H.I.T.S. – Health Ingredient Technology & Solutions®
Featured Ingredients for Great Taste & Well-Being!

WILD offers an advantage to customers looking to create market ready formulations that include applications tested, safe and effective health ingredients.

The use of health ingredients is typically limited by solubility or off-taste. Through proprietary emulsion and extraction technologies, WILD provides efficacious health ingredients that are easy to incorporate into a wide variety of food and beverage formulations.

Featured H.I.T.S. Ingredients

**Immunel™**
A proprietary blend of milk peptides that support immune health and balance total immunity

**Tegricel™**
A premium blend of bioactive milk peptides specifically designed to help support digestive health

**RPM Factors™**
A bioactive whey protein concentrate that supports sports nutrition

**Antiox Blend**
Unique blend of antioxidants from green rooibos, grapeseed, green tea and white tea standardized on polyphenols

**De-flavored Green Coffee Extract**
May reduce the absorption of carbohydrates that are consumed and help the liver process fatty acids more efficiently

**De-flavored Green Tea Catechins**
A class of polyphenols found in green tea, that with proper diet, may aid in the maintenance of healthy weight

**CoQ10**
A very powerful antioxidant that has diverse health benefits - maintaining heart health, cognitive function, energy and skin health

**Vegeceuticals™**
Nutraceuticals from vegetables that impart minimal taste without any bitterness and are completely soluble in a variety of product formulations
Definition and Science

General Information:
- Immunel™ milk peptide is a clinically tested, cost-competitive ingredient that supports immune health and is easily incorporated into a myriad of food and beverage products with no impact on taste, color and texture.
- This ingredient activates the innate immune system.
- Immunel™ is a specific milk peptide fraction that provides a quick and more targeted immune response.

Possible Modes of Action:
- Studies have shown Immunel™ to:
  - Increase number and vigor of immune cells that respond to microbial (bacterial) invaders
  - Support phagocytosis
  - Activate NK (Natural Killer) cells
  - Support surveillance of immune cells
  - Inhibit lipoxygenase enzyme activity, protecting cells from oxidative damage

Ingredient Information

Product Features:
- Form: Powder
- Can be used in foods, beverages, and supplements
- Kosher
- Generally Recognized As Safe (GRAS)
- Whole Foods Friendly

Use Range:
Typical use range is 50mg - 100mg per serving with a recommended daily consumption of 100mg.
Definition and Science

General Information:
• Tegricel™ is a new product made from premium milk peptides and bioactives that helps maintain a healthy gut and creates a healthy environment for optimum digestive function.
• A healthy digestive system is needed to maintain immunity and bowel regularity, and to properly absorb nutrients from food.
• Tegricel™ is not a pre- or pro-biotic; it’s active, but not alive and works to decrease gut permeability (leaky gut syndrome).

Possible Modes of Action:
• Daily usage of Tegricel™ may reduce the damaging effects in the GI Tract caused by stress, unhealthy eating and drinking and NSAID (e.g. aspirin and ibuprofen) use.
• Studies have shown the ability of Tegricel™ to reduce inflammation and promote healing in the digestive tract.
• Tegricel™ stimulates intestinal cell repair (restitution) and growth (proliferation).
• In an open-label human study, participants reported significantly improved digestion, more energy and fewer health complaints with Tegricel™.

Ingredient Information

Product Features:
• Form: Powder
• Kosher
• Generally Recognized As Safe (GRAS)
• Can be used in foods, supplements, and beverage applications
• Whole Foods Friendly

Use Range:
Typical use range is 500mg per serving with a recommended daily consumption of 1000mg (1 gram).

The WILD Difference
Extensive product development expertise incorporating functional ingredients into foods and beverages coupled with exclusive distribution rights on Tegricel™ for food and beverage applications.
RPM Factors™ for Sports Nutrition
Science and Ingredient Information

Definition and Science

General Information:
- RPM Factors™ milk peptides is a clinically tested, cost-competitive ingredient that supports sports nutrition and is easily incorporated into a myriad of food and beverage products with minimal impact on taste, color and texture.
- RPM Factors™ is a bioactive whey protein concentrate that provides a difference consumers can actually see and feel during athletic and exercise activities – Repair, Performance and Mass!

Possible Modes of Action:
- Aid Recovery and Resistance: decreased recovery time, improved resistance strength
- Aid Performance: faster performance times, intensity boost
- Aid Muscle Mass: leaner and larger muscle mass, stronger execution of repetitions

Ingredient Information

Product Features:
- Water soluble powder
- Derived from a natural source
- Kosher and Halal
- Generally Recognized As Safe (GRAS)
- Informed-Choice™ tested for banned substances

Use Range:
- 1.0 gram per day

Differences in RPM Factors™ Vs Whey Protein Concentrate

<table>
<thead>
<tr>
<th>Bioactive</th>
<th>RPM Factors</th>
<th>Whey Protein Concentrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunoglobulin G</td>
<td>40%</td>
<td>5%</td>
</tr>
<tr>
<td>Immunoglobulin A</td>
<td>1.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td>TGF-D2</td>
<td>140μg/100g</td>
<td>8μg/100g</td>
</tr>
<tr>
<td>IGF-1</td>
<td>120μg/100g</td>
<td>5μg/100g</td>
</tr>
<tr>
<td>Proline Rich Peptides</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Lactoferrin</td>
<td>500-700mg/100 g</td>
<td>30mg/100g</td>
</tr>
<tr>
<td>Sialic Acid</td>
<td>1000-1200mg/100g</td>
<td>150-300mg/100g</td>
</tr>
</tbody>
</table>

The WILD Difference

Extensive product development expertise incorporating functional ingredients into foods and beverages coupled with exclusive distribution rights on RPM Factors™ for food and beverage applications.
Definition and Science

General Information:
• Antioxidant blend is a unique proprietary blend of antioxidants that includes green rooibos tea extract, green tea extract, white tea extract, and grapeseed extract.
• Rich in powerful antioxidant compounds that protect the body from free radical damage.
• Tea is a very rich source of a specific kind of antioxidant called flavonoids.

Possible Modes of Action:
• Living cells naturally contain a certain level of antioxidant enzymes and chemicals and a diet with supplementary antioxidants is beneficial in reducing oxidative stress.
• Studies have shown that polyphenols:
  - Are vital for a healthy immune system.
  - Have a powerful antioxidant effect for the skin and may help combat cellular aging.

Ingredient Information

Product Features:
• Form: Powder, standardized to 40% polyphenols
• Can be used in foods, beverages, and supplements
• ORAC value of 6,000 micromoles TE/g
• Whole Foods Friendly

Use Range:
• Typical use range is 50mg – 100mg of polyphenols per serving with a recommended daily consumption of 100mg of polyphenols.

The WILD Difference
Typically, use of polyphenols is limited by taste, dark color and solubility. Through an innovative proprietary technology, WILD provides a distinctive blend of teas with rooibos and grapeseed extracts that impart a clean taste, have minimal color and are soluble in food and beverage formulations.
Definition and Science

**General Information:**
- The chemical constituents of the raw green coffee beans contribute to its health benefits.
- The major polyphenols found in green coffee beans are Chlorogenic Acid and its isomers.
- The most abundant Chlorogenic Acid in coffee is 5-O-caffeoylquinic acid, a key ingredient that has been shown to aid in weight management.

**Possible Modes of Action:**
- Chlorogenic acid may reduce the absorption of carbohydrates that are consumed and reduce post-prandial blood sugar after eating.
- Chlorogenic acid may assist the liver in processing fatty acids more efficiently.
- The presence of chlorogenic acid in the body triggers the liver to stop releasing glucose into the blood stream so that the body may burn stored fat to utilize the glucose content in its fat cells as energy. This process also may increase the body’s metabolism to speed up fat loss.
- Chlorogenic acid may also preserve natural antioxidants in the body and decrease the production of free radicals.

The WILD Difference

Use of other green coffee extracts is limited due to off taste and solubility issues. WILD provides Chlorogenic Acid from Green Coffee that imparts a clean taste that has little to no color and is soluble in food and beverage formulations.

Ingredient Information

**Product Features:**
- Form: Powder standardized to 45% total chlorogenic acid isomers and 15% chlorogenic acid
- Can be used in foods, beverages and supplements
- Kosher
- Generally Recognized As Safe (GRAS)
- Whole Foods Friendly

**Use Range:**
- Typical use range is 50mg - 100mg of chlorogenic acid per serving with a recommended daily consumption of 280mg of chlorogenic acid.
Definition and Science

**General Information:**
- Catechins, including epigallocatechin gallate (EGCG), are a class of polyphenols found in green tea.
- Catechins are powerful antioxidants that capture and neutralize free radicals and have beneficial effects for weight management, heart health and anti-aging.
- Polyphenols are also needed for a healthy immune system.

**Possible Modes of Action:**
- Studies have shown catechins to:
  - Reduce visceral body fat, systolic blood pressure and LDL cholesterol when consumed as a green tea extract high in catechins.
  - Aid in the maintenance of healthy weight with proper diet.
  - Have a thermogenic effect- causing an increase in metabolism and energy expenditure.
  - Inhibit enzymes involved in free radical formation in the endothelia lining of arteries. Free radicals are thought to contribute to cardiovascular disease.

Ingredient Information

**Product Features:**
- Form: Powder standardized to 80% catechins and 40% EGCG
- Easily incorporated into a variety of food and beverage products
- Kosher
- Generally Recognized As Safe (GRAS)

**Use Range:**
- Typical use range is 25mg - 250mg of catechins per serving with a recommended daily consumption of 500mg of catechins.

The WILD Difference

Use of other green tea extracts is limited by taste and solubility. WILD provides Green Tea Catechins that impart a clean taste with low bitterness that is soluble in food and beverage formulations.
Definition and Science

General Information:
• Coenzyme Q10 (ubiquinone) is an enzyme found in all cells in the body.
• It functions as a co-factor in the electron transport chain between cytochromes in the Krebs or energy cycle.
• CoQ10 is located in the mitochondria and supports their energy producing pathways to help fuel the body’s daily activity.
• Coenzyme Q10 is a very powerful antioxidant that has diverse health benefits, such as maintaining heart health, brain health, energy and skin health.

Possible Modes of Action:
• Studies have shown Coenzyme Q10 to:
  - Alter the natural history of cardiovascular illnesses and have the potential for prevention of cardiovascular disease via the inhibition of LDL cholesterol oxidation and by the maintenance of optimal cellular and mitochondrial function.
  - Have the efficacy to prevent many of the detrimental effects of photo-aging of the skin over time; supports collagen and elastin production.
  - Supports proper oxygen utilization and nutrient absorption in brain tissue.
  - Be a key molecule for the development of therapeutics for Alzheimer’s disease by destabilization of preformed beta-amyloid fibrils (amyloid plaque).
  - Functions as an antioxidant, protecting the body from free radical damage.

Ingredient Information

Product Features:
• Forms: Powder standardized to 22% CoQ10 and Liquid Emulsion standardized to 11% CoQ10
• Can be used in foods, beverages and supplements
• Kosher and Whole Foods Friendly
• Generally Recognized As Safe (GRAS)

Use Range:
• Typical use range is 25mg – 100mg of CoQ10 per serving with a recommended daily consumption of 300mg CoQ10.

The WILD Difference
Competitor’s CoQ10 use is limited by solubility. Through innovative proprietary emulsion technology, WILD provides CoQ10 in a water-soluble form for broader beverage and food applications.
Definition and Science

General Information:
• Orange Vegeceuticals™ are unique extracts of numerous vegetables including carrot, pumpkin, sweet potato, paprika (from chili peppers) and Reishi mushroom and deliver beta-carotene, a pro-vitamin A constituent.
• Red Vegeceuticals™ are unique extracts of purple sweet potato, purple maize, purple carrot, beet, rhubarb, tomato and red cabbage and deliver anthocyanin, a powerful antioxidant and major free radical scavenger.

Possible Modes of Action:
• Regular consumption of vegetables high in beta-carotene provides the critical precursor necessary for Vitamin A production in the body. Vitamin A is essential for eyes, skin and proper immune function. The levels of carotenoids, such as beta-carotene, in blood and tissue have shown consistent inverse associations with various health issues.
• Anthocyanins have antioxidant activity and can scavenge free radicals thereby reducing oxidative damage to the cells. The presence of free radicals has been hypothesized by many as a significant disease causal agent.
• Vegetable polyphenols may support the immune system by protecting against oxidative stress.
• Antioxidants from vegetables may also support heart health by protecting LDL cholesterol from oxidative damage.

Product Features:
• Kosher  • Soluble
• Stable  • Clean tasting and no off odor

Use Range:
• Orange: Typical use rate of the Liquid is 0.103g/serving (1.4mg beta-carotene/serving) = the beta-carotene amount in ¼ serving of baby carrots. Typical use rate of the Dry is 0.154g/serving (1.4mg beta-carotene/serving) = the beta-carotene amount in ¼ serving of baby carrots.
• Red: Typical use rate of the Liquid is 0.306g/serving (10mg serving) = the anthocyanin amount in ¼ serving of red cabbage. Typical use rate of the Dry is 0.306g/serving size (10mg anthocyanins/serving) = the anthocyanin amount in ¼ serving of red cabbage.

Orange Liquid Blend
• ORAC 43 uM TE/g
• CAP-e* 10.3 uM GA/ml
• Standardized to 1.5% beta-carotene

Orange Dry Blend
• ORAC 14 uM TE/g
• CAP-e* 1.2 GAE/g
• Standardized to 1.0% beta-carotene

Red Liquid Blend
• ORAC 1300 uM TE/g
• CAP-e* 318 uM GA/ml
• Standardized to 4.25% anthocyanins

Red Dry Blend
• ORAC 1600 uM TE/g
• CAP-e* 29 GAE/g
• Standardized to 4.25% anthocyanins

* A CAP-e value indicates products are capable of protecting live cells from oxidative damage

The WILD Difference
Use of vegetable extracts and powders in beverages and foods are limited by taste and solubility. Through innovative proprietary extraction technology, WILD provides nutraceuticals from vegetables that impart minimal taste without any bitterness and that are completely soluble in a variety of product formulations.

1261 Pacific Avenue Erlanger, KY 41018
1.888.WILDFlavors  www.wildflavors.com