

Retrospective Case Study Evaluating Changes in Food Tolerance, Gastrointestinal Symptoms, and Related Health Outcomes Following Use of Designs for Health Anaerostipes caccae CLB101™

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ABSTRACT

Food sensitivities and intolerances are prevalent conditions that affect 15-20% of the population. Unlike food allergies that are immune-mediated, food sensitivities or intolerance can result from non-immune, metabolic, and systemic mechanisms. Emerging research suggests that the gut microbiome and microbial metabolites such as butyrate may influence intestinal barrier function, microbial carbohydrate metabolism, and mucosal immune regulation. *Anaerostipes caccae* is a commensal butyrate-producing bacterium, but clinical evaluation of the use in individuals with food-related symptoms is limited. This retrospective case series evaluated 12 clients with self-reported food sensitivities, intolerances, and/or gastrointestinal symptoms despite prior dietary and lifestyle intervention. Participants took A. caccae CLB101™ once daily for 12 weeks while continuing their established nutrition and lifestyle routines. Outcomes were assessed using practitioner-developed questionnaires and participant-reported observations, including food tolerance, gastrointestinal symptoms, bowel patterns, stool consistency, and adverse effects. At the end of the study, all 12 participants completed the exit questionnaire. Eleven of 12 participants (91.7%) reported reintroducing or consuming at least one previously problematic food. Among these participants, 9 of 11 (81.8%) reported at least one milder reaction following reintroduction; 6 (54.5%) selected “much milder” and 5 (45.5%) selected “somewhat milder,” while 2 (18.2%) reported reactions that were about the same.

No participant reported worsening. Bristol Stool Form Scale patterns also shifted toward more formed stools, with Types 3-4 reported by 50.0% of participants at baseline compared with 83.3% at exit.

Introduction

This case report is a retrospective review of 12 clients from Amanda Chinkan Nutrition, New York, with a variety of symptoms and medical conditions. All 12 participants presented with a common denominator – food sensitivities and intolerances and subsequent gut symptoms. In this case series, the terms “food sensitivity” and “food intolerance” are used to describe participant-reported adverse reactions to foods based on symptoms that participants tracked and reported, rather than formally diagnosed food intolerance. The adverse

reactions may include gastrointestinal symptoms, skin reactions, mood changes, sleep disturbance, or other participant-specific responses. Because participants did not undergo standardized food allergy testing, oral food challenges, or diagnostic evaluation for specific food intolerances, the underlying causes of these reactions could not be independently confirmed. The study does not evaluate confirmed or formally diagnosed food allergies, but instead, it evaluates changes in self-reported food tolerance, including food associated symptoms, following *Anaerostipes caccae* CLB101™ use.

Food sensitivities and intolerances are complex issues stemming from multiple pathophysiological mechanisms that include immunological, metabolic, pharmacological, and functional pathways. Adverse food reactions are commonly categorized into two categories: immune-mediated (food allergy) and non-immune-mediated (food intolerance).

Immune-mediated reactions (food allergy) involve food allergy symptoms beginning when IgE antibodies recognize a food allergen and activate mast cells and basophils, causing them to release histamine and other inflammatory chemicals within minutes. Depending on how much allergen is eaten, how well it survives digestion, and how easily it crosses the intestinal barrier, the reaction may stay localized or become systemic and potentially cause anaphylaxis. Some reactions also develop hours or days later through T cells, eosinophils, and other immunological pathways, which can contribute to chronic conditions such as atopic dermatitis or eosinophilic gastrointestinal disease. IgE-mediated food allergies affect about 3% of the population [1]. Non-immune-mediated reactions (food intolerance) are more common and affect about 15-20% of the population. There are several mechanisms that may be contributing: enzyme deficiencies, such as lactase deficiency causing lactose intolerance; GLUT-5 transporter defects that can cause fructose malabsorption; poorly absorbed fermentable carbohydrates (FODMAPs) that undergo colonic fermentation causing distension, gas production and diarrhoea. Non-celiac gluten sensitivity/non-celiac wheat sensitivity (NCGS/NCWS) is also relevant, but it is not a single uniform condition.

Symptoms attributed to gluten or wheat may be related to fructans or other fermentable carbohydrates rather than gluten itself [2]. Many food allergies and food intolerances are influenced by the close interaction between the gut microbiome, the intestinal epithelial barrier, and the mucosal immune system. Disruption of the microbiota or barrier may impair immune tolerance to food antigens and increase susceptibility to gut reactions [3-5]. Similarly, non-immune food intolerance can also be influenced by microbiome and barrier-related mechanism, for example microbial fermentation, visceral hypersensitivity, secondary mucosal injury, or altered bowel habits in addition to primary enzyme deficiency [6,7]. Xue [7] suggests that lactose intolerance may involve gut dysbiosis and altered host metabolism in addition to lactase deficiency. Their human multi-omics data and FMT animal experiment linked lactose intolerance with altered microbial composition, distinct fermentation/metabolic pathways, reduced beneficial butyrate-producing bacteria, and increased inflammatory signaling. Another important factor that can contribute to non-immune food intolerance is related to reduced digestive capacity. Pharmacologic acid suppression, such as PPIs, H2 blockers or antacids, is the biggest contributor to low stomach acid; however, any cause of hypochlorhydria, including gastritis and *Helicobacter pylori*, can directly impact digestive capacity [8,9].

Another factor that can contribute to food sensitivities indirectly is hormonal shift. During menopause, the rapid decline of estrogen disrupts intestinal integrity and mucosal homeostasis [10]. Hormonal decline can also affect the gastrointestinal tract indirectly through changes in the gut microbiome, including the estrobolome. As estrogen levels fall during menopause, microbial diversity tends to decrease, beneficial bacteria such as *Bifidobacterium* and *Lactobacillus* may become less abundant, and systemic inflammation can increase [11,12]. This case series does not establish whether altered barrier function contributed to participant symptoms; however, the microbiome-barrier-immune axis provides a biologically plausible mechanism for evaluating changes in self-reported food tolerance and gastrointestinal symptoms following Designs for Health Anaerostipes Probiotic (*Anaerostipes caccae* CLB101™) supplementation. A previously published case report described a 47-year-old female with longstanding food intolerances and gastrointestinal symptoms who experienced improvement following 12 weeks of *A. caccae* CLB101™ supplementation. Her tolerance of previously reactive foods improved, and her stool microbial composition improved. The present case series builds upon this preliminary single-patient observation by evaluating food tolerance, gastrointestinal symptoms, and related outcomes across a larger group of participants.

Background on *Anaerostipes caccae*

Anaerostipes caccae (*A. Caccae*) is a spore-forming, gram-variable, rod-shaped anaerobic bacterium that is found in the human gut microbiota, primarily in the lumen of the colon 1. *A. caccae* is a butyrate-producing bacterium that ferments dietary carbohydrates. It can also participate in microbial cross-feeding by utilizing lactate and acetate generated by other gut bacteria and converting these metabolites into butyrate [13-15]. Butyrate, in turn, contributes to intestinal homeostasis through its effects on the intestinal epithelium and immune system, including support of epithelial barrier integrity and regulation of immune responses [16,17]. Our current understanding of the cause of food related symptoms is either immune-mediated, non-immune, or incompletely characterized mechanisms; consequently, *A. caccae* may potentially be relevant across several pathways: microbial carbohydrate metabolism, epithelial barrier function, and the regulation of mucosal immune tolerance. A potential non-immune mechanism involves microbial metabolism of poorly absorbed carbohydrates. In an animal model, *A. caccae* increased butyrate production, which helped restore the colonic epithelial metabolic environment and microbial carbohydrate metabolism. This reduced the accumulation of poorly absorbed sorbitol in the intestinal lumen, resulting in less water being pulled into the intestinal tract, thus reducing gastrointestinal symptoms such as diarrhoea.

This suggests a potential non-immune pathway through which microbial metabolism may influence certain food intolerance phenotypes, although this mechanism has not been studied in humans [18].

A. caccae may also participate in metabolic interactions occurring near the intestinal mucus layer. *In vitro* studies suggest that *A. caccae* may participate in mucin-associated microbial cross-feeding. *A. caccae* does not directly degrade intact mucin; however, mucin-degrading bacteria such as *Akkermansia muciniphila* can release acetate and mucin-derived sugars that support *A. caccae* growth and subsequent butyrate production [19]. Butyrate may, in turn, support intestinal barrier function by promoting mucin production, thereby contributing to regulation of epithelial permeability to food antigens [20]. This interaction shows how microbial cross-feeding may be relevant in epithelial homeostasis. Lactate utilization is a potentially relevant metabolic function of *A. caccae*. The bacterium has been described as a lactate-utilizing butyrate producer, capable of converting both D- and L-lactate into butyrate [13]. Excess lactate can impair mucosal barrier function and has been linked to atopic eczema in children. *A. caccae* can use lactate and acetate as substrates for butyrate production.

This metabolic activity may influence the colonic fermentation environment, although its clinical significance for food intolerance has not yet been established [21]. *A. caccae* also participates in metabolic cross-feeding by utilizing substrates generated by other species of the gut microbiota. *Bifidobacterium* species can provide monosaccharides, lactate, and acetate that are subsequently utilized by *A. caccae*. In co-culture, *B. infantis* supported *A. caccae* growth and butyrate production through this exchange of metabolites [22]. In addition to these metabolic and epithelial pathways, butyrate may support immune tolerance through several complementary mechanisms. As a histone deacetylase inhibitor, it can enhance acetylation of the *Foxp3* locus and promote the expansion of regulatory T cells, which plays a role in supporting oral tolerance to food antigens. Light Nagler [23] further describes how microbial metabolites, together with retinoic acid and antigen presentation, support the development of intestinal regulatory T cell populations and mucosal immune homeostasis [23]. These mechanisms provide a potential link between microbial butyrate production and regulation of immune responses to dietary antigens. In a preclinical study by Feehley [24], additionally shows the mechanism of *A. caccae* with allergic food responses.

The study demonstrated that the administration of *A. caccae* to germ-free mice mimicked the health infant microbiota and prevented anaphylactic responses to cow's milk allergen [24]. A subsequent study showed that combining the butyrate-producing bacterium *A. caccae* with lactulose promotes bacterial engraftment, increases intestinal butyrate production, and reduces allergic responses in pre-clinical models of cow's milk and peanut allergy. This symbiotic approach seems to have an impact on the gut immune system through immune-regulatory mechanisms, including suppression of epithelial alarmin signaling, expansion of regulatory T cell populations, and reduction of IgE-secreting cells [25]. Together, the above-mentioned studies suggest several biologically plausible pathways through which *A. caccae* could influence food-related symptoms through several different pathways. These include non-immune mechanisms involving

microbial carbohydrate metabolism and fermentation, epithelial and mucus-associated mechanisms related to intestinal barrier homeostasis, and immune-mediated pathways involving T cells and oral tolerance. However, these mechanisms have only been studied *in vitro* or preclinical models and therefore should be considered as proposed mechanisms rather than established clinical findings.

Despite growing interest in various nutraceutical interventions including probiotics or butyrate-promoting supplements, case studies describing the supplementation with *A. caccae* and food intolerance and gastrointestinal outcomes are limited. This case series provides preliminary observational data from a practitioner-led setting and may help initiate future controlled studies examining the clinical relevance of *A. caccae* across different food reaction phenotypes.

Methods

Study Design

Participants were clients of a New York-based practitioner. Prior to initiating CLB101™, participants either completed or actively had been completing The Great Reset program (TGR) - a nutritional and behavior coaching group program designed by the practitioner. Participants followed whole food dietary principles that focused on lean protein, complex carbohydrates, and healthy fat intake. TGR focused on the interventions similar to an elimination diet, involving the removal of common trigger foods: dairy, grains, beans, nuts, added sugars, highly processed foods, all oils, plus any known foods that are poorly tolerated. Depending on the participants, calorie intake, protein needs, and supplement needs were adjusted during TGR. Foods were gradually reintroduced while monitoring individual symptoms and tolerance, and the goal was to identify personally poorly tolerated foods. Baseline variability was that participants were not following identical diets at study entry. Many participants had already identified their individual food sensitivities through prior participation in TGR. TGR also focused on hydration, sleep, exercise, stress, and other lifestyle factors. Participants tracked their gastrointestinal discomfort, bloating, skin symptoms, mood changes, sleep disturbances, or other participant-specific reactions throughout the program. Despite the improvements of many unwanted symptoms, participants continued to experience food sensitivities to certain foods.

For study purposes, food sensitivity or intolerance was defined by participant-reported recurrence or worsening symptoms following the reintroduction of a food that had previously been eliminated. Symptoms included such as gastrointestinal symptoms such as diarrhoea, constipation, bloating, gas and reflux, as well as skin rashes, itching, discomfort; pain or energy levels, and brain fog. Food sensitivities were described as delayed onset of 6-72 hours after exposure to the trigger foods. As no prior clinical evaluation was conducted, the study could not determine whether a reported reaction represented immune-mediated sensitivity, carbohydrate/FODMAP intolerance or another non-immune mechanism. At the time of *A. caccae* initiation,

participants maintained the TGR nutritional plan and did not make additional dietary modifications. Participants did not initiate new probiotics or make supplement changes. All participants were either actively participating in or had previously completed the TGR before the *A. caccae* intervention.

Participants were eligible for inclusion if they used *A. caccae* CLB101™, completed baseline questionnaire data, completed at least one follow-up questionnaire. Written informed consent was obtained from all participants prior to inclusion in the case series and for use of de-identified data. Participants were excluded if they did not provide consent, did not initiate the intervention, withdrew consent before manuscript submission, or lacked sufficient pre/post data for analysis.

Therapeutic Interventions

All Clients took Anaerostipes Probiotic CLB101™ by Designs for Health at a dose of 1 capsule once daily on an empty stomach every morning over the course of 12 weeks. Participants were instructed to take the product on an empty stomach in the morning with water approximately 30 - 60 minutes before breakfast, after a bowel movement when possible. If participants did not have a bowel movement, they were instructed to take the capsule at least 30 minutes prior to breakfast. CLB101™ was the only new practitioner-directed intervention during the 12-week course. Adherence was monitored through participant self-report on study questionnaires and routine communication with the practitioner. Participants noted missed doses, temporary discontinuation of the probiotic, and subsequent resumption. Pill counts were not performed. Outcomes were assessed using practitioner-developed baseline and post-intervention questionnaires. The questionnaires were developed upon the established gastrointestinal symptom assessment tools, including the Gastrointestinal Symptom Rating Scale (GSRS) [26], the NIH Patient-Reported Outcomes Measurement Information System (PROMIS) Gastrointestinal Symptom Scales [27], and the Bristol Stool Form Scale [28] as well as the practitioner’s clinical experience.

The questionnaires used for this case series are provided as supplementary material below. The baseline questionnaire collected demographic and clinical characteristics, medication and supplement use, food-specific reactions and avoidance patterns, gastrointestinal and extraintestinal symptoms, bowel symptoms, stool form, dietary and lifestyle factors, and digestion-related quality-of-life measures. Twenty symptom items were rated on a 0-4 severity scale, and six bowel-related items were similarly rated from 0-4. Food-specific sections assessed reported reaction severity and timing for dairy, gluten/wheat, eggs, soy, corn, nuts/seeds, FODMAP-containing foods, high-histamine foods, and other self-identified foods. The post-intervention questionnaire reassessed the same symptom and bowel domains and additionally evaluated whether participants had consumed or reintroduced previously problematic foods, the perceived severity of reactions following reintroduction, overall changes in food tolerance, and foods participants reported being able to tolerate following the intervention. Bristol stool type, dietary and lifestyle factors, and digestion-related quality-of-life measures were also collected. There was no numeric scoring system, summed symptom score, or composite outcome score.

Participants were not classified as responders/non-responders using predetermined numerical cutoffs and thresholds. Outcomes were evaluated by comparing participants’ questionnaire responses across study time points and noting whether symptoms improved, worsened, resolved, or remained unchanged. Statements such as “improved” or “resolved” should be presented as participant-reported or practitioner-documented observations, not as outcomes derived from a validated scoring system. [29-31]

Results

Participant characteristics, baseline food sensitivity patterns, GI symptom outcomes, Bristol stool and bowel movement patterns, adverse events, skin-related cases.

Participant Characteristics

(Table 1)

Table 1.

Client	Relevant History	Food Triggers and Status at Enrollment
#1 MS, 56F	Post-cholecystectomy digestive symptoms, including postprandial bloating and indigestion	Dairy and gluten. Indigestion and bowel regularity improved during TGR; residual bloating and food sensitivities remained.
#2 LP, 56F	Hidradenitis suppurativa, pyoderma gangrenosum, recurrent cellulitis, fatigue, digestive symptoms	Dairy, fermented foods, grains, nuts, cassava, and certain oils. Food sensitivities and recurrent HS sores remained.
#3 AM, 37F	Food-related gastrointestinal and skin symptoms	Dairy, beans, butternut squash, and most grains; associated with bloating, abdominal discomfort, itching, eczema, disrupted sleep, and GI upset.
#4 ES, 32F	Constipation, irregular bowel movements, abdominal bloating, food sensitivities	Processed grains and dairy; associated with constipation, bloating, gas, heartburn, puffiness, and skin symptoms. Symptoms improved during TGR but remained recurrent.
#5 GP, 43F	Loose stools, digestive symptoms, food sensitivities	Grains/wheat, dairy, high-fat meals, and some nut-based foods. Stool consistency improved during TGR; food sensitivities persisted.

#6 LS, 59F	History of bariatric surgery and reduced stomach capacity	Bread, processed grains, dairy products, lentils, potatoes, and certain artificial sweeteners; associated with cramping, diarrhea, headaches, bloating, and mental “fuzziness.” Digestion was stable at enrollment, but food sensitivities remained.
#7 EB, 60F	History of food sensitivities	Grains associated with bloating, abdominal discomfort, poor sleep, and weight gain; dairy associated with bloating and constipation. Prior improvement was disrupted by stress and changes in health routines.
#8 SC, 36F	Longstanding IBS with urgency, abdominal pain, diarrhea, and irregular bowel movements	Multiple food sensitivities. Bowel regularity improved during TGR, but IBS flares, unpredictable bowel habits, and limited food tolerance remained.
#9 AS, 70F	SIBO following gastric bypass surgery, with bloating, constipation, abdominal pain, fatigue, and brain fog	Multiple food sensitivities. Abdominal pain resolved and bloating improved during TGR; constipation, incomplete evacuation, bloating, and food sensitivities persisted.
#10 SH, 75F	Lifelong constipation, frequent belching, mild reflux, previous <i>H. pylori</i> infection, esophageal erosion	Bowel regularity improved and chronic belching nearly resolved during TGR; residual bloating and digestive concerns remained.
#11 KB, 22F	Food sensitivity and digestive health concerns	Bread and dairy. Energy improved during TGR; food sensitivity and digestive concerns remained.
#12 SD, 54F	Lifelong constipation and multiple food sensitivities	Certain fats, nuts, bread, eggs, dairy, and fruits; associated with diarrhea and constipation. Bowel regularity and pain improved during TGR, but food sensitivities remained.

Baseline Food Sensitivity Patterns

List categories: Gluten, Dairy, Eggs, Soy, Corn, Nuts/Seeds, Fodmap Foods, Histamine Foods, Other. Gluten and dairy were the most frequently reported food sensitivities, each affecting 10 of the 12 participants with completed questionnaires. FODMAP-related symptoms

were reported by seven participants, while six reported sensitivities to foods outside the specified categories. Soy, corn, nuts/seeds, and histamine-containing foods each affected five participants. Egg sensitivity was uncommon and was reported by only one participant. (Table 2)

Table 2.

Participant	Gluten	Dairy	Eggs	Soy	Corn	Nuts/Seeds	FODMAP Foods	Histamine Foods	Other
Patient #1	1	2	0	0	0	0	0	0	3
Patient #2	4	3	0	0	3	0	4	2	4
Patient #3	1	1	0	0	0	0	1	1	1
Patient #4	1	0	0	0	4	0	0	0	0
Patient #5	3	3	0	2	0	2	0	0	0
Patient #6	0	3	0	2	0	0	0	0	0
Patient #7	0	2	0	0	2	2	3	0	0
Patient #8	2	3	0	4	3	4	3	4	0
Patient #9	3	4	3	3	0	2	0	0	4
Patient #10	3	4	0	0	0	0	3	3	2
Patient #11	4	3	0	0	1	0	2	1	0
Patient #12	2	0	0	1	0	1	1	0	2
Participants reporting severity >0	10/12	10/12	1/12	5/12	5/12	5/12	7/12	5/12	6/12

- Other foods reported included:
- Patient #3: sugar
 - Patient #5: high-fat foods
 - Patient #9: garlic, onion, caffeine/coffee, processed foods, high-fat foods, sauces and creams, alcohol, and eggplant

- Patient #11: sugar and white-flour desserts
 - Patient #12: sugar
 - Patient #13: olive oil, avocado oil, and coconut oil

GI Symptom Outcomes

Post hoc exploratory scoring was performed for descriptive evaluation of symptom changes from baseline to exit. In the paired dataset, 12 participants had matched baseline and exit questionnaire data. Symptom severity was assessed on 0-4 categorical scales, with higher scores indicating greater symptom severity. Individual questionnaire items were grouped post hoc by clinical content into gastrointestinal, food/systemic, skin, and bowel-function domains, and item scores within each domain were summed. The mean gastrointestinal domain score decreased from 6.75 at baseline to 3.92 at exit, representing a 42.0% reduction. Nine of 12 participants had lower scores at exit, 2 were unchanged, and 1 had a higher score. The mean food/systemic domain score decreased from 10.00 to 4.75, a 52.5% reduction, with lower scores in 11 of 12 participants and no change in 1. The mean skin domain score decreased from 2.17 to 0.83, a 61.5%

reduction; 7 participants had lower scores, 4 were unchanged, and 1 had a higher score. The mean bowel-function domain score decreased from 3.83 to 2.83, a 26.1% reduction, with lower scores in 6 participants, no change in 5, and a higher score in 1. Among individual questionnaire items, the largest mean reductions were observed for sleep disruption and the item assessing overall digestive comfort, each decreasing by 1.08 points.

Skin itching decreased from 1.25 to 0.33 (73.3%), diarrhoea from 1.25 to 0.42 (66.7%), joint pain/body aches from 1.58 to 0.75 (52.6%), gas from 1.50 to 0.75 (50.0%), bloating from 1.42 to 0.75 (47.1%), and food-reaction severity from 1.67 to 1.00 (40.0%). Percentage reduction was calculated as [(baseline mean – exit mean) / baseline mean] × 100. Domain scores were created post hoc for descriptive purposes and were not derived from a validated composite scoring system (Table 3).

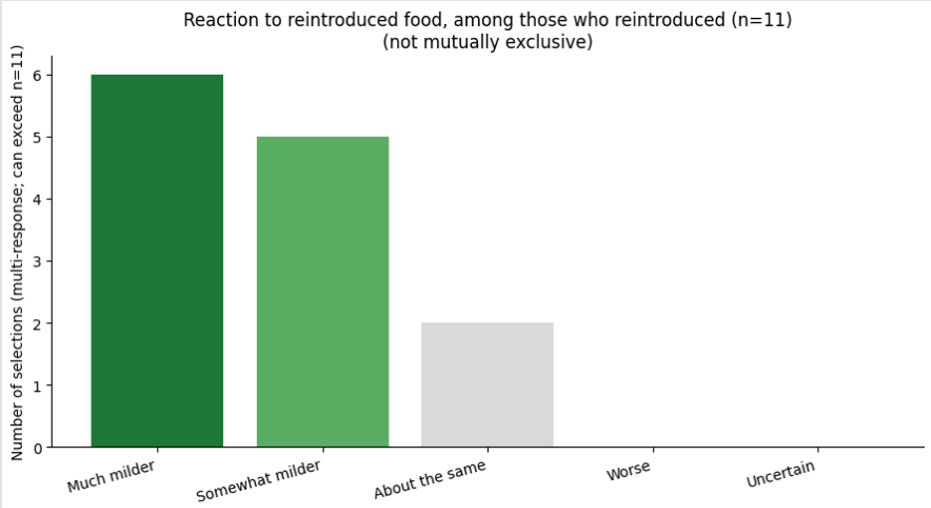
Table 3.

Exploratory symptom category	Baseline mean	Exit mean	Absolute change	Percentage reduction
Gastrointestinal symptoms	6.75	3.92	2.83	42.00%
Food/systemic symptoms	10	4.75	5.25	52.50%
Bowel function symptoms	3.83	2.83	1	26.10%

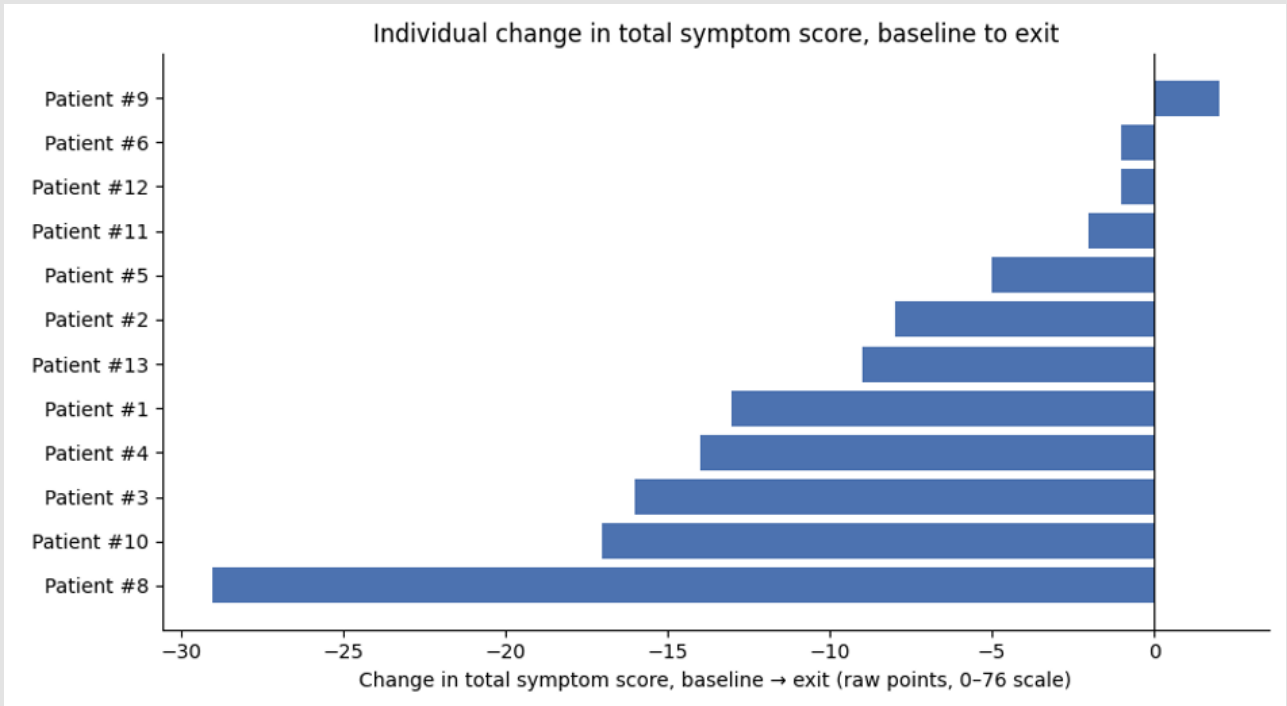
Food Tolerance Outcomes

At the end of the case study, 12 participants completed the exit questionnaire. Eleven of 12 participants (91.7%) reported that they had reintroduced or consumed at least one food that had previously been problematic. Among these 11 participants, 9 (81.8%) selected at least one response indicating that their reaction was milder following reintroduction, while 2 (18.2%) reported reactions that were about the same. Specifically, 6 of 11 participants (54.5%) selected “much milder” and 5 of 11 (45.5%) selected “somewhat milder”; because participants could select more than one response, these categories were

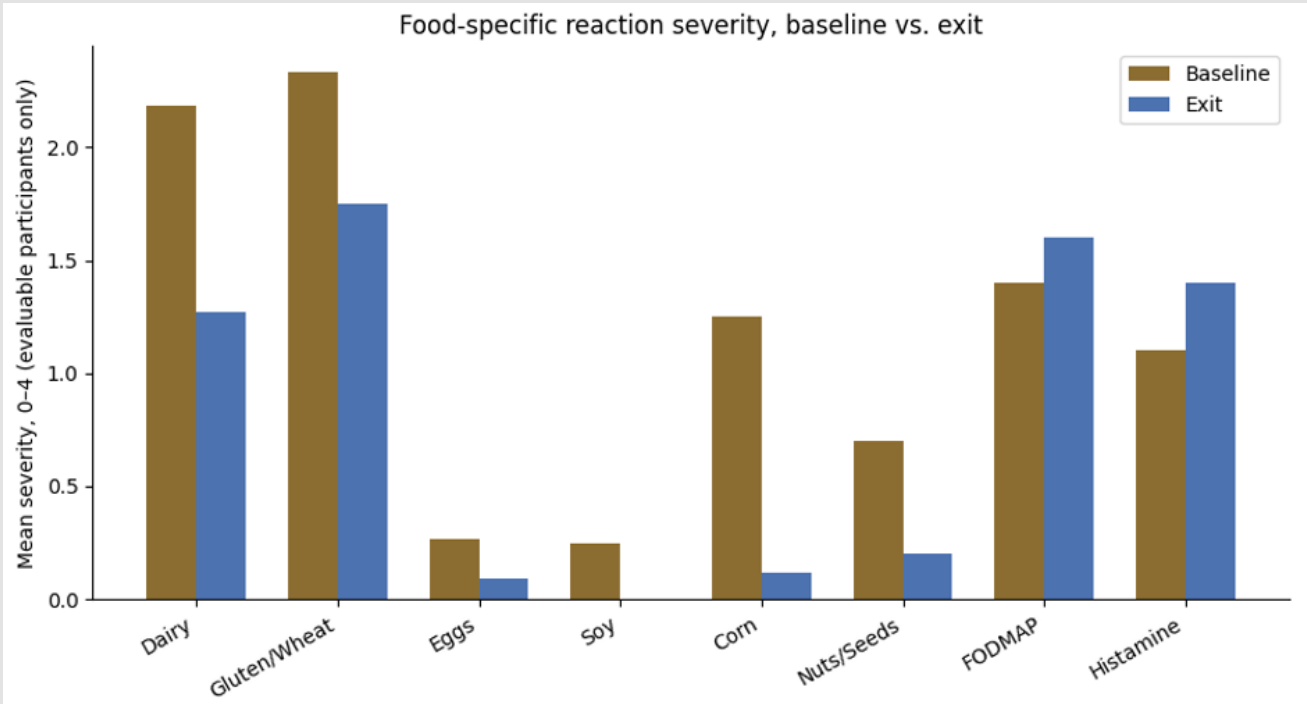
not mutually exclusive. Two participants (18.2%) selected “about the same,” and none selected “worse,” “absent,” or “uncertain.” One participant (8.3%) did not reintroduce a previously problematic food and therefore could not evaluate a change in food tolerance. Counts of how many participants selected each reaction option (“much milder,” “somewhat milder,” “about the same,” “worse,” “uncertain”) after reintroducing a food. In the free-text response section, participants described reduced bloating, indigestion, gas, and skin flares, as well as improved tolerance of foods including dairy, gluten/wheat, dietary fats, and bread in moderation. (Graph1,2 & 3)



Graph 1: Reaction to reintroduced food.



Graph 2: Individual change in total symptom score.



Graph 3: Food-specific severity, baseline vs. exit.

Two participants reported no overall change in food tolerance. Because food reintroduction was participant-directed rather than standardized, and participants differed in the foods and quantities reintroduced, food-specific changes should be interpreted descriptively rather than standardized challenge outcomes. One bar per participant showing how much 19 item symptom sum changed from baseline to exit. Bars pointing left = improvement. No threshold line or color-coding so it doesn't imply any predefined "responder" cutoff. Patient #9

is the one bar pointing right (the single participant whose score went up) For each food (dairy, gluten/wheat, eggs, soy, corn, nuts/seeds, FODMAP, histamine), average reaction severity baseline vs. exit - but only counting participants who actually ate that food at exit. Anyone who didn't eat a given food is left out of that food's bars entirely, so an empty/low bar never gets misread as "improvement" even though it was just non-exposure (Table 4 & 5).

Table 4.

Participant	Gluten	Dairy	Eggs	Soy	Corn	Nuts/Seeds	FODMAP Foods	Histamine Foods	Other
Patient #1	0	2	0	0	0	0	0	0	0
Patient #2	2	0	0	4	0	3	0	2	0
Patient #3	4	2	0	0	0	0	0	2	0
Patient #4	0	0	0	0	0	0	0	0	0
Patient #5	0	1	0	0	0	1	1	1	1
Patient #6	0	0	0	0	0	0	0	0	0
Patient #7	2	1	0	0	0	0	2	2	2
Patient #8	4	1	0	0	0	0	4	4	4
Patient #9	3	3	0	0	0	0	4	0	0
Patient #10	1	1	0	0	1	0	1	1	1
Patient #11	2	1	0	0	0	0	2	0	0
Patient #12	3	2	1	0	0	1	2	2	0
Participants reporting severity >0	8/12	9/12	1/12	1/12	1/12	3/12	7/12	7/12	4/12

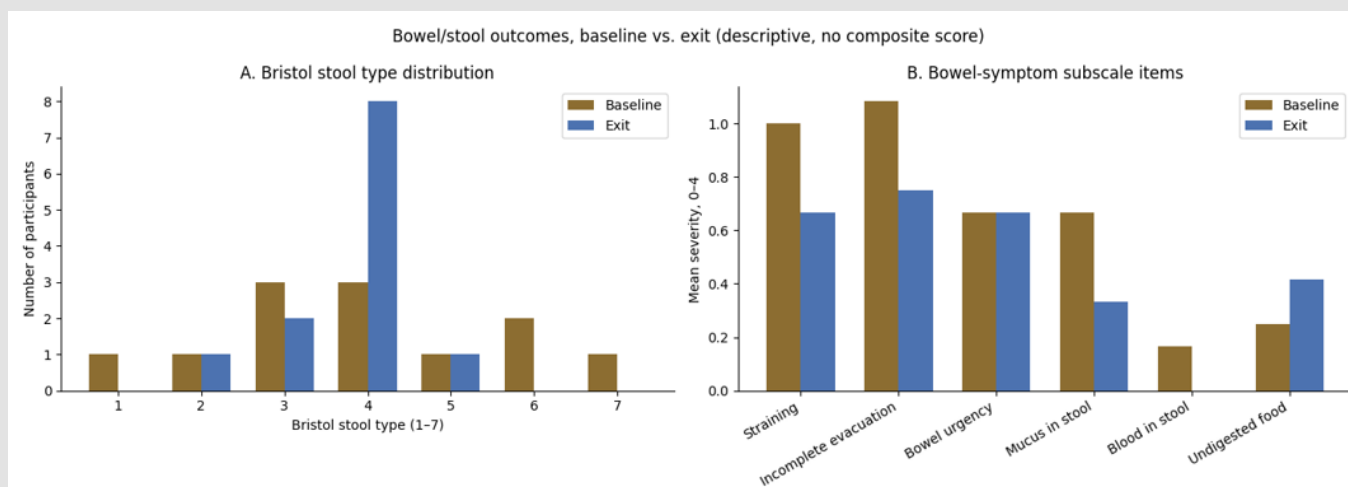
Table 5.

Outcome measure	n/N (%)
Reintroduced or consumed ≥ 1 previously problematic food	11/12 (91.7%)
Did not reintroduce a previously problematic food	1/12 (8.3%)
Reaction among participants who reintroduced foods (n=11):	
Much milder reaction	6/11 (54.5%)
Somewhat milder reaction	5/11 (45.5%)
About the same reaction	2/11 (18.2%)
Worse reaction	0/11 (0%)
Uncertain reaction	0/11 (0%)
Absent reaction	0/11 (0%)

Bristol Stool and Bowel Movement Patterns

At baseline, stool consistency was variable across participants, presenting both constipation and loose stool patterns (Bristol stool type varied from Type 1 to 7). Among the 12 participants, 6 reported Type 3-4 stools, which are generally considered more formed stool patterns and representation of good gut health. The remaining participants reported stools outside this range, including 2 with harder

Type 1-2 stools and 4 with looser Type 5-7 stools. By the exit questionnaire, stool consistency shifted toward Type 3-4 in most participants. 10 of 12 participants reported Type 3 or 4 stools at exit, while only 1 participant reported Type 2 and 1 participant reported Type 5. This represents an increase from 50% of participants reporting Type 3-4 stools at baseline to 83.3% at exit. Overall, the pattern suggests improvement toward more formed and regulated stool consistency by the end of the 12-week intervention. (Graph 4)



Graph 4: Bristol stool type + bowel subscale (two panels).

Panel A: How many participants fell into each Bristol stool type (1-7) at baseline vs. exit

Panel B: The six individual bowel-symptom items (straining, incomplete evacuation, urgency, mucus, blood, undigested food), each shown baseline vs. exit as its own bar pair, not combined into one score.

Adverse events

No adverse effects were documented in the questionnaire data.

Highlighted Skin-Related Cases

Client #2 (LP): Client #2 had a history of hidradenitis suppurativa with persistent recurrent lesions. At initiation of *A. caccae* CLB101™, a mons pubis lesion had remained recurrent for approximately 9 months despite prior interventions. During the 12-week intervention, the client reported progressive improvement, with the lesion becoming nearly healed and no longer painful, swollen, or bleeding by study completion. Because the client continued other treatments, including Tremfya and her established supplement regimen, the observed improvement cannot be attributed solely to CLB101™.

Client #13 (SD): The client entered the study with persistent food-associated itching and rashes. During the 12-week *A. caccae* CLB101™ intervention, she reported progressive improvement in itching and skin reactions. After discontinuing CLB101™, itching and changes in stool consistency reportedly returned; following resumption, bowel patterns normalized and the itching and rashes again improved. This temporal pattern is hypothesis-generating but does not establish causality.

Discussion

The current results suggest that 12 weeks of *A. caccae* supplementation was associated with participant-reported improvements in overall food tolerance in the majority of participants. Participants' phenotypes were heterogeneous: food reactions and symptoms oc-

curred due to dairy, grains, FODMAP-type foods, fats, nuts, and other foods. Symptoms ranged from bloating, diarrhea, constipation, and abdominal discomfort; skin reactions included itching, eczema, as well as sleep disturbance and brain fog. After the intervention, 11 of 12 participants (91.7%) reported reintroducing or consuming at least one food that had previously been problematic. Among these participants, 9 of 11 (81.8%) selected at least one response indicating a milder reaction following reintroduction. Six participants (54.5%) selected "much milder" and 5 (45.5%) selected "somewhat milder," while 2 (18.2%) reported that reactions were about the same. Because participants could select more than one response category, these percentages were not mutually exclusive. No participant selected "worse," and 1 participant did not reintroduce a previously problematic food and therefore could not assess a change in tolerance. It is important to note that food reintroduction was participant-directed rather than standardized, and the foods and quantities consumed varied between participants.

Along with improvements in symptom scores, Bristol stool chart comparison also showed a positive shift. The proportion of participants reporting Bristol Stool Form Scale Types 3-4 increased from 50.0% at baseline to 83.3% at exit, suggesting a movement toward more formed stool patterns over the intervention period. In addition, 2 participants with notable pre-existing skin manifestations reported improvement during the intervention; however, these observations remain exploratory because of concurrent treatments and the observational nature of the case series. Because food-reaction phenotypes were heterogeneous, and no chemical biomarkers was used as a baseline, microbial metabolism, epithelial and barrier integrity, and

immune-regulatory pathways should be considered as biologically plausible hypothesis rather than established evidence. Microbial metabolism is probably the plausible mechanism to be relevant to the participants whose symptoms were predominantly gastrointestinal. One possible explanation is *A. caccae* mediated changes in microbial carbohydrate metabolism and butyrate production, which might influence the amount and type of substrates available in the colon and thereby altering the metabolic environment. This is particularly relevant to participants reporting reactions to FODMAP-type foods, grains, sugars, or other carbohydrates.

Another plausible mechanism is that *A. caccae* could potentially influence barrier integrity indirectly by supporting butyrate production. Butyrate is involved in mucus and barrier homeostasis, which in turn, can contribute to a more stable intestinal environment and altered sensitivity to potentially triggering foods. Lastly, the participants with skin manifestations may have involved an immune component. In a preclinical model, *A. caccae* has shown to prevent anaphylactic responses to cow's milk allergen. In addition, combining the butyrate-producing bacterium *A. caccae* with lactulose promoted bacterial engraftment, increased intestinal butyrate production, and reduces allergic responses in preclinical models of cow milk and peanut allergy. This approach plausibly modulates immune regulatory mechanisms, including suppression of epithelial alarmin signaling, expansion of regulatory T-cell populations, and reduction of IgE-secreting cells.

Limitations

This case study is a retrospective observational case series. The study has a small sample size and no control group presented. No validated or standardized objective markers were used in the assessment. Because TGR recommendations were individualized and participants entered the intervention at different stages of the program, dietary and lifestyle exposures were not standardized, which should be acknowledged when interpreting changes during *A. caccae* supplementation. Participants also completed TGR before CLB101™, so CLB101™ was not tested as a stand-alone intervention. The case series also relies on self-reported food tolerance and symptoms. There is a potential placebo/expectancy effect that can't be confirmed without a double-blind control study.

Conclusions

Food sensitivities and intolerance are an intricate physiological process that encompasses both immune-mediated and non-immune-mediated responses. (List above mentioned mechanisms in short); Currently, no standard care exists in the management of these responses. This case report investigated the use of *A. Caccae* in management and improvement of food sensitivities and intolerance. 12 participants took the probiotic and reported improvements in several gastrointestinal symptoms, as well as skin conditions. The case study has several limitations mentioned above; however, it shows the positive dynamics worth further investigations and future studies to elucidate the efficacy of *A. Caccae* in improving food tolerance and gastrointestinal symptoms (Supplementary Materials 1-3).

Supplementary Materials: Baseline and Exit Questionnaires for CLB101™ Case Series

- Reformatted from Google Forms for manuscript submission; participant responses removed.
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No.	Question / item	Response format / options
A	Sex	Male; Female; Prefer not to say; Other
B	Yes/no questions	Yes; No; Other where specified
C	Food reaction timing	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
D	Food-specific symptom severity	0 = none; 1; 2; 3; 4 = severe/extreme as labeled in the original form
E	General symptom score	0 = none; 1 = mild; 2 = moderate; 3 = severe; 4 = extreme
F	Stool function score	0 = no symptoms; 1; 2; 3; 4 = extreme
G	Bristol Stool Chart options	Type 1; Type 2; Type 3; Type 4; Type 5; Type 6; Type 7

Common response scales used in the questionnaires.

Baseline Questionnaire

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- Original instruction: Use this form to track your changes over the next 3 months. Asterisks in the original form indicated required questions.

Section 1: Participant information and recent medication/supplement context.

No.	Question / item	Response format / options
1	Name	Free text
2	Participant ID	Free text
3	Date	Date field; example in original form: January 7, 2019
4	Age	Free text / numeric
5	Sex	Male; Female; Prefer not to say; Other
6	Height	Free text
7	Weight	Free text
8	What is your current diagnosis/known conditions?	Free text
9	What medications are you currently taking?	Free text
10	What supplements are you currently taking?	Free text
11	Have you used antibiotics in the last 6 months?	Yes; No
12	Have you used PPI or antacids in the last 6 months?	Yes; No
13	Do you use laxatives?	Yes; No; Other
14	Are you taking any hormonal medication?	Yes; No; Other
15	Are you pregnant or breastfeeding?	Yes; No

Section 2: Why are you trying Anaerostipes?

No.	Question / item	Response format / options
16	Check all symptoms that apply below	Food sensitivities/intolerances; Bloating; Gas; Constipation; Diarrhea; Reflux; Abdominal pain; Histamine-type reactions; Skin reactions; Fatigue after eating; Brain fog; Autoimmune/inflammatory symptoms; Other
17	What is your main goal in your own words?	Free text

Section 3: Food intolerance profile.

No.	Question / item	Response format / options
18	Dairy: How long have you avoided dairy?	Free text / NA if not avoided
19	Dairy: What symptoms does it cause?	Free text
20	Dairy: What is the severity of symptoms?	0-4 scale: none to severe/extreme
21	Dairy: How quickly do you react to dairy?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
22	Gluten/wheat: How long have you avoided gluten/wheat?	Free text / NA if not avoided
23	Gluten/wheat: What symptoms does gluten cause?	Free text
24	Gluten/wheat: What is the severity of symptoms?	0-4 scale: none to severe/extreme
25	Gluten/wheat: How quickly do you react to gluten/wheat?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
26	Eggs: How long have you avoided eggs?	Free text / NA if not avoided
27	Eggs: What symptoms do eggs cause?	Free text
28	Eggs: What is the severity of symptoms?	0-4 scale: none to severe/extreme
29	Eggs: How quickly do you react to eggs?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
30	Soy: How long have you avoided soy?	Free text / NA if not avoided
31	Soy: What symptoms does soy cause?	Free text
32	Soy: What is the severity of symptoms?	0-4 scale: none to severe/extreme
33	Soy: How quickly do you react to soy?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified

34	Corn: How long have you avoided corn?	Free text / NA if not avoided
35	Corn: What symptoms does corn cause?	Free text
36	Corn: What is the severity of symptoms?	0-4 scale: none to severe/extreme
37	Corn: How quickly do you react to corn?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
38	Nuts/seeds: How long have you avoided nuts/seeds?	Free text / NA if not avoided
39	Nuts/seeds: What symptoms do nuts/seeds cause?	Free text
40	Nuts/seeds: What is the severity of symptoms?	0-4 scale: none to severe/extreme
41	Nuts/seeds: How quickly do you react to nuts/seeds?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
42	FODMAP foods: How long have you avoided FODMAP foods?	Free text / NA if not avoided
43	FODMAP foods: What symptoms do FODMAP foods cause?	Free text
44	FODMAP foods: What is the severity of symptoms?	0-4 scale: none to severe/extreme
45	FODMAP foods: How quickly do you react to FODMAP foods?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
46	High-histamine foods: How long have you avoided high-histamine foods?	Free text / NA if not avoided
47	High-histamine foods: What symptoms do high-histamine foods cause?	Free text
48	High-histamine foods: What is the severity of symptoms?	0-4 scale: none to severe/extreme
49	High-histamine foods: How quickly do you react to high-histamine foods?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
50	Other avoided foods: If there are other foods you are avoiding, please list them.	Free text / NA if not avoided
51	Other avoided foods: How long have you avoided these foods? What symptoms do these foods cause?	Free text
52	Other avoided foods: What is the severity of symptoms?	0-4 scale: none to severe/extreme
53	Other avoided foods: How quickly do you react to these other foods?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified

Note: Original instruction: If you do not avoid a particular food please write NA. Reference charts for FODMAP foods and high-histamine foods were included in the original Google Form.

Section 4: Symptom score - past 7 days.

No.	Question / item	Response format / options
55	Please score your symptoms in the past 7 days below.	Rows: Bloating; Gas; Abdominal pain; Constipation; Diarrhea; Urgency; Reflux/heartburn; Nausea; Food reaction; Fatigue after meals; Brain fog; Headaches/migraines; Skin itching; Rashes; Acne; Joint pain/body aches; Sinus congestion/post-nasal drip; Anxiety/irritability after meals; Sleep disruption; Overall digestive comfort. Scale: 0 = none; 1 = mild; 2 = moderate; 3 = severe; 4 = extreme.

Section 5: Stool function.

No.	Question / item	Response format / options
56	Please score your stool function symptoms.	Rows: Straining; Incomplete evacuation; Urgency; Mucus in the stool; Blood in the stool; Undigested food in the stool. Scale: 0 = no symptoms; 1; 2; 3; 4 = extreme.

Section 6: Diet and confounders.

No.	Question / item	Response format / options
58	Have you had any major dietary changes in the last 30 days?	Yes; No
59	How would you rate your fiber intake?	Low; Moderate; High
60	How would you rate your fermented food intake?	Never; Occasionally; Weekly; Daily
61	What is your alcohol intake?	None; Weekly; Daily

62	What is your processed food intake?	Low; Moderate; High
63	What is your current level of stress?	0 = none; 1; 2; 3; 4 = extreme
64	How would you rate your quality of sleep?	0 = poor, less than 4 hours; 1; 2; 3; 4 = well rested, 8+ hours
65	How often do you exercise?	Never; Occasionally; Sometimes; 3/4 days a week; Every day

Section 7: Quality of life.

No.	Question / item	Response format / options
66	In the last 7 days, how much have symptoms limited your food choices?	0 = not at all; 1; 2; 3; 4 = always
67	In the last 7 days, how much anxiety do you feel around eating?	0 = none at all; 1; 2; 3; 4 = extreme
68	In the last 7 days, how much do your symptoms affect social eating?	0 = not at all; 1; 2; 3; 4 = always
69	In the last 7 days, how much have your symptoms affected your daily energy?	0 = not at all; 1; 2; 3; 4 = all the time
70	What is your overall quality of life related to digestion?	0 = terrible, digestion constantly disrupts life; 1; 2; 3; 4; 5; 6; 7; 8; 9; 10 = no disruptions at all due to digestion

Exit Questionnaire

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- Original instruction: Use this form to track your changes over the next 3 months. Asterisks in the original form indicated required-questions.

Section 1: Participant information and recent medication/supplement context.

No.	Question / item	Response format / options
1	Name	Free text
2	Participant ID (initials)	Free text
3	Date	Date field; example in original form: January 7, 2019
4	Age	Free text / numeric
5	Sex	Male; Female; Prefer not to say; Other
6	Height	Free text
7	Weight	Free text
8	What is your current diagnosis/known conditions?	Free text
9	What medications are you currently taking?	Free text
10	What supplements are you currently taking?	Free text
11	Have you used antibiotics in the last 6 months?	Yes; No
12	Have you used PPI or antacids in the last 6 months?	Yes; No
13	Do you use laxatives?	Yes; No; Other
14	Are you taking any hormonal medication?	Yes; No; Other
15	Are you pregnant or breastfeeding?	Yes; No

Section 2: Overall health after completing the Anaerostipes intervention.

No.	Question / item	Response format / options
16	After Anaerostipes, are you still experiencing any of the following?	Food sensitivities/intolerances; Bloating; Gas; Constipation; Diarrhea; Reflux; Abdominal pain; Histamine-type reactions; Skin reactions; Fatigue after eating; Brain fog; Autoimmune/inflammatory symptoms; Other
17	Now that you have completed the Anaerostipes intervention, explain in your own words the difference, if any, you feel/experience in your overall health.	Free text

Section 3: Food intolerance profile after the intervention.

No.	Question / item	Response format / options
18	Dairy: Have you had dairy since completing the Anaerostipes intervention?	Yes; No
19	Dairy: What symptoms did it cause?	Free text
20	Dairy: What is the severity of symptoms?	0-4 scale: none to severe/extreme
21	Dairy: How quickly do you react to dairy?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
22	Gluten/wheat: Have you had gluten/wheat since completing the Anaerostipes intervention?	Yes; No
23	Gluten/wheat: What symptoms does gluten cause?	Free text
24	Gluten/wheat: What is the severity of symptoms?	0-4 scale: none to severe/extreme
25	Gluten/wheat: How quickly do you react to gluten/wheat?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
26	Eggs: Have you had eggs since completing the Anaerostipes intervention?	Yes; No
27	Eggs: What symptoms do eggs cause?	Free text
28	Eggs: What is the severity of symptoms?	0-4 scale: none to severe/extreme
29	Eggs: How quickly do you react to eggs?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
30	Soy: Have you had soy since completing the Anaerostipes intervention?	Yes; No
31	Soy: What symptoms does soy cause?	Free text
32	Soy: What is the severity of symptoms?	0-4 scale: none to severe/extreme
33	Soy: How quickly do you react to soy?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
34	Corn: Have you had corn since completing the Anaerostipes intervention?	Yes; No
35	Corn: What symptoms does corn cause?	Free text
36	Corn: What is the severity of symptoms?	0-4 scale: none to severe/extreme
37	Corn: How quickly do you react to corn?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
38	Nuts/seeds: Have you had nuts/seeds since completing the Anaerostipes intervention?	Yes; No
39	Nuts/seeds: What symptoms do nuts/seeds cause?	Free text
40	Nuts/seeds: What is the severity of symptoms?	0-4 scale: none to severe/extreme
41	Nuts/seeds: How quickly do you react to nuts/seeds?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
42	FODMAP foods: Have you had FODMAP foods since completing the Anaerostipes intervention?	Yes; No
43	FODMAP foods: What symptoms do FODMAP foods cause?	Free text
44	FODMAP foods: What is the severity of symptoms?	0-4 scale: none to severe/extreme
45	FODMAP foods: How quickly do you react to FODMAP foods?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
46	High-histamine foods: Have you had high-histamine foods since completing the Anaerostipes intervention?	Yes; No

47	High-histamine foods: What symptoms do high-histamine foods cause?	Free text
48	High-histamine foods: What is the severity of symptoms?	0-4 scale: none to severe/extreme
49	High-histamine foods: How quickly do you react to high-histamine foods?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified
50	Other avoided foods: If there are other foods you were avoiding, please list them.	Free text
51	Other avoided foods: Have you had these other items since completing the Anaerostipes intervention? / How long have you avoided these foods? / What symptoms do these foods cause?	Yes/No or free text, as applicable
52	Other avoided foods: How long have you avoided these foods?	Free text
53	Other avoided foods: What symptoms do these foods cause?	Free text
54	Other avoided foods: What is the severity of symptoms?	0-4 scale: none to severe/extreme
55	Other avoided foods: How quickly do you react to these other foods?	N/A; immediate; within 1-3 hours; 4-12 hours; next day; 2+ days later; Other where specified

Note: Original instruction: If you do not avoid a particular food please write NA. Reference charts for FODMAP foods and high-histamine foods were included in the original Google Form.

Section 4: Symptom score - since completing the Anaerostipes study.

No.	Question / item	Response format / options
56	Please score your symptoms since completing the Anaerostipes study.	Rows: Bloating; Gas; Abdominal pain; Constipation; Diarrhea; Urgency; Reflux/heartburn; Nausea; Food reaction; Fatigue after meals; Brain fog; Headaches/migraines; Skin itching; Rashes; Acne; Joint pain/body aches; Sinus congestion/post-nasal drip; Anxiety/irritability after meals; Sleep disruption. Scale: 0 = none; 1 = mild; 2 = moderate; 3 = severe; 4 = extreme.

Section 5: Stool function - since completing the Anaerostipes study.

No.	Question / item	Response format / options
57	Please score your stool function symptoms since completing the Anaerostipes study.	Rows: Straining; Incomplete evacuation; Urgency; Mucus in the stool; Blood in the stool; Undigested food in the stool. Scale: 0 = no symptoms; 1; 2; 3; 4 = extreme.
58	How often do you have a bowel movement?	Free text
59	Please identify your most common stool type.	Bristol Stool Chart options: Type 1 - separate hard clumps; Type 2 - lumpy and sausage-like; Type 3 - sausage shape with cracks in the surface; Type 4 - smooth soft sausage or snake; Type 5 - soft blobs with clear-cut edges; Type 6 - mushy consistency with ragged edges; Type 7 - liquid consistency with no solid pieces.

Section 6: Diet and confounders.

No.	Question / item	Response format / options
60	Have you had any major dietary changes in the last 30 days?	Yes; No
61	How would you rate your fiber intake?	Low; Moderate; High
62	How would you rate your fermented food intake?	Never; Occasionally; Weekly; Daily
63	What is your alcohol intake?	None; Weekly; Daily
64	What is your processed food intake?	Low; Moderate; High
65	What is your current level of stress?	0 = none; 1; 2; 3; 4 = extreme
66	How would you rate your quality of sleep?	0 = poor, less than 4 hours; 1; 2; 3; 4 = well rested, 8+ hours
67	How often do you exercise?	Never; Occasionally; Sometimes; 3/4 days a week; Every day

Section 7: Food reintroduction and digestive comfort outcomes.

No.	Question / item	Response format / options
68	Since completing the Anaerostipes study, have you reintroduced or consumed any previously problematic food items?	Yes; No
69	If so, what food item/items did you reintroduce?	Free text
70	If you did reintroduce a previously problematic food, was the reaction:	Absent; much milder; somewhat milder; about the same; worse; uncertain
71	What do you feel was the overall change in your food tolerance?	Free text
72	Which previously avoided foods, if any, are you now able to tolerate?	Free text
73	How would you rate your overall digestive comfort since completing the Anaerostipes intervention?	1 = extremely poor; 2; 3; 4; 5 = great

Section 8: Quality of life.

No.	Question / item	Response format / options
74	In the last 7 days, how much have symptoms limited your food choices?	0 = not at all; 1; 2; 3; 4 = always
75	In the last 7 days, how much anxiety do you feel around eating?	0 = none at all; 1; 2; 3; 4 = extreme
76	In the last 7 days, how much do your symptoms affect social eating?	0 = not at all; 1; 2; 3; 4 = always
77	In the last 7 days, how much have your symptoms affected your daily energy?	0 = not at all; 1; 2; 3; 4 = all the time
78	What is your overall quality of life related to digestion?	0 = terrible, digestion constantly disrupts life; 1; 2; 3; 4; 5; 6; 7; 8; 9; 10 = no disruptions at all due to digestion

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