Brain Drain

Preventing Degenerative Brain Diseases
Preserving Cognition

Dr Len Brancewicz, NMd, CCN, RPH
Protocols by Joe Messino, Functional Nutritionist

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Making the world healthy

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- (727) 916 – 4215
- PODCAST AT SPEAKER.COM… “Your Daily Dose” with Dr. Len
- Daily podcast with the most up to date information from all sources
- As Health Director, assistance is there for any difficult situations… just email or call

Joe Messino

Joe Messino has been involved in the wellness field for over 30 years. Beginning with a career in martial arts, hitting the pinnacle as PKA Karate Association PA Champ in 1984 & 1985. His career progressed into functional nutrition & functional medicine as National Sales Director for Douglas Labs, 1997, Director of National Accounts & product formulator for Food Science Corp, 2008, and now Trainer & Educator for Nutritional Frontiers since 2016.

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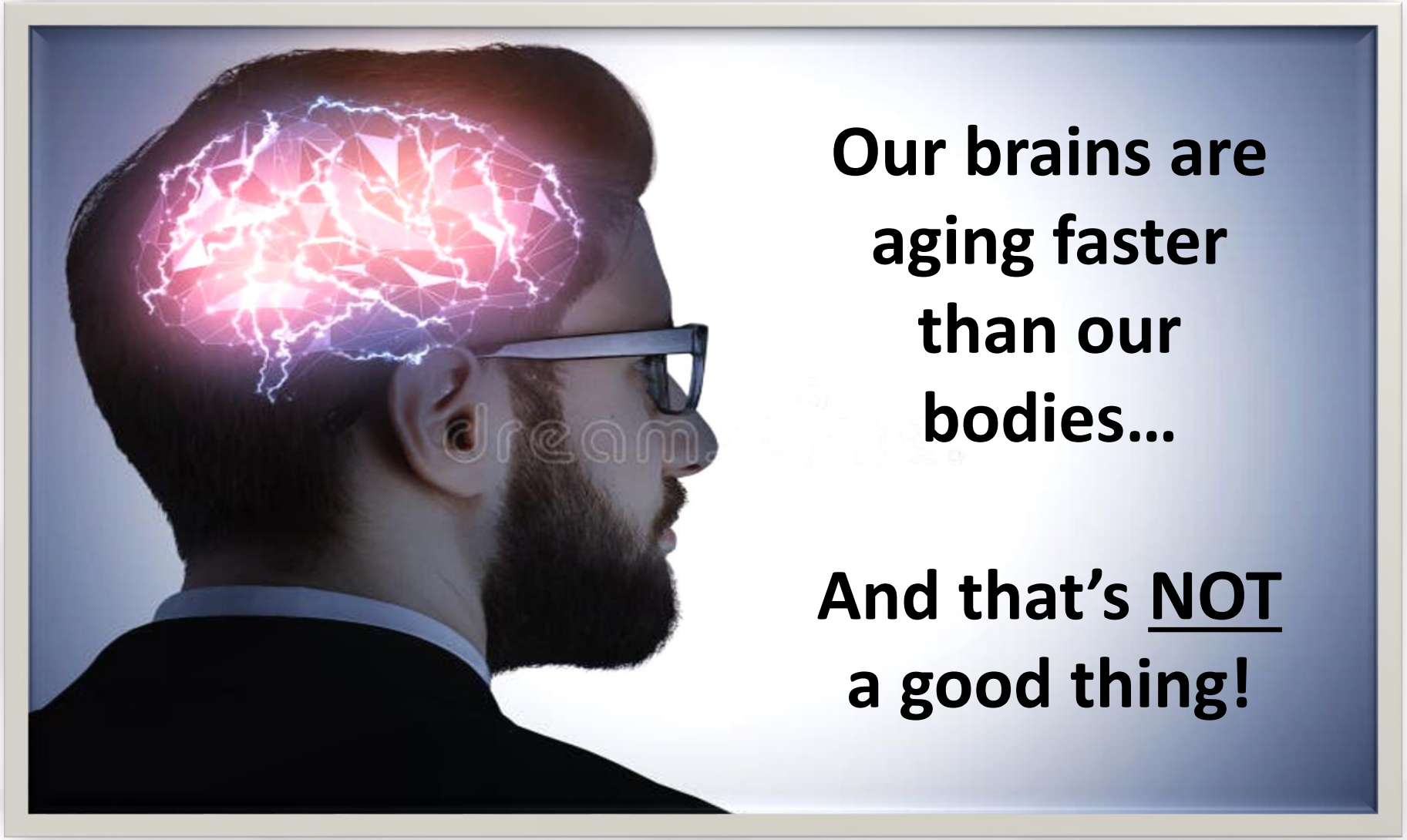
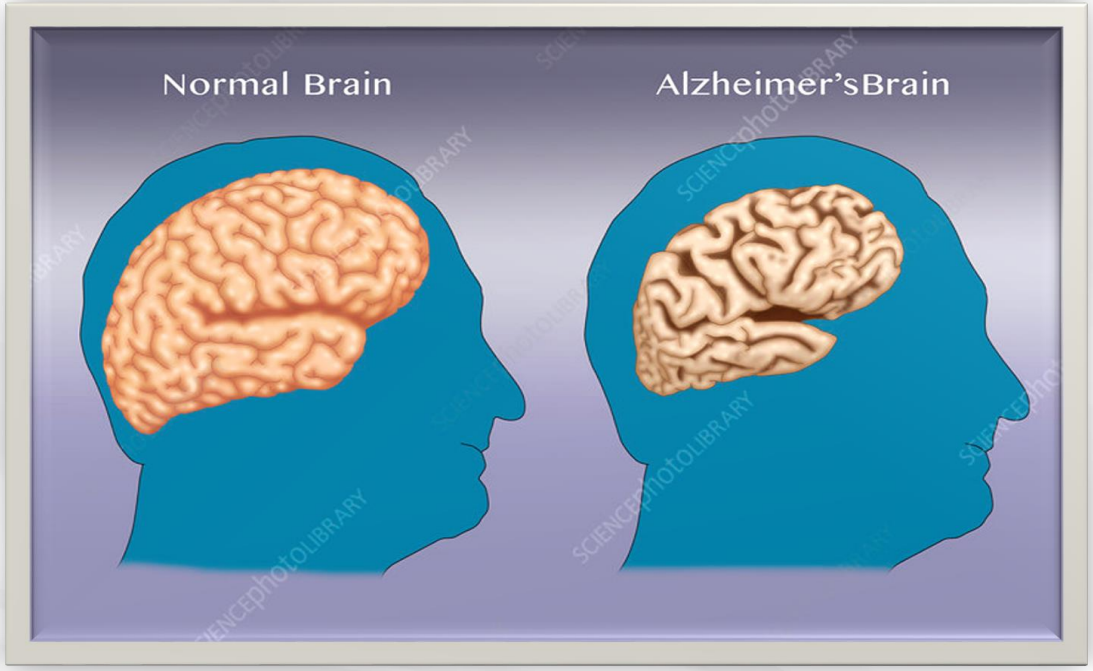
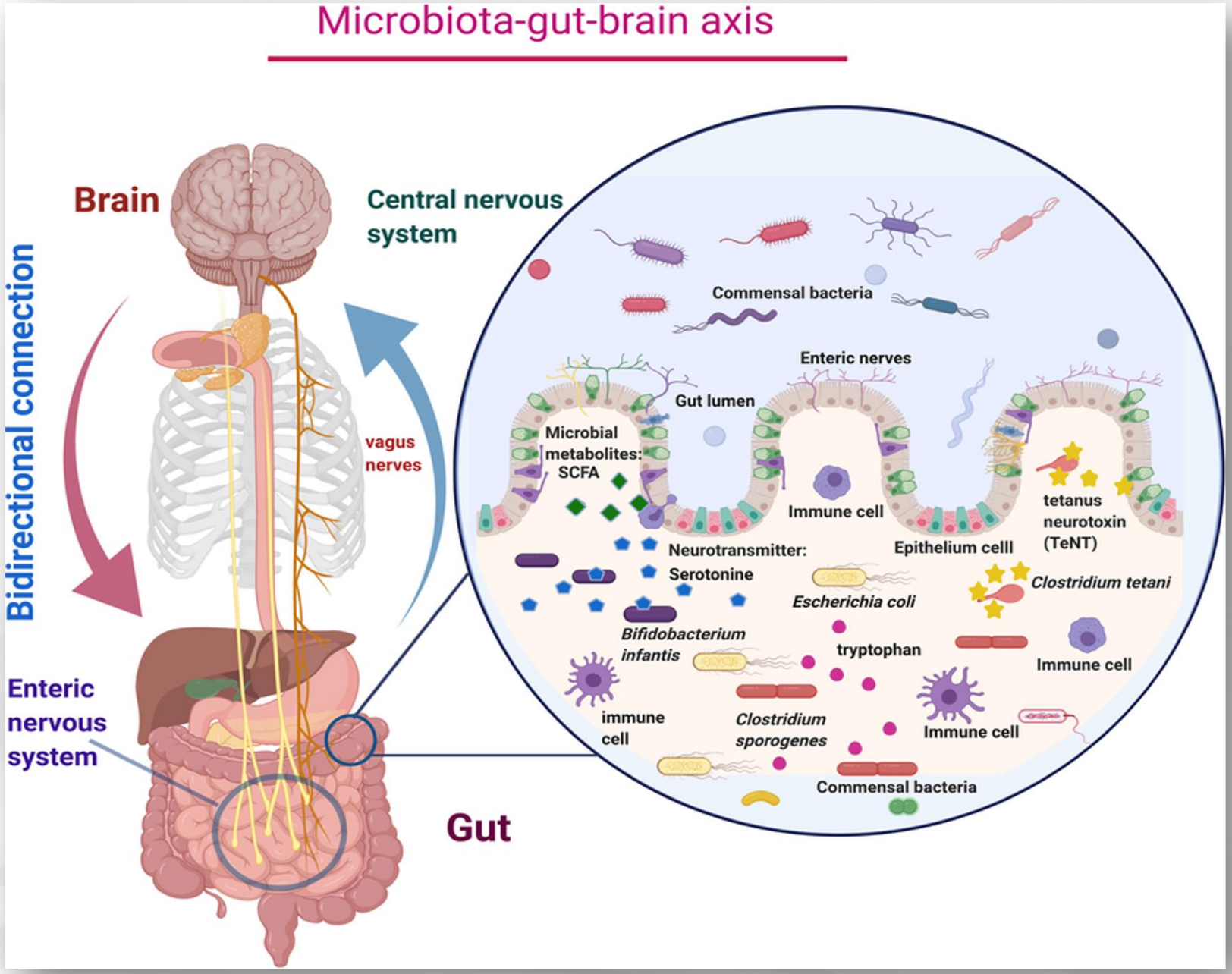

Our brains are aging faster than our bodies…
And that's NOT a good thing!

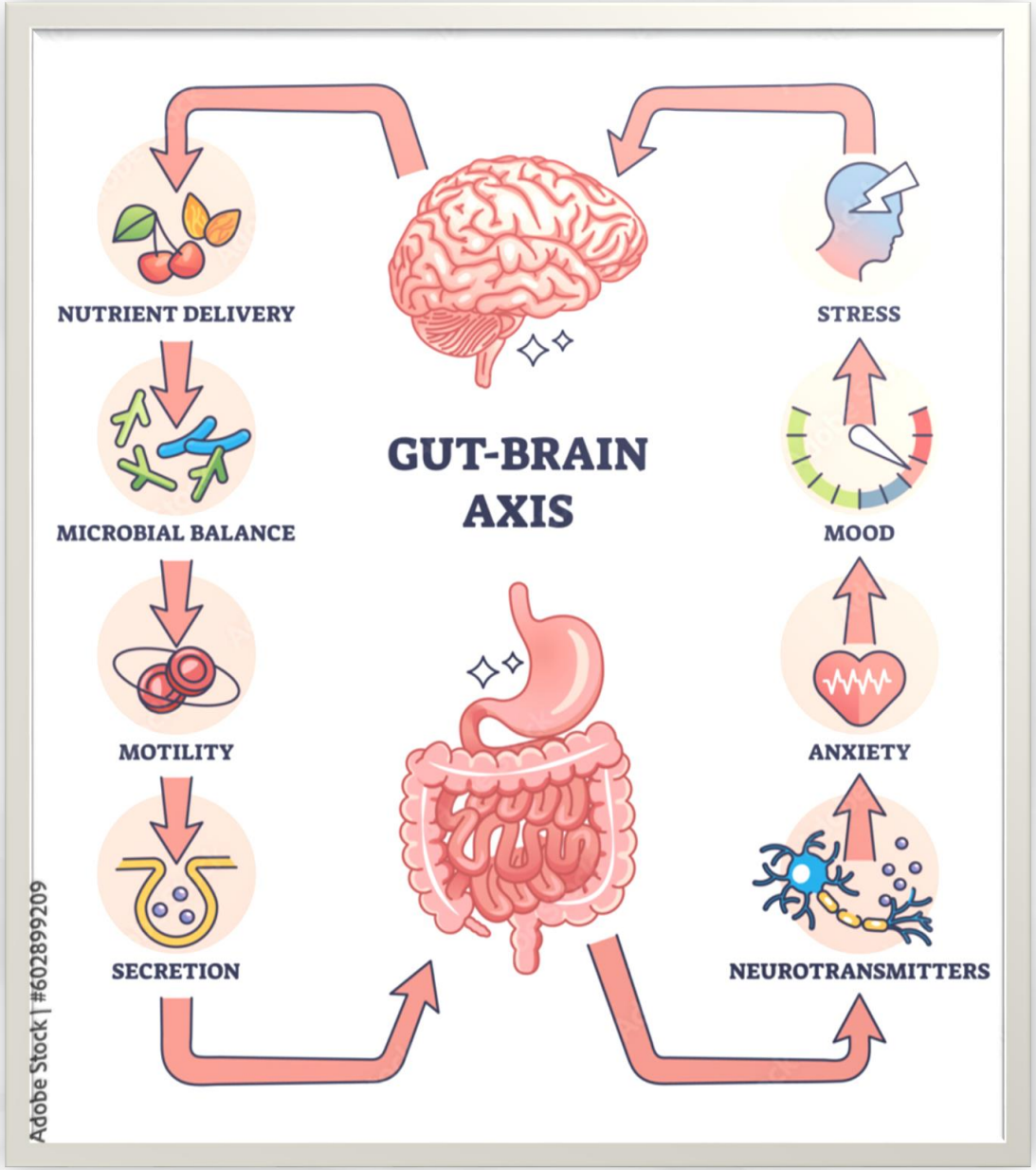
Definitions: Metaphorically & Scientifically

Metaphor: Loss of cognitive potential
Biology: Loss of brain cells, synaptic density, etc



Microbiota-gut-brain axis




GUT-BRAIN AXIS
NUTRIENT DELIVERY
MICROBIAL BALANCE
MOTILITY
SECRETION
STRESS
MOOD
ANXIETY
NEUROTRANSMITTERS
Adobe Stock | #602899209

Understanding The Threat

Alzheimer’s disease: memory, function, death
Multiple sclerosis: brain, muscle
Parkinson’s: dopamine, nerve control, death?
ALS: complete muscular shutdown, death
Huntington’s disease: progressive, motion, cognition
Epilepsy: seizures
Migraines: many related reasons, but neurological
Stroke: the damage vs. recovery
Traumatic brain injury

The Threat, Continued

Spinal cord injury: impaired neurological
Peripheral neuropathy: chemo, diabetes, neurological
Carpal tunnel: structure as well as neurological
Bell’s palsy: paralysis of face, inflammation nerves
Meningitis: crossing brain barrier
Narcolepsy: hypocretin, chronic neurological
Dementia: loss of brain volume and function
Tourette's syndrome: repetitive involuntary motion

The Common Thread

Cellular dysfunction and death of neurons manifests through several interconnected mechanisms.

The Common Thread

- **Protein mis-folding and aggregation**
- **Mitochondrial dysfunction**
- **Inflammation**
- **Disrupted cellular communication**
- **Oxidative stress**
- **Neurons have limited regenerative capacity!**

The Biochemistry Links Between All The Above

Protein aggregation and mis-folding: these folds trigger similar cellular stress response and overwhelm the protein quality control, autophagy pathways

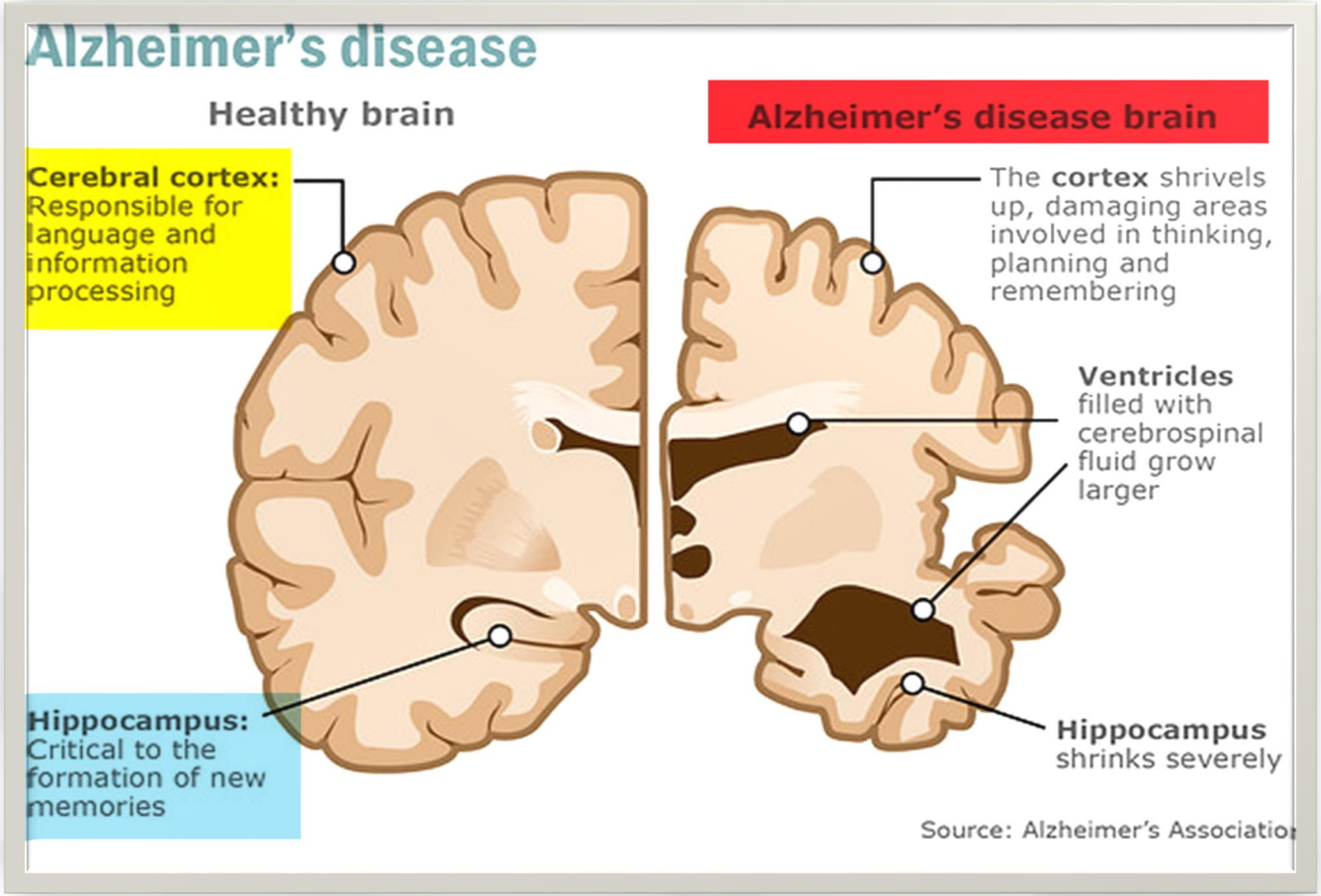
Oxidative stress and mitochondrial dysfunction: elevated ROS in all the above, due to amyloid-beta's toxic effects on mitochondria

Neuroinflammation: abnormal RNA metabolism in splicing and transport; synaptic dysfunction

Biochemistry Links, Continued

- **Axonal transport disruption: defective transport of mitochondria, neurofilaments, microtubule stability, and motor protein function**
- **Glutamate excitotoxicity: neuronal death is inevitable; frontal synaptic function and memory deterioration**
- **Genetic overlap: very common threads–C9orf72 gene expression leads to dementia.**
    - **This explains why most therapies overlap in their involvement**

Alzheimer's disease



Causes of Cognitive Decline

Genetics

Lifestyle Factors

Environmental Toxins

Inflammation

Mental Inactivity

Brain Drain in Modern Life

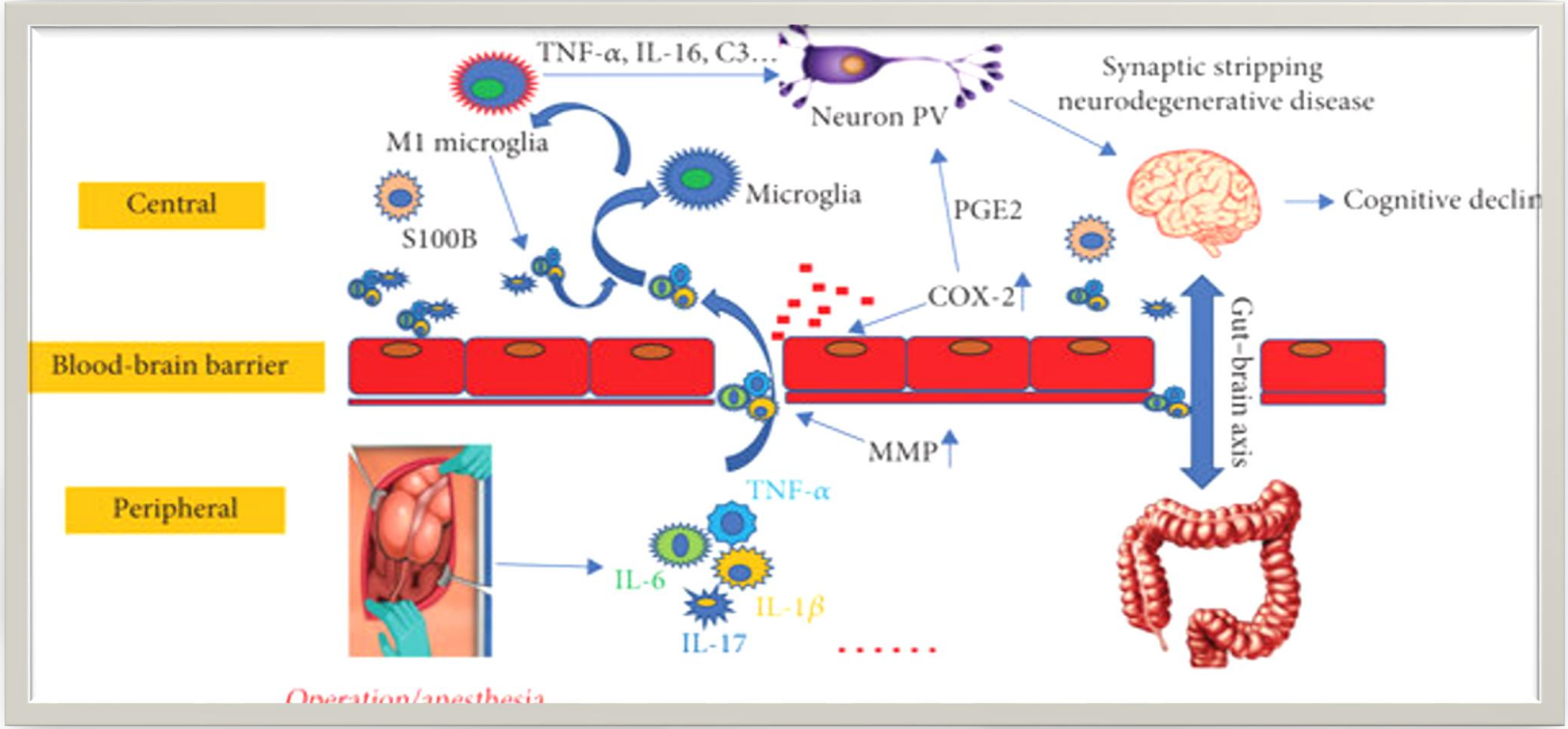
Lifestyle and Cognitive Erosion

A) Excessive Screen Time

B) Poor Diet

C) Lack of Sleep

D) Chronic Stress


TNF-α, IL-16, C3…
Neuron PV
Synaptic stripping
neurodegenerative disease
M1 microglia
Microglia
Central
S100B
PGE2
Cognitive declin
COX-2
Blood-brain barrier
Gut–brain axis
MMP
TNF-α
Peripheral
IL-6
IL-1β
IL-17
Operation/anesthesia

Prevention Strategies

Building Brain Resilience:

A) Regular Exercise

B) Brain Training (Puzzles, Learning)

C) Healthy Diet (Omega 3's, Greens)

D) Sleep Hygiene

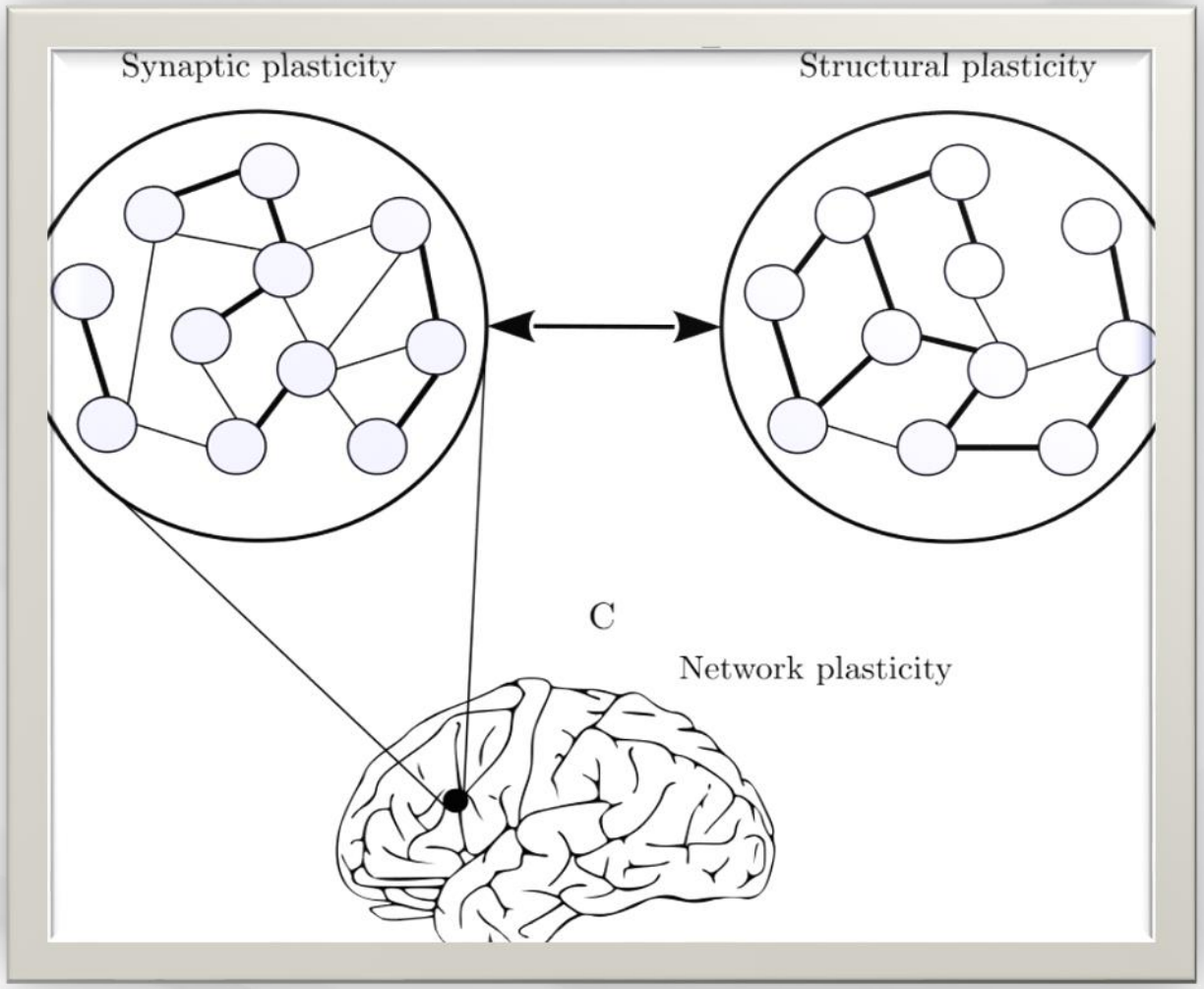
E) Social Engagement

Neuroplasticity & Resilience

Rewiring the Brain:

A) The brain adapts and forms new connections.

B) Positive habits enhance cognitive reserve.



Emerging Research

Hope on the Horizon:

A) AI in Early Detection

B) Stem Cell and Gene Therapies

C) Gut-Brain Axis Studies

D) Proper Supplements

Daily Brain Health Plan

Your Brain Boost Checklist:

A) Morning Exercise

B) Mid-day Healthy Meal

C) Afternoon Brain Exercise

D) Evening Relax and Sleep

Conclusion

Protect Your Brain, Live Fully:

A) Degeneration is Not Inevitable

B) Prevention is Possible with Daily Habits

C) Take Action Today, Not Tomorrow

The Research:

- **Brain chemicals shape appetite and blood sugar..jourbrain and neurological health 7/25**
- **Ultra-processed foods brain changes..healthnews..6/25**
- **Animal foods good for brain health..brain and neurohealth 6/23/25**
- **Food affects cognition..dementia and alz.12/8/24**
- **High dose vitamin d and neurologicals..health news3/16/25**

The Research, Continued

- **"Modify the microbiome"…*Health News*, 12/8/24**
- **"Brain flushes out waste"..*Health Premium Reports,* 12/19/24**
- **"Reading print better for brain"..*Lifestyle Journal*. 3/16/25**
- **"Optimal time to prevent cognitive decline"..*Research and Discoveries*, 4/10/25**
- **"Citrus fruits enhance brain function"..*Food and Nutrition* 4/20/25**

The Research, Continued

- **"Obesity and the brain"..*Brain and Neurological Health*, 5/29/25**
- **"Working long hours changes brain"..*Research and Discoveries*, 6/4/25**
- **Parkinsons': second most common neurodegenerative**
- **"Olive oil and the brain"..le roux 6/22/25**
- **"Speed up cerebral detoxification"..*Health View*, 2/5/25**
- **"How to boost dopamine in Parkinson's"..npj 2024**
- **"Avocados and the brain"..*American Heart Assoc.*, 2022**

THE PRODUCTS THAT WORK!

Nattokin Plus	CircuCore	SPM
Glucolyze	NutraGlutide	Brain Boost
Mood Boost	Calm Day	Sleep Time

NUTRITIONAL FRONTIERS
GlucoLyze®
Advanced Blood Sugar Support*
120 Vegetarian Capsules
NUTRITIONAL FRONTIERS
Nattokin Plus
Systemic Enzyme Therapy*
120 Vegetarian Capsules
NUTRITIONAL FRONTIERS
CircuCORE
Nitric Oxide Booster*
PROFESSIONAL GRADE DIETARY SUPPLEMENT
NUTRITIONAL FRONTIERS
Brain Boost
with Patented Ingredients for Brain Health and Memory*
NUTRITIONAL FRONTIERS
Sleep Time
Advanced Sleep and Mood Support*
PROFESSIONAL GRADE DIETARY SUPPLEMENT
120 Vegetarian Capsules
NUTRITIONAL FRONTIERS
Calm Day®
Targeted Brain and Mood Support
PROFESSIONAL GRADE DIETARY SUPPLEMENT
120 Vegetarian Capsules
NUTRITIONAL FRONTIERS
NutraGlutide
Supports Healthy Glucose Levels & Weight Management
PROFESSIONAL GRADE DIETARY SUPPLEMENT
60 Vegetarian Capsules
NUTRITIONAL FRONTIERS
Mood Boost
Mood and Stress Support*
PROFESSIONAL GRADE DIETARY SUPPLEMENT
120 Vegetarian Capsules
NUTRITIONAL FRONTIERS
SPM
Specialized Pro-resolving Mediators
120 Softgels

THE PROTOCOL FOR: BRAIN WASTE

Sleep Time: 1-2 Caps at Bed	**Calm Day**: 1-4 Caps per Day to Regulate Stress	**NAD+**: 1-2 Caps per Day
Gluthathione: 1 Vial Daily for 10 Days. Stop for 20 days and repeat.	**Brain Boost**: 2-4 Caps per Day	**Olive Oil and Avocados** with Everything

THE PROTOCOL FOR: ADHD

Under 12 Years:	NeuroMax – 1 tsp 1-2 times per day
	EnerDMG Liquid – 1 dropper 1 to 3 times per day
	D3 Liquid– 5,000 IU's per day
Adults:	Brain Boost – 3 caps per day
	NAD+ - 1 to 2 caps per day
	EnerDMG – 1,000 to 1500 mg per day
	Pro Purples – 1 to 2 scoops per day
	Remove all refined and artificial sugars, preservatives, flavors and colors from diet.
	Increase good fats such as coconut, coconut oil, avocados and avocado oil

SUPPLEMENT FACTS

Serving Size: 7.5 ml (approximately 1 tsp.)
Servings Per Container: 60
Amount Per Serving

Vitamin B1 (as Thiamine HCl)	10 mg
Vitamin B5 (as Pantothenic Acid)	10 mg
Vitamin B6 (as pyridoxine HCl and Pyridoxal 5-Phosphate)	30 mg
Folate [from Quatrefolic®, (6S)-5-Methyltetrahydrofolic acid, glucosamine salt]	667 mcg DFE
Vitamin B12 (as Methylcobalamin)	25 mcg
Vitamin D3 (as Cholecalciferol)	10 mcg (400 IU)
Magnesium (as Magnesium citrate)	50 mg
Calcium (as Calcium citrate)	50 mg
Zinc (as Zinc amino acid chelate)	3 mg
Dimethylglycine HCl (DMG)	250 mg
Betaine Anhydrous	25 mg

Other Ingredients: Purified water, glycerin, xanthan gum, natural flavors, malic acid, stevia leaf extract, and potassium sorbate.

Suggested Use: Shake well before each use. As a dietary supplement take:
4-11 years old: 1/2 tsp. twice daily.
Over 12 years old: 1 tsp., 3 to 4 times daily or as directed by your healthcare practitioner. Product can also be mixed with a small amount of water or juice if desired.

Warning: If pregnant or nursing, consult your healthcare practitioner before taking this product.

NeuroMax Liquid

Cognition

Memory

Focus

SUPPLEMENT FACTS

Serving Size: 3 Capsules
Servings Per Container: 30
Amount Per Serving

Folate	800 mcg
(as Quatrefolic® (equivalent to 1.6 mg of (6S)-5-Methyltetrahydrofolic acid, glucosamine salt))	
Vitamin B12 (as Methylcobalamin)	300 mcg
Phosphatidyl Choline	400 mg
Bacopa Monnieri Extract (20% Bacopasides)	300 mg
Ginseng (Panax) Root Powder	200 mg
Phosphatidylserine	200 mg
Acetyl L-Carnitine HCl	200 mg
Ginko Biloba (Leaf)	45 mg
Vinpocetine	15 mg
Huperzine A	50 mcg

Other ingredients: Rice flour, Vegetable Stearate, Silicon Dioxide, Vegetable Cellulose (Capsule), Water

Suggested Use: As a dietary supplement, take 3 capsules per day with food, or as directed by your healthcare practitioner.

Warning: This product contains vinpocetine. Do not consume this product if you are pregnant or could become pregnant. The FDA has warned that consumption of vinpocetine may be associated with adverse reproductive effects. Consult your healthcare practitioner before taking this product.

Brain Boost

THE PROTOCOL FOR: PARKINSON'S

EnerCoQ10: 4-8 Tablets per Day Supplying 300mg of CoQ10 and 300mg of DMG)

Omega 3D: 2-4 Soft Gels per Day Supplying 3,200 to6,400 mg of EPA/DHA

D3 Liquid: 10,000 IU's daily

Organic CBD Liquid Tincture: 1-2 Droppers per Day

NAD+: 2 Caps per Day

THE PROTOCOL TO ENHANCE BRAIN-GUT

GI Complete: 1-2 Scoops per Day in Morning/Evening on Empty stomach

IgG: 1 scoop daily

SPM: 2-4 Soft Gels or 2 Teaspoons per Day

Brain Boost: 3 Caps per Day

Probzyme: 1 Chewable with Each Meal, Plus 1-2 Before Bed

THE PROTOCOL TO PREVENT AGE RELATED DECLINE

EnerCoQ10: 1-2 Chewable Tablets per Day	**Brain Boost**: 3 Caps per Day	**Pro Purples**: 1 Scoop per Day
NAD +: 1-2 Caps per Day	**20/20**: 3 Caps per Day	**Sleep Time**: 2 Caps Before Bed

Focus

Skin

Circulation

SUPPLEMENT FACTS

Serving Size: 10 Grams (Approx. 1 Scoop)
Servings Per Container: 30

Amount Per Serving	
Calories	40
Total Carbohydrate	9 g
Dietary Fiber	3 g
Total Sugars	1 g
Folate (as L-5-Methyltetrahydrofolate Calcium (Biofolate®))	200 mcg
Sodium	20 mg
Proprietary Fruit Blend: Cranberry Fruit Powder, Blueberry Fruit Powder, Raspberry Fruit Powder, Black Currant Fruit Powder, European Elder Fruit Powder, Black Cherry Fruit Powder, Plum Fruit Powder, Dried Plum Fruit Powder, Vitis labrusca Fruit Powder, Bilberry Fruit Powder, Fig Fruit Powder.	4 g
Proprietary Vegetable Blend: Beet Root Powder, Carrot Root Powder, Asparagus Shoot Powder, Solanum melongena Fruit Powder, Cabbage Leaf Powder.	1 g
Proprietary Circulation Matrix Blend: Cabbage Palm Fruit Powder, Camu Camu Fruit Powder, Mangosteen Fruit Extract, Lycium Fruit Powder, Pomegranate Fruit Extract, Activin® Grape Seed Extract.	660 mg
Proprietary Brain Blend: N-N-Dimethyl Glycine, L-Carnosine, Trans-Resveratrol (from Japanese Knotweed Root Extract), Alpha Glycerylphosphorylcholine, NutriPQQ™ Pyrroloquinoline Quinone Disodium Salt, Huperzine-A (from Toothed Clubmoss Leaf and Stem Extract).	91.01 mg

Other Ingredients: Fibersol®-2 Digestion Resistant Maltodextrin, Banana Fruit Powder, Natural Flavors, Citric Acid, Rebaudioside A (From Stevia Leaf Extract).

Suggested Use: As a dietary supplement, mix 1 heaping scoop (10 g) daily in 8 oz. of cold water or juice, or as directed by your healthcare practitioner.

Pro Purples

THE PROTOCOL FOR OBESITY AND THE BRAIN

Ultimate Shake: 1-2 Scoops per Day

Pro Lean Greens: 1-2 Scoops per Day, Combined with Ultimate Shake

Liv Complete: 3 Caps per Day

NutraGlutide: 2 Caps per Day

Thermogenesis Complete: 3 Caps per Day

Control: 1-3 Caps per Day

Brain Boost: 3 Caps per Day

Insulin Resistance

Cortisol Balance

Blood Sugar Regulation

Serving Size: 2 Capsules | Servings Per Container: 30

Chromium (as Chromium Nicotinate Glycinate Chelate)(Albion®)	200 mcg
Berberine (Berberine Hydrochlorides Berberis aristate Rebersa®)	250 mg
Cinsulin® Cinnamon water extract (bark)	250 mg
Capsimax Capsicum Ext. (contains 2% Capsaicinoids)	250 mg
L-Theanine (Suntheanine®)	200 mg
Sensoril® Ashwagandha extract (root and leaf)(std. 10% withanolide glycoside conjugates)	100 mg
Sirtmax® (Kaempferia Parviflora root extract)	50 mg

Ingredients: Hypromellose (capsule), MCC, Silica, Magnesium Stearate

Suggested Use: As a dietary supplement, take 2 capsules daily, or as directed by your healthcare practitioner.

Warnings: If pregnant or nursing, consult your healthcare practitioner before taking this product.

Color of this formula may vary due to color variations of the ingredients.

Keep out of reach of children. Store in a cool, dry place.

*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

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SIRTMAX CinSulin®

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NutraGlutide

Cravings

Imbalance

Insulin Resistance

SUPPLEMENT FACTS

Available Bottle Sizes: 90
Serving Size: 1 Capsule
Softgels Per Container: 90
Amount Per Serving

Fenugreek Extract (Standardized to 50% saponins)	250 mg
L-Theanine	100 mg
Rhodiola Rosea Extract (Standardized to 1% salidrosides)	100 mg
L-Tryptophan	50 mg

Other ingredients: Capsules (vegetable cellulose), maltodextrin, magnesium stearate, and silicon dioxide.

Suggested use: 1 capsule 3 times a day, or as directed by your healthcare practitioner

Caution: People injecting insulin or taking anti-hyperglycemic drugs like metformin should monitor their blood sugar carefully when starting supplements that may lower blood sugar, to prevent hypoglycemia. If this product causes gas or bloating, simply reduce the dose and wean up slowly over the course of a week.

Control

Blood Sugar Balance

Metabolic Support

Insulin Sensitivity

Serving Size: 1 Capsule | Servings Per Container: 60

Selenium (as Selenium Glycinate)(Albion®)	50 mcg
Chromium (as Chromium Nicotinate Glycinate Chelate)(Albion®)	200 mcg
Dahlia4™ (Dahlia pinnata Flower & Petal Extract)	150 mcg
Vanadium (as Vanadium Nicotinate Glycinate Chelate)(Albion®)	100 mcg

Ingredients: Hypromellose (Capsule), Rice Flour, Magnesium Stearate

Suggested Use: As a dietary supplement, take 1 capsule daily, or as directed by your healthcare practitioner.

Warnings: If pregnant or nursing, consult your healthcare practitioner before taking this product.

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Albion® Minerals

ALBION MINERALS

Sweet Balance

Let’s Talk Brain Health

N-acetyl-cystine	Brain Boost	Nattokin Plus
SPM	Omega-3s	Ultimate Shake
Ener-CoQ10	Andrenamax	NAD +