APLGO Product Zoom Call – PWR Apricot and PWR Lemon
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1. What are the key components in PWR L and PWR A? And, do they have similarities? Can they interact with conventional hormone therapies?

- The APLGO drops contain vital nutrients the body recognizes immediately as compatible with "self" in maintaining its proper functioning at the micro cell level.
    - Since they contain biologically correct nutrients, including those that aid proper hormone functioning, then those nutrients are preferred over non-nutrient or foreign molecules.
    - Correctly structured nutrients will not have adverse side effects once they are allowed in and working within the cells.

Differences between HRT and PWR Nutrient Actions

Menopause Hormone Replacement Therapy (HRT)
Pills, Skin Patches, Gels, Sprays, Vaginal Creams/Rings

- HRT requires a consultation with a medical provider to be aware of individual risks vs. benefits.
- HRT is generally recommended to use the lowest effective dose for the shortest duration of time.
- Estrogen – for women with no uterus.
    - Synthetic (chemically altered) – conjugated equine estrogens from horse urine or ethyl estradiol.
    - Bioidentical estradiol (body identical) – from yams or soy.
- Combined estrogen and progestogen – for those with a uterus to allegedly reduce the risk of endometrial or uterine cancer.
    - Synthetic progestogen (progestin) – prevents uterine lining from thickening, preventing endometrial cancer, and has a different chemical structure than natural progesterone.
    - Natural progesterone – naturally produced in the ovaries and adrenal glands, also converted from leafy greens, citrus, whole grains, and nuts.
        - Regular exercise helps balance estrogen and progesterone by regulating fat metabolism, reducing stress chemicals like cortisol, which disrupt hormone functions.

        - Exercise lowers estrogen and progesterone levels in premenopausal women who are at high risk of breast cancer (Kossman, 2011).
- HRT:
    - Is used to treat hot flashes, night sweats, vaginal dryness.
    - Purports to help maintain bone health against osteoporosis, fractures.
    - Claims to stop growth of prostate, breast, and endometrial cancers.
    - **Side effects**: headaches, mood changes, bloating, irregular bleeding, breast tenderness.
    - **Increased health risks**: blood clots, breast cancer, stroke, heart attacks, and gallbladder disease with long-term use and higher doses.

"Hormone therapy was once routinely used to treat menopausal symptoms and protect long-term health. Then, large clinical trials showed health risks." **(Mayo Clinic, 2025)**

- Associates can emphasize the verified scientific research about how plant nutrient factors in the PWR formulations (and exercise) help play a role in generating the right balance of hormones to minimize or eliminate menopausal symptoms:

    - Hot flashes, night sweats.
    - Brain fog, fatigue.
    - Mood changes, sleep disruptions.
    - Joint pain, vaginal dryness, irregular menses.
    - Increased facial hair, heart palpitations.
    - Any essential nutrient provided to the body through a well-balanced, whole foods daily diet can be properly absorbed through the cell membranes and utilized, and therefore impacts the body's hormone production and functions.
    - PWR Apricot and PWR Lemon contain the phytonutrient factors found to influence hormonal actions toward resetting, guiding the body to improve its biochemical balance and restore equilibrium/homeostasis.
    - More research on Hormone Replacement Therapy and nutrient interactions is required. Clinical trials on these botanicals in the drops do, however, show how effective they can be in helping the body control menopausal symptoms.

How PWR Botanicals' Nutrients Influence Hormone Functions and Help Lower Disease Risk	
PWR Apricot	**PWR Lemon**
Apricot (*Prunus armeniaca*) • Carotenes help maintain the proper functioning of the endocrine glands. • Antioxidant phenolic phytonutrient compounds are anticarcinogenic, anti-aggregant, and have been shown to be effective in resolving cardiovascular diseases. • Pectin prevents high cholesterol and heart disease. • Anthocyanins, and anthocyanidins – shown to be effective against atherosclerosis, coronary heart disease, anti-tumor. • Melanoidins and other phytonutrients shown to counteract and prevent free radical damage and cell death from obstructive plaques, lesions, thrombus and embolisms on vessel walls.	**----**
Ashwagandha Root (*Withania somnifera*) • Anti-tumor effect on ovary cancer cells. • Found to help control uterine fibroids.	**Ashwagandha Root (*Withania somnifera*)**
Asparagus Root (*Asparagus racemosus*) • Asparagines — shown to have a beneficial effect on heart functioning.	**----**
Damiana Leaf (*Turnera diffusa*) • Phytochemical complexes that help balance the hormonal system: cyanoglycosides, flavonoids, phenolic glycosides, volatile oils containing alpha-pinene, beta-pinene, p-cymene, cineole, and beta-sitosterol, a phytosterol. • Helps restore normal levels of female hormones and endocrine system functioning. • Shown to increase libido. • Used in cases of nervous breakdowns, depression, neurasthenia (extreme mental and physical fatigue, emotional stress). • Used against anxiety neurosis associated with depression, impotency and sexual performance inadequacy, and gonorrhea. • Shown to have aphrodisiac activity. • Helps stabilize the body's sensitivity to stress.	**Damiana Leaf (*Turnera diffusa*)**
----	**Fig (*Ficus carica*)** • Helps enhance bone density, prevent muscle weakness, improve nerve functioning. • Helps improve memory, learning and thinking. • Antioxidant nutraceutical properties, reduces damaging, scavenging free radicals, protects cell reproduction. • Contains the antioxidant peroxidase enzyme, ficin, consists of 174 amino acids that aid in wound healing. • Nutrient compounds are found to be anti-mutagenic, protect DNA against genetic code damage.

	• Anti-inflammatory properties, helps attenuate inflammatory cytokine protein levels. (Gilbert, 2024) • Sperm and semen quality has decreased since the 20th century due to increased exposure to chemical pollutants, particularly formaldehyde (FA). • FA exposure also decrease motility and number of spermatozoa, and destroy spermatogenic cells. (Naghdi, 2016) • Was shown to improve reproductive hormone levels and help resolve fertility issues in both males and females: (Ain, 2022)
Ginger Root (*Zingiber officinale*) • Helps to strengthen blood vessels, reduces risk of blood clots. • Contains the primary essential fatty acid linoleic acid, needed for cell membrane maintenance, brain and nervous system health. • Contains ginsenosides, saponins – anticarcinogenic, reduce severity of symptoms from cancer treatments, inhibit proliferation of cancer cells, induce apoptosis or cancer cell self-destruction. • A universal remedy for ridding the body of accumulated toxic waste.	**Ginger Root (*Zingiber officinale*)**
Ginkgo Leaf (*Gingko biloba*) • Helps improve memory, reduce anxiety, normalize sleep. • Shown to block the formation of blood clots, clean lymph, improve blood circulation. • Strengthens the arteries, veins and capillaries, slows the aging process down, strengthens hair. • Improves menopausal disorders: memory problems, poor concentration, depression, dizziness, and tinnitus (ringing in the ears). • Flavonoids, terpenoids – found to prevent the formation of blood clotting factors and protect nerve cells in the brain; together help improve memory and learning ability. • A global view in applying ginkgo to patients concluded that ginkgo improves dementia and cognition, working memory and working memory speed. • Contains flavonol glycosides, ginkgolides, bilobalide and proanthocyanidins – are potent free radical scavenging antioxidants that protect nerve cells from damage, influence nerve transmissions critical in cognition (perception, discernment, comprehension, insight). • These active compounds enhance cholinergic processes in the brain's hippocampus, the center of the autonomic nervous system, which influences emotions and spatial working memory.	**----**

----	**Ginseng, Asian, Root (*Panax ginseng*)** • Contains ginsenosides, saponins, shown to improve mental and physical performance, ability to increase physical loads without the need for more oxygen consumption. • Improves mental work capacity, endurance and recuperation after physical loads. • Anti-anxiety, antidepressant and enhances cognition. • Immunomodulatory, vasodilatory, anti-inflammatory, anti-aging, anti-fatigue, anti-depressive, anticancer, and anti-stress effects. • Stimulatory effect on the brain, increases neurotransmitters dopamine, noradrenaline, and 5-hydroxytryptamine, which have antidepressant effects; improve cell-to-cell nerve signaling resulting in improved alertness. • Polysaccharides, flavonoids, and volatile oils demonstrated protective antioxidant effects against stroke, multiple sclerosis, Parkinson's diseases, improved cognitive function in advanced years of life. • Ginsenosides, triterpenoid glycosides, known to protect neurons, enhance memory, learning, spatial navigation, improve cognitive performance, and protect against neurodegeneration. (Gilbert, 2024)
----	**Lemon (*Citrus limon*)** • Flavonoids hesperidin and naringin shown to decrease blood plasma cholesterol and triglycerides in the liver, improve conditions of hyperglycemia, help prevent obesity. • Polyphenolic compounds help improve insulin resistance, stimulating the uptake of glucose out of the blood, suppressing accumulation of fat in body tissues. • Effective against fungal strains *Candida albicans, Aspergillus niger*, and *Penicillum spp*. (Gilbert, 2024) • Flavonoids were shown to be effective in treating erectile dysfunction by raising nitric oxide levels in cell energy production. • Anti-obesity phytonutrient compounds eriocitrin and D-limonene lowered lipid levels. (Ademosun, 2022) • Phenolic compounds improved blood pressure with daily exercise, improved red blood cell quality and red blood cell count. (Kato, 2014)
----	**Pomegranate Seed (*Punica granatum*)** • Helps lower blood pressure and relieve headaches. • Helps improve (iron-containing protein) hemoglobin levels. • Chinese used pomegranate seeds to enhance male power.

	• Studies show helps prevent cancer and aging. (Gilbert, 2024) • Antioxidant nutrient compounds polyphenols, anthocyanosides, flavonols, various flavones, lignans, alkaloids, and organic acids have been useful in diabetes, Alzheimer's, cancer, arthritis, male infertility, obesity, cardiovascular disorders. • Improved semen quality, HDL cholesterol levels. (Eghbali, 2021)

(Gilbert, 2024)

2. How would women and men know if their body needs PWR A or PWR L? Do the drops address symptoms like: mood swings, sleep disruption, irregular cycles and Cortisol stress?

- By studying the above chart for each botanical's health attributes, one can determine which drop to use, which address the functioning needs of the various body systems.
    - The nutrient factors in the PWR formulations play vital, protective roles in helping the body's hormonal system to return to homeostasis and therefore reduce or eliminate menopausal symptoms.
- Considering the scientific findings of how the PWRs' botanical nutrient factors work in the body, one may experience improvements in:
    - Maintaining brain and nervous system health, including learning, memory, cognition.
    - Maintaining hormonal health, including controlling/attenuating moods.
- Negative factors associated with causes of menopausal symptoms, which can be corrected through:
    - Eliminating trans fats: heated oils, fried foods, hydrogenated fats (margarine, shortening), oxidation of healthy omega-3 fats.
    - Avoiding being sedentary; lack of regular exercise and sunlight exposure leads to health problems that bring on adverse symptoms.
    - Avoiding nutrient deficiencies, which are fulfilled through diet, vitamin/ mineral/whole food supplements, eating sufficient or optimal protein, whole food carbohydrates, and whole food, unaltered fats.
    - Avoiding or eliminating absorption/exposure to synthetic chemicals in consumer products, environmental pollutants that adversely impact hormone functioning.
    - Avoiding smoking, alcohol, being aware of prescription drug side effects.
    - Avoiding chronic emotional, psychological stress intensified by unhealthy personal nutritional and lifestyle health practices.

3. What is the best protocol for using PWR apricot and PWR lemon for women entering peri/menopause? How many? When to take them? What to watch out for?

- The drops should not be regarded in the same way that people relate to drugs such as exact doses, taking them at specific times of day or night, with or without meals, and expecting possible adverse side effects.

- This perspective is not necessary with the drops, which are whole food nutritional supplements which nutrients are required for optimal cellular functioning.

- The drops are whole food nutrient complexes that can be taken any time of day or night, the number of drops is not really limited (within reason since consuming a whole package of drops in one day can likely boost energy levels or rapidly clean out your system!).

- Based on the chart in question number 1, one may elect to use both or one of the formulations. Nutrients are not gender specific; the body utilizes nutrients to build the necessary molecules for maintaining biochemical balance or equilibrium according to one's gender, including when transitioning into or during menopause.

- Since nutrients have a calming, anti-inflammatory effect, hormonal changes in menopause do not need to be disruptive, degenerative, or uncomfortable.

- However, when foreign, toxic substances or biologically incompatible molecules such as those listed above in question number 2 circulate or accumulate in the body, there will be disruptions in equilibrium, resulting in abnormal responses such as typical negative menopausal symptoms.

4. For women in Pre-menopause, where their hormones are fluctuating rather than fully declining, how do PWR L and PWR A balance symptoms like: mood swings, sleep disruption, irregular cycles and Cortisol stress?

- The nutrient factors listed in the chart in question number 1 have been shown to reduce, eliminate, and help prevent those symptoms and biochemical stress reactions like cortisol and the immune response of brain microglia immune cells activating and releasing inflammatory cytokines.

- These biochemical stress responses can damage neurons that alter nerve communications, disrupt the blood-brain barrier, and lead to cognitive issues and mood changes.

- Maintaining a nutrient-rich daily intake of whole foods supplemented with the drops can avert these adverse stress reactions since a highly nourished system is not subject to such fluctuations.

5. When taking PWR A or L for hot peri/menopause symptoms, can the drops affect a 40 year old differently than a 60 year old?

- Yes, because of the physiological differences between younger and older women.

- In 40 year olds irregular menses may not mean **true menopause**:

    - Quantity and quality of eggs decline.
    - Fluctuating hormones causing irregular menses.
    - Stress.
    - Extreme exercise, low body fat level.
    - Drastic weight changes.
    - Medications, medical conditions such as thyroid, pituitary issues or polycystic ovary syndrome (PCOS).

- The nutrient complexes such as those in the PWR botanicals have been shown to help return a premenopausal younger woman to her proper hormonal and physiological balance, given the right recuperative, regenerative conditions or circumstances, including:

    - Regular exercise.
    - Sunlight (for natural vitamin D_3 production).
    - Dietary changes, a nutrient-rich, balanced whole foods diet.
    - Elimination of refined foodstuffs and beverages high in sugar and trans fats.
    - Making pregnancy possible once hormonal conditions are corrected or improved.

- Metabolic changes in women age 40 or those up to age 49 can lead to transitioning into actual menopause when there is:

    - An increased proportion of adipose tissue and size of fat cells, increase in visceral fat, decrease in energy expenditure.
    - Impairment of insulin secretion and insulin sensitivity, increased risk of type 2 diabetes mellitus.
        - A carbohydrate metabolism disorder is related to the presence or absence of sex hormones.
        - Lowered estrogen levels leading to decreased insulin secretion by the pancreas.
        - Decreased fat metabolism and insulin sensitivity in the liver.
        - Increased triglyceride accumulations with decreased insulin clearance out of the blood.
        - Increased body fat in obesity leading to metabolic syndrome (increased risk of heart disease, cancer, diabetes, increased and imbalanced levels of low density lipoprotein compared to high density lipoprotein cholesterol).
        - Increased inflammatory reactions, inflammation mediators accumulate.
        - Menopause occurring before the age of 40 had the highest risk of diabetes.
    - With menopause occurring between ages 45 and 49, there is a lowered risk of developing a carbohydrate metabolism disorder.

- 49 - 60 year old women have typically already reached **true menopause**, which is when no more eggs are produced in the ovaries because they stop producing the hormones estrogen and progesterone, and menses have ceased.

    - Changes in body composition (higher body fat ratios or adiposity) in older ages are associated with:
        - Increased risk of diabetes due to weight gain.
        - Decreases in estrogen levels which increase the risk of cardiovascular diseases.

  (Erdélyi, 2023) (Lizcano, 2014)

- Research and clinical studies around the world have shown the effects of phytochemicals the PWR formulations contain for protecting against typical menopausal symptoms:

    - **Ginkgo and citrus flavonoid:** protection against ovarian damage, protection of nerves, inhibiting inflammation, halting oxidation, improving intestinal immunity.
    - **The saponin ginsenoside in ginseng:**
        - Improved fertility in naturally aging mice due to the antioxidant effect on ovaries and the hypothalamus, the gland in the forebrain that coordinates the autonomic nervous system and the pituitary gland for controlling body temperature, thirst, hunger, sleep and emotions.
        - Anti-inflammation, reduced aging signaling pathway proteins, reducing damage of ovary and uterus.
    - **The polyphenols in fig, lemon, and pomegranate:**
        - Antioxidant
        - Anti-aging
        - Anti-bacterial
        - Anti-inflammation
        - Immunoregulation
        - Liver, cardiovascular, neural protection.
        - **Reproductive protection: protected the number of follicles of female stem cells *in vivo* and *in vitro*, therapeutic effects on ovarian function, improved stem cell survival rate, improved developmental potential of oocytes and preventing oocyte aging by activating mitosis (the forming of new cells in an ovary able to produce an ovum, which can give rise to an embryo)**

      (Xueling, 2023)

Health Implications: Age 40 vs. Age 60

The primary difference in health outcomes stems from the duration of the body's exposure to protective hormones, particularly estrogen, at certain ages.

Health Condition	Menopause at Age 40 (Premature/Early)	Menopause at Age 60 (Late-Onset)
Cardiovascular Disease	**Increased risk** of heart disease, stroke, and associated mortality, especially before age 60.	**Decreased risk** of heart disease and stroke compared to earlier menopause.
Osteoporosis & Bone Health	**Increased risk** of low bone density, osteoporosis, and fractures due to longer estrogen deprivation.	**Decreased risk** of osteoporosis; associated with stronger bones.
Cancers (Hormone-dependent)	**Decreased risk** of breast and endometrial cancers.	**Increased risk** of breast, ovarian, and endometrial cancers due to longer estrogen exposure.
Cognitive Function	Potential for earlier cognitive decline and higher risk of Alzheimer's disease.	Longer protective effects of estrogen on the brain.
Overall Mortality	**Increased risk** of all-cause mortality, particularly if untreated with hormone replacement therapy (HRT).	Later age at menopause and longer reproductive lifespan are associated with longer life expectancy.

(Zhu, 2019)

6. If someone is taking either of these drops but not feeling relief right away, could this fall under the "Hierarchy of DIS-ease" in the body?

- Nutrients take time to be distributed to sites where they are needed. Corrective actions such as repairing damaged cells, especially when the DNA's genetic instructions are disrupted, are not usually felt immediately.

- Depending on the extent of health conditions in the body, the restorative process can take hours, days, or weeks, and therefore relief may not be readily apparent in many cases, even as the nutritive actions of the drops do begin immediately.

- The healing process in a body system requires whole food macro nutrient amounts from a balanced, nutrient-rich diet over time, with the APLGO drops providing a very significant contribution of phytonutrients toward that corrective, recuperative process.

- There are many underlying reasons for the disease process, with the state of one's mental/emotional/psychological health being one factor. The nutrient factors contained in the botanicals in the drops have been shown to help attenuate biochemicals produced under stress that can damage physical health.

7. Do our drops penetrate the "blood brain barrier"? What is the blood brain barrier?

- Yes, the phytochemical complexes in the botanicals are known to be readily accepted into the protective blood brain barrier (BBB); however, their access depends on the molecule's size.

- The blood-brain barrier:

    - Connects the body's vascular system to the brain.
    - Is a selective barrier that separates circulating blood from cerebrospinal fluid of the brain, and strictly regulates access of circulating molecules into the central nervous system.

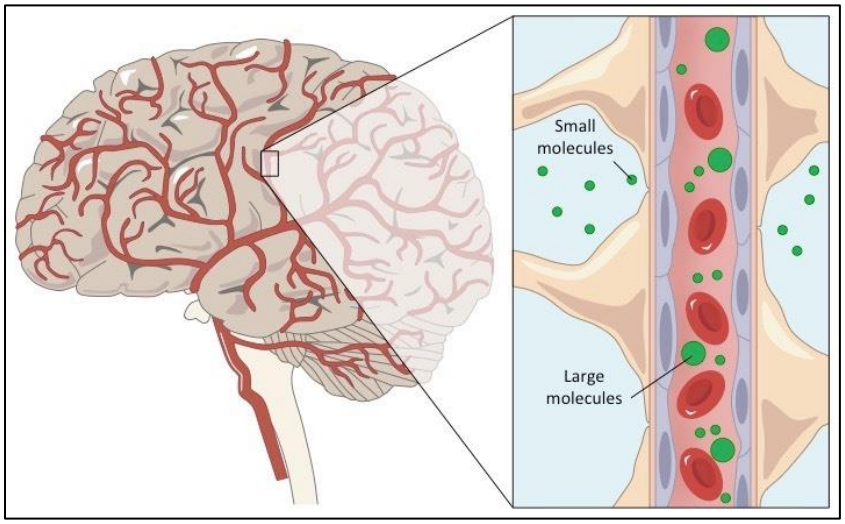
- Smaller molecules such as phytochemicals, oxygen, carbon dioxide and hormones can still freely cross the blood-brain barrier.

    - Plant phytochemicals/phytonutrients are typically lipid-soluble molecules under 400-600 Daltons (a unit of mass).
    - A Dalton is approximately the mass of one proton or neutron in an atom (1.66×10^{-24}).
    - The mass or weight measurement of phytochemical molecules can be compared to their physical diameter size, measured in nanometers (nm), or micrometers or microns (µm).
        - 1 micron = 0.0001 cm (one ten thousandths of a centimeter)

    (Kumar, 2012)

- Brain cells are connected through tight junctions to prevent the movement of large molecules from the blood into the brain, protecting it against pathogenic infections.

- The human brain contains a vast network of blood vessels, a system of arteries, capillaries, and veins that deliver constant oxygen and nutrients while removing waste, and estimated to be around 400 miles (600 kilometers) long.



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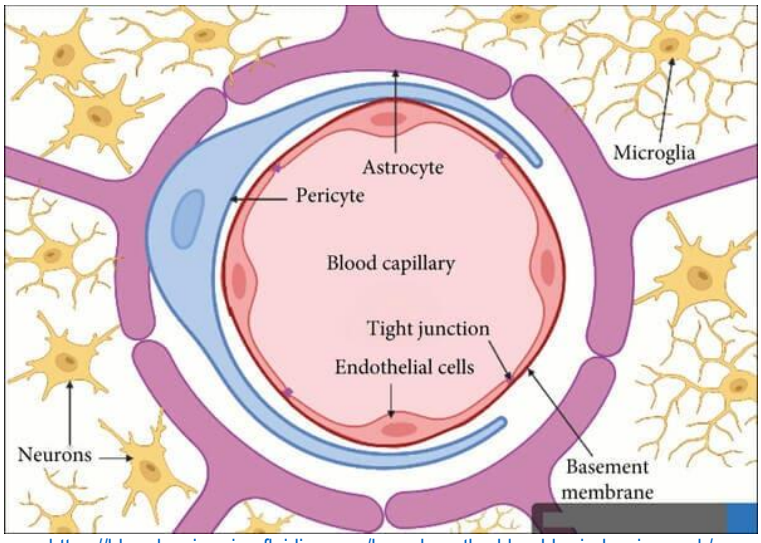
Cross Section of Brain Blood Vessels and Its Blood Brain Barrier



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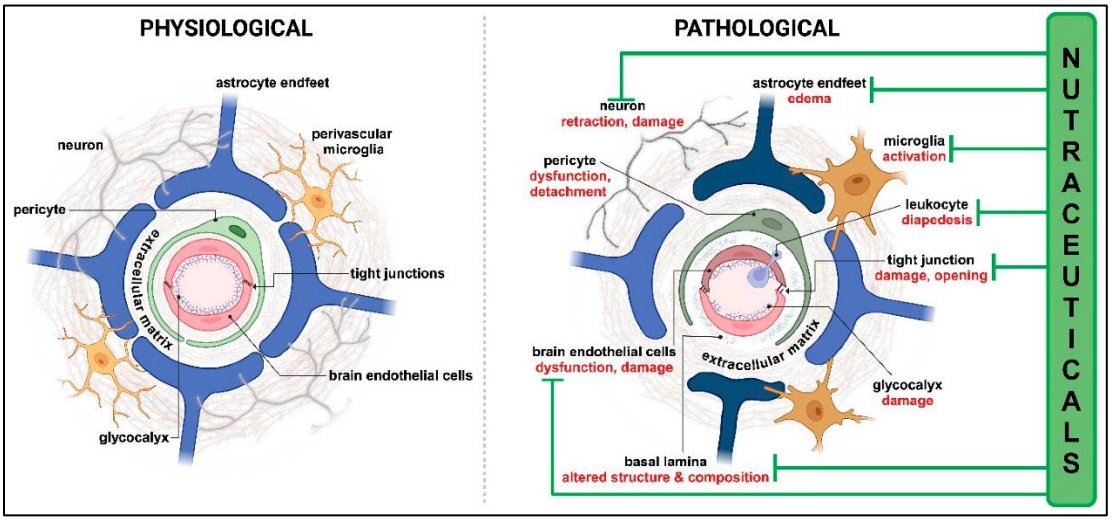
- The phytochemical complexes from the plant kingdom have shown health-related bioactivities across cell membranes via specific transporters that allow them to reach the brain, arriving either intact or after being transformed into smaller, simpler units.

- Prevent or oppose oxidative stress, maintaining the integrity of the brain cells and those of other body systems (Velasquez-Jimenez, 2021).
- Are neuroprotective, preventing cognitive dysfunction and neurodegenerative disorders.
- Phytochemicals play a vital role in maintaining the brain's chemical balance and neurotransmissions.
- Studies show phytochemicals exhibit neuro-protective actions such as resistance to various stressors in various neuropsychiatric and neurodegenerative disorders such as those in the PWR botanicals:
    - Phenols
    - Alkaloids
    - Flavonoids
    - Saponins
    - Terpenes

(Kumar, 2012) (Wong, 2013) (Jin, 2025)



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Main Takeaway Sales Points

- **PWR Botanicals' Nutrients Influence Hormone Functions and Help Lower Disease Risk**
- **The nutrient factors in the PWR formulations play vital, protective roles in helping the body's hormonal system to return to homeostasis and therefore reduce or eliminate menopausal symptoms.**
- **The drops should not be regarded in the same way that people relate to drugs such as exact doses, taking them at specific times of day or night, with or without meals, and expecting possible adverse side effects.**
- **The drops are whole food nutrient complexes that can be taken any time of day or night, the number of drops is not really limited.**
- **Since nutrients have a calming, anti-inflammatory effect, hormonal changes in menopause do not need to be disruptive, degenerative, or uncomfortable.**

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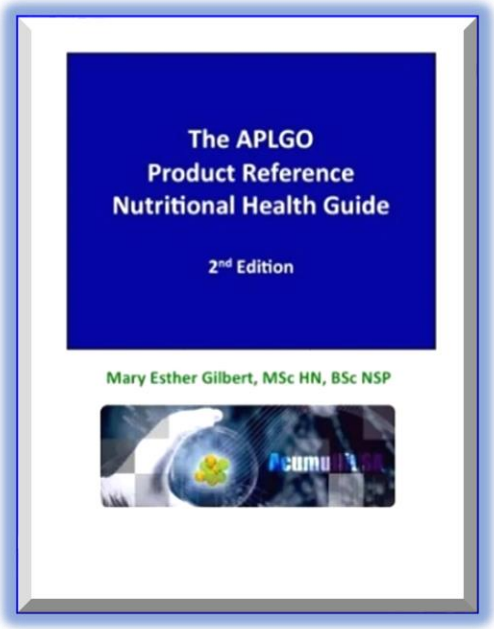

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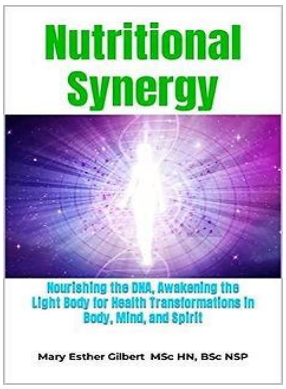

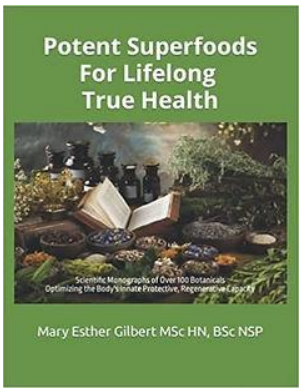

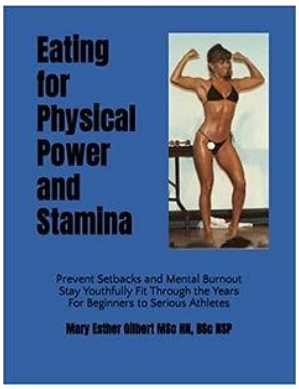

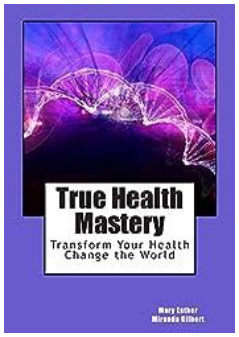

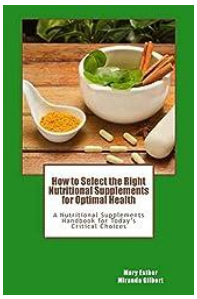

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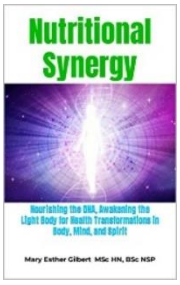

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