

Athletes Kit Product Call and Q & A

Mary Esther Gilbert MSc HN, BSc NSP

June 10, 2024

2 GRW + 2 GTS + 1 HRT + 2 SLD + 2 STP



Key Features of the Athletes Kit

Energy Production
Stamina
Endurance
Strong Heart

Nerve Communication
Circulatory Efficiency
Metabolic Efficiency
Detox Efficiency

Anti-Free Radical
Tissue Repair
Anti-Inflammation

1. **Is the Athletes Kit just for athletes, or can any exerciser benefit from it?**

- Any form of exercise will stimulate an increased metabolic response (the rate at which the body processes and utilizes nutrients, delivers oxygenation, performs normal detoxification through its eliminative channels), and improve immune efficiency.
 - *Flexibility*: movements that increase muscle and connective tissues range of motion.
 - *Muscular strength*: weight-bearing resistance, pushing or pulling against gravity.
 - *Cardiorespiratory capacity*: sustained, elevated heartrate, developing lung capacity/oxygenation for performing physical work.
 - *Improved immune system capacity*
- **Beginners**
 - Improve muscle tone, physical strength, range of motion.
 - Improve immune system efficiency
 - Improve energy levels
 - Improve self-image, confidence
 - Help restore tensile strength and flexibility of blood vessels, cell structures of muscles, organs, connective tissues.
- **Intermediate**
 - Develop significant muscle tone, feel stronger, enhance one's figure or physique.
 - Increase energy levels, improve mental and physical capabilities.
 - Progressive shift in body composition to less body fat and more lean body mass.
 - Clothing fits better, dropping inches around chest, waist, thighs, etc.
 - Noticeable change in one's physical appearance.
- **Advanced, Very Active Adult**
 - Increase muscular strength, strength endurance.
 - Decrease higher percentage of body fat, increase higher percentage of lean body mass.
 - Improve reflex reactions in sports
 - Develop advanced skills in coordination of body movements.
 - Significantly, strikingly alter physical appearance.

- Elite Athlete
 - Able to maintain or increase superior levels of muscular strength, strength endurance.
 - Able to push the limits of one's physical skills: reflex reactions, coordinated movements.
 - Perfecting mind-body connections for greater performance.
 - Achievement of competitive, highest levels of skills and performance.

2. How does the Athletes Kit support one's physical performance?

- Provides the nutrient factors required for fueling the brain and nerves, muscle and heart contractions, lung/oxygen delivery capacity, and all other cells in all body systems.
- Nutrient compounds in the Kit have been found to improve cellular fuel production for:
 - Increased physical energy.
 - Improved mental energy, drive, competitiveness.
 - Improved physical strength and muscular power.
- Critical post-workout recuperation:
 - *Nutrient replenishment*: complete amino acids protein, whole food carbohydrates, whole food fats, fresh enzyme-active, light energy active fruits, vegetables, leafy greens, herbs, spices.
 - *Rehydration*: readying the body for the next workout: reloading muscle cells with glycogen, water, electrical potential with plant minerals and light energy transfer.
 - *Sleep*: repair, regeneration, neutralizing inflammatory free radicals normally caused by physical exercise.
- What it takes **to build strong muscles and have a competitive edge**:
 - Nutrition alone without exercise, and under-replenishment after exercise, will not improve muscle tone.
 - Progressive resistance exercise (weight-bearing work against gravity).
 - Flexibility exercises to maintain tendons, cartilage, ligaments that support muscles.
 - Build more efficient heart and lung capacity for oxygen and nutrient delivery to do the muscular work.
 - Develop and hone physical skills for performing the necessary coordinated actions.
 - Replenish the body with the full range of macro, micro, and phytonutrients:
 - Full nutrient replenishment with major food groups as described above.
 - Fully rehydrated.
 - **Athletes Kit**: contains many botanicals containing a vast range of highly beneficial phytochemical compounds for speed, power, sustained stamina, resilience (Gilbert, 2021) (Gilbert, 2023).

3. Can the Athletes Kit speed up injury recovery and actually help prevent injuries? Yes.

- **For Full and Proper Workout Recovery, (important for injury prevention):**
 - Recover from injuries more rapidly and completely when including the Athletes Kit's abundant array of:
 - Phytonutrients, plant cell component organelles, negatively charged active ions.
 - Regenerative, repairing, anti-inflammatory, anti-oxidant phytonutrients.
 - Maintain consistent sleep, muscle recuperation periods of rest and relaxation
 - Provide the body with thorough nutrient replenishment, complete hydration with natural spring water.
 - Prevent overtraining and under recuperation, which lead to stress injuries, goal setbacks (Gilbert, 2023).

4. Will the Athletes Kit support weight loss goals? Yes.

- What does “weight loss” mean?
 - Maintaining healthy body fat amounts for supporting the needs of all cells in all body systems
 - Maintaining a higher percentage of lean body mass: muscles, bones, connective tissues, cell structures.
 - Maintaining high energy levels for metabolic needs and having the desire to exercise (mental energy)
 - Starvation diets don’t work; they result in:
 - Negative nitrogen balance, catabolism or self-consumption of lean body mass (including valuable muscle loss and nutrient-deficient blood).
 - Loss of vital water in all cells, rendering them unable to complete their vital cellular processes.
 - Low blood sugar, leading to mental and physical fatigue, irritability, binge eating.
 - Compromised immune system.
 - Hormonal responses that slow metabolism and conserve body fat.
 - Uncontrollable cravings.
- What it takes to lose fat, but keep the muscle:
 - *Strength or weight resistance training* exercises to increase metabolic rate:
 - Burn more calories at rest between workouts.
 - Gain the muscle power needed to sustain a fat-burning, aerobic activity that requires an elevated heart rate and develops greater lung capacity.
 - *Aerobic exercise or workouts* that activate the ATP energy production cycle—the ongoing and rapid conversion of fat stores for fueling sustained muscular work.

Exercise reduces the amount of excess visceral fat. Cardiovascular exercise improves the heart rate and blood vessels’ capacity to pump and move blood, and allows the body to burn its fat stores for fuel. Strength training improves muscle strength and strength endurance, which also helps raise the metabolism, or the rate at which the body burns fuel for energy when at rest.

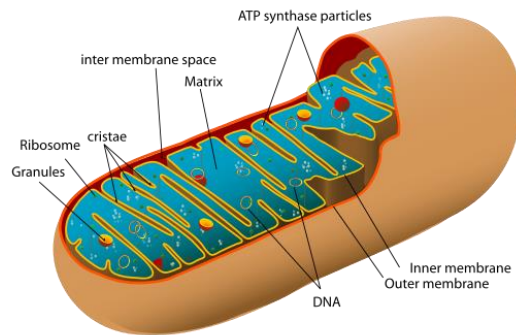
Cardio or aerobic (fat-burning) exercise includes cycling, and aerobic workouts, which sustain the elevated heart rate for at least 30 minutes, as well as running, swimming and rowing. Strength training builds sturdy connective tissues, strong muscles, and when combined with aerobic exercise, builds muscular endurance (Gilbert, 2023).

How the Athletes Kit Nourishes the Body for Boosting Physical Performance

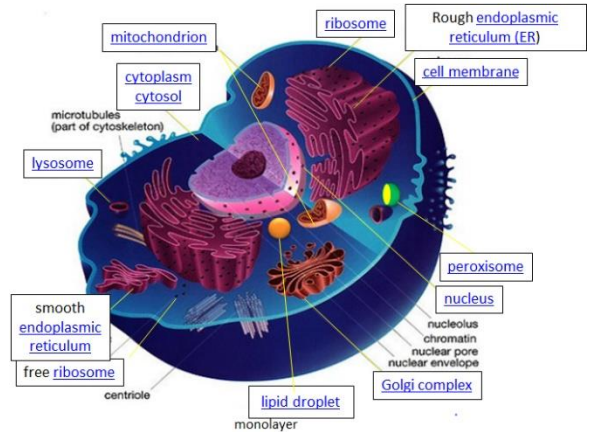
The Athletes Kit contains plant cell components and phytochemical nutrient compounds known to boost mitochondria energy production for fueling the body's cells, including muscle cells.



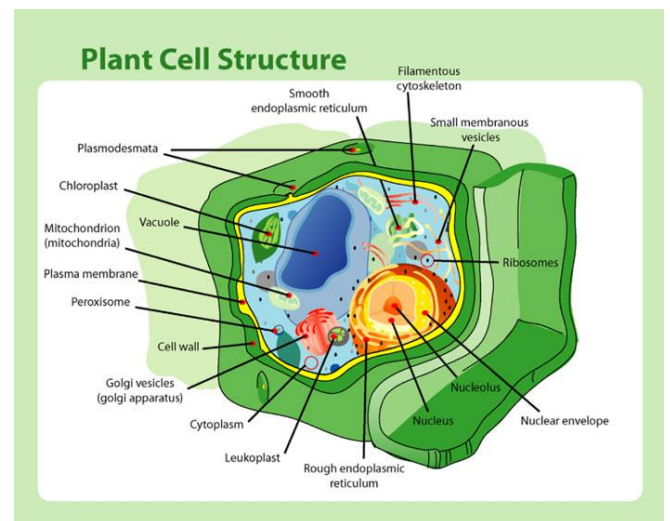
Cell Mitochondria Organelle
Photo: Stock Cake 2024



Cell Mitochondria Anatomy
Photo: Lady of Hats, Wikipedia 2006



Organelle	Responsible for
Nucleus	Housing DNA, 'brain' of the cell
Mitochondria	Energy production, 'power house' of the cell
Golgi apparatus	Sorting, packaging and transport of proteins
Endoplasmic reticulum	Synthesis and processing of proteins, lipid expression
Chloroplast	Photosynthesis, only present in plants
Flagellum	Locomotion and sensory functions
Vacuole	Storage and maintaining homeostasis
Lysosome	Digestions of larger molecules
Peroxisome	Degradation of hydrogen peroxide
Ribosome	Synthesis of proteins
Proteasome	Break down of proteins with expired function



- Mitochondrial functions—two main types of cellular energy production:
 - Some mitochondria produce a constant source of energy *for fueling ongoing, normal cellular, life-perpetuating processes* through the process of glycolysis.
 - The process in which glucose is broken down to produce immediate source of energy for cell work.
 - Produces two molecules of pyruvate, ATP, NADH, and water.
 - For aerobic or fat-burning *physical work that sustains an elevated heart rate*, the main mitochondria sites produce fuel through the ATP energy production cycle. ATP units of energy provide a constant supply of muscle fuel.
 - The main energy production sites in mitochondria convert nutrient substrates into adenosine triphosphate (ATP) for burning stored body fat as muscle fuel.
 - Muscle endurance training allows longer periods of aerobic muscular work for greater body fat loss.

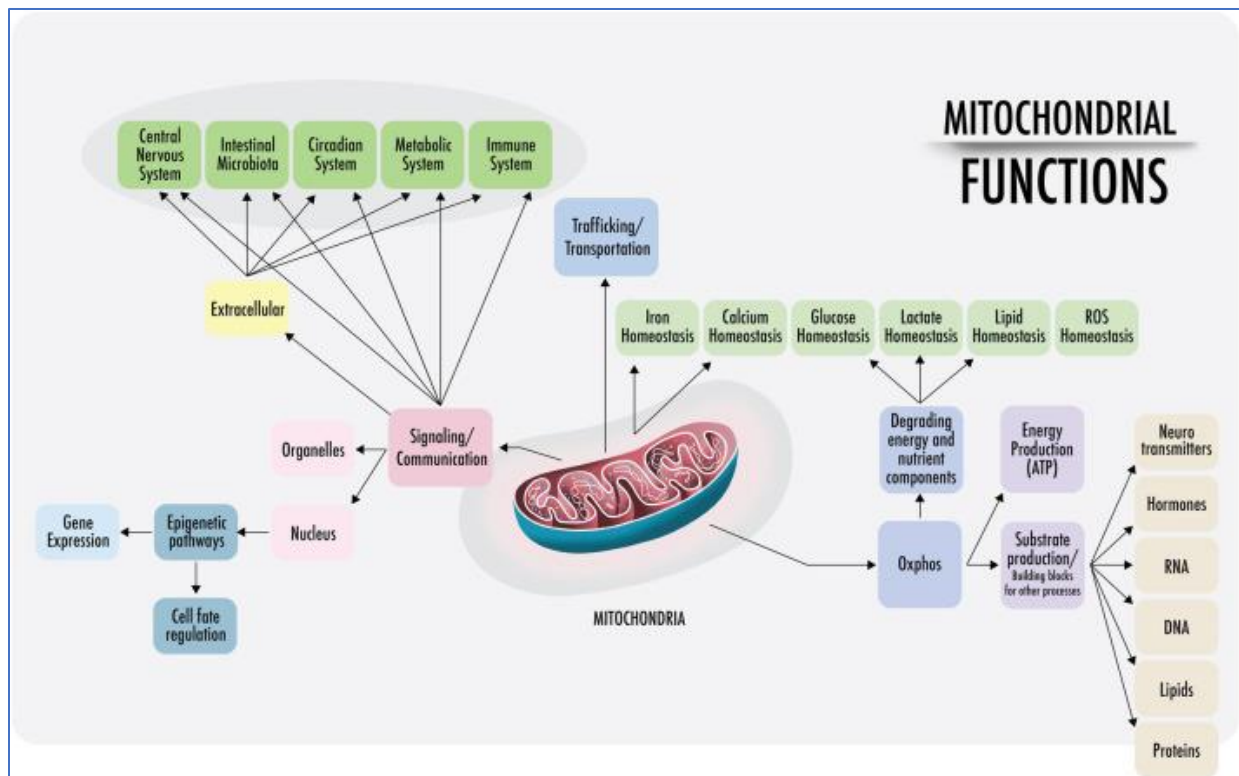


Photo: Casanova, 2023

- Mitochondrial malfunctions can lead to detrimental or adverse health consequences:
 - Respiratory system (pulmonary)
 - Urinary system
 - Neurological or nervous system
 - Immune system miscommunications

- Mitochondria is found to help protect the body’s resiliency and adaptive responses to stressors:
 - Allow resistance to illness or degeneration.
 - Aid in adaptive response to physical work—strength endurance, muscle power.
 - Enables adaptable physiological responses to new stimuli.
 - Are a bridge between external experiences and how well the body responds to biological stress.
 - Illness
 - Injury
 - Physical exercise and post workout recovery.
 - Mental, emotional, psychological challenges.

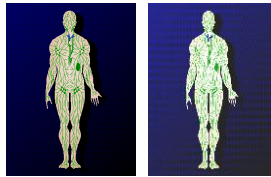
- Polyphenols in functional foods have beneficial *hormetic effects* in the body’s adaptive responses to stress.
 - Polyphenolic compounds in botanicals are found to improve metabolism or rate at which the body’s cells of all body systems function.
 - Hormetic triggers by plant compounds are vital for the communications occurring between all systems.
 - Absence of hormetic triggers decrease transcription factors NRF1 and NRF2, TFAM, TFB2M, ultimately leading to a decrease in mitochondrial mass.
 - Absence of hormetic triggers may also alter PGC-1 α activity, resulting in tissue dysfunctions leading to adverse metabolic conditions. (Casanova, 2023)
 - **Hormetic principle:**
 - “Single or repeated exposures to low levels of environmental challenges improve cellular and organismal fitness and raise the probability of survival.

- Hormetic principles have been most intensively studied in physical exercise but apply to numerous other challenges known to improve human health (e.g., intermittent fasting, cognitive stimulation, and dietary phytochemicals).”
(Mattson, 2024)

Athletes Kit Metabolic Features

GRW - Functional Nutrients

GRW	Mitochondria Energy Production	Stamina, Endurance, Preventing Lactic Acid Buildup in Muscles	Strong Heart	Nerve Communications	Circulatory Efficiency	Metabolic Efficiency, Fat Metabolism	Detox Efficiency, Cleansing	Anti-Free Radical	Tissue Repair	Anti-Inflammation, Anti-Arthritic, Antioxidant, ROS
Aloe			X		X	X				X
Ashwagandha	X	X		X						X X X
Astragalus					X			X		X X
Balsam Pear			X			X	X	X	X	X
Bilberry									X	X X
Cranberry			X							X X
Currant			X					X	X	X
Husk Tomato						X				X
Olive			X			X				X
Pomegranate			X							X
Purple Coneflower							X			X X
Reishi					X	X				X X
Rowanberry			X					X		X



Immune Cell Production: T-Cells, macrophages; saponins, triterpenes, polysaccharides, flavonoids.

Detoxification: proanthocyanidins.

Cardiovascular Functions: flavonoids.

Mitochondria Energy Production: adenosine.

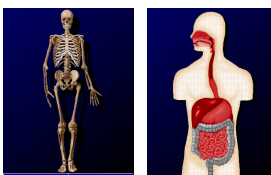
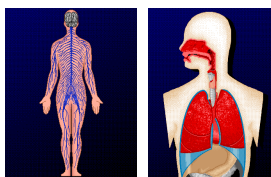
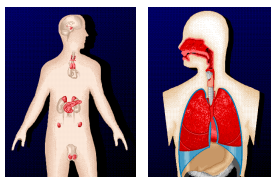
Antioxidants: phenolic acids.

Neutralize Free Radicals (Toxins), Anti-aging, Anti-inflammatory: plant sterols lupeol, campesterol, beta-sitosterol.

Stress-relieving Properties: sitoindosides and acylsterylglucosides.

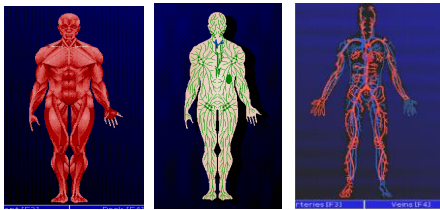
Hormone Precursors: alkaloids, tannins, glycosides, and natural plant steroids.

Clear Blood Vessels: anthocyanins (Gilbert, 2018).



GTS - Functional Nutrients

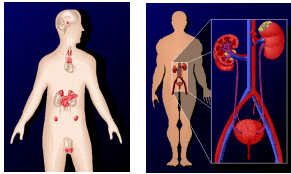
GTS	Mitochondria Energy Production	Stamina, Endurance, Preventing Lactic Acid Buildup in Muscles	Strong Heart	Nerve Communications	Circulatory Efficiency	Metabolic Efficiency	Detox Efficiency, Cleansing	Anti-Free Radical	Tissue Repair	Anti-Inflammation, Anti-Arthritic, Antioxidant, ROS
Apple			X			X				X
Ashwagandha	X	X		X						X X X
Ginseng, Siberian, Eleuthero-coccus						X				X
Gooseberry			X							
Green Tea			X			X		X	X	X X
Magnolia								X		X
Pineapple					X	X			X	X X X
Water Hyssop										X



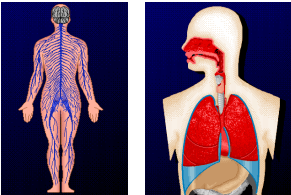
Mitochondria Energy Production, Endurance: eleutherosides

Metabolism Regulating Organic Acids: chlorogenic, ursolic, malic, tartaric, citric, chlorogenic, salicylic, arabic, boric, ascorbic.

Fat, Cholesterol, Glucose Metabolism: glycosides, essential fatty acids, resins.

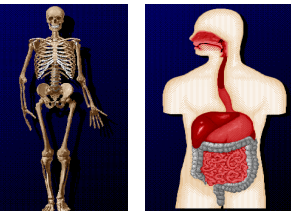


Tissue Repairing, Antimutagenic Antioxidants: catechins, plant pigments.



Heart, Arteries, Lungs, Nerve Cells: sesquiterpenes neutralize free radicals.

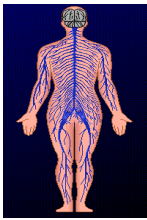
Stress-Reduction Effects: sitoindosides, acylsterylglucosides.



Cognition, Focus, Alertness, Enhances Acetylcholine Function: flavonoids, phenolic acids.

HRT - Functional Nutrients

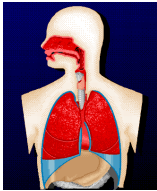
HRT	Mitochondria Energy Production	Stamina, Endurance, Preventing Lactic Acid Buildup in Muscles	Strong Heart	Nerve Communications	Circulatory Efficiency	Metabolic Efficiency	Detox Efficiency, Cleansing	Anti-Free Radical	Tissue Repair	Anti-Inflammation, Anti-Arthritic, Antioxidant, ROS
Grape seed			X	X		X		X		X
Hawthorne			X		X	X		X		X
Mistletoe, White			X			X		X		X X
Pomegranate			X							X
Raspberry			X	X	X	X		X	X	X X
Strawberry			X	X		X		X		X X



Circulatory, Cardiovascular, Respiratory Endurance: omega 3, 9, monounsaturated fatty acids, flavonoids, pectin, epicatechin and chlorogenic acids, naringenin, quercetin, kaempferol, polyphenol rosmarinic and puniceic, arachidonic, oleic fatty acids, tannins, anthocyanins, elergitannins, salicylic acid, anthocyanins.



Immune Modulation, Antioxidants, Toxic Chemical Detox, DNA-Protective, Antimicrobial: phytosterols, resveratrol, proanthocyanidins, phytoncides, chlorophyll, oligomeric procyanidines, triterpenes, cartenes, flavonoids, polysaccharides, catecholamines, saponins, phenolics, ellagitannin and ellagic acids.



Nervous System, Learning, Cognition: tannins, amygdalin, *choline and acetylcholine*, omega-3 alpha-linolenic fatty acid.

Antioxidant/Anti-inflammatory, Anti-Oxidative Stress, Anti-Free Radical: triterpene saponins, alkaloids, organic acids, histamines, rhamnetin, quercetin, isorhamnetin, organic acids ursolic, betulinic, choline, gamma-aminobutyric acid, gallic, protocatechuic, gentisic, chlorogenic, para-OH benzoic, caffeic, syringic, salicylic, para-cumaric, ferulic, sinapic, and trans-cinnamic, polyphenolics, flavonoids catechins, cyanidins, phenolics caffeic, cinnamic acids, carotenoids lutein & zeaxanthin.

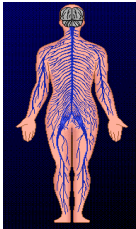
Antimicrobial: phenolics, flavonoids, and ellagic acids.

SLD - Functional Nutrients

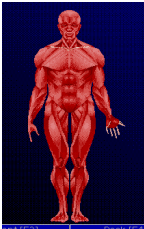
SLD	Mitochondria Energy Production	Stamina, Endurance, Preventing Lactic Acid Buildup in Muscles	Strong Heart	Nerve Communications	Circulatory Efficiency	Metabolic Efficiency	Detox Efficiency, Cleansing	Anti-Free Radical	Tissue Repair	Anti-Inflammation, Anti-Arthritic, Antioxidant, ROS
Balsam Pear Fruit						X	X	X	X	X
Ginger Root				X		X				X X X
Grapple Plant										X X
Green Tea						X		X	X	X X
Licorice Root			X							X
Strawberry			X			X		X		X X
Turmeric			X		X			X		X X X



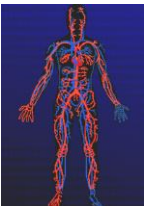
Pain, Inflammation, Improve Ease of Movements in Joints, Muscles, Tendons: choline, caprylic fatty acid, silica, monounsaturated oleic omega-9 fatty acid.



Antioxidant, Anti-Inflammatory: polyphenols flavonoids, phenolic acids, phenolic alcohols, stilbenes, lignans, flavonols, flavones, flavanones, isoflavones, anthocyanidins, anthocyanins, catechins, epicatechin, epigallocatechin, gallic catechins, kaempferol, isorhamnetin, quercetin, kaempferol, carotenoids beta-carotene, lutein, zeaxanthin, pectins. stilbenes pterostilbene, resveratrol, curcuminoids.



Tissue Repair: essential amino acids tryptophan, tyrosine, valine, leucine, threonine, and lysine, sterols, omega-3 alpha-linolenic acid.



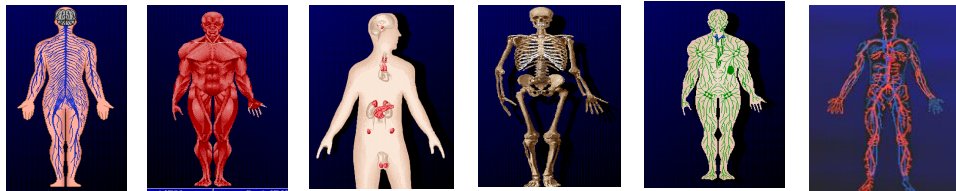
Immune System: cinnamic acids coumaric, ferulic, 5-caffeoylquinic, iridoid and phenylpropanoid glycosides including harpagoside and harpagide, saponins glycyrrhizin (GL) and 18β-glycyrrhetic acid (GA), which contain antiviral properties, while liquiritigenin (LTG), licochalcone A (LCA), licochalcone E (LCE) and glabridin (GLD).

Blood Cleansing: chlorophyll, carotenoids.

STP - Functional Nutrients

STP	Mitochondria Energy Production	Stamina, Endurance, Preventing Lactic Acid Buildup in Muscles	Strong Heart	Nerve Communications	Circulatory Efficiency	Metabolic Efficiency	Detox Efficiency, Cleansing	Anti-Free Radical	Tissue Repair	Anti-Inflammation, Anti-Arthritic, Antioxidant, ROS
Ashwagandha	X	X		X						X X X
Cherry				X		X		X		X X X
Ginger Root				X		X				X X X
Grapple Plant										X X
Licorice Root			X							X
Raspberry			X	X	X	X		X	X	X X
Turmeric			X		X			X		X X X

(Gilbert 2021)



Immune System, Anti-inflammation/Anti-Stress Responses, Repair = No Pain:

acetylsterlyglycosides, sitoindosides, alkaloids, steroidal lactones, salicylic acid, melatonin (aids immune system), caprylic acid, indoid glycosidesglycosides, saponins, capsaicin, capsacinoids, phenylpropanoid.

Protecting Blood Vessels, Heart, Circulation: flavonoids, pectin, asparagines, ellagic acid, anthocyanins.

Brain, Neuro-Protective: melatonin (nerve stabilization), polyphenolics, curcuminoids, essential oils termerone, curlone, curumene, cineole, *p-cymene*.

Antioxidants, Prevent Tissue Damage, Anti-Free Radical: polyphenols anthocyanins, chlorogenic acid, catechins, flavonol glycosides, elergitannins.

Ease of Movements: asparagines, choline, silica.

Reference:

Casanova A, Wevers A, Navarro-Ledesma S, Pruijboom L. Mitochondria: It is all about energy. *Front Physiol.* 2023 Apr 25;14:1114231. doi: 10.3389/fphys.2023.1114231.

[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10167337/#:~:text=Adenosine%20triphosphate%20\(ATP\)%20is%20the,Herzig%20and%20Shaw%2C%202018](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10167337/#:~:text=Adenosine%20triphosphate%20(ATP)%20is%20the,Herzig%20and%20Shaw%2C%202018)).

Gilbert, M.E. (2023). [Eating for Physical Power and Stamina](#). Tucson, AZ: Holistic Choices Publishing.

Gilbert, M. E. (2021). [Potent Superfoods for Lifelong True Health](#). Tucson, AZ: Holistic Choices Publishing.

Mattson MP, Leak RK. The hormesis principle of neuroplasticity and neuroprotection. *Cell Metab.* 2024 Feb 6;36(2):315-337. doi: 10.1016/j.cmet.2023.12.022. Epub 2024 Jan 10.

<https://pubmed.ncbi.nlm.nih.gov/38211591/#:~:text=These%20phylogenetically%20conserved%20processes%20are,raise%20the%20probability%20of%20survival>.

Resources:

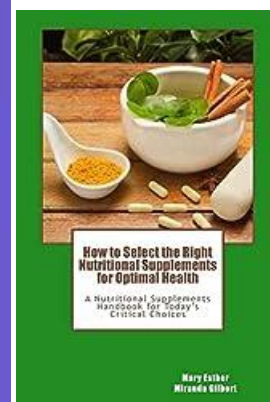
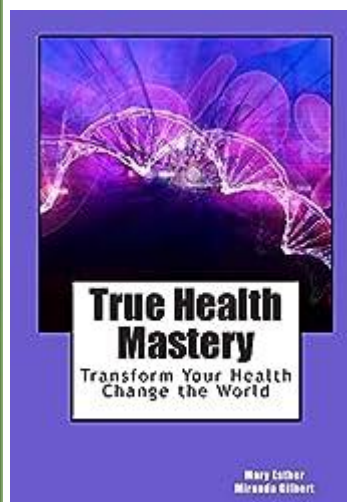
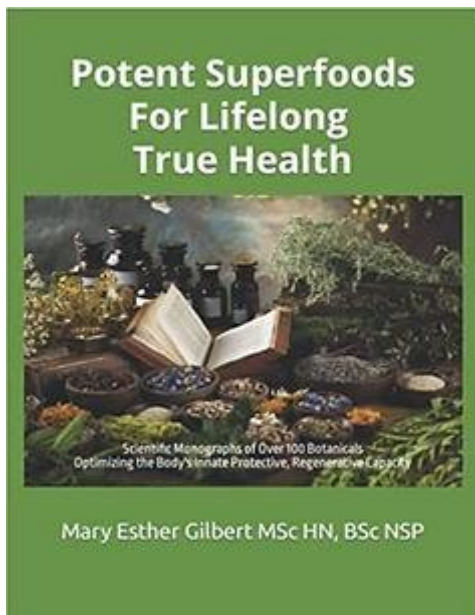
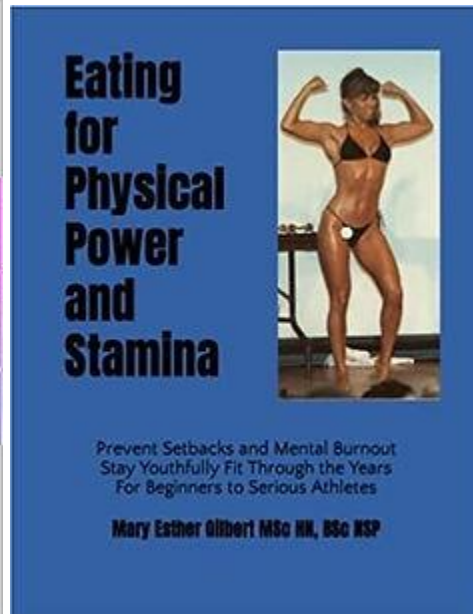
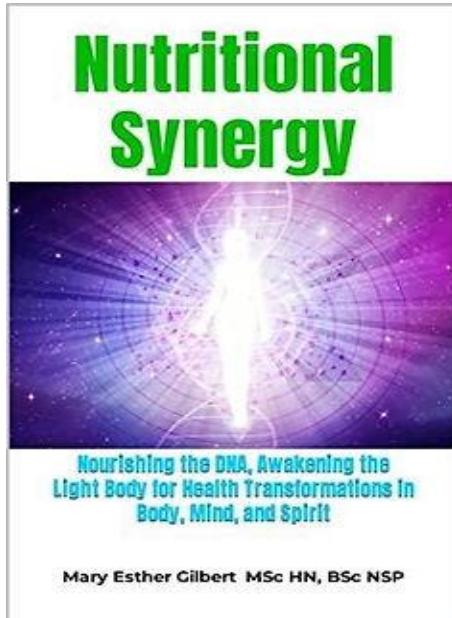
Download This and Other APLGO Free Q & A Product Zoom Call PDF Documents and View the Product Call Videos:

<https://www.holisticchoices.com/apl>

Books, Book Descriptions and Summaries by Mary Esther Gilbert, MSc HN, BSc NSP

<https://www.holisticchoices.com/books-by-mary-esther-gilbert>

About Mary Esther's Athletic Coaching, Sports Nutrition: <https://www.holisticchoices.com/about-1>



Subscribe to Mary Esther's YouTube and Rumble Channels

<https://www.youtube.com/@holisticchoices>

<https://rumble.com/c/c-679245>

