

one • bio oat fiber: a clinically validated, innovative and consumer friendly fiber

one.bio oat fiber is a next-generation fiber developed to meet the dual challenge faced by CPG innovators: how to deliver meaningful fiber benefits without compromising taste, texture, or tolerability. To support its integration into everyday foods and beverages, we conducted a human study to confirm tolerability and safety and to substantiate benefits suggested by preclinical studies¹.



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Why this study?

Our goal was to confirm tolerability and rapidly generate benefit insights in a real world setting to guide product positioning. The study was designed as an open-label, dose-ranging trial to evaluate tolerability in healthy individuals, across three dose levels (5 g, 10 g, 20 g per day) and to explore a range of potential health effects, including digestive health, glucose response, and mental health-related symptoms. This format allowed us to efficiently gather foundational data to inform product development, positioning and the design of future pivotal, benefit-focused trials. The study was conducted in accordance with ethical standards and was registered on ClinicalTrials.gov (NCT06739941). A manuscript with study results is currently in preparation.

What did we learn?

Exceptional tolerability: one.bio oat fiber is exceptionally well tolerated across all doses, even at the highest dose tested, 20 g/day. Tolerability was assessed using the Gastrointestinal Symptom Rating Scale, a validated tool that measures common digestive symptoms such as abdominal pain, bloating, indigestion, diarrhea, and constipation. Total GSRS scores did not increase at any daily dose and remained within the mild/minimal range.

Improvement in digestive symptoms: The groups receiving 5 and 10 g/day exhibited significant improvement in total gastrointestinal symptoms (Figure 1). Moreover, these groups reported significant reduction of abdominal pain. These are excellent outcomes given that the participants had, at worst, mild symptoms at baseline. Compared to commodity fibers such as inulin or polydextrose, which often cause GI discomfort even at lower doses, one.bio oat fiber demonstrated a superior tolerability profile and the ability to deliver meaningful digestive health benefits.

Reduction in post-meal blood glucose response: Post-meal blood sugar response, measured via continuous glucose monitoring (CGM), demonstrated improvement of glucose response across multiple metrics over the 2-week period. These effects were most pronounced in the higher dose groups (10 g and 20 g/day). Peak

Figure 1 TOTAL DIGESTIVE SYMPTOMS

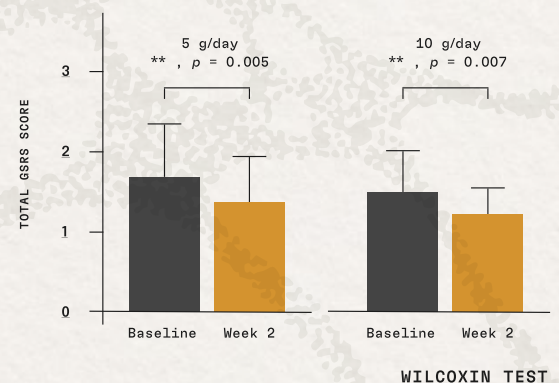
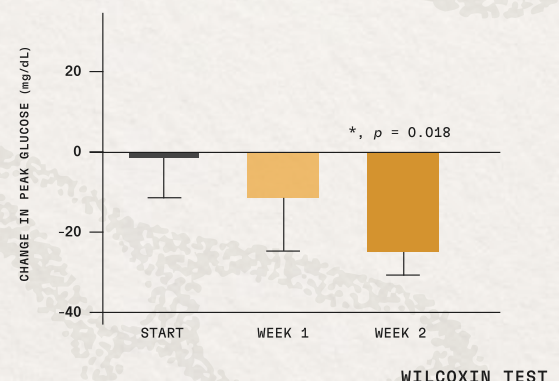


Figure 2 IMPACT ON PEAK GLUCOSE AFTER RICE CHALLENGE (20G/DAY)



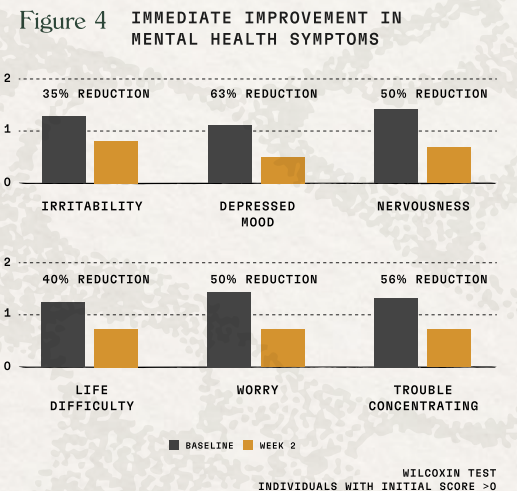
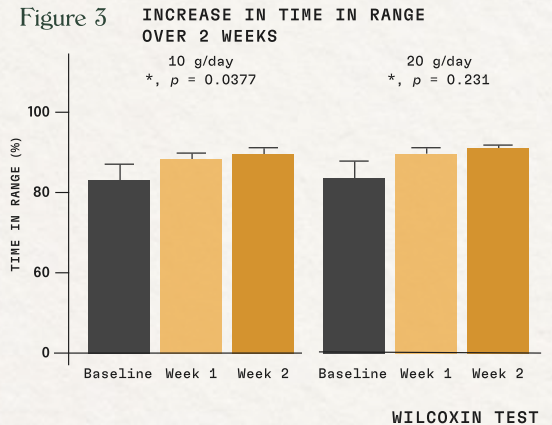
What did we learn? cont.

baseline-to-peak distance after rice challenges show a significant reduction after 2 weeks for the 20g/day group (Figure 2). Reduction in peak glucose after meals is a key metric in the longer-term management of blood glucose. Further, the time spent within both standard and ideal glucose ranges increased significantly in 10 g/day and 20 g/day group (Figure 3). For both groups, the mean time in range increased by about 14 % over 2 weeks, meaning the participants kept their blood glucose levels in range about 95% of the time. Time in range is another key metric in the longer-term management of blood glucose. Additional analysis of continuous glucose data further supports improved glycemic control. Measures of glucose variability, including glucose standard deviation, percent coefficient of variation, and mean amplitude of glycemic excursions, also improved, particularly in the higher dose groups. All these measures improved over the 2 weeks, suggesting further improvement with continued use.

Improvement in mental health and performance: In a subgroup of participants reporting mild symptoms of anxiety or low mood, pooled analysis revealed significant improvements in mental health symptoms across domains including irritability, life difficulty, nervousness and worry (Figure 4). These exploratory findings align with emerging evidence linking dietary fiber and SCFA production to mood and cognitive resilience.

Why it matters for CPG

Formulating with one.bio oat fiber means choosing a consumer-friendly fiber, with clinically proven digestive health, blood glucose and mental health benefits. The exceptionally good tolerance properties of one.bio oat fiber, coupled with excellent organoleptics, allows formulation at doses which deliver these benefits, clearly differentiating one.bio oat fiber from commodity fibers. Unlike commodity fibers, one.bio oat fiber enables health benefits without sacrificing taste, texture, digestive comfort and daily usability. In addition to the benefits shown in this study, one.bio oat fiber carries all the implicit benefits of oats without the formulation difficulties of oats.



1. Marcobal, A.M. et al. Highly Soluble β -Glucan Fiber Modulates Mechanisms of Blood Glucose Regulation and Intestinal Permeability. *Nutrients* 2024, 16, 2240. <https://doi.org/10.3390/nu16142240>