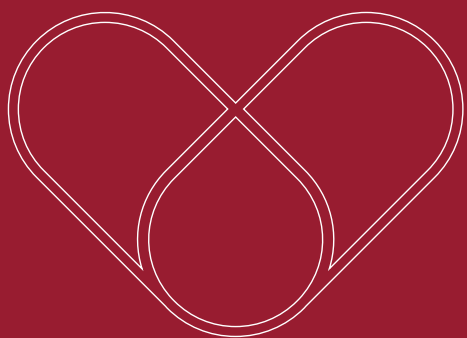




ADVANCED NUTRITION PROGRAMME™

Research Study | **Skin Integrate 28™**





Skin Integrate 28™

Skin Integrate 28 is a powder drink with 28 supercharged ingredients, to support gut, skin and all-round health.

Introduction

A healthy gut is the foundation for systemic wellbeing, healthy skin and optimal ageing. A growing body of peer-reviewed evidence highlights the essential role that specific compounds found in food and supplements have in shaping gut health, and in turn systemic and skin health. Central to these effects are probiotics live organisms that confer a benefit and (prebiotics – substrates that feed the gut microbiota).

Prebiotics are defined by the International Scientific Association of Probiotics and Prebiotics (ISAPP) as ‘selectively fermented ingredients that result in specific changes in the composition and/or activity of gastrointestinal microbiota, thus conferring benefit(s) upon host health’ [1].

Classic prebiotic fibres are fermented by gut microbiota, leading to the production of short-chain fatty acids (SCFAs), such as butyrate, propionate, acetate and lactic acid [2]. SCFAs are essential for maintaining intestinal barrier integrity, modulating immune responses and supporting metabolic health [3].

Beyond classic fibres, dietary polyphenols, plant-derived antioxidants found in fruits, vegetables, tea, cacao and wine, exert prebiotic-like actions, by selectively promoting beneficial bacteria, while suppressing pathogenic species. Many polyphenols, often when bound to fibre, are not fully absorbed in the small intestine and therefore reach the colon, where they selectively encourage the growth of beneficial bacteria. These polyphenols are also transformed by the microbiota into bioactive metabolites, which have antioxidant activity and reduce systemic inflammation [4, 5].

Recently, researchers have proposed that certain amino acids and peptides may act as prebiotic substances. Alongside their skin benefits supporting collagen synthesis, wound healing and hydration [7,8], these could function as a novel class of prebiotics through modulation of the gut microbiota, acting as selective substrates for beneficial bacteria and leading to production of bioactive metabolites with potential host benefits [6].

Few studies have evaluated the combined impact of fibres, bound polyphenols, and amino acids on both gut and skin health in humans.

Objective

This study aimed to evaluate the effects of Skin Integrate 28, a food supplement powder blend containing 23 plant fibres bound to polyphenols, together with amino acids, vitamin C and zinc, on gut and skin health.

Study method

Participants and procedure

This study was conducted over 8 weeks. 6 women and 4 men, aged 26 to 51 years (average of 41.6 years), were enrolled. Participants were healthy with normal skin. A 2-week washout period was implemented before the start of the study to allow for the clearance of any previously administered food supplements before the new intervention was introduced.



Participants were not allowed to make any changes to their skincare routine, undergo any facial treatments or cosmetic alterations, or take food supplements other than medically prescribed supplements such as iron or vitamin B12. All subjects provided consent prior to participation.

Test products and ingredients

Participants consumed one heaped teaspoon of Skin Integrate 28 powder daily, mixed into water or food. Each daily serving (one heaped teaspoon) delivered a blend of spinach, broccoli, kale, barley grass, wheat grass, alfalfa, chlorella, spirulina, beet, apple pomace, tomato, cranberry, tart cherry, raspberry, strawberry, carrot fibre, blueberry fibre, black rice, extracts of orange, pineapple, and kiwi, as well as glutamic acid, aspartic acid, glycine, acacia gum, dragon fruit, vitamin c and zinc.

Assessment

Subjects were assessed at baseline and week 8. Facial areas measured with the Courage & Khazaka™ equipment, included the mid-forehead, lateral to the eye (commonly referred to as crow's feet area) and mid-cheek. Stool samples were collected from four participants.

Assessment included:

- **Direct measurement of skin using Courage & Khazaka™ probes:**
 - **Hydration** in the stratum corneum is assessed with a Corneometer®, which measures the capacitance of the dielectric properties of the stratum corneum.
 - **Transepidermal water loss (TEWL)** is assessed with a Tewameter®, which uses open chamber evaporimeters to measure TEWL. This, together with the electrical method used by the Corneometer, is the preferred technique for measuring the water balance in the stratum corneum.
 - **Skin elasticity** is assessed with a Cutometer®, which uses suction methods to deform skin and a non-contact optical measurement system to measure the deformity and recoil, which is used to calculate the elastic and viscoelastic properties of skin.
 - **Melanin and erythema** (haemoglobin) are assessed with a Mexameter®, which emits 3 specific wavelengths of light and measures the reflectance of skin (light reflected back).
 - **High-resolution imaging** of the skin surface with the Courage and Khazaka™ Visioscan®, a UVA-light video camera assessment of wrinkle depth, skin smoothness, and skin roughness.
- **Eventis Launchpad™**
 - Image analysis of the full face. The Launchpad device captures high-quality images in multiple modes - natural, redness, and pigmentation, to provide a comprehensive overview of skin health.
- **Biomesight Gut Microbiome Test Kit**
 - Stool samples were collected using the Biomesight at-home testing kit, which preserves microbial DNA for analysis. The test applies 16S rRNA gene sequencing to identify bacteria and archaea in the gut, classifying them from phylum to species level where possible. This approach provides a snapshot of microbiome composition, including the diversity and relative abundance of microbial taxa, and is widely used to evaluate how diet, lifestyle, or interventions alter gut ecology.



Results

Skin measurements

The most consistent improvement was seen in hydration, which increased in all participants, particularly in the crow's feet area, with corresponding reductions in transepidermal water loss (TEWL). These findings suggest a barrier-supportive effect of the intervention.

100%

of participants
achieved increased
skin hydration

80%

of participants achieved
improvements in
hydration exceeding 13%

80%

of participants
showed measurable
improvements in wrinkle
depth

80%

of participants
showed increased
elasticity

70%

of participants had
reductions in TEWL
and erythema

Stool Testing

To assess the impact of the intervention on gut microbiota composition, stool samples from four participants were analysed using the Biomesight microbiome test. One participant's results were excluded due to gastroenteritis contracted during the study. Individuals showed considerable improvements in key bacteria, with increased levels of *Bifidobacterium* and *Lactobacillus*, (Figures 1 and 2). *Blautia* (Figure 3), a key short-chain fatty acid producer, improved across all participants. Gram-negative bacteria, which are key producers of lipopolysaccharides (LPS) and may trigger inflammation in the gut [9], declined in all participants (Figure 4), suggesting a potential decrease in LPS-mediated inflammatory burden.

These findings suggest a positive shift in gut microbiota composition and a potential reduction in inflammatory processes within the gut.

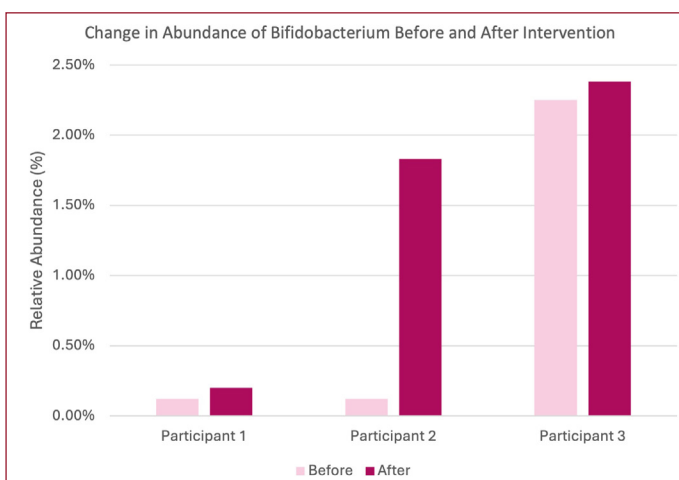


Figure 1. Relative abundance of *Bifidobacterium* before and after intervention across three participants. All participants showed increases relative to their own baseline.

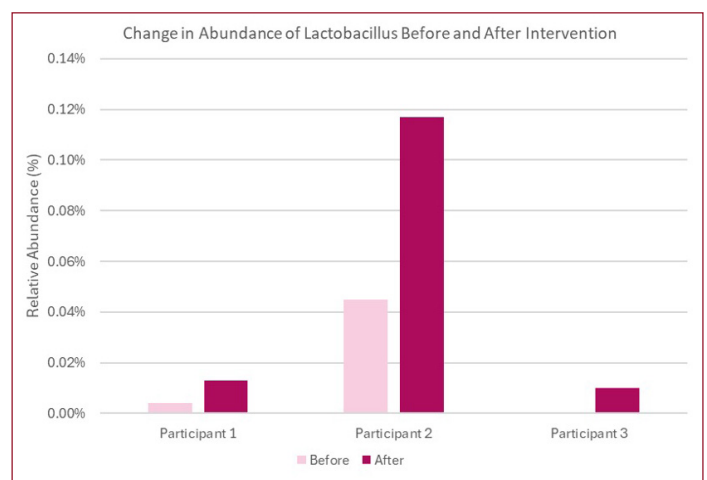


Figure 2. Relative abundance of *Lactobacillus* before and after intervention across three participants. All participants showed increases relative to their own baseline.

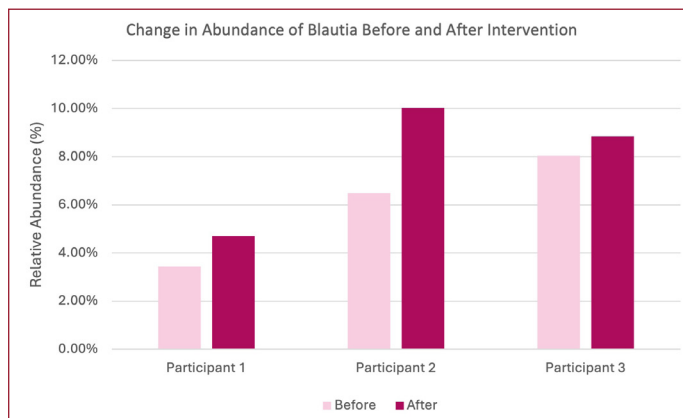


Figure 3. Relative abundance of *Blautia* before and after intervention across three participants. All participants showed increases relative to their own baseline.

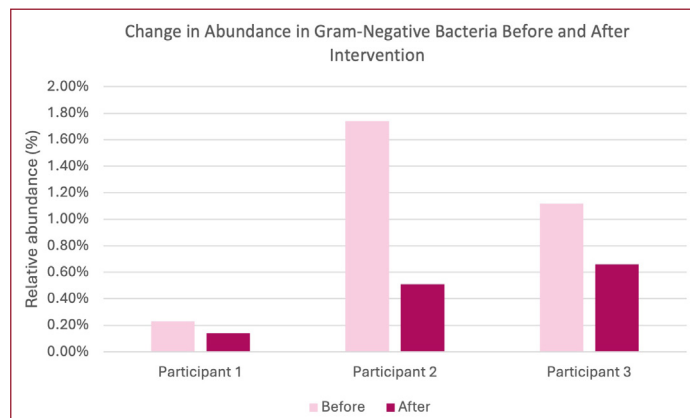


Figure 4. Relative abundance of gram-negative bacteria before and after intervention across three participants. All participants showed reductions in LPS producing bacteria.

The fourth participant was excluded from the group due to gastroenteritis, which had a slight impact on the results. Despite having an infection unrelated to the product, it is still worth noting that this participant had improvements in overall gut wellness during the 2 weeks (Figure 5), as interpreted by the Biomesight platform. It is interesting to note that the abundance of *Bifidobacterium* levels was reduced by 60% which is consistent with research [10] exploring microbiome alterations that happen during episodes of illness.

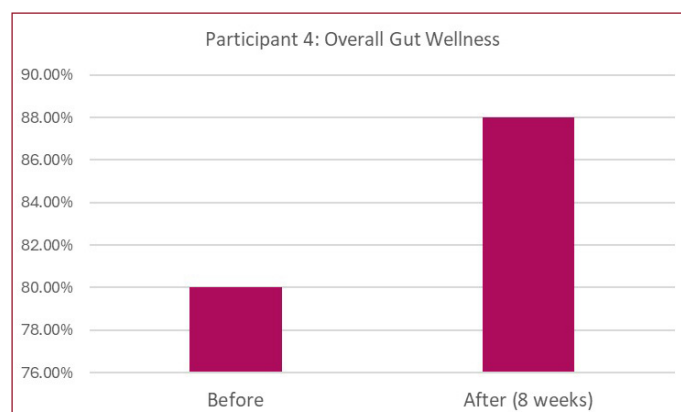


Figure 5. Changes in overall gut wellness for participant 4, showing improvement from baseline to week 8.

Conclusion

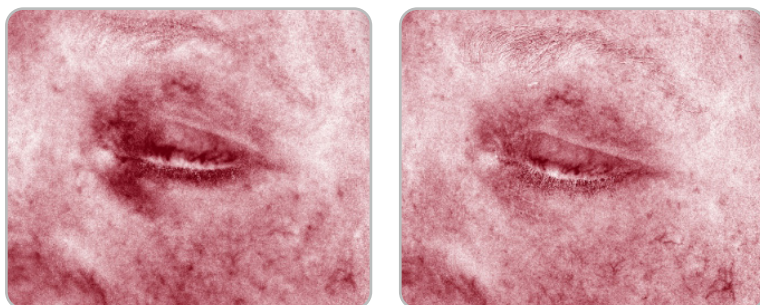
This pilot study provides preliminary evidence that daily supplementation with Skin Integrate 28, a food supplement powder combining prebiotic fibres, polyphenols, amino acids, vitamins, and minerals may benefit both gut and skin health. Improvements in hydration, elasticity, and wrinkle depth suggest that nutritional modulation of the gut-skin axis can enhance skin barrier function. This is largely mediated by changes in beneficial gut bacteria, coupled with reductions in pro-inflammatory bacteria. While the sample size was small and larger trials are warranted, these preliminary results provide initial evidence that a targeted combination of biome supporting ingredients can beneficially influence the gut-skin axis.



Results

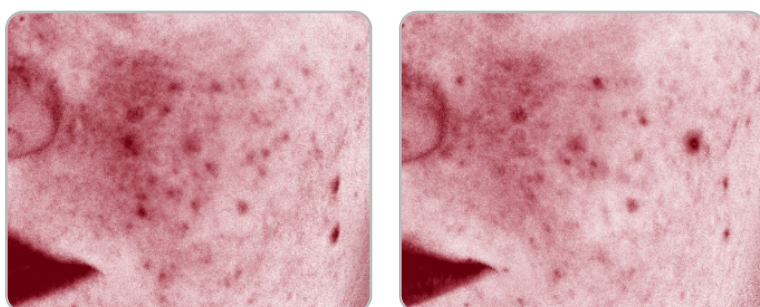
Participant 1

Dose: One heaped teaspoon | Duration: 2 weeks



Participant 2

Dose: One heaped teaspoon | Duration: 4 weeks



Testimonials

*After 4 weeks the darkness around my eyes reduced. Texture of my skin feels smoother. Stomach is amazing! Previous chronic IBS symptoms issues have been sorted. The skin on my hands and legs feels and looks less dry. **Terry T***

*I added it to lots of different foods like yoghurt, salad dressings, juice and scrambled eggs. I got a lot of compliments on my skin, and I noticed that my skin is more glowy and redness has reduced! I am not getting as many spots. I feel more energised, and my sleep has been better. I struggle to take capsules, but this was easy to build into my daily life. **Emily S***

*I feel less bloated than before. Before I started, I had more constipation, and now I haven't had any. I have noticed reduced redness with my skin. **Hind A***



References

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