

SPECIAL NUTRIENTS FOR GUT HEALTH

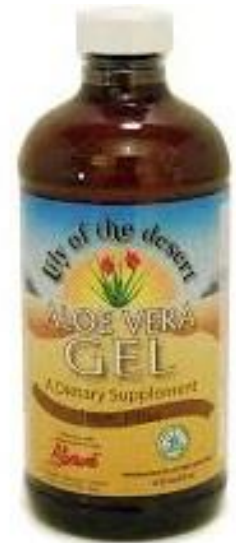


Helpful

- The following is a list of nutrients you may find in supplements – both probiotic supplements and GI supplements
- New ones will be added over time – this is an evolving area for research and for the creation of supplements
- This will give you an idea of what ingredients should or could do to help

Aloe Vera

- Anti-microbial – anti-viral, anti-bacterial and anti-fungal
- Improves digestion and absorption
- Increases good bacteria levels as a prebiotic and lowers bad bacteria and yeast (as anti-microbial)
- Inhibits gastric acid output
- Anti-inflammatory - Inhibits PG2
- Soothing and healing to internal tissue
- Gel is better than juice (does contain preservatives)
- Best taken alone - can mix with fruit juice



Glutamine

- Helps to rebuild and repair the intestinal lining
- Heals leaky gut and ulcers and can protect from further damage
- Aid memory, focus and concentration as a precursor to glutamate and GABA in the brain
- Acts as an anti-inflammatory in the gut and in the body and has analgesic properties
- Balances mucus production which aids healthy bowel movements and helps with diarrhea and IBS

Glutamine

- Aids the body in recovery from injury and infection – is the primary amino acid needed for repair
 - Improve muscle strength and aids muscle repair
 - Stabilizes blood sugar, curbs sugar and alcohol cravings
 - Improves metabolism and cellular detoxification
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- Powder is best – up to 5000 mg
 - A number of companies make combination products



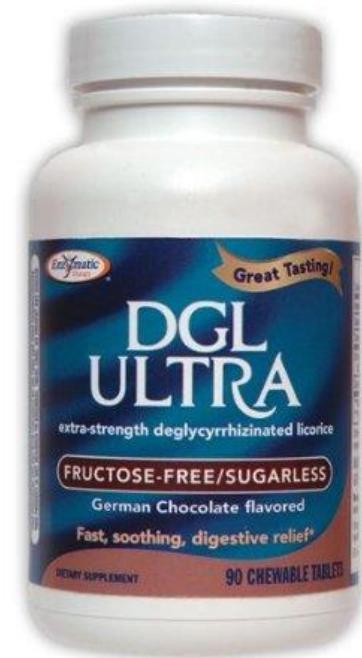
Butyrate

- Is available as a supplement (Genesta)
 - Lowers inflammation
 - Nourishes colon mucosa and provides energy for the colon
 - Produces T-reg cells in the gut
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- If client has issue with resistant starch
 - the supplement may be the way to go



DGL

- Deglycyrrhizinated Licorice
- Glycyrrhizinate is the element in licorice that is contraindicated with blood pressure medicine
- Soothes the mucus membrane
- Also helps with reflux and peptic ulcers



Marshmallow

- Aids and soothes the mucosal lining
- It is a mucilage (which remains unaltered until it reaches the colon and coats the gastro-intestinal membranes)
- Contains flavanoids that are anti-inflammatory
- Can promote phagocytosis to engulf pathogenic bacteria and dead cell tissue
 - this speeds healing
- Available in capsule or buy loose marshmallow and simmer in water for 15 minutes



Slippery Elm

- Also a mucilage and coats gastrointestinal membranes to soothe and aid repair
- Helpful for ulcers
- Can provide relief for IBS, diarrhea, colitis, Crohn's and GERD
- Also contains beneficial antioxidants
- Available in capsule or buy loose slippery elm bark and simmer in water for 15 minutes



Triphala

- Aids constipation
- Improves peristalsis
- Helps improve and protect the intestinal wall lining during radiation treatments
- It's antibacterial and an anti-inflammatory with strong antioxidant properties
- Blood sugar stabilizer
- Available in capsules and powder



N-acetyl Glucosamine

- Monosacharride derived from glucose
- Calms inflammation of the mucosa
- Helps with ulcers
- Useful for treating all types of inflammatory bowel disease
- Not found commonly as a single supplement – usually found in a gut health product

Fiber

- Citrus Pectin – Prebiotic - helps *L. rhamnosus* adhere better to intestinal cells than inulin (FOS), and reduces the adhesion of *Salmonella*
- Also, lowers inflammation and speeds healing
- Psyllium is also prebiotic and can be hydrolysed by bifidobacterium bacteria but water is needed for hydrolysis



MSM

- Methylsulfonylmethane
- It is a source of the mineral sulfur
- It is an anti-inflammatory
- Dysbiosis can cause a deficiency of sulfur in the body – as bad bacteria converts it to hydrogen sulphide gas
- MSM can coat the mucous membranes and prevent allergens from entering the bloodstream



Chamomile

- Anti-inflammatory and anti-cancer properties
- Aids colic, diarrhea and eczema
- Soothes gastrointestinal irritations and helps with gas, bloating
- Relaxes muscles that move food through the intestinal system
- Lowers gastric acid and helps with ulcers and hemorrhoids



Other Nutrients

- Zinc Carnosine: Protects and repairs the intestinal wall lining
- Quercetin: helps inhibit histamine release, controlling intestinal inflammation and intestinal barrier function
- Cat's Claw: wound healing, anti-inflammatory and helps with ulcers and protects against oxidative stress
- Whatever combination you choose, these nutrients aid the healing process of the gastrointestinal system



Other Nutrients

- Okra Extract (*Hibiscus esculentus*) – protects the liver, stabilizes blood sugar and is an antioxidant and supports the health of the intestinal tract
- Prune Powder contain phenolic compounds neochlorogenic and chlorogenic acids that aid bowel movement, control absorption of glucose into the body and have a prebiotic effect
- Colostrum – IGF-1 has been shown to have a healing effect for the intestinal wall lining by stimulating tissue repair, mediating intestinal function, and inhibiting pathogens

Prebiotic Example

Fruit and Vegetable Concentrates	1 Capsule	2 Capsules
FOS (short chain oligosaccharide) (Helianthus tuberosus)	220 mg	440 mg
Inulin (medium chain oligosaccharide) (Cichorium intybus L)	110 mg	220 mg
Chicory (long chain oligosaccharide) (Cichorium intybus)	60 mg	120 mg
Cranberry Extract (36:1) (Vaccinium macrocarpum)	140 mg	280 mg
Red Wine Concentrate (Vitis vinifera L)	30 mg	60 mg
Asparagus (Asparagus officinalis)	25 mg	50 mg
Jerusalem Artichoke (Helianthus tuberosus)	25 mg	50 mg
Elderberry Extract (Sambucus nigra)	20 mg	40 mg
Garlic (Allium sativa)	15 mg	30 mg
Onion (Allium cepa)	12.5 mg	25 mg
Leek (Allium porrum)	10 mg	20 mg
Colostrum (Bos taurus – Milk)	10 mg	20 mg
Lactoferrin (Bos taurus – Milk)	5 mg	10 mg

Example: Intestine

- **Repairs and rebuilds intestinal tract:**
 - L-Glutamine
 - - increases intestinal villous height, stimulates mucosal cell growth in the intestinal tract, and helps to maintain the mucosal cell integrity.
 - N-Acetylglucosamine
 - - required for tissue repair mechanisms.
- **Anti-inflammatory:**
 - Ginger Root
 - - anti-inflammatory properties.
 - Marigold Flower
 - - helps to alleviate mucous membrane inflammation.
- **Demulcent (soothing):**
 - Marshmallow Root
 - - alleviates local irritation.
 - - inhibits mucociliary activity.



Intestine

- **Carminative (expels gas from stomach, intestines or bowel):**
- Ginger Root
- **Anti-Diarrhea:**
- Cranesbill Root - contracts blood vessels thereby stopping internal bleeding.
- Helpful for diarrhea and chronic dysentery.
- **Enhances gastric & ileal movement:**
- Gamma-Oryzanol (from rice or wheat bran and found in some fruits and vegetables)

Intestinal Bowel Soother helps to soothe the irritated intestinal tract and bowel by reducing inflammation, cramps, and spasms. This can be helpful for those with intestinal problems such as Crohn's, Colitis, and I.B.S. helpful in alleviating menstrual cramps.