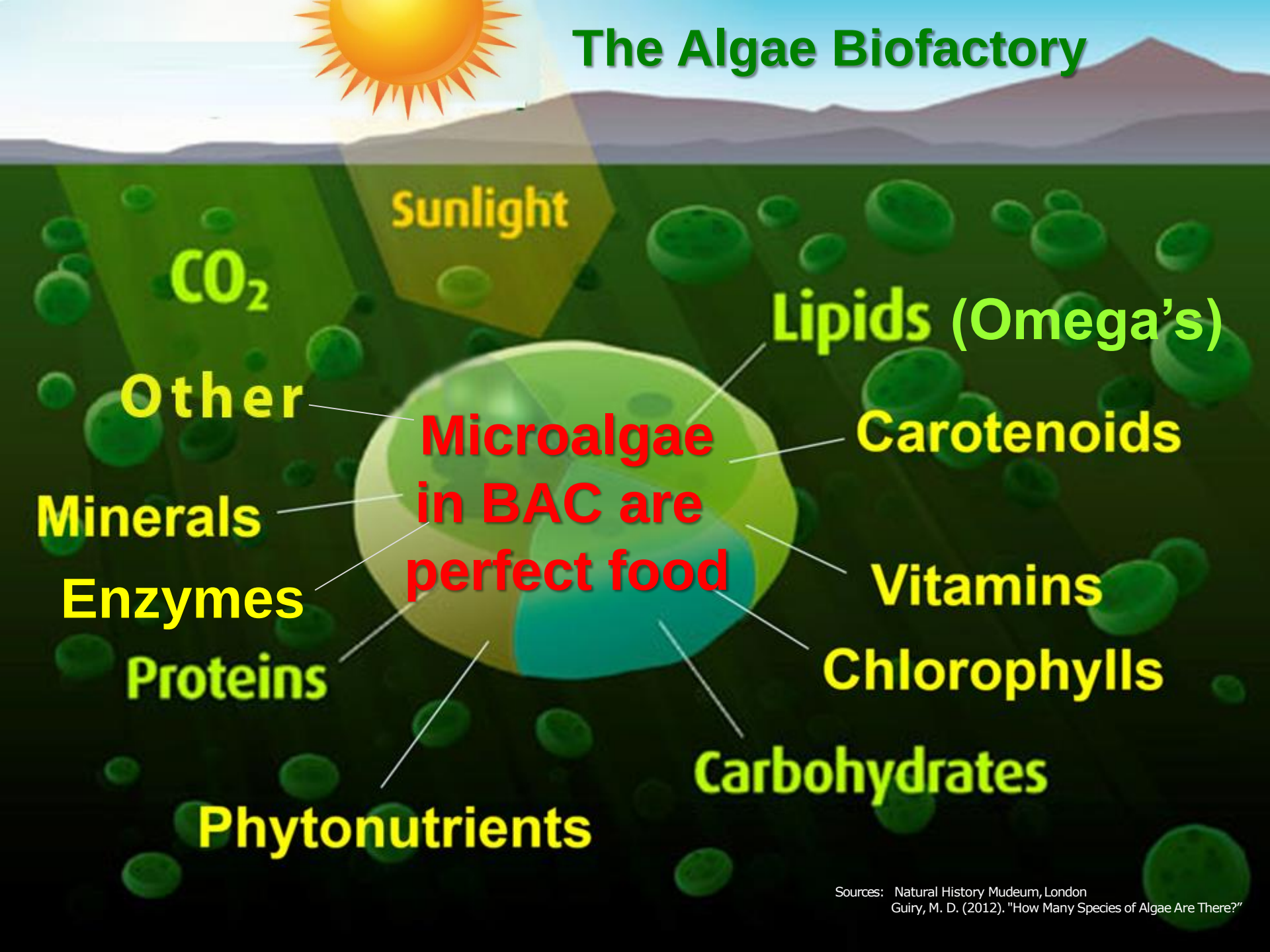
How Does
Bio-Algae Concentrates (BAC)
Awaken the Genius Within

“ The culmination in cellular nutrition is the science of selecting and combining foods that have the highest efficiency at nourishing the cells of the hypothalamus, our mission critical brain organ that regulates homeostasis, allowing for ideal endocrine and organ balance ”

- Michael Kiriac, PhD

What is it in such a small amount of food, that can deliver such benefits?

The Algae Biofactory



Sources: Natural History Mudeum, London
Guiry, M. D. (2012). "How Many Species of Algae Are There?"

The Algae Biofactory

BAC is the most complete, balanced and synergistic food on earth with over 5000 nutrients

Nutrients (partial list)	Spirulina Platensis	Spirulina Pacifica	Dunaliella Salina	Haematococcus Astaxanthin
General Composition				
Proteins	60-70%	54%	38-43%	24%
Glucides	18%	19%	8-10%	38%
Fat	5%	6%	5-8%	14%
Vitamins				
Vitamin A (fr beta carotene)	n/a	n/a	n/a	n/a
Vitamin B1 (Thiamin)	0,31 mg	0,34 mg		0,048 mg
Vitamin B2 (Riboflavin)	0,35 mg	0,33 mg		0,17 mg
Vitamin B3 (Niacin)	1.46 mg	2.07 mg		0,66 mg
Vitamin B6	0,066 mg	0,042 mg		0,036 mg
Vitamin B12 (Human-active)	32 mcg	22 mcg		0,012 mg
Vitamin C		0,48 mg	9-12 mg	0,86 mg
Vitamin E (d-a tocopherol)	1 mg	156 mcg		186 IU/lb
Lipids (Fatty acids)				
Gamma Linolenic (GLA)	135 mg	100 mg		0.21
Inositol		10 mg		
Glycerol			31-36%	
Nucleic Acids			3,2-3,8 %	
Tocoferol			2,0-2,5 mg	
Carotenoids / Phytonutrients				
Carotenes (pigments)	0,02%	0.04%	6-9%	13-15%
Chlorophyll	115 mg	79 mg		
Phycocyanine	1,500 mg	1,110 mg		
Minerals				
Calcium	66-100 mg	42 mg		1.58%
Magnesium	32-40 mg	48 mg		1.14%
Potassium	120-160 mg	152-228 mg		
Iron	11-15 mg	10,5 mg		0.73%
Sodium	60 mg	73-109 mg		
Phosphore	93,5 mg	102 mg		
Manganese	0,49 mg	0,25 mg		
Zinc	0,27 mg	0,12 mg		

Note1: per 10 grams - approx. daily serving of BSF

Sources: Bionutrition research and analysis

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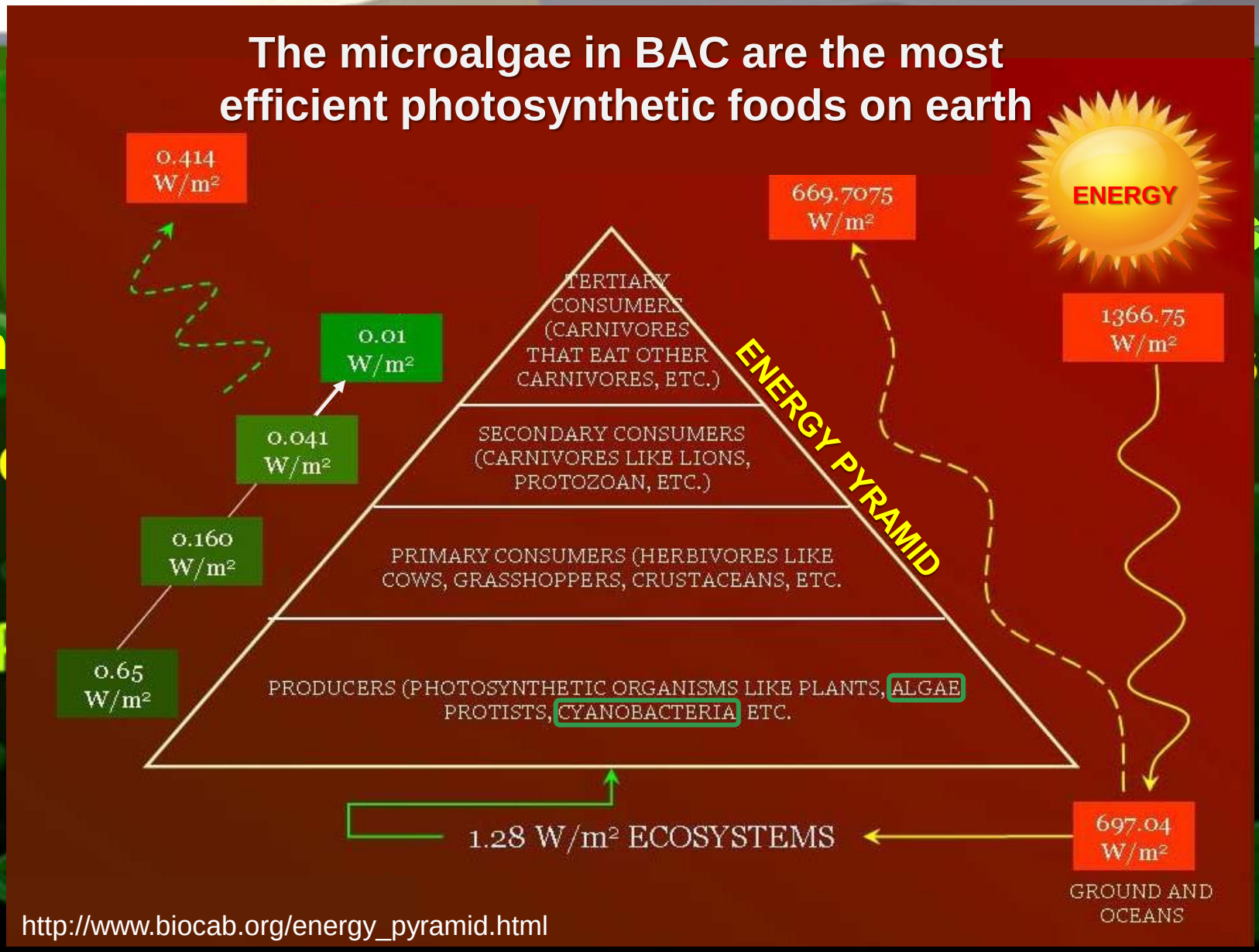
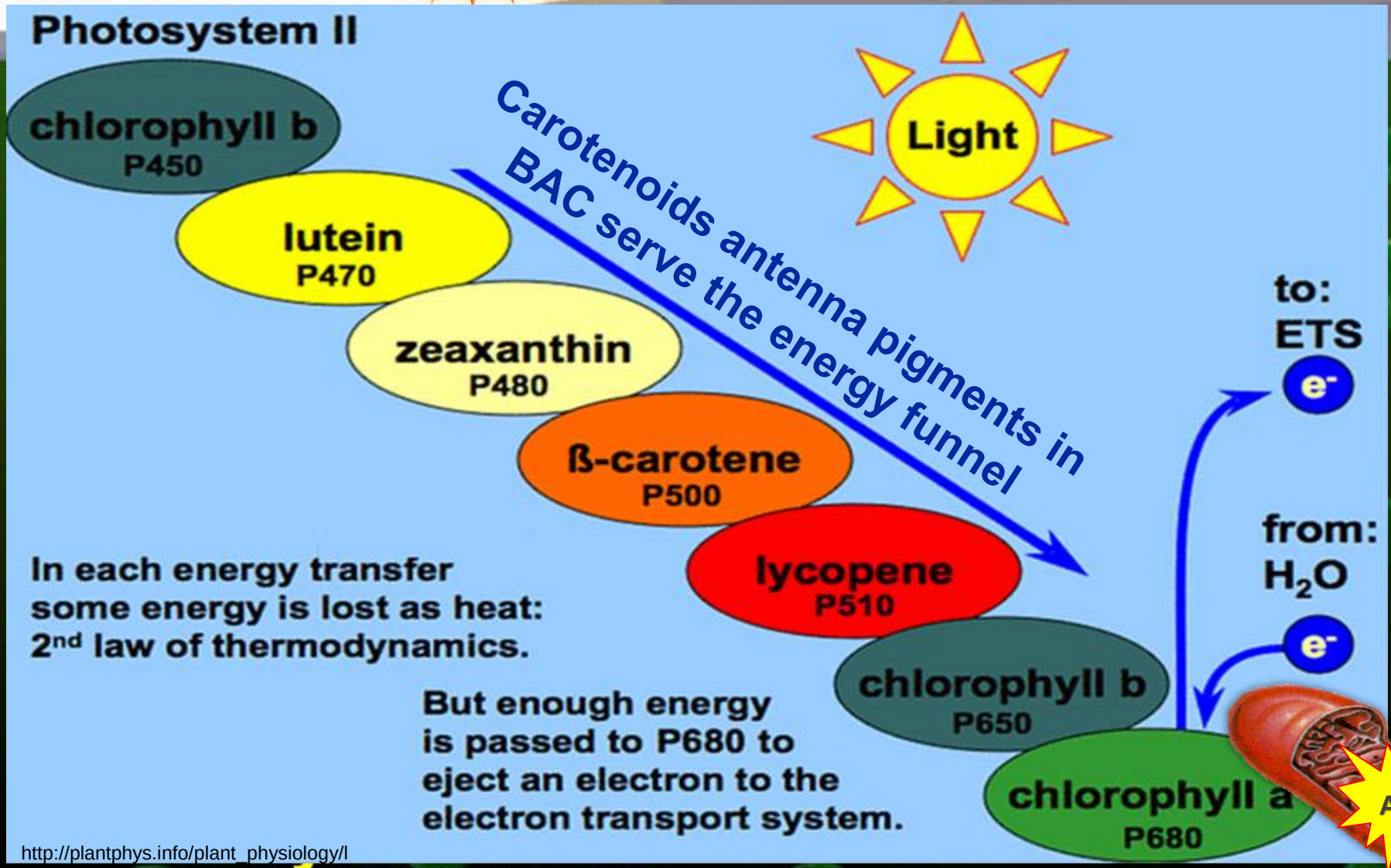


http://www.biocab.org/energy_pyramid.html

The Algae Biofactory



http://plantphys.info/plant_physiology/l
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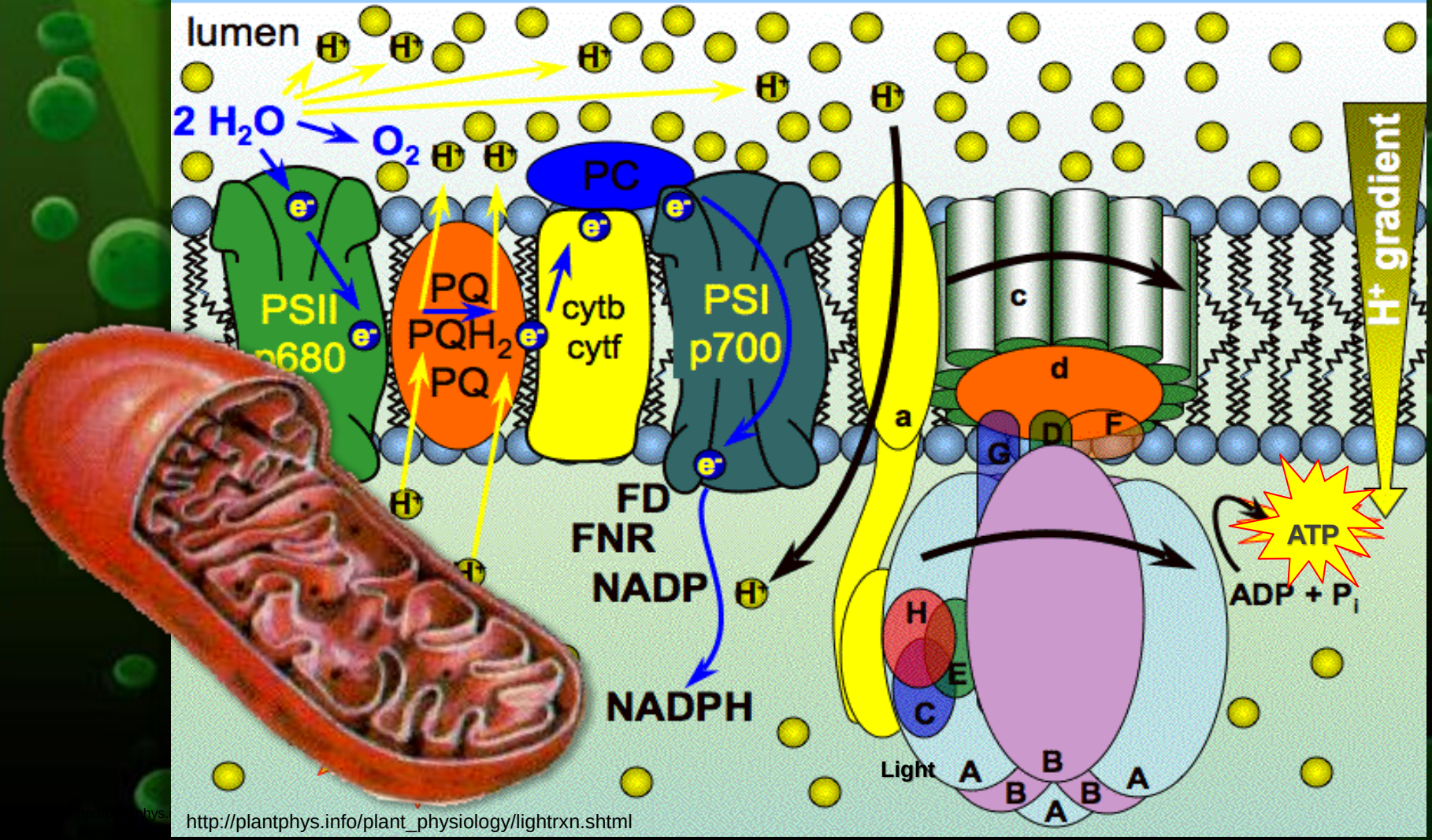
The Algae Biofactory

The carotenoids pigments in BAC serve the energy funnel that renders efficient nutrition to the Krebbs Cycle within the Mitochondria

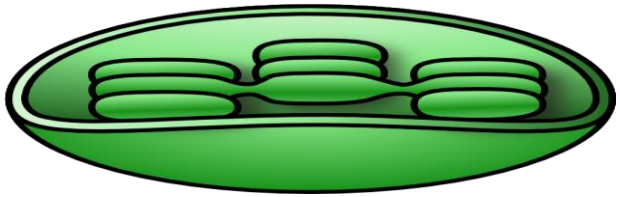


Nutrients in BAC allow for the transfer of sunlight energy into chemical energy (ATP) at near 100% efficiency

ENERGY

chloroplast

traps sun's energy in plants



$CO_2 + H_2O$

Photosynthesis

O_2 + sugars

ATP

ATP

mitochondria

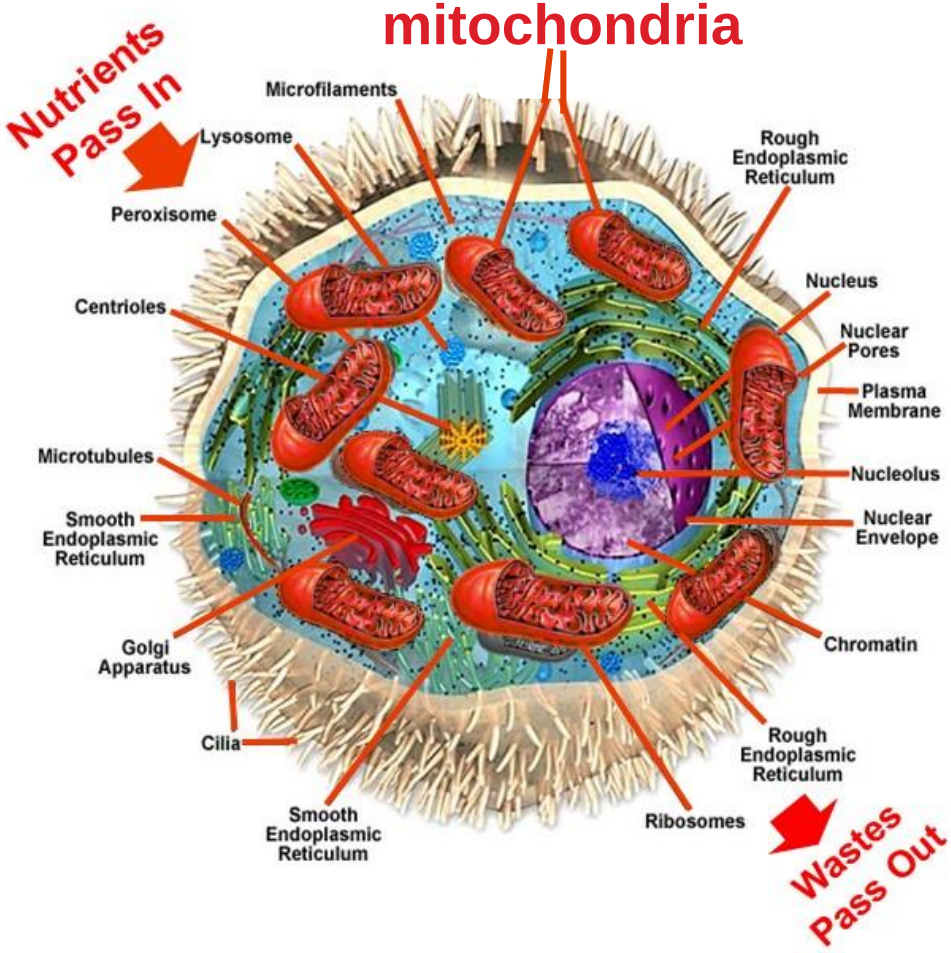
makes adenosine triphosphate (ATP), the energy for cellular productivity in all living cells

The nutrients in BAC allow for the transfer of sunlight energy to cellular mitochondria at near 100% efficiency resulting in increased cellular energy and productivity

Disease or Health is a battle fought at the cellular level

Disease

Fatigued,
Dehydrated,
Acidic,
Hypoxia,
Polarity (+),
Intoxicated,
Viscosity,
Poor growth,
Low repair,
Shorter life

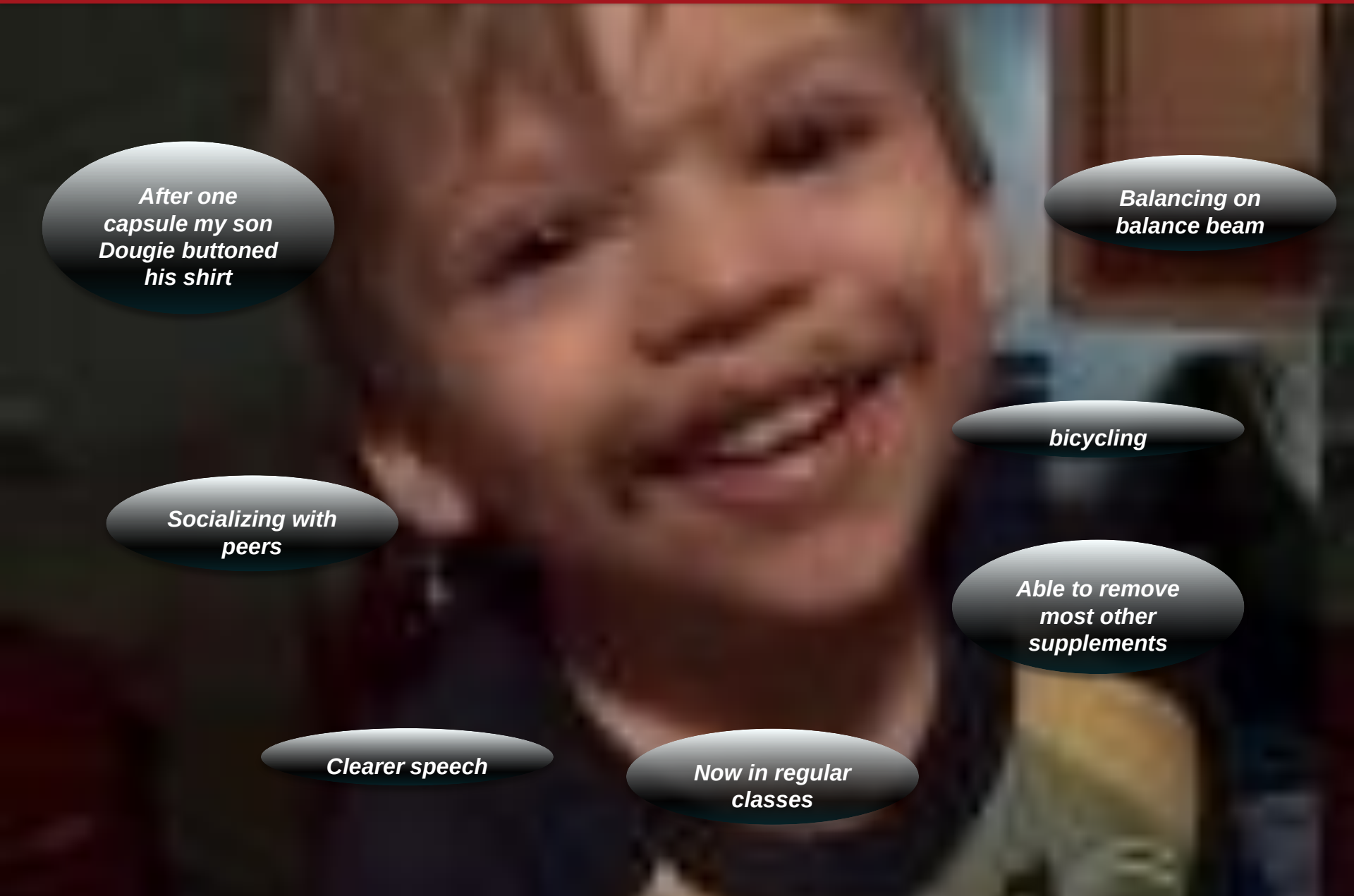


Health

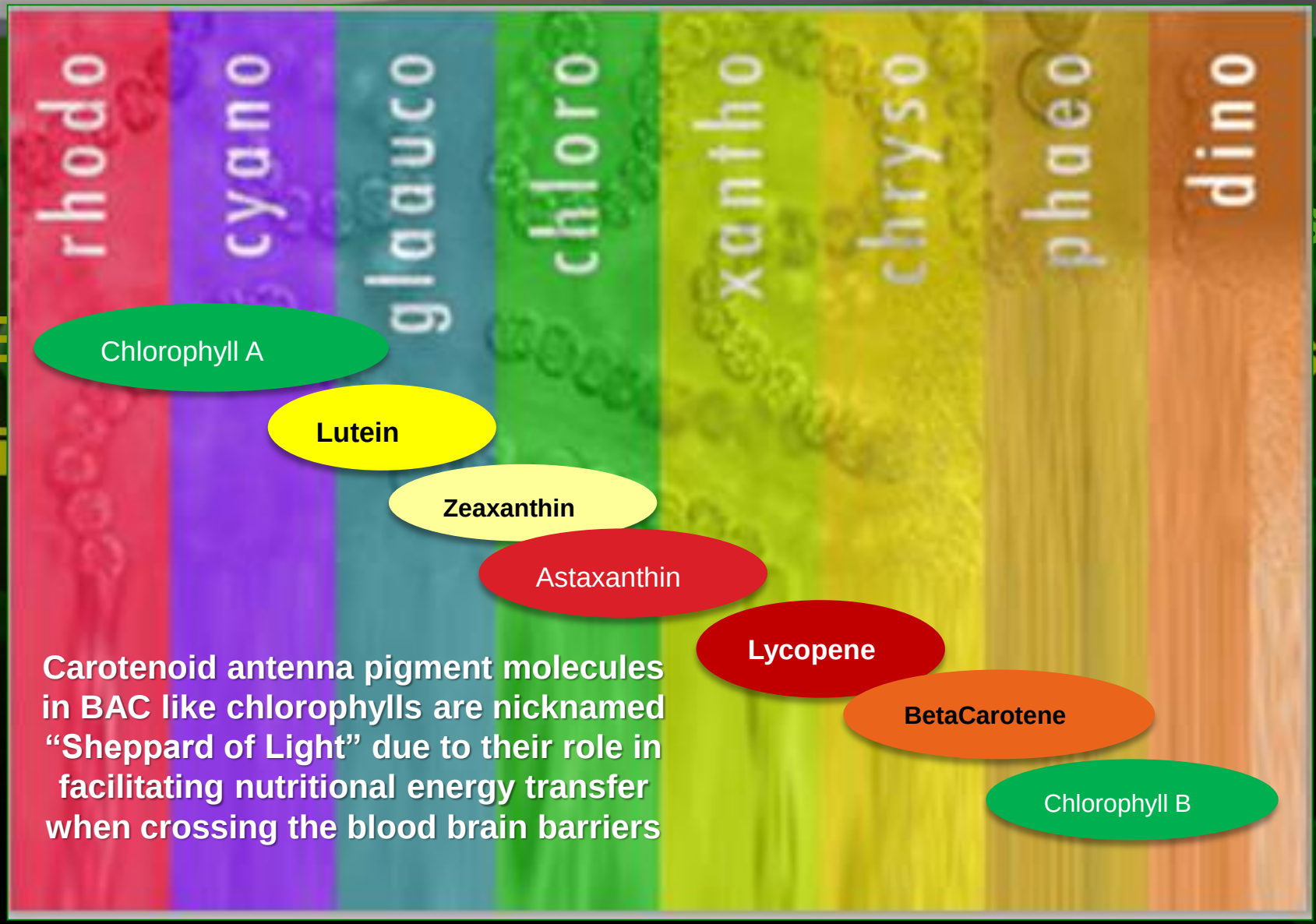
Energized,
Hydrated,
Alkaline,
Anoxia,
Polarity (-),
Detoxified,
Fluidity,
Growth,
Repair,
Regenerates,
Longer life

There are on average 2000 mitochondria per cell in our body

What is it in BAC that a few hours after intake, allows for an autistic boy to button his shirt for the first time without his mother's help?

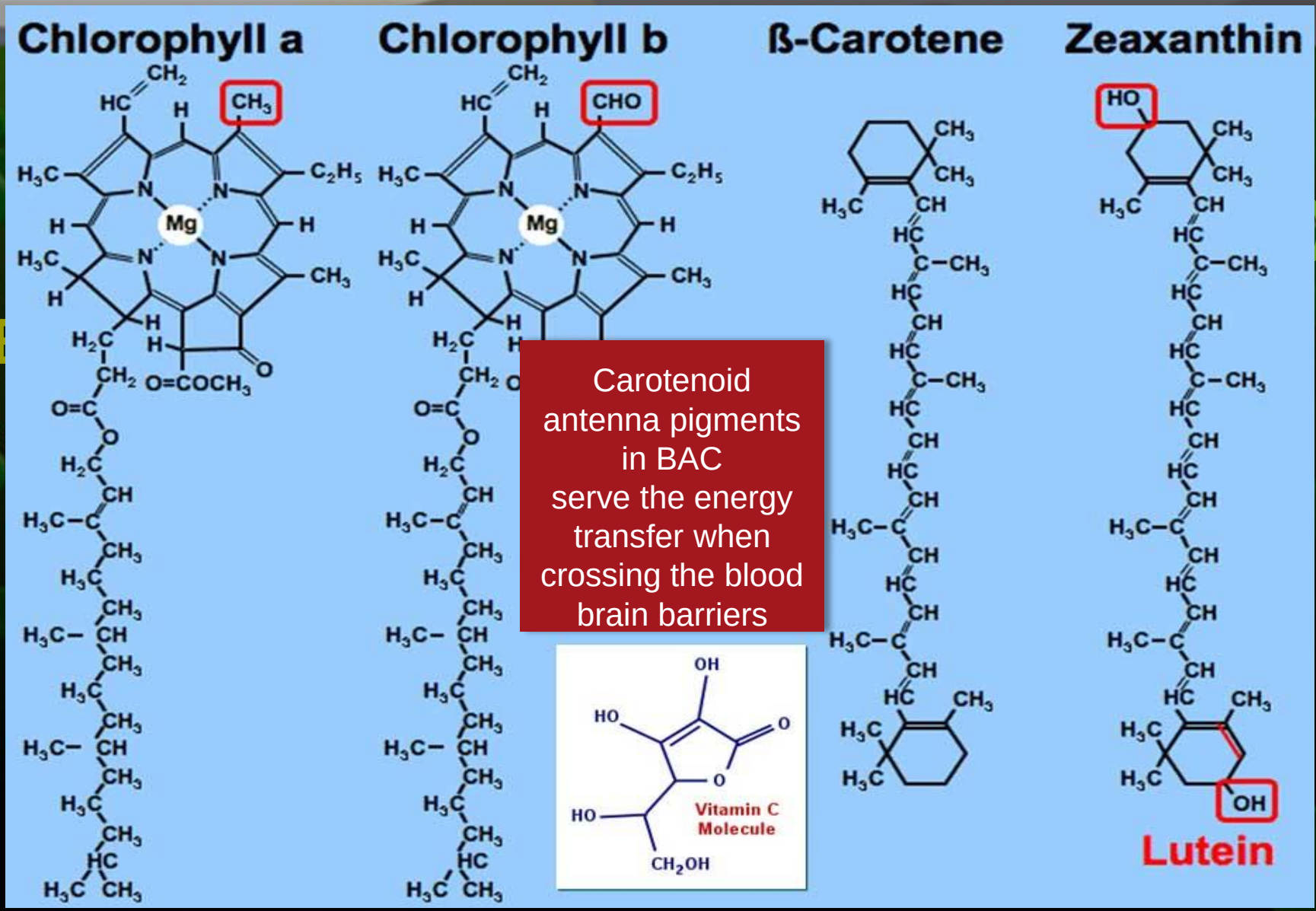


The Algae Biofactory



Carotenoid antenna pigment molecules in BAC like chlorophylls are nicknamed "Sheppard of Light" due to their role in facilitating nutritional energy transfer when crossing the blood brain barriers

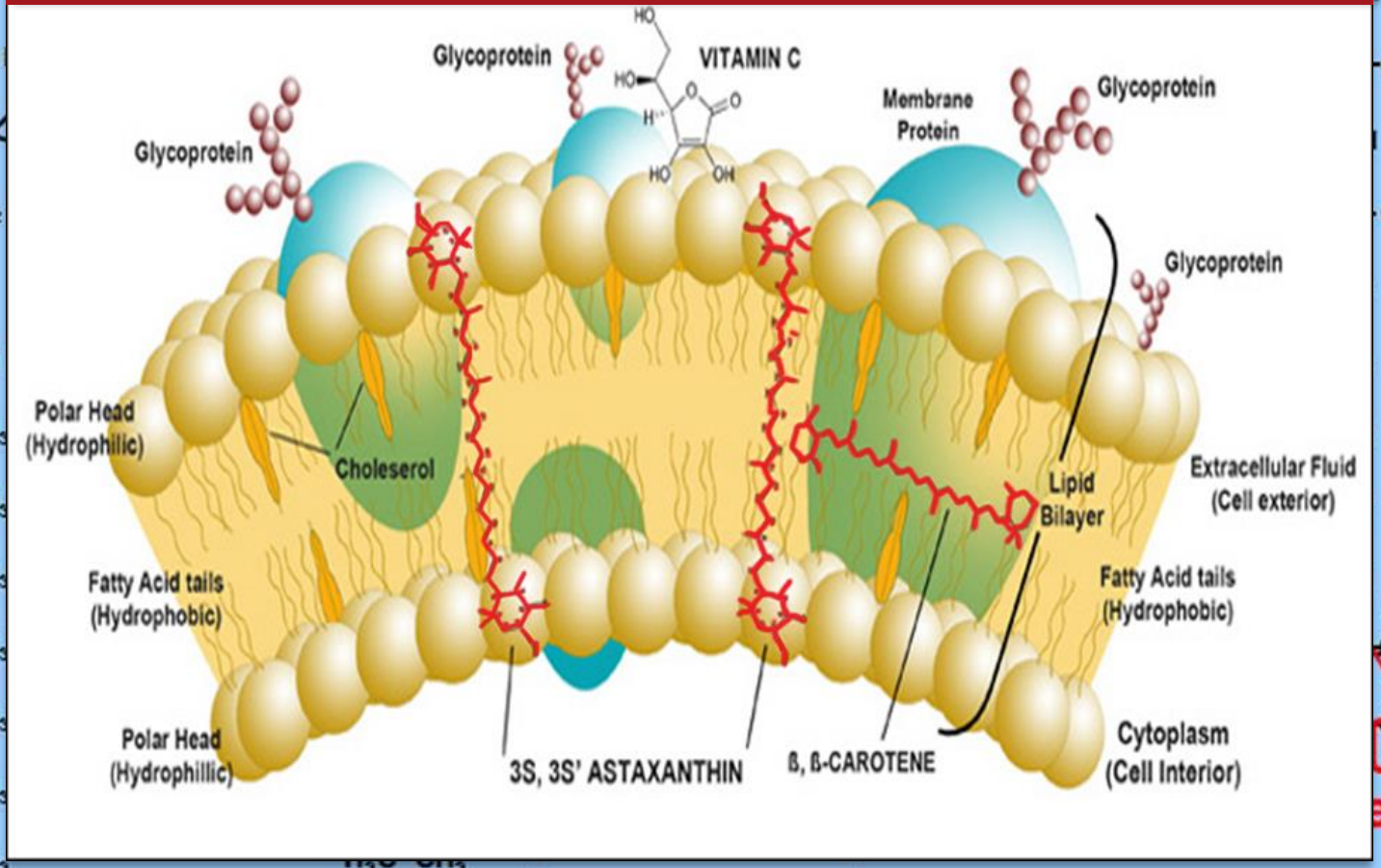
The Algae Biofactory



The Algae Biofactory

Chlorophyll a Chlorophyll b ß-Carotene Zeaxanthin

Carotenoid antenna pigments in BAC like astaxanthin below, facilitate the crossing of cellular membranes even those that make up the blood brain and blood retinal barriers



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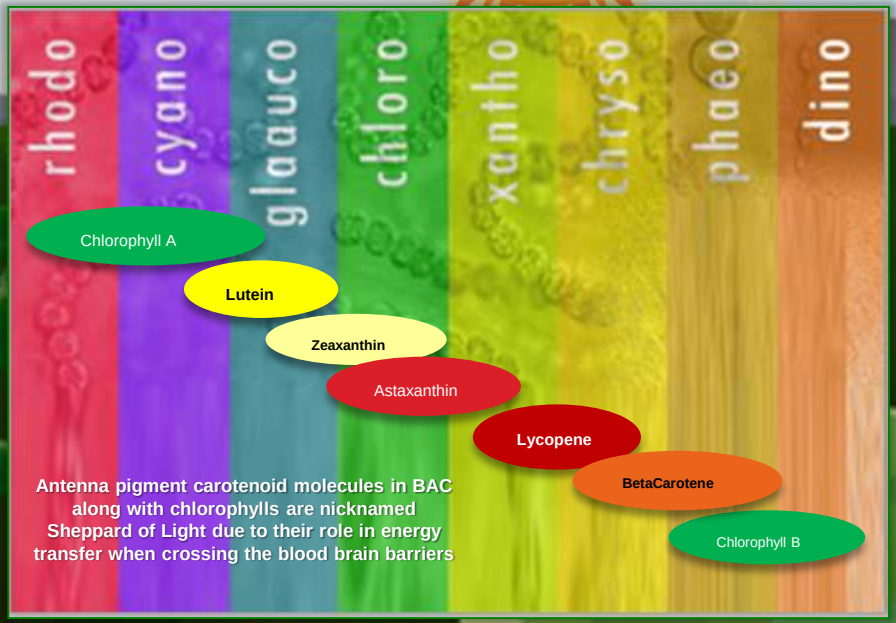
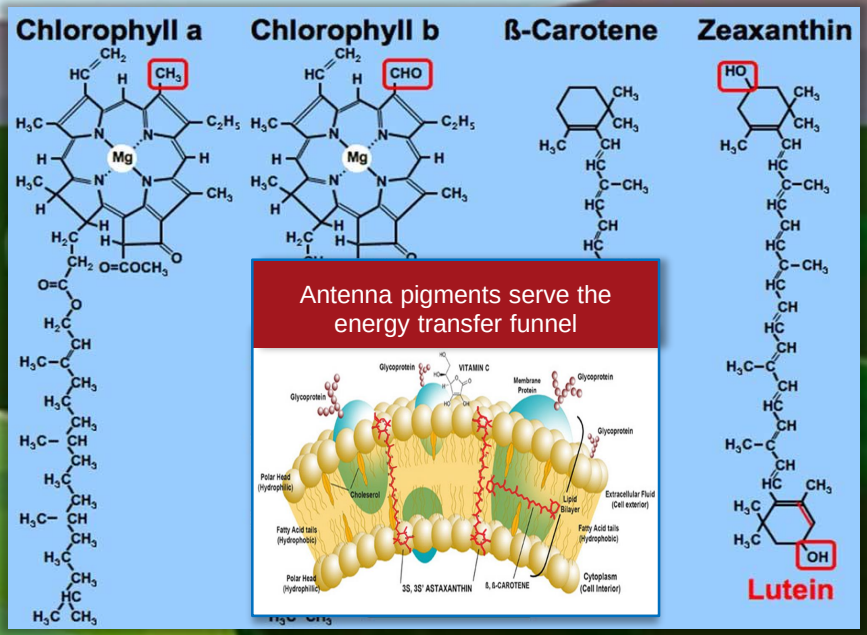
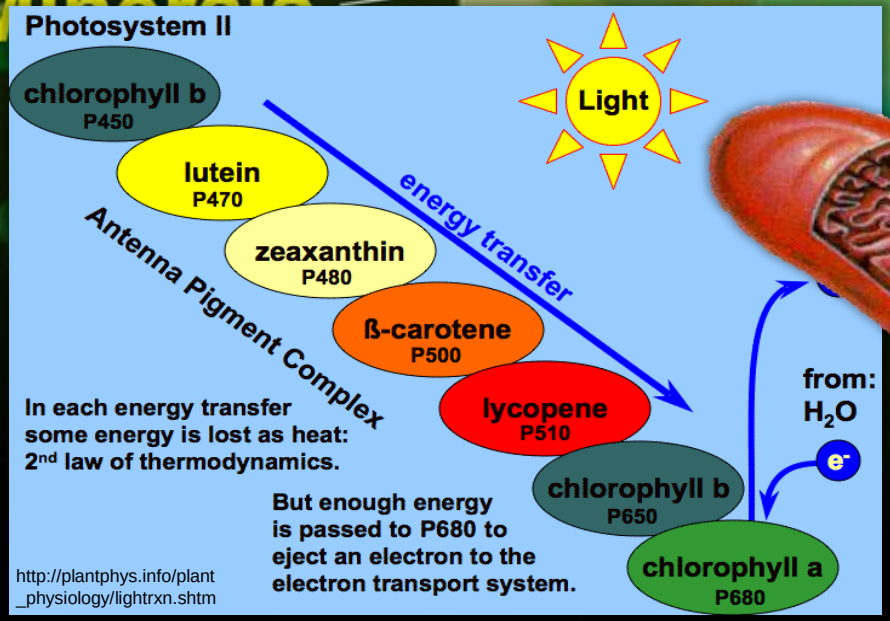
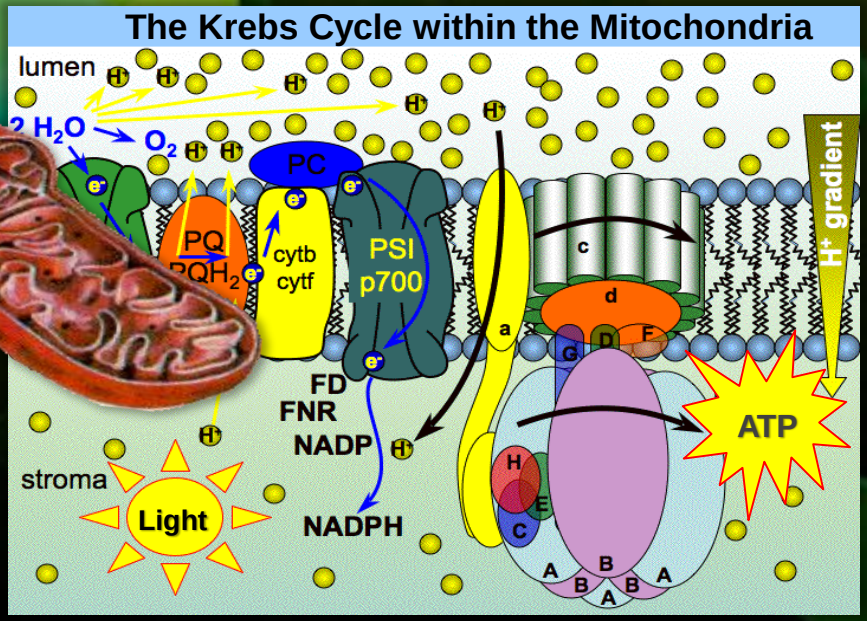


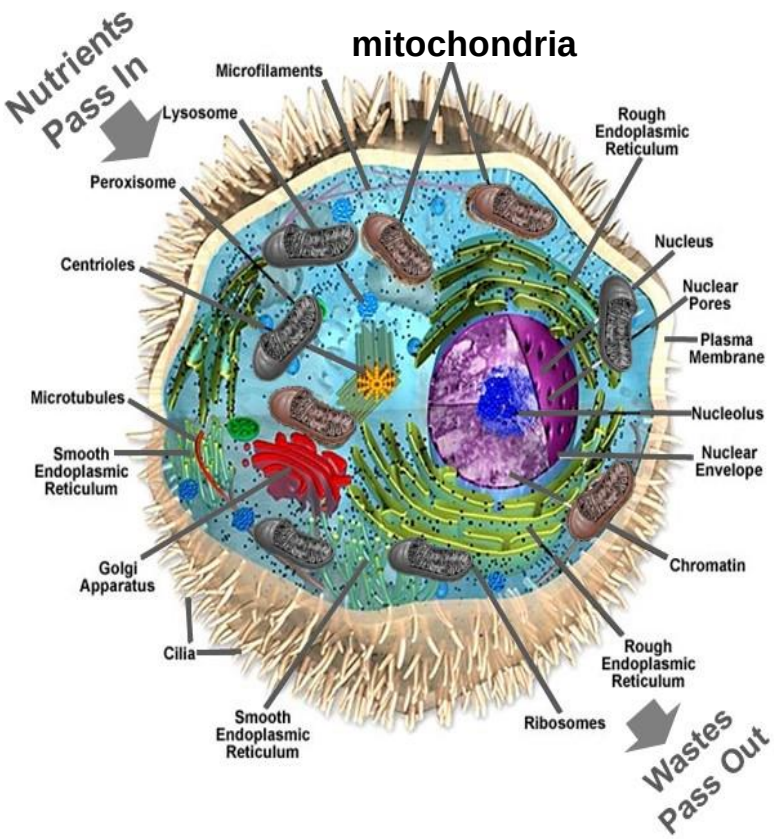






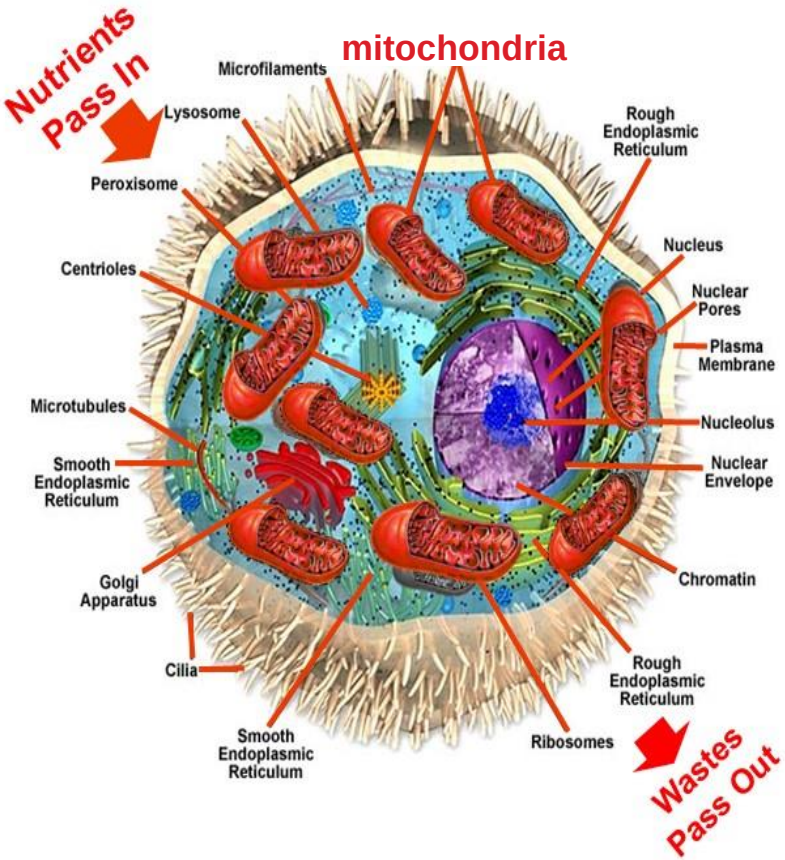
Nutrients in BAC efficiently cross the blood brain barriers, to be 100% absorbed/utilized causing an energetic awakening

Cell metabolisms <u>slows down</u> with aging, deficiencies and diseases



Fatigued, Dehydrated, Acidic, Hypoxia, Polarity (+), Intoxicated, Viscosity, Poor growth, Low repair, Short life

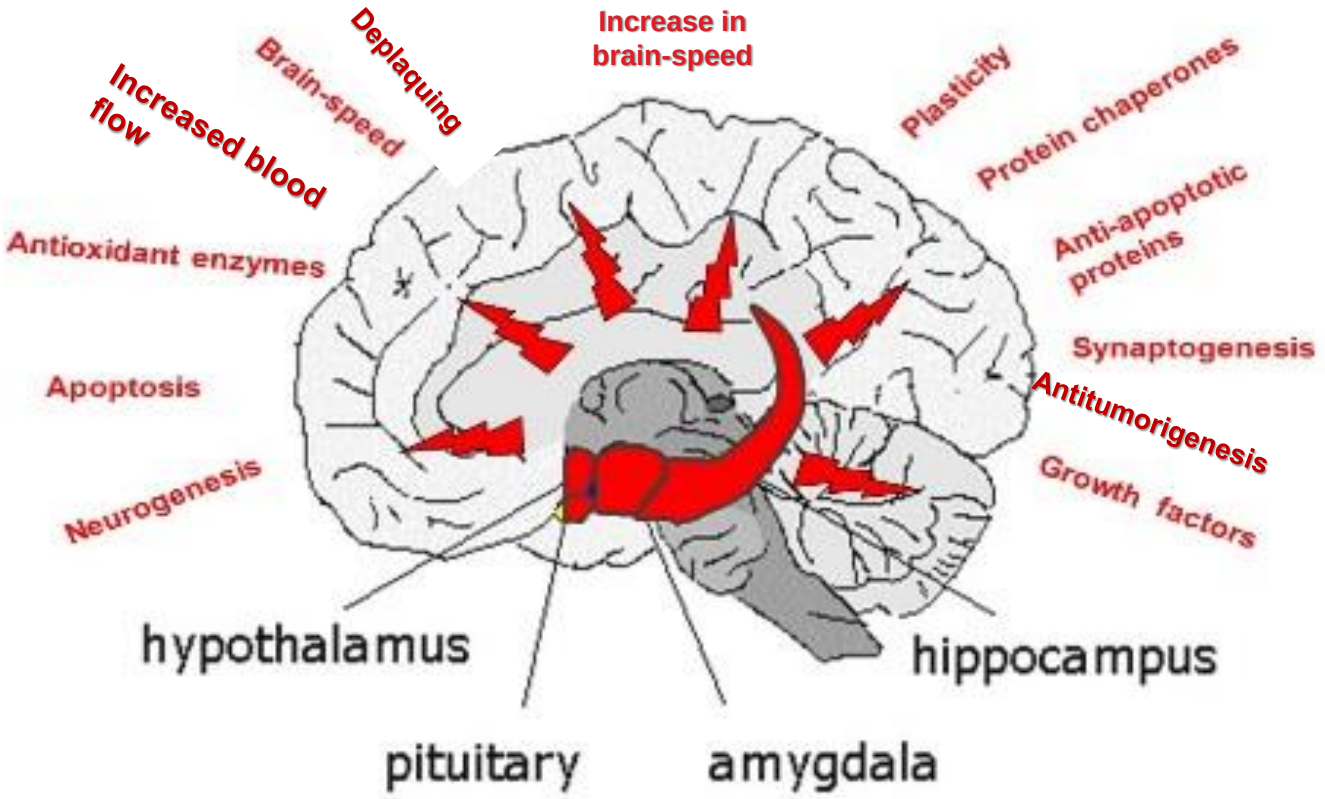
Cell metabolisms increases when consuming BAC



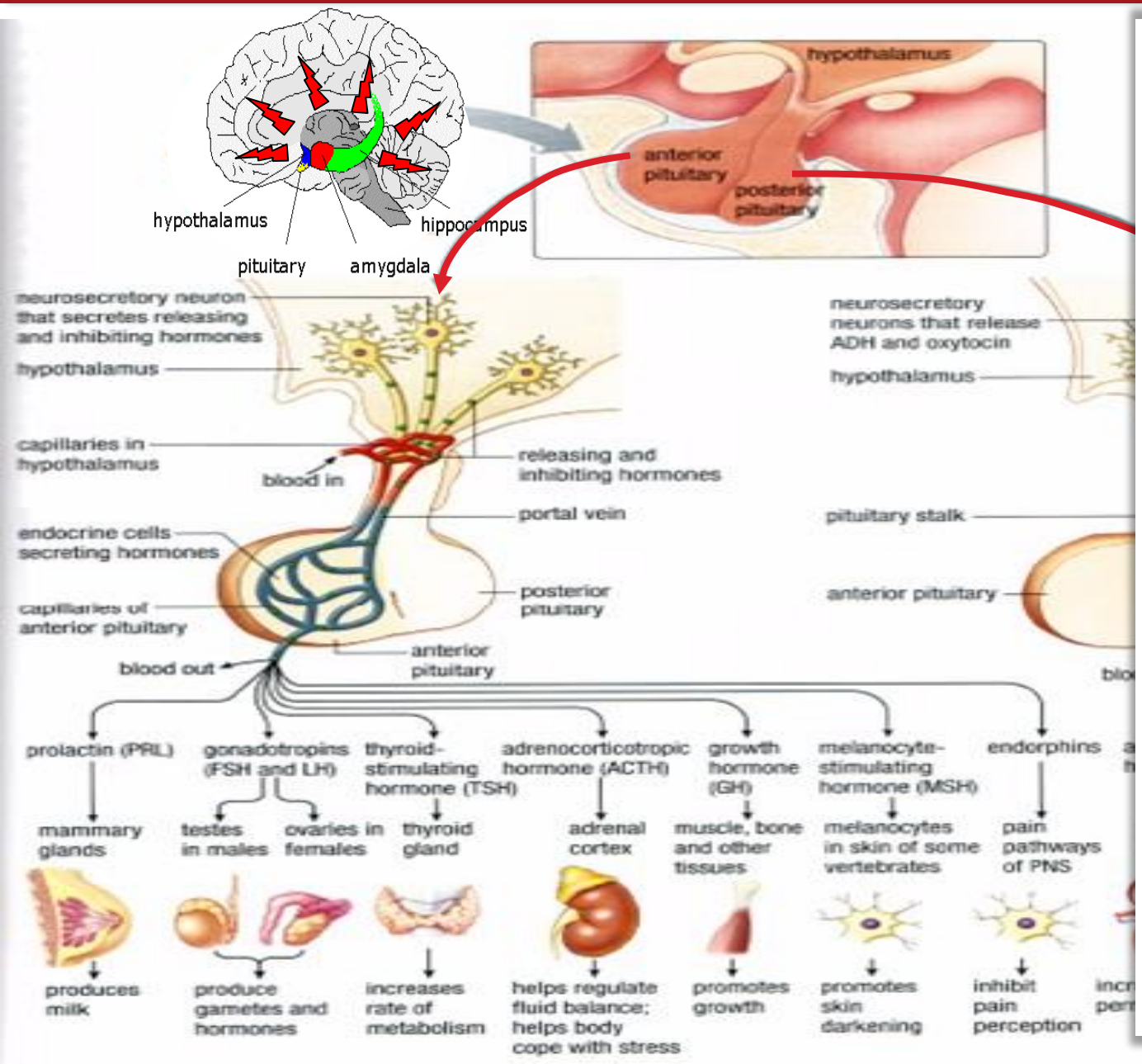
Energized, Hydrated, Alkaline, Anexia, Polarity (-), Detoxified, Fluidity, Growth, Repair, Regenerates, Long life

Nutrients in BAC efficiently cross the blood brain barriers, to be 100% absorbed/utilized causing an energetic awakening

When consuming BAC, the energy of the brain cells making up the hypothalamus <u>increase</u> increasing the balance and performance of the dependant brain, endocrine and dependant organ functions



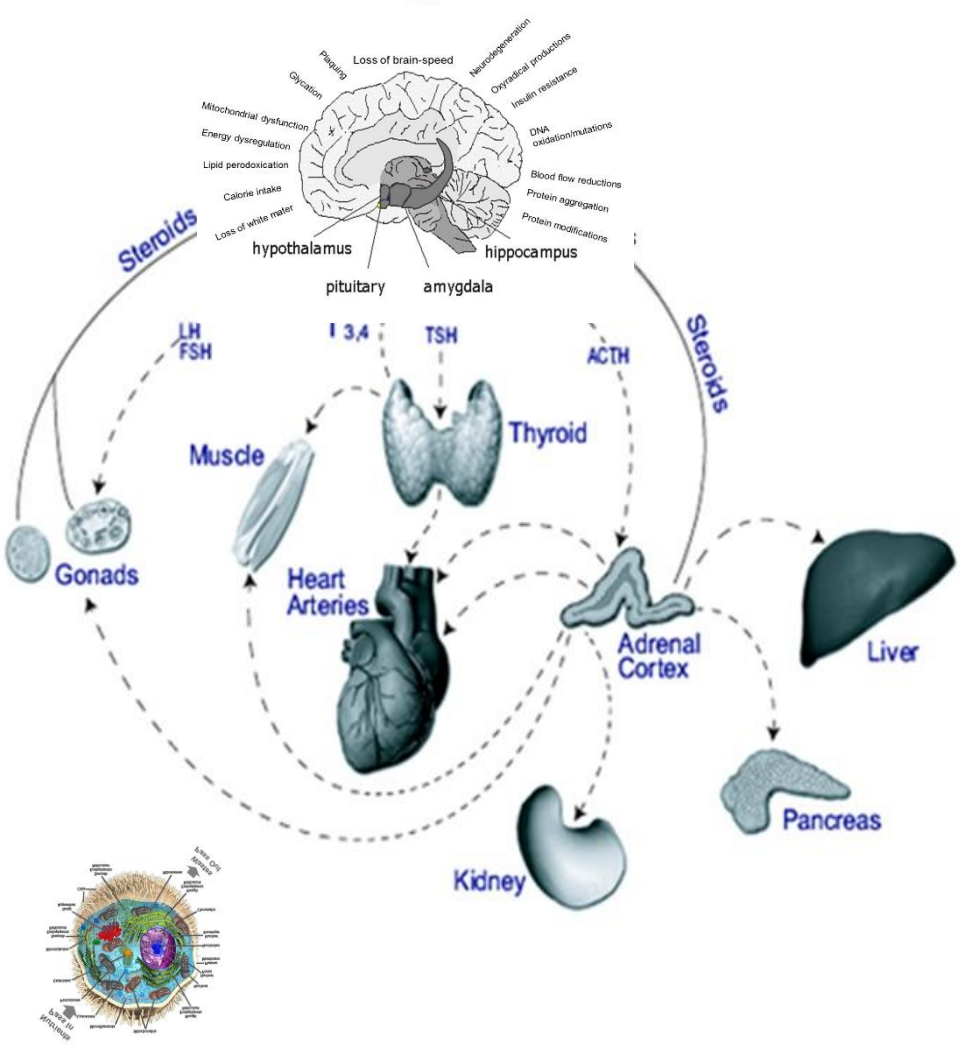
Nutrients in BAC efficiently cross the blood brain barriers causing an awakening of the hypothalamus resulting in greater hormonal performance



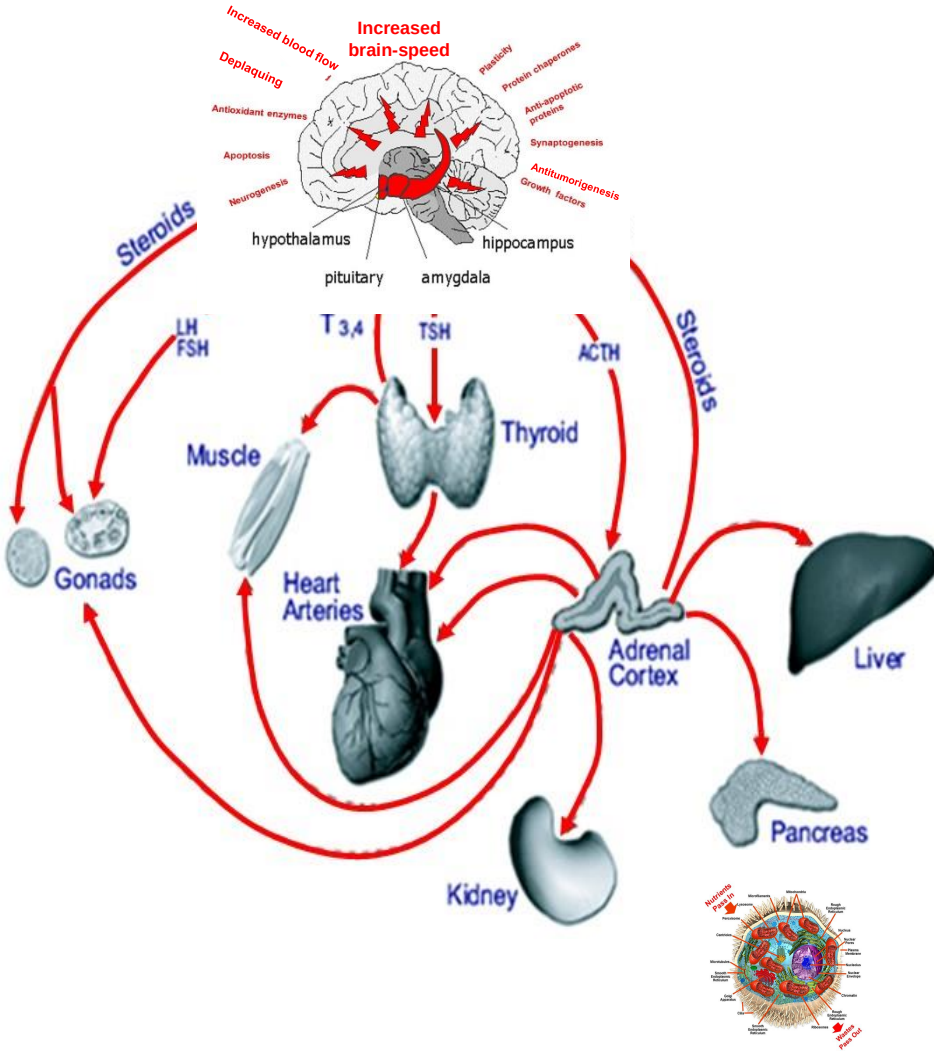
* **Adrenaline**
* Adrenocorticotrophic Hormone (ACTH)
* Aldosterone
* Angiotensin
* Antidiuretic Hormone (ADH)
* **Calcitonin**
* Cholecystokinin
* Corticotrophin Releasing Hormone (CRH)
* Cortisol/Glucocorticoids
* Glucagon
* Gonadotrophin Releasing Hormone (GnRH)
* **Growth Hormone (GH)-Releasing (GHRH)**
* Human Chorionic Gonadotropin (HCG)
* Inhibin
* **Insulin**
* Luteinizing Hormone
* **Melatonin**
* Noradrenaline
* **Oestrogens**
* Oxytocin
* Parathyroid Hormone (PTH)
* **Progesterone**
* Prolactin
* Renin
* Secretin
* **Testosterone**
* **Thyroid Stimulating Hormone (TSH)**
* Thyrotrophin Releasing Hormone (TRH)
* T3 and T4 (Thyroxine And Triiodothyronine)
* **Vitamin D**

BAC nourishes the hypothalamus, posterior and anterior pituitary glands increasing Homeostasis and productivity of all gland and organ functions

The productivity of the brain, HPA, glandular, and organ body functions declines with aging and diseases

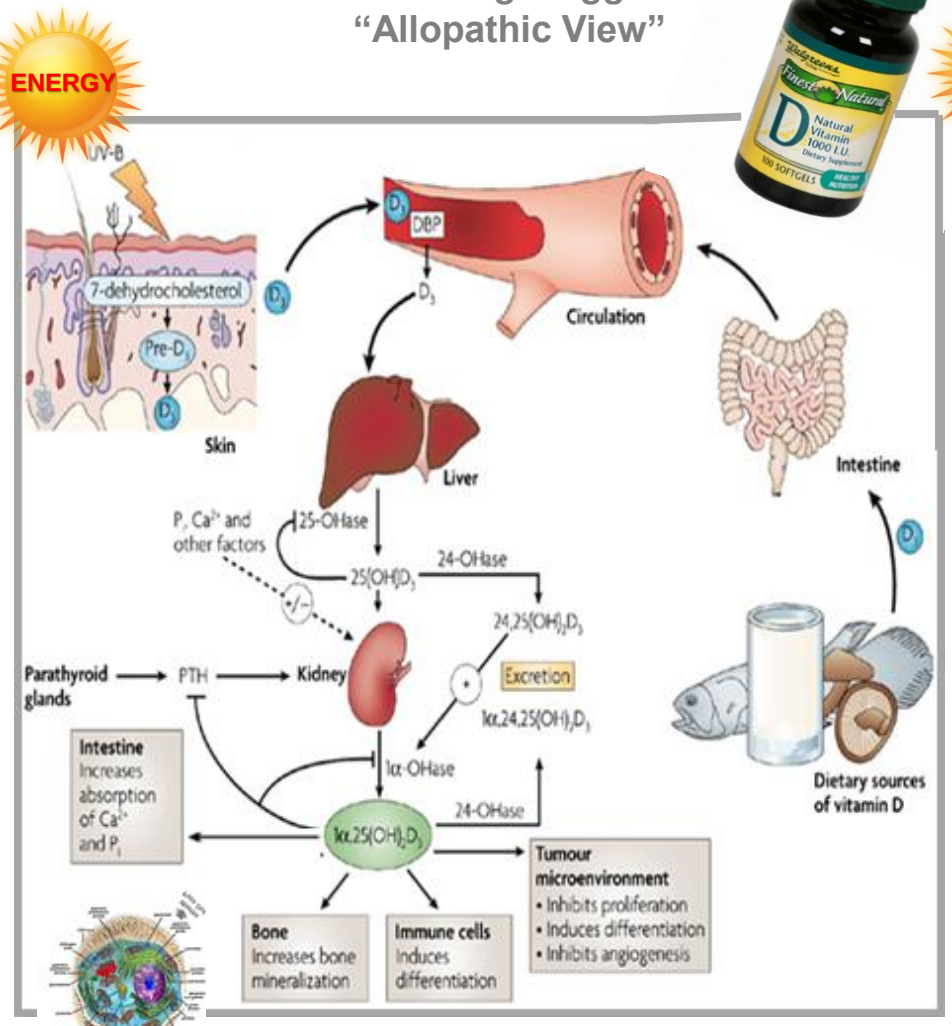


The productivity of the brain, HPA, glandular, and organ body functions increase when consuming BAC

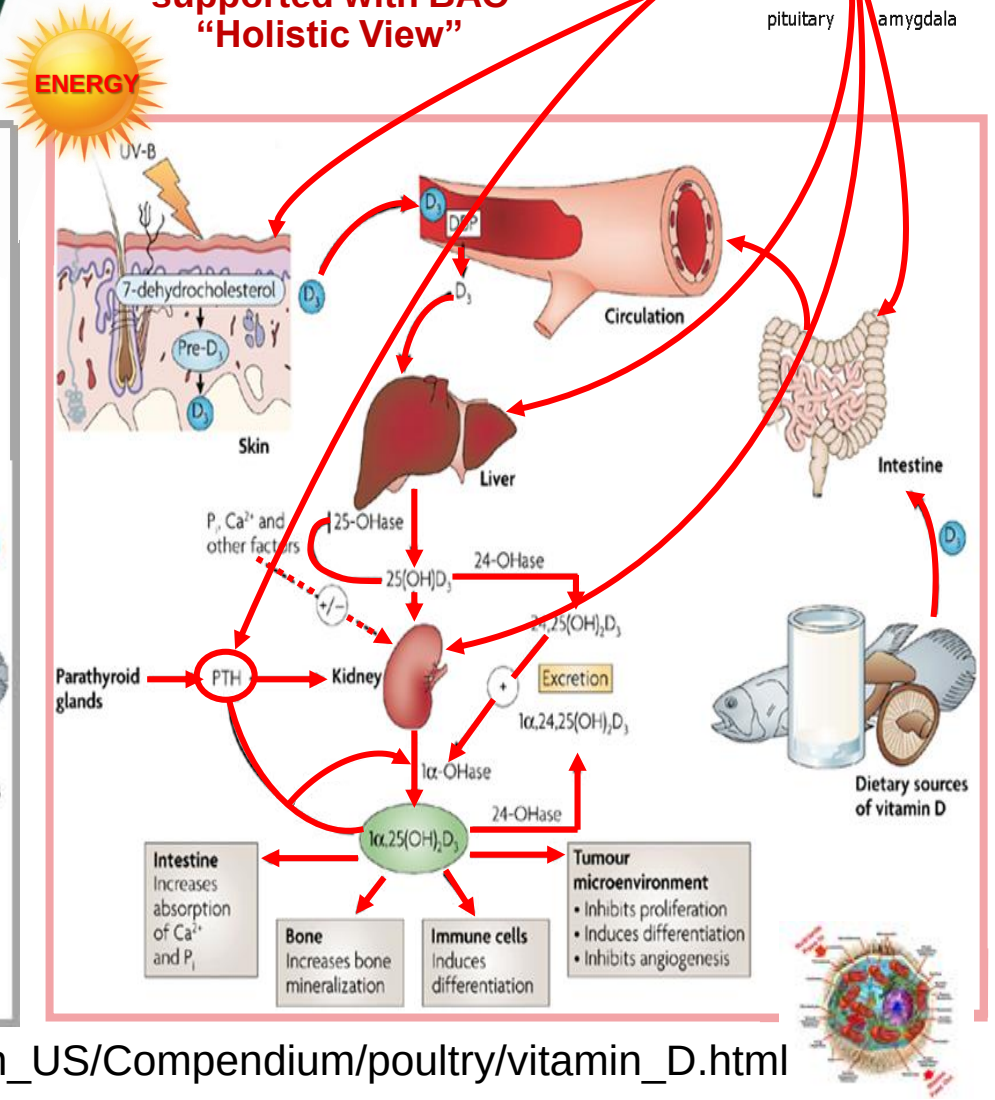


When consuming BAC, there is increase homeostasis and regulation of Calcitriol (Vitamin D, 1,25 D3) diminishing the need of supplementation

Vitamin D metabolism declines with the HPA Function becoming sluggish "Allopathic View"



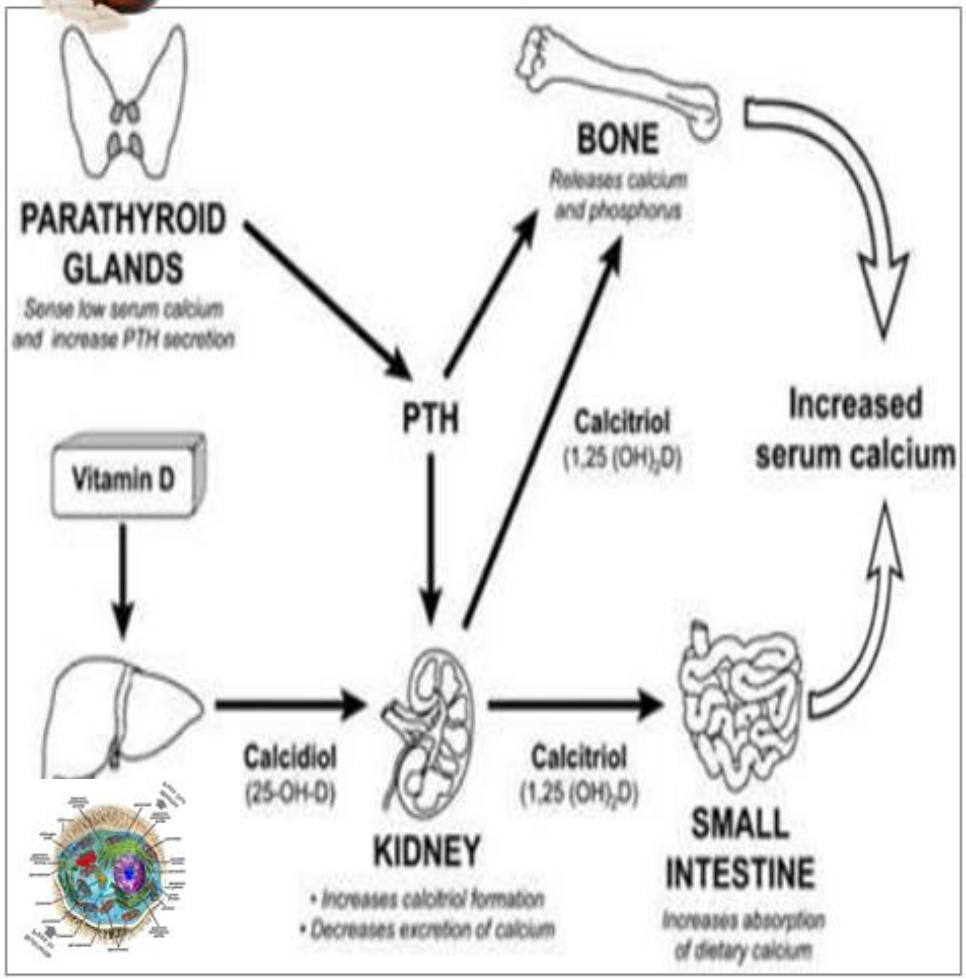
Vitamin D metabolism increases when the HPA is supported with BAC "Holistic View"



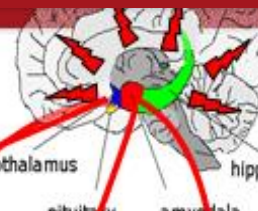
https://www.dsm.com/markets/anh/en_US/Compendium/poultry/vitamin_D.html

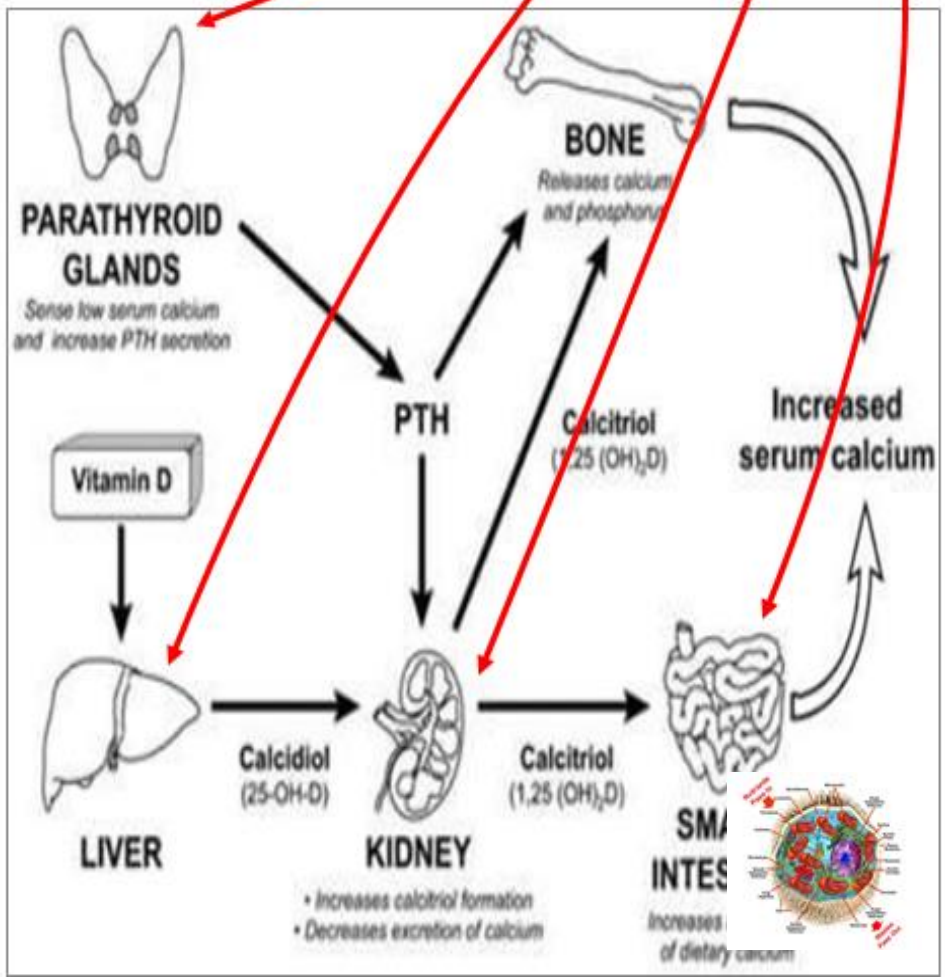
When consuming BAC, there is increase homeostasis and regulation of calcitonin, diminishing or eliminating the need of supplementation

Calcium metabolism declines with the HPA Function becoming sluggish "Allopathic View"



Calcium metabolism increases when the HPA is supported with BAC "Holistic View"





When consuming BAC, there is increase acquisition and utilization of nutrients from the good diet, diminishing or eliminating the need of supplementation

There is a tremendous opportunity for simplification of supplementation and medication when consuming BAC!

Read the entire story at :

www.awakeningthegeniuswithin.com

" ***If you can increase brain health, the rest of the body is a no-brainer*** "

Michael Kiriac, PhD