

TriPlex™ Microbiome Activating Combo*

Healthy Gut. Happy You.™ And Weight Loss Too.*

By Karen P Wright

The clinically demonstrated TriPlex System works in 3 ways to remove, restore and rebalance your body to help get your gut back into balance

TriPlex is the supercharged boost your gut needs to attack your health challenges from the inside out.

This document contains research for each of the ingredients in the Plexus TriPlex products. The goal is for you to understand why this three product system has worked on thousands of people. Most of the information was taken from the Mayo Clinic website and the US National Library of Medicine, National Institute of Health.

*Supplements are not approved by the FDA so I felt it was my duty to do some research for you. There is a lot more information for you to research if you care to.

I hope this helps you understand what the Plexus TriPlex Microbiome products can do for you and why it works.

Plexus® ProBio 5

Restores Balance.*

Plexus ProBio 5 is formulated to promote an optimal gut health environment to balance intestinal yeast. This unique blend of enzymes and probiotics helps the gut maintain a healthy digestive environment.*

Benefits

- Keep intestinal yeast in balance*
- Helps support a healthy intestinal tract*
- Supports healthy digestion*
- Helps improve natural response to imbalance*
- Promotes healthy bacteria counts and pH levels in the gut*

Features

- Delivers 2 billion CFU per capsule at time of manufacture
- No artificial colors, flavors, or preservatives
- Gluten Free

Usage

- Take 1-2 capsules at bedtime on an empty stomach.
- Take up to four capsules at bedtime, until desired results are achieved.

Suggested Use: Take 1 capsule at bedtime.

Optimal Use: Take up to 4 capsules at bedtime, until desired results are achieved.

Supplement Facts		
Serving Size 1 Capsule		
Servings Per Container 60		
	Amount Per Serving	% DV
Vitamin C (as ascorbic acid)	150 mg	250%
Vitamin B6 (as pyridoxine hydrochloride)	2.5 mg	125%
Proprietary Enzyme Blend	200 mg	**
Proteases		**
Chitosanase (from <i>Bacillus coagulans</i>)		**
Cellulase		**
Serrapeptase (as Peptizyme SP®)		**
Probiotic Blend	100 mg	**
<i>Bacillus coagulans</i>		**
<i>Lactobacillus acidophilus</i>		**
<i>Bifidobacterium longum</i>		**
<i>Lactobacillus plantarum</i>		**
<i>Saccharomyces boulardii</i>		**
Grape seed extract	25 mg	**
** Daily Value (DV) not established		

Other Ingredients: Gelatin, water, brown rice powder

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Vitamin C (as ascorbic acid) (1)

- A vitamin your body needs to form blood vessels, cartilage, muscle and collagen in bones.
- Vital to your body's healing process
- An antioxidant, vitamin C might help protect your cells against the effects of free radicals which play a role in heart disease, cancer and other diseases
- Helps your body absorb and store iron
- Because your body doesn't produce vitamin C, you need to get it from your diet
- People with gastrointestinal conditions and some types of cancer might be susceptible to vitamin C deficiency.
- Used to increase iron absorption from the gastrointestinal tract.
- Severe vitamin C deficiency can lead to a disease characterized by anemia, bleeding gums, bruising and poor wound healing (scurvy).

Vitamin B-6 (pyridoxine) (1)

- Important for normal brain development and for keeping the nervous system and immune system healthy.
- Food sources of vitamin B-6 include poultry, fish, potatoes, chickpeas and bananas. Vitamin B-6 can also be taken as a supplement, typically as an oral capsule, tablet or liquid
- Important for normal brain development
- Keeps the nervous system and immune system healthy
- People who have kidney disease or conditions that prevent the small intestine from absorbing nutrients from foods (malabsorption syndromes) are more likely to be vitamin B-6 deficient.
- Certain genetic diseases and some epilepsy medications also can lead to deficiency. This can cause a condition in which you don't have enough healthy red blood cells to carry adequate oxygen to your body's tissues (anemia), confusion, depression and a weakened immune system.

Proprietary Enzyme Blend

Proteases (2)

- The current success of research in this group of ancient enzymes derives mainly from the large collection of findings demonstrating their relevance in the control of multiple biological processes in all living organisms
- Regulate the fate, localization, and activity of many proteins, modulate protein-protein interactions, create new bioactive molecules, contribute to the processing of cellular information, and generate, transduce, and amplify molecular signals
- Influence DNA replication and transcription, cell proliferation and differentiation, tissue morphogenesis and remodeling, heat shock and unfolded protein responses, angiogenesis, neurogenesis, ovulation, fertilization, wound repair, stem cell mobilization, hemostasis, blood coagulation, inflammation, immunity, autophagy, senescence, necrosis, and apoptosis
- Consistent with these essential roles of proteases in cell behavior and survival and death of all organisms, alterations in proteolytic systems underlie multiple pathological conditions such as cancer, neurodegenerative disorders, and inflammatory and cardiovascular diseases
- Accordingly, many proteases are a major focus of attention for the pharmaceutical industry as potential drug targets or as diagnostic and prognostic biomarkers
- Proteases play key role in plants and contribute to the processing, maturation, or destruction of specific sets of proteins in response to developmental cues or to variations in environmental conditions

Chitosanase (from Bacillus coagulans) (2)

- A polysaccharide consisting of 1,4- β -linked d-glucosamine residues, partially substituted with N-acetyl group
- Has attracted attention among many researchers, because chitosan oligosaccharides are not only water-soluble, but also show various functional properties such:
 - Anti-inflammatory
 - Anti-oxidative
 - Anti-tumor
 - Preservative
 - Prebiotic
- The major sources of chitosanase are bacteria, such as Bacillus, Serratia, Aeromonas, Streptomyces, Pseudomonas, and Paenibacillus.

Cellulase (3)

- Cellulose, the substrate of cellulase, is the most abundant polysaccharide present on earth
- It is the main substance in plant materials
- Anselme Payne was the very first person to discover and isolate this compound from green plants
- Cellulosic materials have played a crucial role in daily human life
- Cellulase is also being highly recognized as an effective alternative to available antibiotics for treatment of biofilms produced by Pseudomonas. Therefore, the potential of cellulases to fight against antibiotic-resistant bacteria is a trend which will overcome problems in the healthcare sector

Serrapeptase (as Peptizyme SP) (4)

- Serratiopeptidase has been used in Europe and Asia for over 30 years, but is relatively new in the United States and Canada
- Powerful anti-inflammatory properties
- Clinical studies have shown that it is effective in:
 - reducing swelling and edema
 - metabolizing scar tissues in the body
 - useful for post-traumatic swelling, fibrocystic breast disease and bronchitis
 - It can digest dead tissue, blood clots, cysts, and arterial plaques

Probiotic Blend

Bacillus coagulans (5)

- Several spore-forming strains of Bacillus are marketed as probiotics due to their ability to survive harsh gastrointestinal conditions and confer health benefits to the host.
- Members of Bacillus genus form resistant dormant endospores as a protective mechanism during conditions of nutrient deprivation and environmental stress, which makes them resistant to extreme pH, UV irradiation, high temperatures, and solvents
- Bacillus probiotics are currently of keen interest to the probiotic industry as they can be marketed in the spore form, which has indefinite shelf life
- The tough coat of the spores helps these organisms to transit across gastric environmental barriers, and experiments conducted using a murine model have demonstrated that ingested Bacillus subtilis spores actually germinate, proliferate and re-sporulate in the gut
- Demonstrated to significantly improve abdominal pain and bloating associated with irritable bowel syndrome in two double-blind, randomized, placebo-controlled clinical trials
- Effective in the form of a synbiotic in improving symptoms of irritable bowel syndrome and childhood functional abdominal pain

- In a study of 40 Indian women, *Bacillus coagulans*, as an adjunct to antibiotic therapy has been demonstrated to have a positive effect in the treatment of bacterial vaginosis
- *Bacillus coagulans* has also been demonstrated to reduce symptoms of *Clostridium difficile*-induced colitis in mice
- Additionally, a study measuring the in vitro T-cell response of individuals consuming *Bacillus coagulans* suggests that this probiotic might increase immune response to viral infections

Lactobacillus acidophilus (1)

- A probiotic that is used to help maintain the number of healthy bacteria in your stomach and intestines
- A bacterium found in the mouth, intestine and vagina, is used as a probiotic
- Probiotics are good bacteria that are either the same as or very similar to the bacteria that are already in your body

Bifidobacterium longum (2)

- *Bifidobacterium longum*, a common component of infant gut microbiota, appears in the gut shortly after birth and can be detected there throughout an individual's lifespan
- The importance of the gut microbiota at the early stage of life has been well investigated. It is suggested that the gut microbial composition during this period is associated with the risk of diseases (e.g. allergy, asthma, and obesity) in the following life stages
- The composition of an infant's gut microbiota is influenced by various factors, such as the mode of delivery, diet, antibiotic usage during infancy, and host genetics

Lactobacillus plantarum (2)

- Lactobacilli are widespread microorganisms which are extensively used in the food field both as technological starters in the fermented products and as probiotics due to their strain-specific healthy properties
- Among Lactobacilli, *Lactobacillus plantarum* is one of the most versatile species, including strains with valuable technological skills and recognized probiotic features
- More number of probiotic *L. plantarum* strains hold multipurpose features as they can both carry out appreciable fermentative and metabolic processes, e.g., increasing the amount of specific beneficial compounds such as vitamins in the fermented food product, and promote the maintenance of consumers' health, since their capacity to modulate the host immune response and to de novo produce vitamins in the human gut
- The increasing attention of consumers for healthy and natural food prompts food industry and scientific research to investigate the application of natural compounds for the processing of food products, in order to eliminate or reduce chemical additives used as antimicrobial agents. Thus, in recent decades, several lines of research have tried to find "the natural solution" to "the chemical problem." Among these, the selection of microbial molecules, and/or bacterial strains able to produce such compounds, to be used as antimicrobials and preservatives, proved that Lactic Acid Bacteria (LAB) could be suitable candidates for such "natural purpose"

Grape Seed Extract

- This plant extract forms an interesting example of how product-specific research followed and contributed to the scientific evolution of botanical, biochemical and physiological insights during the post-WWII period. In this time, grape seed extracts constantly remained at the forefront of successive innovations in scientific investigation

- Applications have been found in the treatment of:
 - chemo- and radiotherapy-induced toxicity
 - chemoprevention
 - cardiovascular diseases
 - neurodegenerative diseases
 - oral health
 - cosmeceutical

Plexus Bio Cleanse™

Detox & Cleanse.*

Plexus Bio Cleanse helps get your digestion on track by speeding up the removal of harmful microbes and substances to support your body's natural detoxification process.*

Benefits

- Help cleanse the gastrointestinal tract*
- Helps relieve gas, bloating, and discomfort*
- Helps promote regularity*
- Helps remove harmful microbes and substances*
- Relieves occasional constipation*

Features

- No artificial colors, flavors, or preservatives
- Gluten Free
- 100% Vegetarian

Usage

- Take 2 capsules with 8oz of water twice daily between meals or at night

Suggested Use: 2 Capsules with 8oz of water 2 times daily between meals.

Supplement Facts		
Serving Size 2 Capsules		
Servings Per Container 60		
	Amount Per Serving	% DV
Vitamin C (as ascorbic acid)	150 mg	250%
Magnesium (as magnesium hydroxide)	380 mg	95%
Sodium (as sodium bicarbonate)	50 mg	2%
Bioflavonoid Complex (Orange (peel), lemon (peel), quince (whole fruit))	50 mg	**
** Daily Value (DV) not established		

Other Ingredients: Hypromellose (vegetarian capsule), rice flour

Not recommended for use by children under 18. If pregnant or nursing, consult your physician prior to use. Keep out of reach of children. Store in a cool, dry place.

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*Free of milk, eggs, fish, shellfish, tree nuts, peanuts, wheat, and soy

Vitamin C (as ascorbic acid) (1)

- A vitamin your body needs to form blood vessels, cartilage, muscle and collagen in bones.
- Vitamin C is also vital to your body's healing process.
- An antioxidant, vitamin C might help protect your cells against the effects of free radicals which play a role in heart disease, cancer and other diseases.
- Vitamin C also helps your body absorb and store iron.
- Because your body doesn't produce vitamin C, you need to get it from your diet.
- People with gastrointestinal conditions and some types of cancer might be susceptible to vitamin C deficiency.
- Vitamin C is also used to increase iron absorption from the gastrointestinal tract.
- Severe vitamin C deficiency can lead to a disease characterized by anemia, bleeding gums, bruising and poor wound healing (scurvy).

Magnesium (as magnesium hydroxide)

- Magnesium is a naturally occurring mineral
- Reduces stomach acid, and increases water in the intestines which may induce defecation
- A laxative to relieve occasional constipation (irregularity)
- An antacid to relieve indigestion, sour stomach, and heartburn

Sodium (as sodium bicarbonate)

- Known as baking soda, is used to relieve:
 - Heartburn
 - sour stomach
 - acid indigestion by neutralizing excess stomach acid
 - treats the symptoms of stomach or duodenal ulcers
- makes the blood and urine more alkaline in certain conditions.

Bioflavonoid Complex

- Orange peel, lemon peel, quince whole fruit
- Citrus bioflavonoids and related substances are widely used in Europe to treat diseases of the blood vessels and lymph system, including hemorrhoids , chronic venous insufficiency , leg ulcers, easy bruising , nosebleeds , and lymphedema following breast cancer surgery
- These compounds are thought to work by strengthening the walls of blood vessels

Plexus Slim® Microbiome Activating*

This is how healthy happens!™

Nutrition never tasted so delicious. Slim features a premium microbiome activating formula that contains ingredients clinically demonstrated to improve your gut health and promote weight loss! Slim is a no-brainer. Feed your gut beneficial prebiotics, support a healthy glucose metabolism, and lose weight - all with one great-tasting pink drink.◇*

[Click here to access the Plexus Slim® Microbiome Activating* Reference Sheet](#)

Benefits

- Clinically demonstrated to help you lose weight*
- Promotes the growth of good gut microbes◇*
- Increases Lactobacillus by 365 times and Bifidobacterium by 290 times - contributing to overall health◇*
- Increases the metabolism enhancing Akkermansia microbes by 250 times◇*
- Supports healthy glucose metabolism*
- Clinically studied XOS prebiotic
- Patent pending formula

Features

- Delicious raspberry, lemon, watermelon flavor
- No artificial sweeteners, flavors or preservatives
- 30 single serve packets
- Only 5 calories
- Gluten Free
- 100% Vegetarian
- Non-GMO

Usage

- Pour one packet of Plexus Slim into 12-20 ounces of water, shake well, and drink 30-60 minutes before a meal
- Use Slim 1 - 2 times per day. Results may vary by person

Supplement Facts

Serving Size 1 Slim Drink Packet

Servings Per Container 30

	Amount Per Serving	% DV
Calories	5 cal	
Total Carbohydrate	2 g	1%***
Chromium (as chromium polynicotinate)	200 mcg	167%
Xylooligosaccharide	1,000 mg	**
Plexus Slim® Blend	531 mg	**
Green coffee (<i>Coffea robusta</i>) bean extract (contains 50% chlorogenic acid and less than 2% natural caffeine), <i>Garcinia cambogia</i> fruit extract, alpha lipoic acid, Mulberry (<i>Morus alba</i>) fruit extract		

***Percent Daily Values are based on 2,000 calorie diet

**Daily Value (DV) not established

Other Ingredients: Citric acid, natural flavors, stevia (*Stevia rebaudiana*) leaf extract, beet (*Beta vulgaris*) root extract and other fruit and vegetable juice (for color), cellulose gum, silicon dioxide

Not recommended for use by children under 18. If pregnant or nursing, consult your physician prior to use. Keep out of reach of children.

Avoid direct sunlight and excess heat.

Chromium (as chromium polynicotinate) (1) (2) (6)

- In 2005 the US Food and Drug Administration permitted a qualified health claim indicating that the evidence for chromium picolinate supplements in reducing the risk of insulin resistance and, possibly, T2DM is highly uncertain
- A complex of trivalent chromium and nicotinic acid.
- Boosts the effectiveness of insulin, which helps keep your blood sugar at optimal levels
- Participates in the metabolism of carbohydrate, fat and protein
- Chromium polynicotinate sounds similar to another chromium supplement called chromium picolinate, but the picolinate-containing supplement can affect brain neurotransmitters -- a danger not associated with chromium polynicotinate.
- Don't take supplements if you have liver or kidney disease
- It is a mineral called an "essential trace element" because very small amounts of chromium are necessary for human health
- Chromium is taken by mouth for improving blood sugar control in people with prediabetes, type 1 and type 2 diabetes, and high blood sugar due to taking steroids and HIV treatments.
- Taken by mouth for:
 - Depression
 - Turner syndrome
 - polycystic ovary syndrome (PCOS)
 - lowering "bad" cholesterol
 - raising "good" cholesterol in people taking heart medications called beta blockers
 - obesity
 - metabolic syndrome
 - heart attack
 - schizophrenia
 - bipolar disorder

- binge eating disorder
- a disease called reactive hypoglycemia
- body conditioning including weight loss
- increasing muscle
- decreasing body fat
- improves athletic performance
- increases energy
- treats a decline in memory and thinking skills in older people that is more than what is normal for their age

Xylooligosaccharide (XOS) (2)

- Significantly modified the gut microbiota and resulted in dramatic shifts of 4 bacterial taxa associated with Pre-diabetes Mellitus
- A prebiotic fiber that feeds good bacteria
- Derived from a Non-GMO corn-derived form of oligosaccharide called Xylooligosaccharide
- In a double-blind, randomized, placebo-controlled study, researchers at the University of California at Los Angeles (UCLA) found that daily doses of XOS as low as 1 gram strongly fosters the growth of bifidobacteria and other good gut microbes, while helping reduce bad bacteria in healthy people
- Effective in promoting the intestinal health

Plexus Slim Blend

Green Coffee (coffea robusta) bean extract (contains 50% chlorogenic acid and less than 2% natural caffeine)

- Evidence indicates that the intake of green coffee extract can promote weight loss (2)
- Green coffee bean extract is derived from coffee that has not yet been roasted
- Green coffee beans have a higher level of Chlorogenic acid compared to regular, roasted coffee beans
- Chlorogenic acid is a phytochemical that acts as an alpha-glucosidase inhibitor
- Chlorogenic acid can help maintain healthy blood glucose already in the normal range
- Chlorogenic acid may also induce body fat loss via increasing body heat produced
- Plexus Slim uses a Non-GMO green coffee bean extract standardized to 50% Chlorogenic acid and less than 2% of natural caffeine.*

Garcinia cambogia fruit extract

- Garcinia Cambogia is a citrus fruit tree that grows in Southeast Asia
- Plexus uses a standardized extract from the fruit rind that contains a phytonutrient called hydroxycitric acid (HCA), which is bioactive compound
- Plexus Slim uses a Non-GMO Garcinia Cambogia extract to promote
 - Loss of appetite or desire to eat less than usual.
 - Reduced cravings for unhealthy foods
 - Positive mood (feeling happier, energetic, etc.)
 - Increase in concentration and energy
 - Stabilized sugar levels
 - Improved bowel movements
 - Reduced joint pains

Alpha lipoic acid (1)

- An antioxidant the body can use to prevent or manage a tissue-damaging process called oxidative stress
- Oxidative stress is a part of the diabetic neuropathy disease process
- Has been shown to reduce blood sugar levels

Mulberry (Morus alba) fruit extract (2)

- Anthocyanins from mulberry fruits can inhibit the oxidation of low-density lipoprotein (LDL) and scavenge free radicals. Studies have shown that the Mulberry fruit may help with:
 - Cardiovascular disease
 - Diabetes
 - Obesity
 - Gastrointestinal tract cancer tumors
 - Fatty liver disease
 - Antioxidant to reduce exercise-induced oxidative stress and physical fatigue
 - Protect against brain damage

Other Ingredients: Citric acid, natural flavors, stevia (*Stevia rebaudiana*) leaf extract, beet (*Beta vulgaris*) root extract and other fruit and vegetable juice (for color), cellulose gum, silicon dioxide

References

Prebiotics (1)

Prebiotics are specialized plant fibers

They act like fertilizers that stimulate the growth of healthy bacteria in the gut

Found in XOS of Plexus Slim

Probiotics (1)

Probiotics contain live organisms, usually specific strains of bacteria

Directly add to the population of healthy microbes in your gut

Found in Plexus Probio5

Prebiotics feed the Probiotics!!!!

(1) <https://www.mayoclinic.org>

(2) <https://www.ncbi.nlm.nih.gov/pmc/>

(3) <https://www.intechopen.com/online-first/microbial-cellulases-an-overview-and-applications>

(4) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5790697/>

(5) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4892684/>