary cause of inflammation, and aid in differentiating among various types of dietary fibre as forms of remediation.

When dosed properly, dietary fibre offers a viable alternative to probiotics as a way of reducing inflammation in the GI tract. Dietary fibre acts as a prebiotic, resisting breakdown in the upper GI tract until it reaches the colon. Once in the colon, fibre serves as a substrate for fermentation by beneficial bacteria such as Bifidobacteria and Lactobacilli. Through fermentation, short-chain fatty acids (SCFAs) such as acetate, propionate, and butyrate are generated. These SCFAs play a vital role in maintaining a healthy gut environment by providing energy, regulating pH, improving gut motility, enhancing intestinal barrier function, and reducing inflammation.

I describe the use of Manual Muscle Testing (MMT) in conjunction with magnet testing and composite vials to detect the presence of intestinal dysbiosis.

Indexing terms: Chiropractic; Dietary Fiber; Inflammation; Applied Kinesiology; Intestinal Dysbiosis; Probiotics; Short-Chain Fatty Acids (SCFAs); Cytokines; Manual Muscle Testing (MMT); Neurological Facilitation; Neurological Inhibition.

Introduction

A broad diversity of bacterial species in the gastrointestinal (GI) tract correlates with good health. (1) Dysbiosis is characterised by a reduction in microbial diversity, coupled with a rise in pro-inflammatory species. Factors contributing to dysbiosis include genetic predispositions, and a variety of environmental influences: unhealthy diet, antibiotic use, emotional stress, medications, etc. (2) In the United States, dysbiosis is widespread, largely due to an inadequate intake of fibre and dietary patterns

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Discussion

In the GI tract, inflammation is a natural response of the immune system,

aimed at fighting pathogens and preserving homeostasis. Under normal circumstances, inflammatory responses terminate once pathogens have been neutralised. However, in cases of dysbiosis, harmful pathogens colonise and cause inflammation that persists unresolved. Classic symptoms of dysbiosis include altered bowel habits, bloating, abdominal discomfort, and the

sensation of incomplete bowel movements. (3) In many instances, however, the symptoms are less obvious.

Given the relationship between dendritic cells in the GI tract and neuroglia cells in the brain, inflammation in the gut often correlates with inflammation in the brain. From this perspective, the potential health problems rooted in dysbiosis are manifold.

Research indicates that probiotics can enhance the production of anti-inflammatory cytokines, (4) however, their efficacy is short-lived. Once probiotics are discontinued, the benefits are not sustained unless concurrent changes in diet and lifestyle are made. (5) Applied Kinesiology Manual Muscle Testing (MMT) demonstrates that probiotics begin to induce a weakening response within 10 days or less, despite an initial strengthening response (neurological facilitation).

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Applied Kinesiology Protocol for Dysbiosis

Following a complete history and physical exam, the practitioner uses Manual Muscle Testing (MMT) in conjunction with magnet testing and composite vials to detect the presence of intestinal dysbiosis.

The procedure is as follows:

- 1. Perform Injury Recall Technique if indicated. (7)
- 2. Test the Tensor Fascia Lata (TFL) bilaterally. If the muscle tests 'strong' (facilitated), check for autogenic inhibition. A failure to inhibit (over-facilitation) may indicate dysbiosis and should be monitored in follow-up visits. If the muscle tests 'weak' (neurologically inhibited), check for autogenic facilitation. If the muscle does not strengthen (become neurologically facilitated), revisit step 1. If a 'weak' (neurologically inhibited) muscle does strengthen, this may indicate dysbiosis and should be monitored in follow-up visits.
- 3. Locate a normal testing (neurologically facilitated) muscle, other than the *Tensor Fascia Lata* (TFL). This will be used for indicator testing.
- 4. Test microbial composite vials one at a time by placing them on the solar plexus and covering them with a 3000-5000 gauss magnet, south pole facing the subject. (7) Have the subject Therapy Localise (TL) the large intestine Chapman's reflex, and retest the indicator muscle. A 'weakening' response (neurological inhibition) suggests dysbiosis.
- 5. Test vials of SCFAs Butyrate and Propionate one at a time against the weakening microbe (both under magnet simultaneously) as the patient Therapy Localises (TLs) the large intestine Chapman's reflex. A strengthening response (neurological facilitation) indicates a deficiency in SCFA.
- 6. Test vials of anti-inflammatory cytokine IL-10 (or other anti-inflammatory cytokine) against weakening microbe (both vials placed under a magnet simultaneously) as the patient Therapy Localises (TLs) the large intestine Chapman's reflex. A strengthening response to the anti-inflammatory cytokine suggests a deficiency.

- 7. Test various types of fibre against the weakening microbe by having the subject chew the fibre and keeping it on their tongue. A strengthening response prompts prescription of that fibre.
- 8. Repeat this protocol in 2-3 weeks. Signs of improvement include facilitated bilateral TFL and a neutral response to IL10 and/or SCFA. If there are no observable changes, retest from step 2, but this time include the following: have the subject chew the fibre and keep it on their tongue while challenging for open Ileocecal Valve (ICV) and Valves of Houston (VOH) against strong indicator muscle. No response prompts an increase in fibre volume or frequency. Conversely, a weakening response suggests that the fibre type, frequency, or volume is unsuitable. In this case, suspend the fibre for two weeks, then reintroduce it at reduced levels. Reevaluate in two weeks and make necessary adjustments.

Injury Recall Technique (IRT) is a technique developed by the late Dr Walter Schmitt, designed to erase the neurological memory of past injuries. It is important to begin any Applied Kinesiology protocol with IRT, as omitting this step often leads to inaccurate findings. As an example, a weak, neurologically inhibited TFL is a common finding in dysbiosis because it is the muscle associated with the Large Intestine. However, a chronically weak TFL can also be an adaptation to a past injury. Past injuries can also skew cytokine testing.

Acetate is excluded from the SCFA testing as a strengthening response may be due to factors unrelated to gut bacteria, such as a deficiency in vitamin B5, Iron, Niacinamide, Riboflavin, or Molybdenum.

Other anti-inflammatory cytokines besides Il-10 can be tested; however, IL-10, being produced by beneficial gut bacteria, appears to be most indicative of changes in gut flora.

It is important to test fibre orally as it might not respond when tested under a magnet. Similarly, patients are advised to chew the fibre when consuming them at home. Failure to do so can often result in minimal or no benefits. The appropriate fibre dosage varies by individual tolerance but starting with one teaspoon per day then gradually increasing to 1 heaping tablespoon usually yields observable results. It's best to consume fibre before meals, rather than after meals, to prevent bloating. It is advisable to limit each type of seed to about twice per week to avoid over-consumption. Follow-up testing will establish each person's optimal tolerance level.

Conclusion

Managing chronic inflammation necessitates addressing dysbiosis. If left unchecked, dysbiosis-induced inflammation can evolve into autoimmune diseases, metabolic disorders, and neurological conditions. Sources of highly concentrated fibre such as chia seeds or flaxseeds offer a potent solution for overcoming dysbiosis, mitigating inflammatory processes, and maintaining gut health. Applied Kinesiology is designed to monitor inflammation in real-time, provide precise remediation, and methodically track progress.

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References

- 1. Human Microbiome Project Consortium. (2012). Structure, function and diversity of the healthy human microbiome. Nature, 486(7402), 207–214. https://doi.org/10.1038/nature11234
- 2. DeGruttola A. K., Low D., Mizoguchi A., Mizoguchi E. (2016). Current understanding of dysbiosis in disease in human and animal models. Inflammatory Bowel Diseases, 22(5), 1137-50.
- 3. Banaszak M., Górna I., Woźniak D., et al. (2023). Association between gut dysbiosis and the occurrence of SIBO, LIBO, SIFO, and IMO. Microorganisms, 11(3), 573.
- 4. Kaji R., Kiyoshima-Shibata J., Tsujibe S., et al. (2018). Short communication: probiotic induction of interleukin-10 and interleukin-12 production by macrophages is modulated by co-stimulation with microbial components. Journal of Dairy Science, 101(4), 2838-2841.
- 5. Sniffen J. C., McFarland L. V., Evans C. T., et al. 2018. Choosing an appropriate probiotic product for your patient: an evidence-based practical guide. PLoS ONE, 13(12), Article e0209205. https://doi.org/10.1371/journal.pone.0209205
- 6. Portincasa P., Bonfrate L., Vacca M., et al. Gut microbiota and short chain fatty acids: implications in glucose homeostasis. International Journal of Molecular Sciences, 23(3), 1105. 2022.
- 7. Schmitt W. Injury recall technique, Chiropractic Journal of NC Vol 6, 1990; pp 25-30
- 8. Lebowitz M. Biomagnetic kinesiology testing. ICAK-USA Collected Papers Vol 1, 1991.

