



Clinically Proven Digestive Support now with Demonstrated Microbiome Mechanism

Validated human colon research shows butyrate-forward microbiome engagement without fiber or live bacteria.

Digestive ingredients often reference the microbiome, but few demonstrate how they meaningfully interact with it. In two published human clinical studies, Digexin® demonstrated improvements in gastrointestinal regularity, transit time, and constipation-related symptoms^{1,2}.

Now, in a validated *ex vivo* human colon simulation, Digexin® was shown to engage existing gut microbiota, driving beneficial fermentation and metabolite production linked to digestive comfort and gut integrity³. These findings add mechanistic insight to Digexin's established clinical benefits.



Increased
Microbial
Diversity



Functional
Fermentation



Butyrate-Forward
SCFA Profile

Key Results :

Boosted Short-Chain Fatty Acids

- Butyrate +44%
- Acetate +22%
- Propionate +35%

Shift Toward Gut-Protective Metabolism

- Increased carbohydrate fermentation
- No increase in proteolytic byproducts

Functional Microbiome Balance

- Measurable beta-diversity shift
- Functional differentiation within existing microbiota

What this shows

Digexin® has prebiotic effects that promote microbiome health, supporting microbial cross-feeding, promoting beneficial metabolite production, and increasing microbiome diversity.

Unlike many traditional prebiotics that primarily drive acetate production, Digexin demonstrated a balanced, butyrate-forward SCFA profile comparable to strong prebiotic fibers, but without fiber loading.

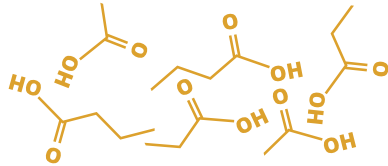
¹Punukollu R, et al. (2024) *J Ethnopharmacol*

²Singh G, et al. (2024) *JANA*

³ *Ex vivo* microbiome data from *ProDigest® Colon-on-a-Plate®* model pending publication.

From Clinical Results to Microbiome Mechanism

Metabolic Signals Behind Digestive Function



Short-Chain Fatty Acids (SCFAs)

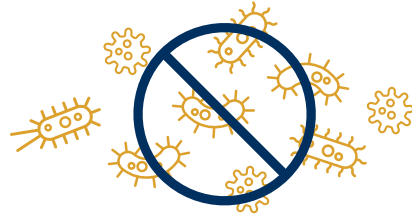
Short-chain fatty acids — especially butyrate — are microbial metabolites associated with:

- Gut barrier integrity
- Balanced inflammation signaling
- Digestive comfort and motility
- Gut-brain communication

What that means:

Digexin's butyrate-forward prebiotic-like fermentation profile indicates meaningful microbiome engagement rather than passive tolerance.

Fermentation Without the Trade-Offs



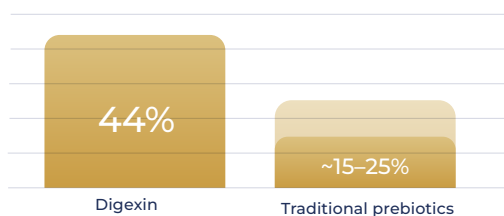
What Digexin Did Not Increase

- Proteolytic fermentation markers
- Irritation-associated byproducts

Why this matters:

Many fiber-heavy ingredients drive fermentation at the cost of bloating or discomfort. Digexin supports beneficial microbial metabolism without fiber loading.

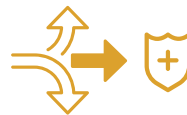
Butyrate Response



Butyrate Response Comparison

- Digexin: **44% increase**, Response 100%
- Traditional prebiotics: ~15-25% increase, Response 50%

A New Digestive Health Lane



Digexin delivers butyrate-forward, prebiotic-like microbiome engagement designed for real-world digestive comfort.

- Microbiome engagement without fiber
- No live bacteria or viability risk
- Stable, botanical, formulation-friendly

Ex vivo human microbiome study; not a human clinical trial. | Study results pending publication.

These statements have not been evaluated by the FDA. Products are not intended to diagnose, treat, cure, or prevent any disease.

