



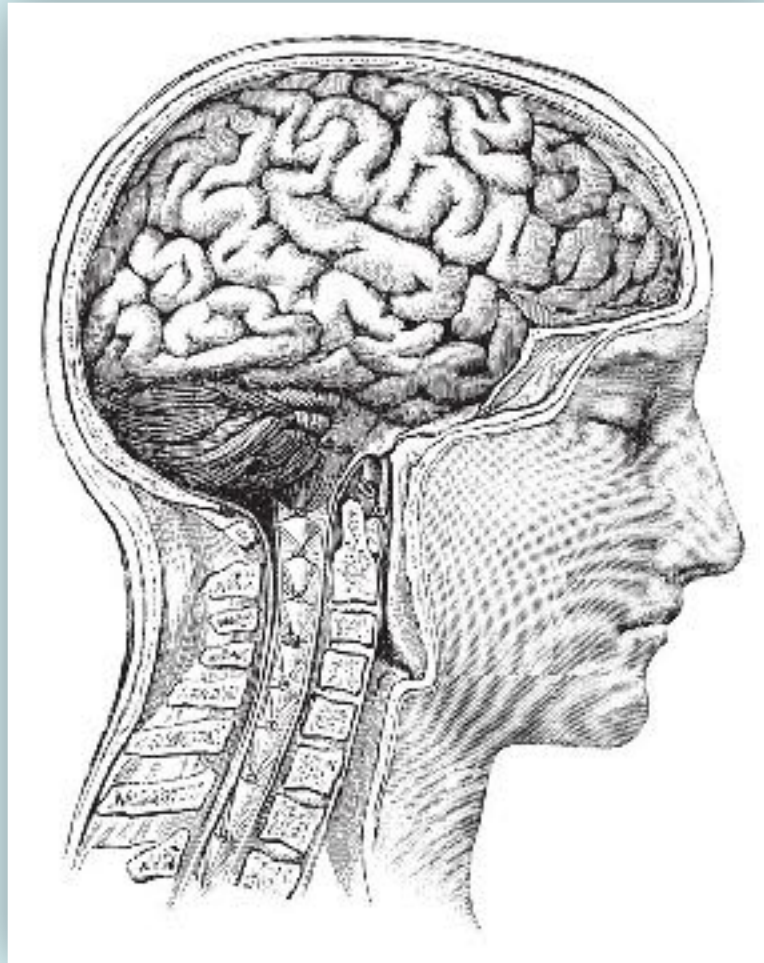
Cynthia Libert, M.D.
Functional Medicine for the
Brain & Body

The Brain Protection Plan:

Put out the Fire

How to Optimize Body Composition & Turn Off
Chronic Inflammation

36+ Holes in Your Roof



7 Keys to Restoring Brain Health



- Optimize Nutrition
- Calm & Train your Brainwaves
- Heal your Gut
- Restore Hormonal Balance
- Jumpstart Your Energy Systems
- **Put out the Fire of Inflammation**
- Enhance Detoxification

UNCOVER THE ROOT CAUSES OF BRAIN & BODY DYSFUNCTION



- **Inflammatory**
- Infectious
- Glycotoxic
- Atrophic
- Toxic
- Vascular
- Traumatic



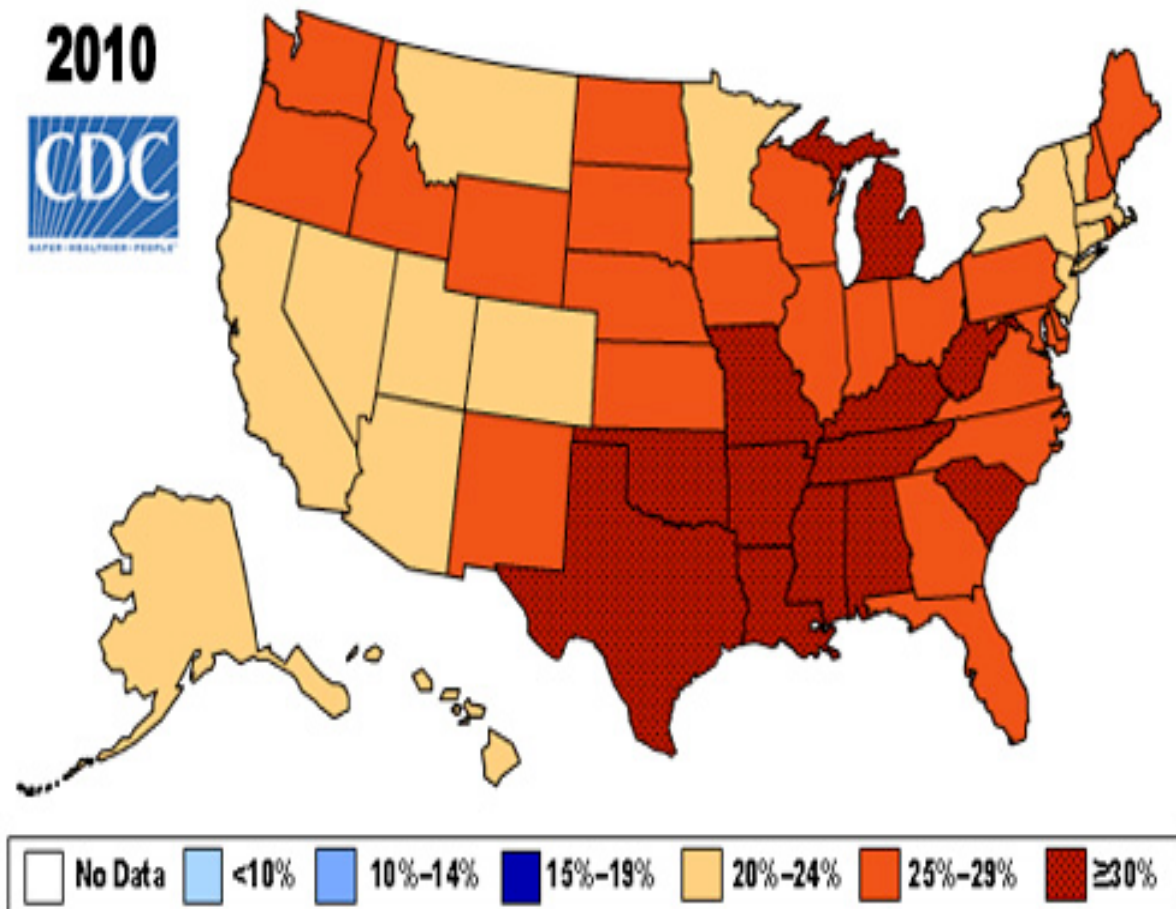
One Pound of Fat



**Excessive Abdominal Fat is an
Inflammatory Organ**

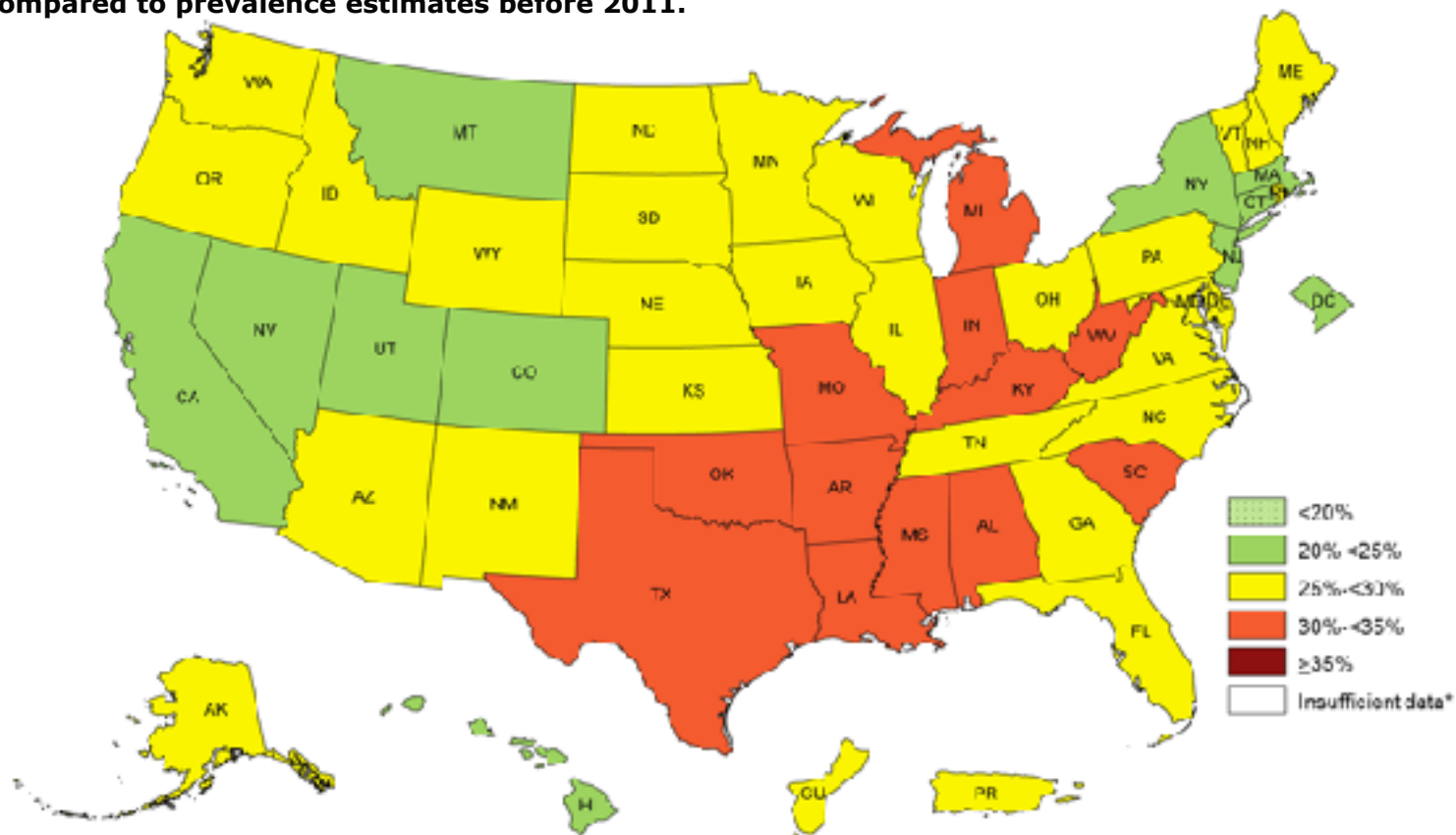
A Crisis in America Today

Growing Epidemic



Prevalence[¶] of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2011

[¶] Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.

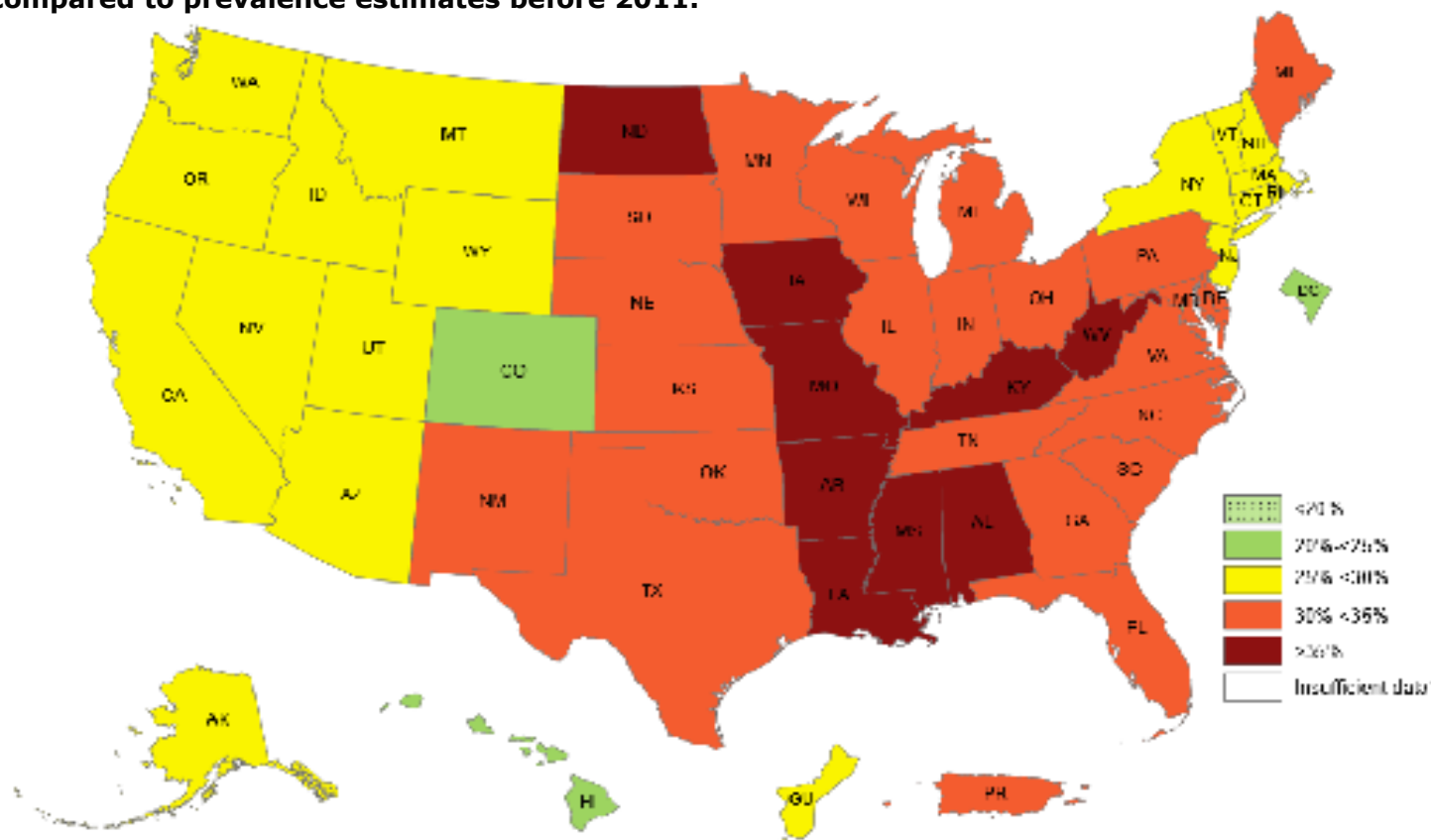


*Sample size <50 or the relative standard error (dividing the standard error by the prevalence) ≥ 30%.



Prevalence[¶] of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2018

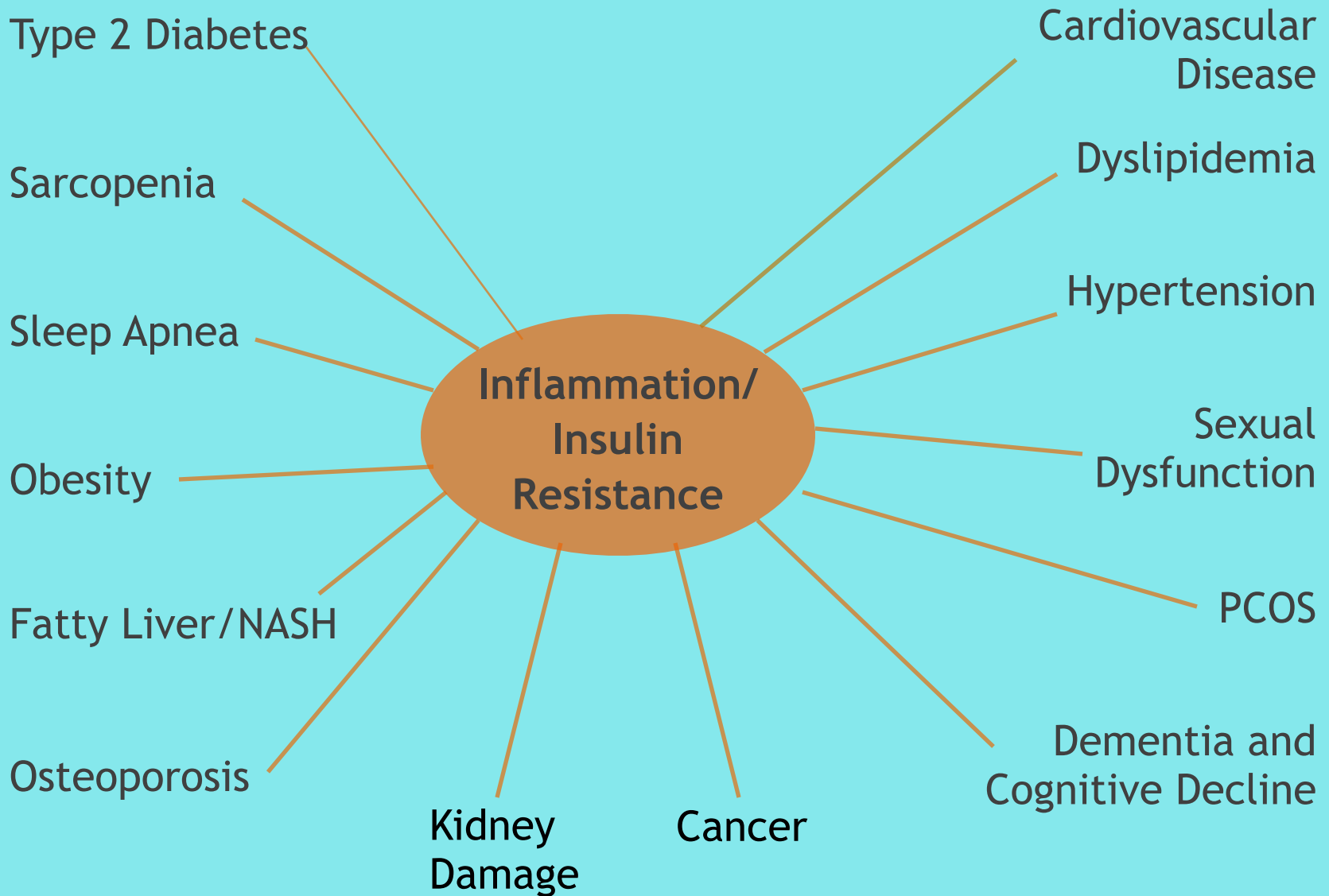
[¶] Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.



*Sample size <50 or the relative standard error (dividing the standard error by the prevalence) $\geq 30\%$.



Excess body fat is associated with:





Excessive body fat around the middle linked to smaller brain size, study finds

Date: January 9, 2019

Source: American Academy of Neurology

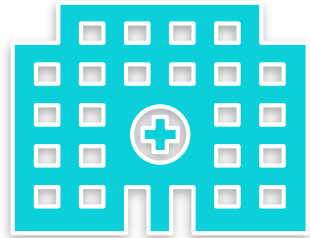
Summary: Carrying extra body fat, especially around the middle, may be linked to brain shrinkage, according to new research. For the study, researchers determined obesity by measuring body mass index (BMI) and waist-to-hip ratio in study participants and found those with higher ratios of both measures had the lowest brain volume.

As body fat increases, brain function and size decreases!

Metabolic Syndrome

Measure	Categorical Cut Points
Elevated Waist Circumference	\geq 40 inches in men \geq 35 inches in women
Elevated TG	\geq 150 mg/dL (or drug tx for elevated TG)
Reduced HDL-C	< 40 mg/dL in men < 50 mg/dL in women
Elevated BP	\geq 130 mm Hg systolic BP or \geq 85 mm Hg diastolic BP or drug tx for HTN
Elevated fasting glucose	\geq 100 mg/dL or drug tx for elevated glucose





Gastro-
enterology

Neurology

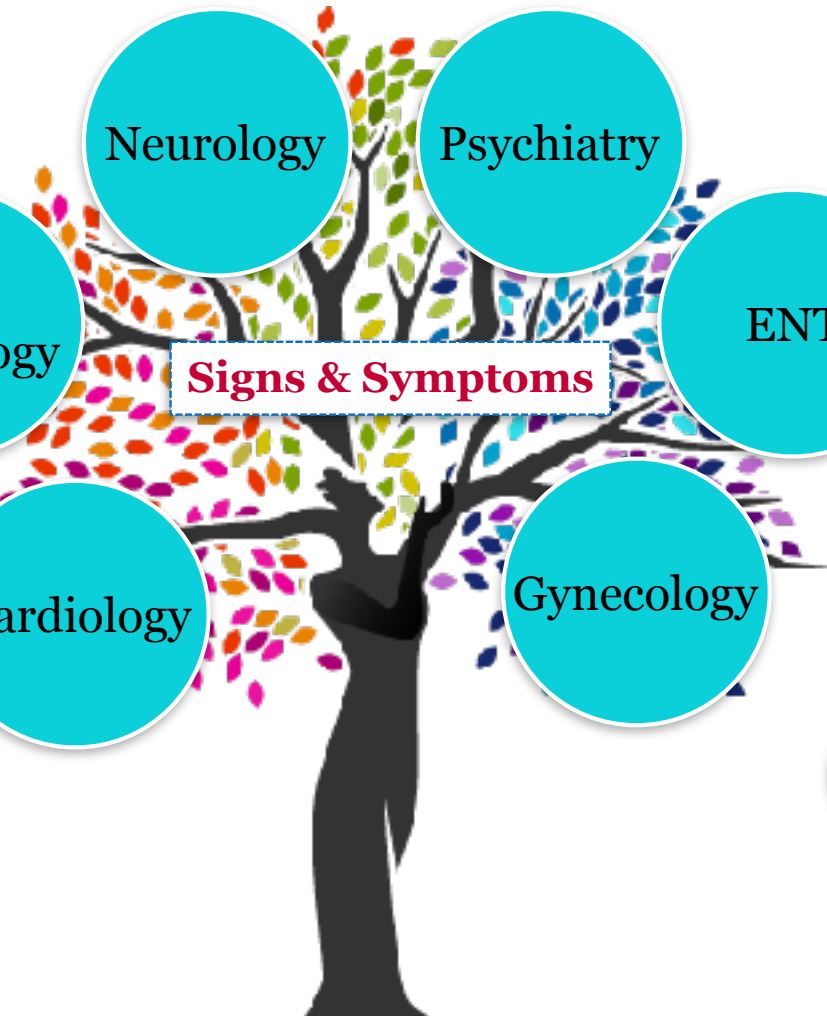
Psychiatry

ENT

Signs & Symptoms

Cardiology

Gynecology





Conventional medical therapy typically requires that each of the metabolic risk factors be singled out and treated separately, resulting in multiple prescriptions.

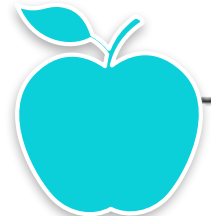


A pill for every ill...

TLC: The Gold Standard for Disease Treatment

- National Institutes of Health
- Am. Heart, Blood & Lung Institute
- Am. Diabetes Association
- Am. Heart Association
- Am. Association Clinical Endocrinologists
- Arthritis Foundation
- North American Menopause Society
- Many others







- Inflammation
- Dysbiosis
- Hormones
- Insulin Resistance
- Hidden food sensitivities
- Medications
- Thyroid dysfunction
- Chronic Stress
- Sleep Deprivation
- Mood Disturbance
- Sarcopenia
- Toxicity



Hidden Causes of Stubborn Belly Fat



Address the Modifiable Personal Lifestyle Factors:

- Sleep, Stress, R & R
- Nutrition
- Relationships
- Exercise

Professional Help

- History & Physical Exam
- Basic Labs
- Functional Medicine Diagnostics
- Address the Matrix

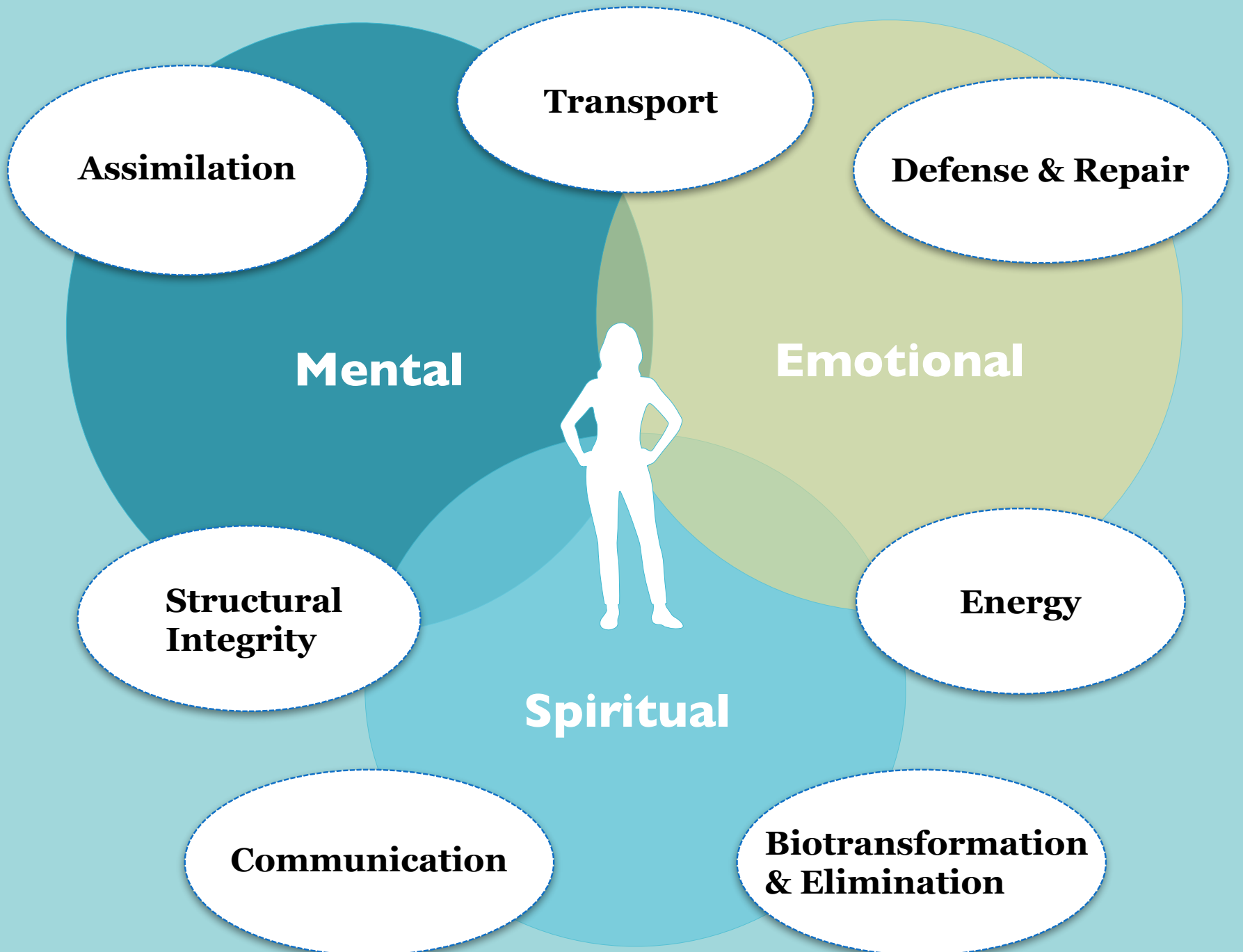


A Lifestyle & Functional Medicine Approach to Optimizing Body Composition



Root Cause Medicine
Core Clinical Imbalances &
The Functional Medicine Matrix





Assimilation

Transport

Defense & Repair

Mental

Emotional

**Structural
Integrity**

Energy

Spiritual

Communication

**Biotransformation
& Elimination**

7 Keys to Restoring Brain Health



...AND Optimizing Body Composition

1. Optimize Nutrition
2. Calm & Train your Brainwaves
3. Heal your Gut
4. Restore Hormonal Balance
5. Jumpstart Your Energy Systems
6. Put out the Fire of Inflammation
7. Enhance Detoxification



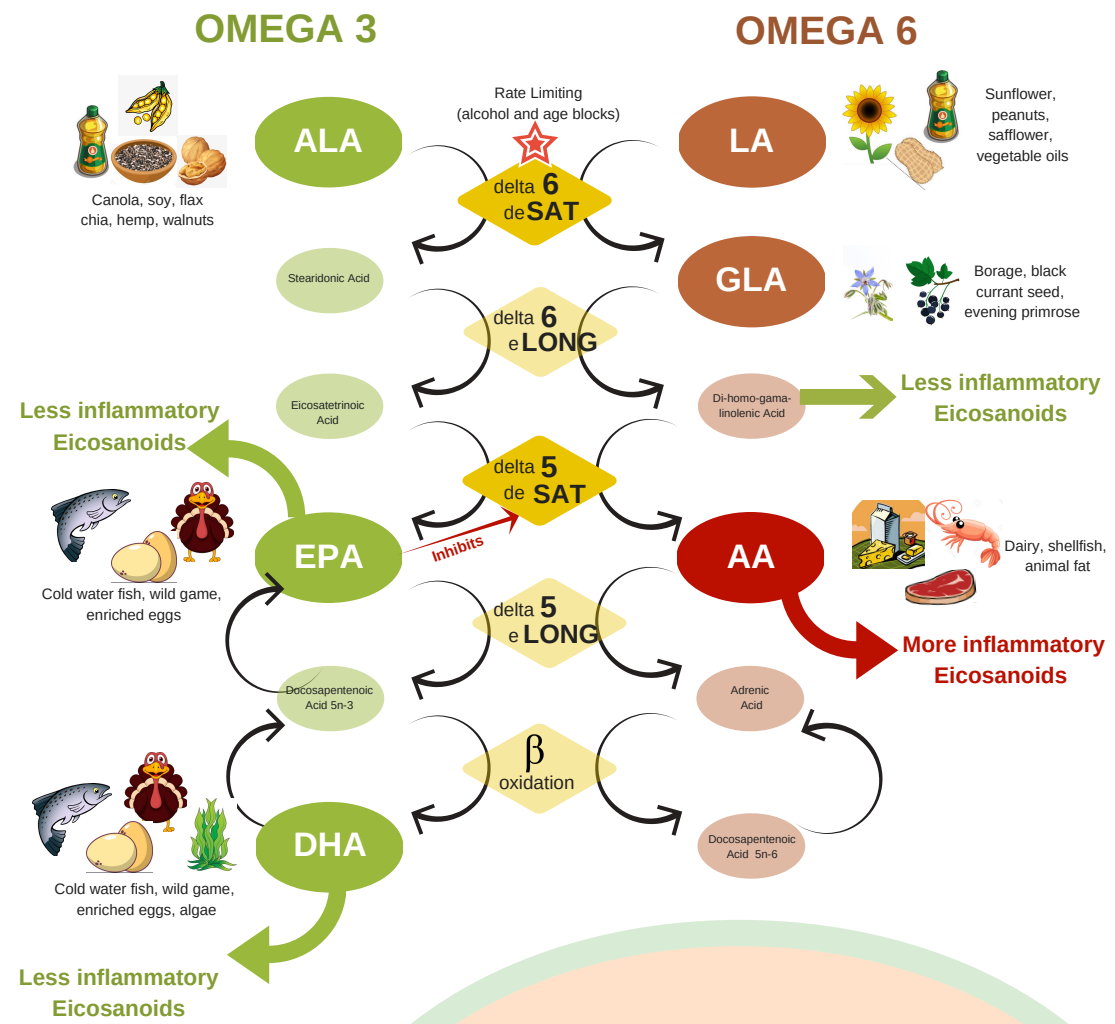
3 Simple Food Rules

- Eat real food
- Mainly plants
- Not to much



Optimize Nutrition

Understanding Fatty Acids



OMEGA 6 : OMEGA 3 RATIO

Current population average is 16:1 (ideal is as close to 1:1)

- 3:1** suppressed inflammation in **Rheumatoid Arthritis**
- 2.5:1** reduced rectal cell proliferation in those with **rectal cancer**
- 5:1** had beneficial effects on **asthma** (10:1 did not)
- 4:1** associated with 70% decrease in mortality with **CVD**



- Therapeutic Foods for Energy
- Protective Anti-Oxidants
- Anti-Inflammatory Nutrients
- High Quality Dietary Fats
- Low Glycemic Impact
- Reduced Carbohydrates with Ketogenic Option
- Intermittent Fasting & Caloric Restriction
- Low Grain & Gluten-Free



The Mito Eating Plan



- Sleep
- ? Caffeine ???
- Stress Reduction
- Breathing Techniques
- Guided Meditation & Visualization
- Prayer
- Herbs & Nutrients
 - Lavender
 - L-theanine
 - Passionflower
 - Magnesium
- Brain HQ
- Neural Agility
- Counseling



Calm & Train the Brainwaves



The 5R Functional Medicine Approach

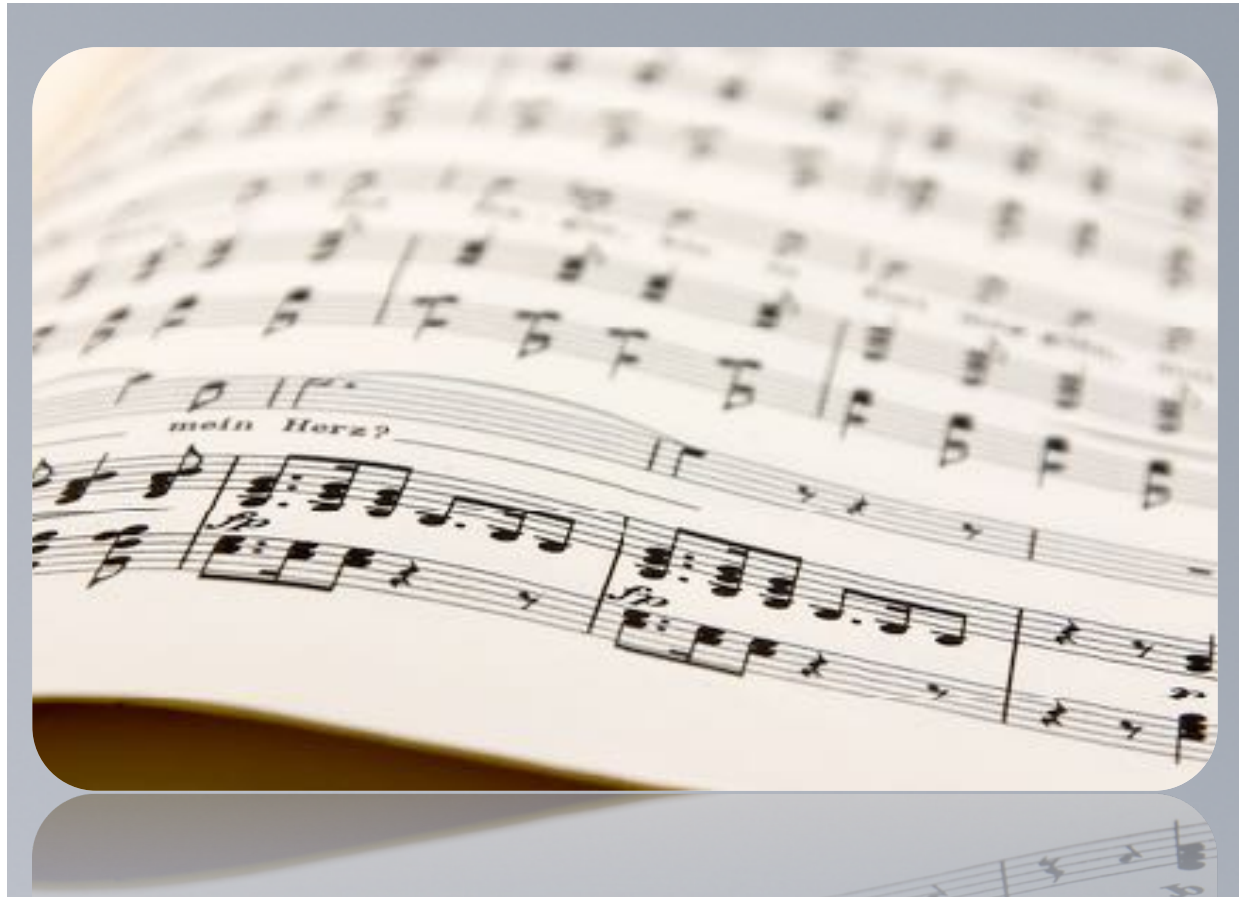
1. Remove
2. Replace
3. Re-Inoculate
4. Repair
5. Re-balance



Heal Your Gut



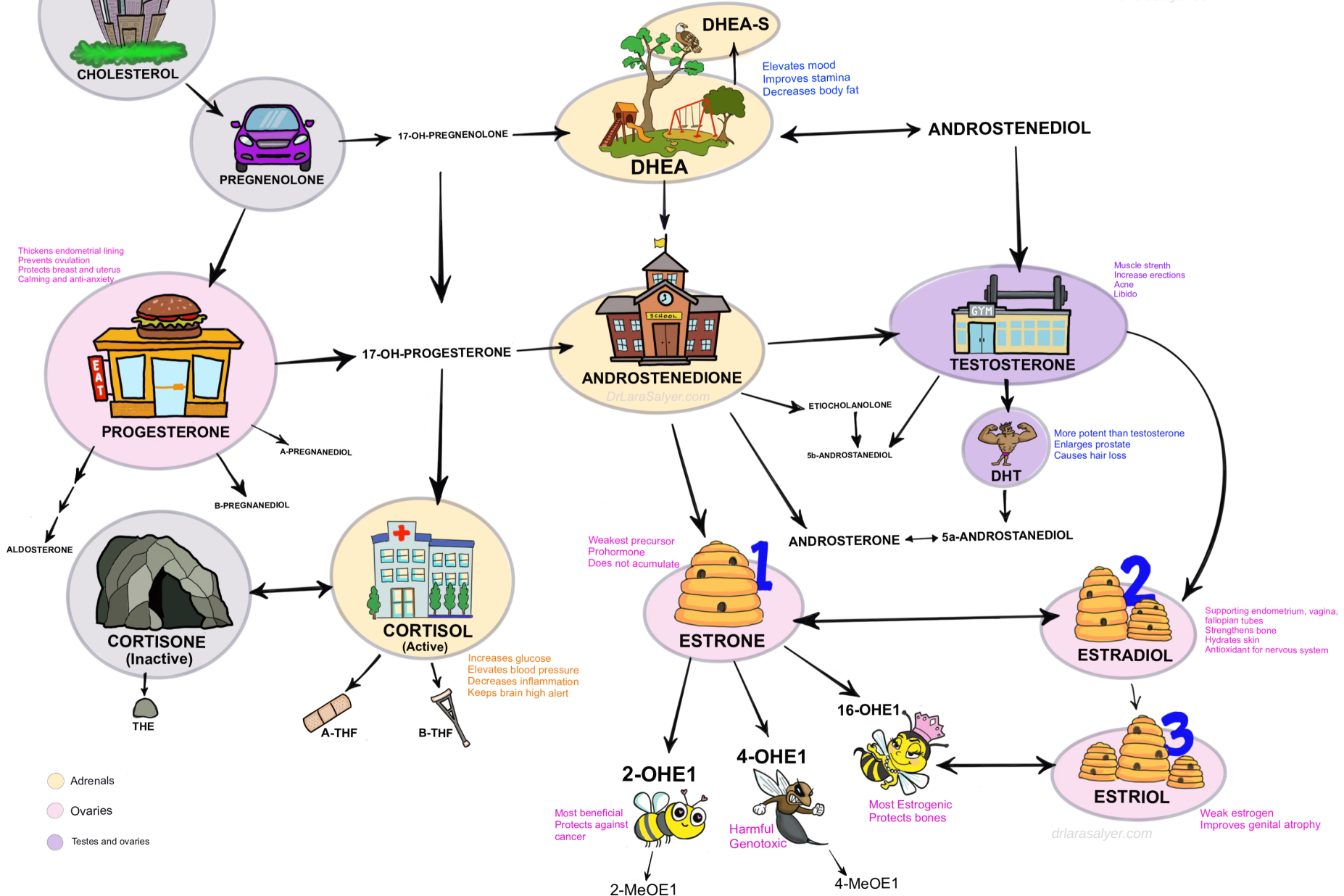
- Adrenal
- Thyroid
- Sex Hormones
- Insulin-Blood Sugar Balance



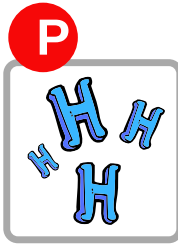
Restore Hormonal Balance

Greetings from Hormone World!

drlarasalyer.com



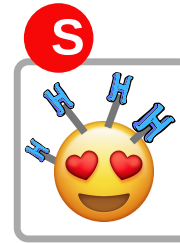
The PTSD of HORMONES



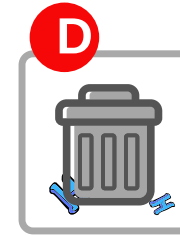
Hormones are **produced**



Hormones **travel** on a carrier



Cells are **sensitive** to hormone



Hormones are **destroyed**

PRODUCTION

- Xenoestrogens (toxins)
- Genetic (SNP)
- Prescription medications
- Sleep (circadian rhythm)
- Food type
- Inflammation status
- Illness
- Stress (cortisol)
- Microbiome (gut bacteria)
- Obesity (increased aromatase)
- Insulin resistance
- Age
- Thyroid abnormalities

TRANSPORT

- SHBG (Sex Hormone Binding Globulin)
- THBG (Thyroid Hormone Binding Globulin)
- Albumin (protein)
- Hormonal contraceptive pills
- Other endocrine problems
- Diet (vegetarian increases SHBG)
- Hydration status

SENSITIVITY

- Hyperglycemia (insulin resistance)
- Chronic inflammation (stress, sugar, caffeine)
- Exercise
- Xenoestrogens (toxins that act like estrogens)
- Prescription medications
- Vitamin status (CoQ10, Magnesium, Vit D, Vit A)
- Cellular membrane fluidity (fatty acids EPA/DHA)

DESTROY

- Liver function
- Kidney function
- Bowel motility
- Methylation status
- Genetics (SNP)
- Micronutrient deficiency
- Diet (soluble fiber)
- Alcohol use
- Age
- Gut bacterial or yeast overgrowth

Each of these steps can influence the effect of hormones in your body. Working with a functional medicine provider can help uncover blind spots that aren't typically evaluated with conventional testing.



https://commons.wikimedia.org/wiki/File:Mitochondria,_mammalian_lung_-_TEM.jpg
Louisa Howard / Public domain

100 nm

TEM

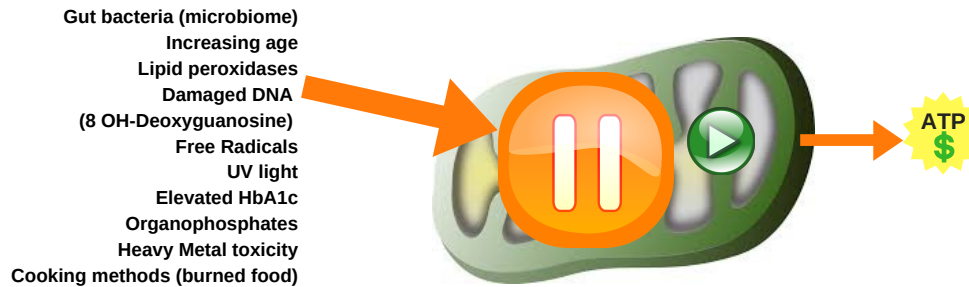
1/7/0 RHM

Jump Start Your Energy Systems

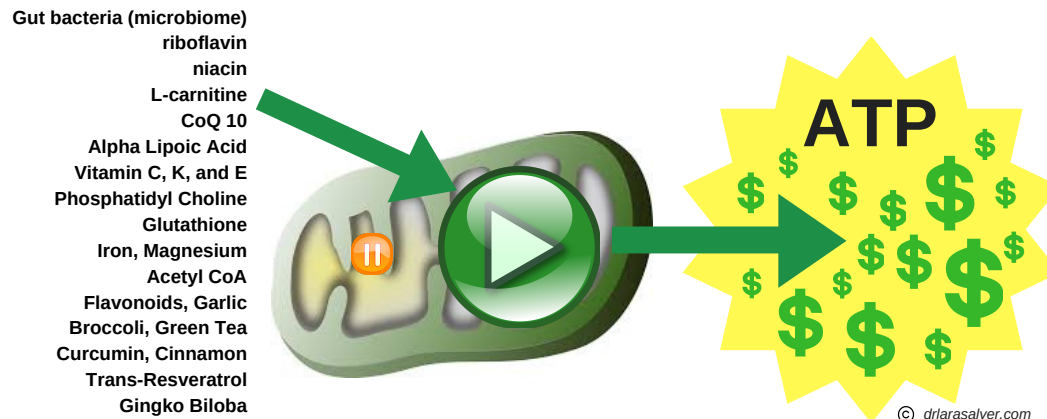
Meet Your Mitochondria



INFLAMMATION AND OXIDATIVE STRESS: TURNS ON TNF alpha & NF-kB



ANTI-OXIDANTS, ANTI-INFLAMMATORY: TURNS ON NRF-2





- Symptoms?
- Lab Testing
- TLC
- Address the Matrix
- Natural Medicines



Put Out the Fire of Inflammation

Natural Anti-Inflammatory Compounds



- **Proteolytic enzymes:** help break down damaged tissue, promotes a healthy response to inflammation
- **Curcumin & Ginger:** Spices and roots both modulate the production of inflammatory compounds.
- **Rutin, Rosemary & Resveratrol:** Antioxidant compounds help protect the body at a cellular level by limiting oxidative stress, thereby decreasing inflammation



- **Stay Hydrated**
- **Avoid Constipation**
- **Avoid Tobacco, Drugs and Excessive Alcohol**
- **Love your liver**
- **Cruciferous Veggies**
- **Use Air & Water Filters**
- **Minimize Environmental Toxic Exposures**
- **Exercise**
- **Heavy Metal Testing**
- **POPs**
- **Genetics?**
- **Spiritual Detox**



Enhance Detoxification

Written on the wall in Mother Teresa's home for children in Calcutta



- People are often unreasonable, irrational, and self-centered. Forgive them anyway.
- If you are kind, people may accuse you of selfish, ulterior motives. Be kind anyway.
- If you are successful, you will win some unfaithful friends and some genuine enemies. Succeed anyway.
- If you are honest and sincere people may deceive you. Be honest and sincere anyway.
- What you spend years creating, others could destroy overnight. Create anyway.
- If you find serenity and happiness, some may be jealous. Be happy anyway.
- The good you do today, will often be forgotten. Do good anyway.
- Give the best you have, and it will never be enough. Give your best anyway.
- In the final analysis, it is between you and God. It was never between you and them anyway.

E-Mail Your Questions in Advance



HELP@CARINGFORTHEBODY.ORG

OR

VIA YOUR PATIENT PORTAL

OR

CALL THE OFFICE AT (828)490-1545

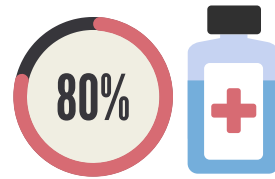
Learn how
**Functional
 Medicine**
is essential for everyone

www.functionalmedicine.com

9% teens are pre-diabetic in 2000
 23% teens are prediabetic in 2008



Pediatrics vol 129, No 6, June 2012



Percentage of Americans who
 take one medication daily

N Engl J Med 2012;367:

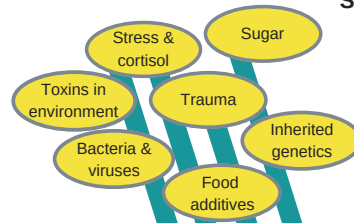
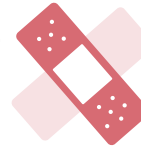


Predicted percentage of
 US population in 2030
 with Chronic Disease

*Projection of Chronic Illness
 Prevalence and Cost Inflation. RAND
 corporation October 2000*

Shortage of 90,000
 doctors by 2025

*Association of American
 Colleges Report 2015*



FUNCTIONAL MEDICINE

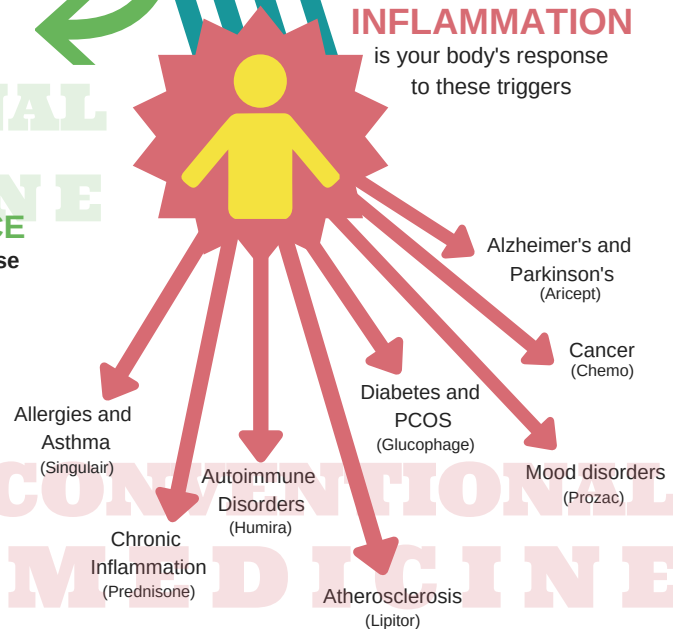
goes upstream to impact health

- REMOVE** triggers
- REPLACE** deficiencies
- REINNOCULATE** healthy microflora
- REPAIR** gut lining
- REBALANCE** sleep, diet, exercise

INFLAMMATION

is your body's response
 to these triggers

**STOP taking
 "a pill for an ill"**



FUNCTIONAL MEDICINE

CONVENTIONAL MEDICINE

Cynthia Libert, M.D.

CARING FOR
THE BODY, PLLC

1998 Hendersonville Rd

Suite 24

Asheville, NC 28803

828.490.1545

caringforthebody.org

