

INFLAMMATION AND HOLOSOMATIC HEALTH

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Integrative Medicine

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PERSONAL BACKGROUND

- 1986: “Spiritual Healing” – start
- 1989: Met Projectiology
- 1990: Entered Medicine
- 1993: Volunteer in IIP
- 1996: moved to Foz do Iguaçu - CEAEC
- Specializations: Homeopathy, Acupuncture, Community and Family Medicine, Integrative Medicine

HEALTH AND EXISTENCIAL PROGRAM

- An Existencial Program is full of challenges, of continuous overcomings
- Each stage demands our best performances: physical, energetical, emotional and cognitive
- A perfect health is many times an important factor for executing our goals
- Many people lose great oportunities for a deficient health status

OPTIMUM HEALTH OR DECLINING STATUS



UNICIN: INCREASE OF INCIDENCE OF DISEASES?

- Autism
- Alzheimer
- Cancer
- Psychiatric diseases

DISEASES OF CIVILIZATION

Fibromyalgia Heart Disease GERD
Chronic Fatigue Cancer MS
Depression Diabetes
Obesity Pain
Arthritis

The Gut

Toxins

Negative
Emotions

Inflammation

Neurotransmitters

Cellular
Energy

Digestion
Absorption
Detoxification

Hormones

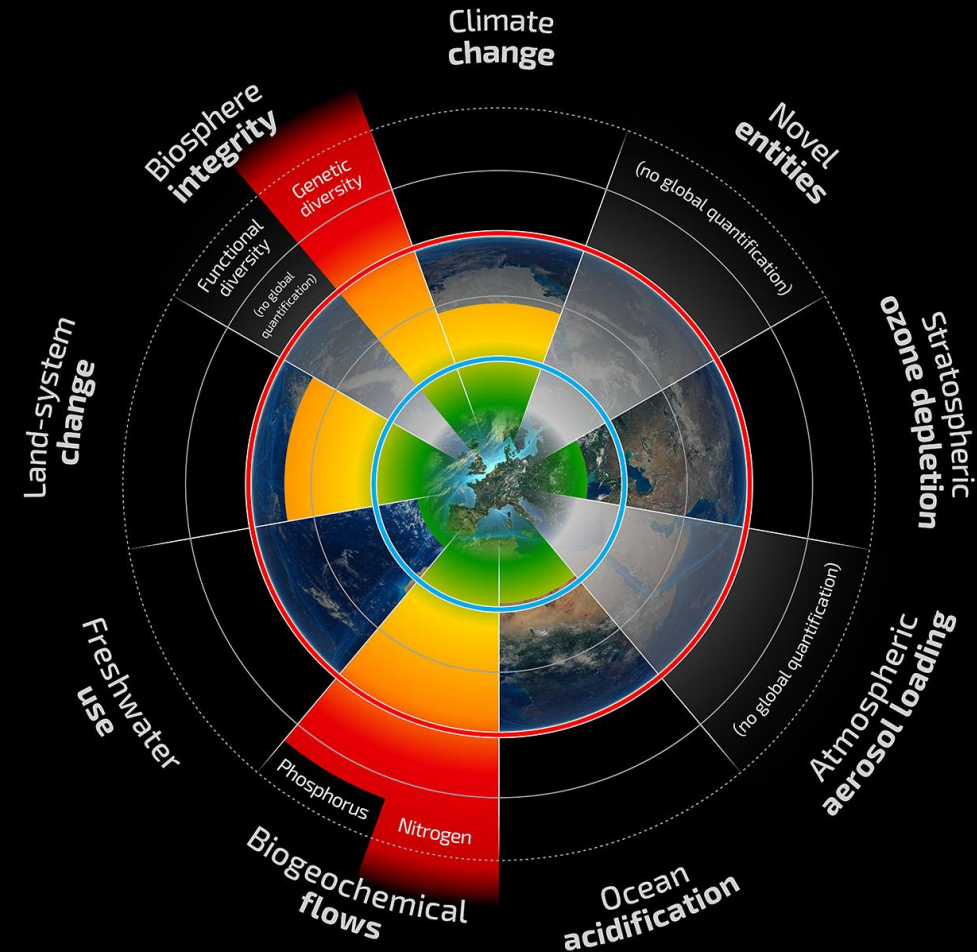
UNDERLYING MEDIATORS

BURDEN OF A POLLUTED WORLD

- In the Limit of Toxicity of the Planet
- Toxic metals
- Pesticides
- Air, food, hormones, industrialized food
- Genetic Modified Organisms
- Electromagnetic Fields

Planetary Boundaries

A safe operating space for humanity



- Beyond zone of uncertainty (high risk)
- In zone of uncertainty (increasing risk)
- Below boundary (safe)
- Boundary not yet quantified

SILENT REVOLUTION IN MEDICINE

- Despite Technological Medicine, Diseases of Civilization are augmenting
- Treatment of one disease causing other diseases
- Descending spiral of diseases
- Last decades: increase of demand for Complementary Medicine
- Reasons: Limitations of results, side effects, philosophy

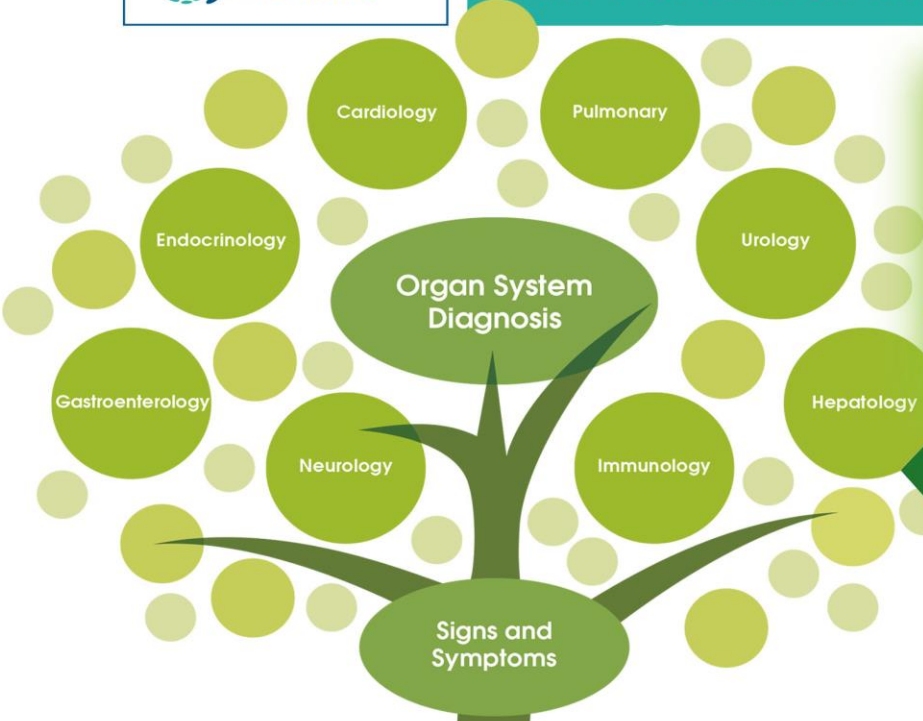
INTEGRATIVE MEDICINE

- Conventional Medicine plus Alternative and Complementary Medicine,
- allied to advanced sciences like Functional Medicine, Lifestyle Medicine and Translational Medicine,
- integrating biological, emotional, cognitive, social, epigenetic, energetical and spiritual factors,
- considering individual differences, in a holistic comprehension

FAILURE OF CONVENTIONAL MEDICINE

- Natural substances may not be patented
- Investments on synthetic medications
- Antinatural ways of treatment
- Treatments not applied to root causes of diseases, just to symptoms, consequences
- Objective: profit on diseases

THE FUNCTIONAL MEDICINE TREE



"...Conventional medicine tends to look at the constellation of symptoms first (the branches and leaves), which usually results in a disease diagnosis. Often, this diagnosis is associated with a drug or drugs that can be prescribed to treat this constellation of symptoms, and that is the end of the story..."



The Fundamental Organizing Systems and Core Clinical Imbalances

Assimilation <i>Digestion, Absorption, Microbiota/GI, Respiration</i>	Energy <i>Energy regulation, Mitochondrial function</i>	Transport <i>Cardiovascular, Lymphatic systems</i>
Defense and Repair <i>Immune system, Inflammatory processes, Infection and microbiota</i>	Biotransformation and Elimination <i>Toxicity, Detoxification</i>	Structural Integrity <i>From the subcellular membranes to the musculoskeletal system</i>
	Communication <i>Endocrine, Neurotransmitters, Immune messengers, Cognition</i>	

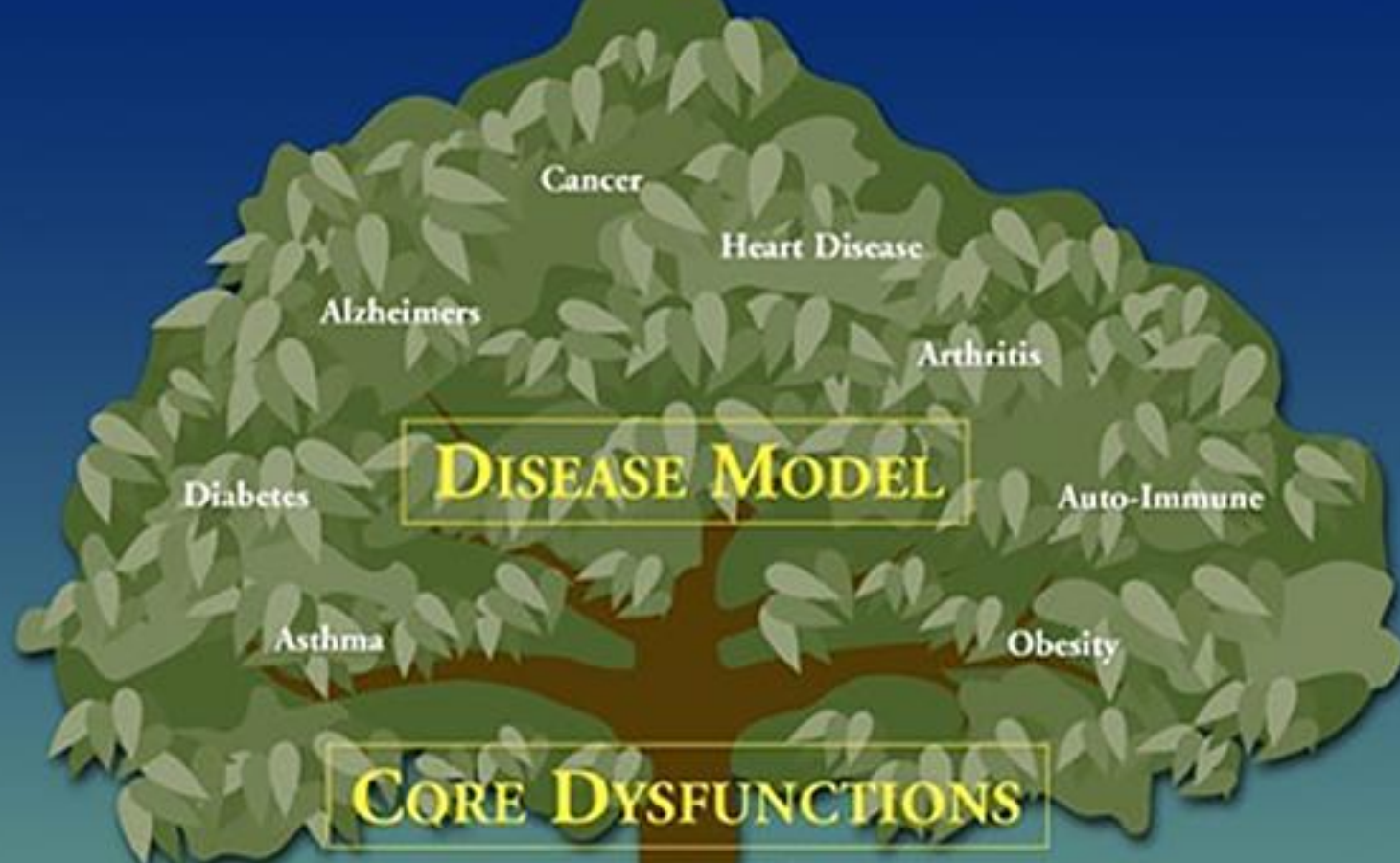
Antecedents, Triggers, and Mediators

Mental, Emotional, Spiritual Influences **Genetic Predisposition** **Experiences, Attitudes, Beliefs**



"...In order to keep a tree healthy and allow it to flourish, you need to support the most basic and essential elements first; the foundation: the roots and soil..."





INFLAMMATION

OXIDATIVE STRESS • HORMONAL • NEUROTRANSMITTER • MITOCHONDRIAL
IMMUNE • DETOXIFICATION • DIGESTIVE • MUSCULOSKELETAL

ROOT CAUSES

ENVIRONMENTAL STRESS • TOXINS • DIET • NUTRIENTS • GENETIC PREDISPOSITIONS
EXERCISE • LOW GRADE INFECTIONS • PHYSICAL TRAUMA • BELIEFS • ATTITUDES
EMOTIONAL TRAUMA • PSYCHOLOGICAL STRESS • DRUGS • SLEEP • SPIRITUAL • RELATIONSHIPS

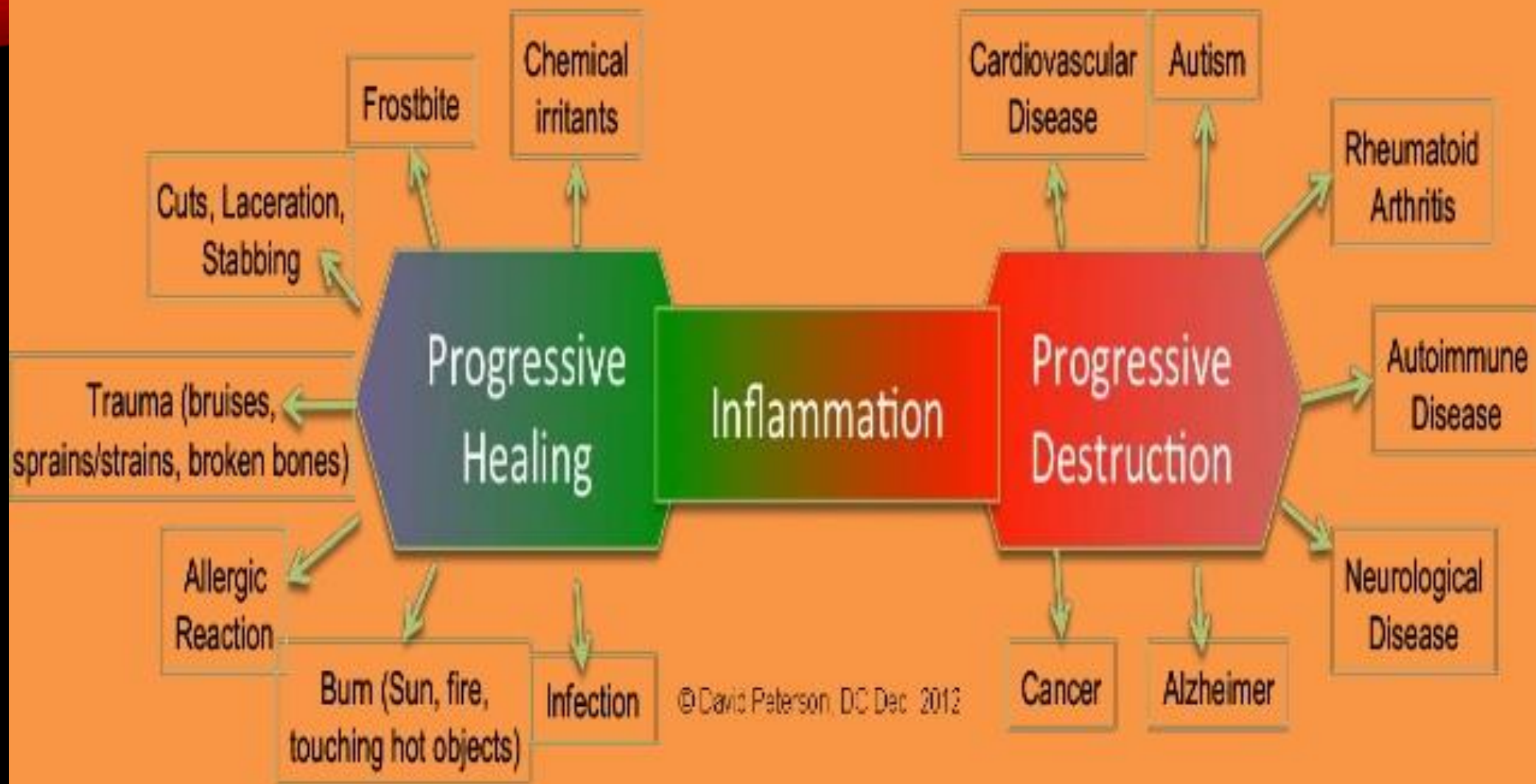


INFLAMMATION

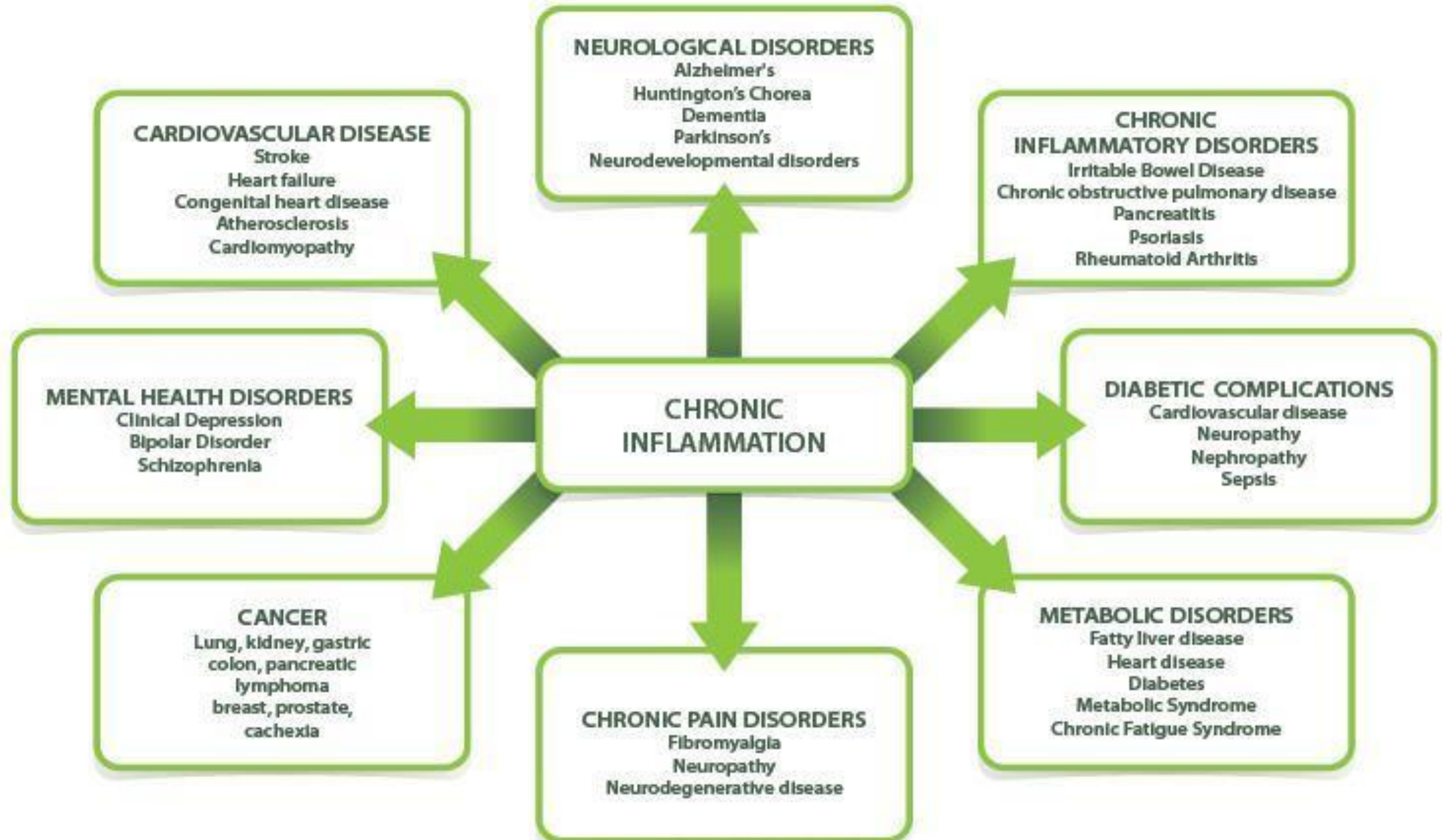
at the *Root* of Most Diseases



Acute versus Chronic

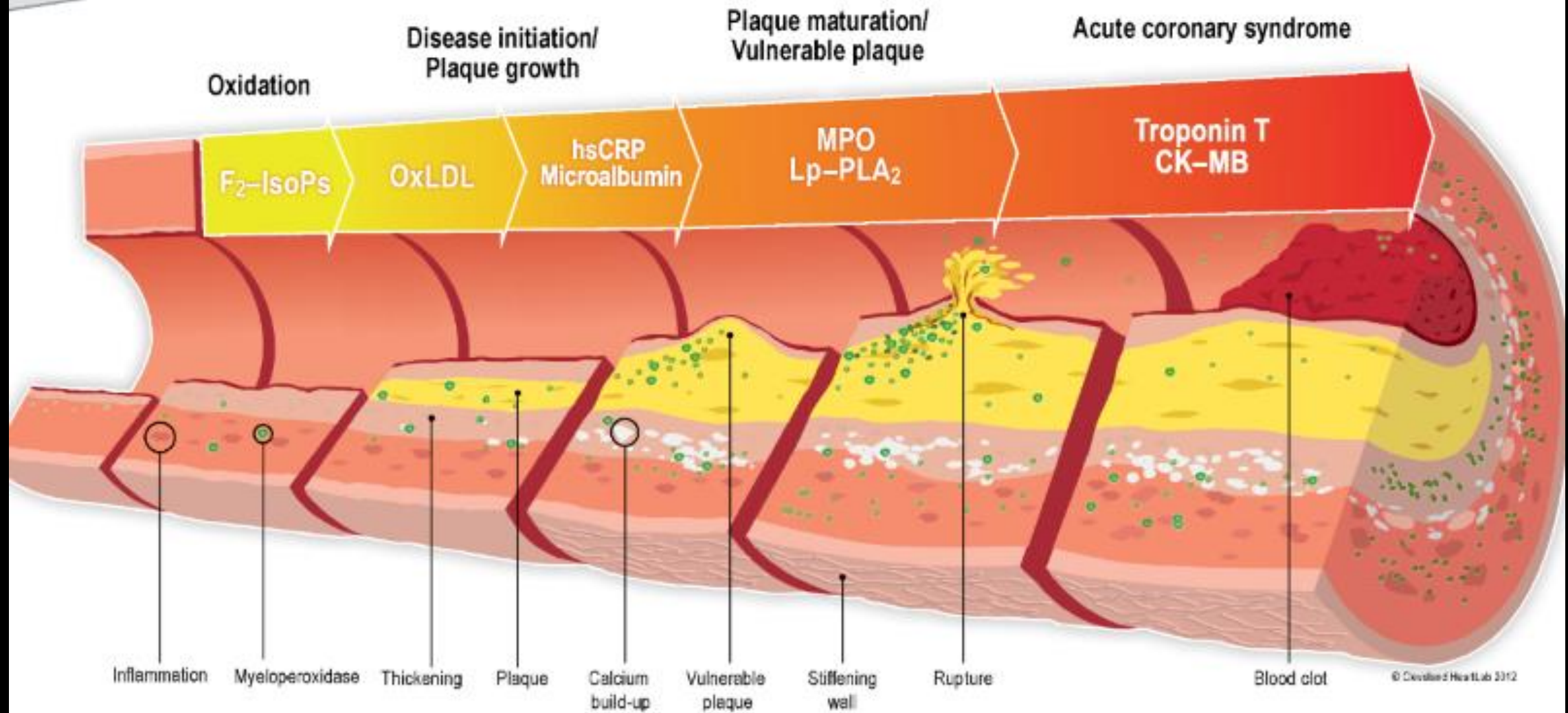


Inflammation in chronic disease



Inflammatory Biomarkers and the Progression of Atherosclerosis

The progression of atherosclerosis is marked by specific inflammatory biomarkers, and their levels can be measured to determine a patient's risk for heart disease and cardiac events.



CANCER

Medscape

Microbial pathogens
Environmental exposure
Dietary lifestyle
Therapy induced



Tumor development

Cell transformation

Primary growth

Metastasis

Inflammation and cancer



It is now well-established that the induction of inflammation by bacterial and viral infections increases cancer risk.

Crit Rev Oncol Hematol (2009);70:183-194.

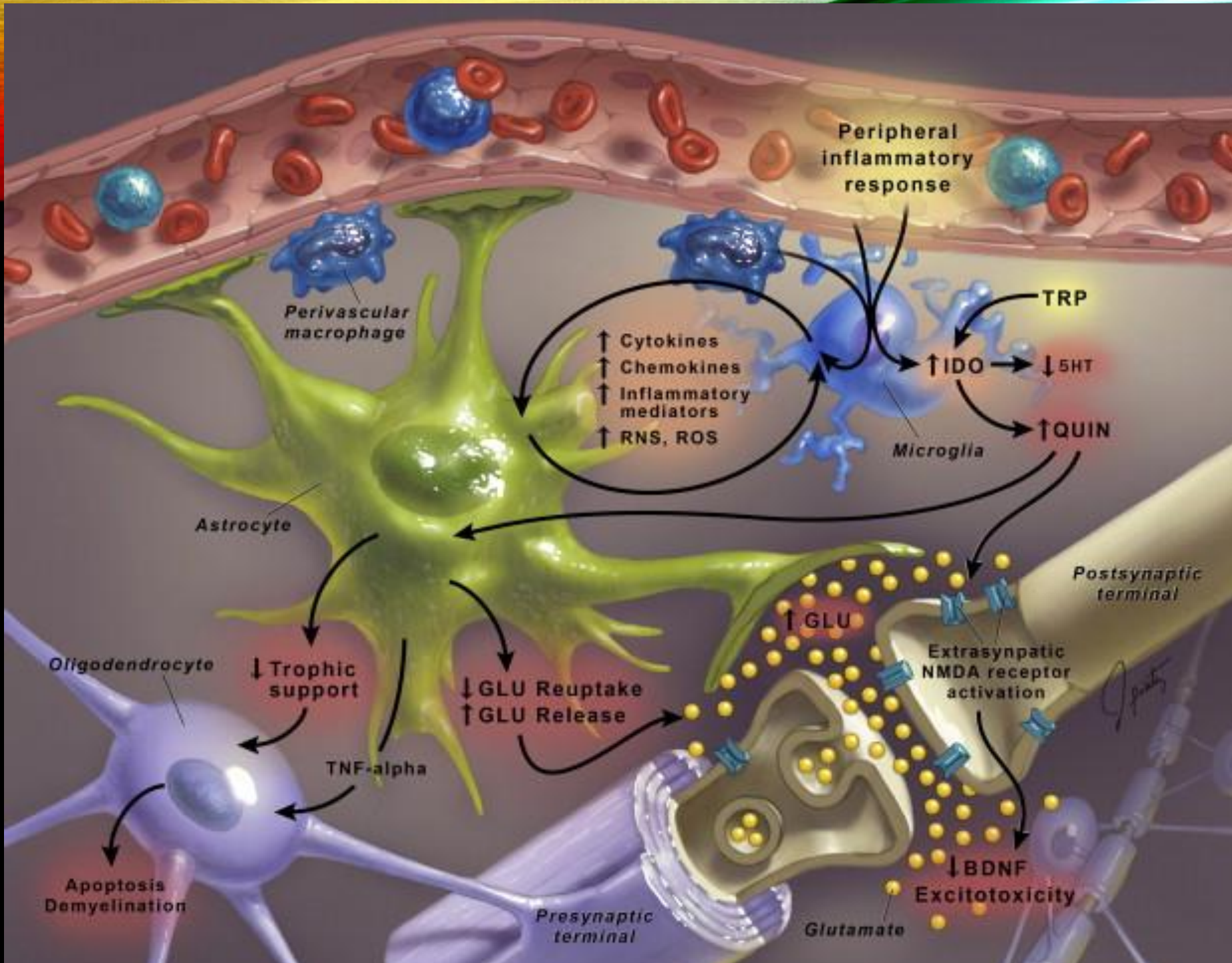
Various types of immune and inflammatory cells are frequently present within tumors. Chronic inflammation increases cancer risk.

Cell. (2010) ; 140: 883-899

Inflammation impacts every single step of tumorigenesis, from initiation through tumor promotion, all the way to metastatic progression.

Numerous studies suggest that inflammation is likely to have an important role in bladder carcinogenesis.

Urologic Oncology: Seminars and Original Investigations (2007) ;25: 260-268



IN CNS

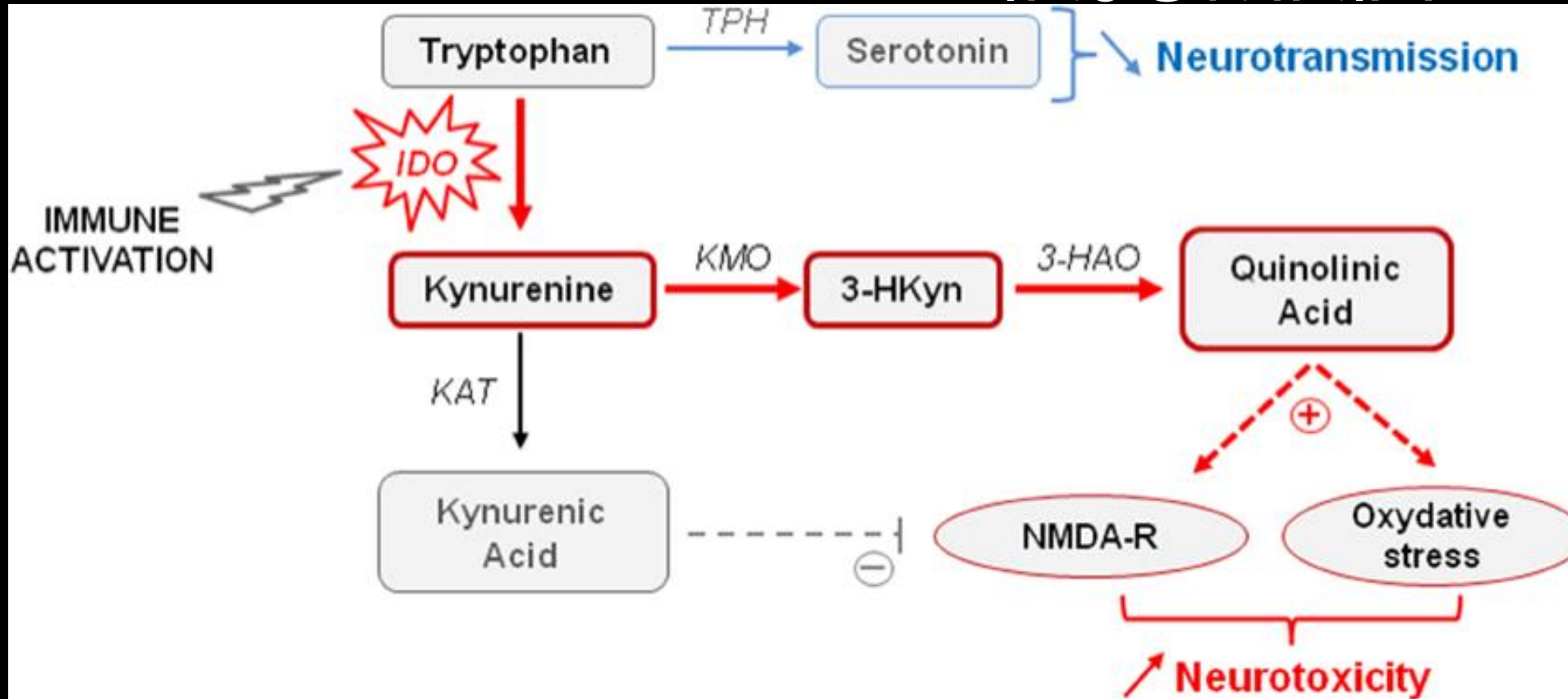
- Inflammatory mediators activate Microglia
- Inflammatory Metabolic pathways
- Activation of Glutamate receptors (excitatory and Neurotoxic)
- Excessive entrance of Calcium leading to Free Radicals and neuron death:
- Alzheimer, Parkinson, Anxiety, Depression, Psychotic disorders, Autism, ADHD

WELLNESS X IRRITABILITY AND INSOMNIA

Normal pathway:
Tryptofan is converted to Serotonin, and to Melatonin

Under **Inflammation**, or lack of Magnesium, Tryptofan is converted to Quinolinic acid, a Neurotoxic molecule

Leading to Glutamate Exccess: an excitatory neutransmitter

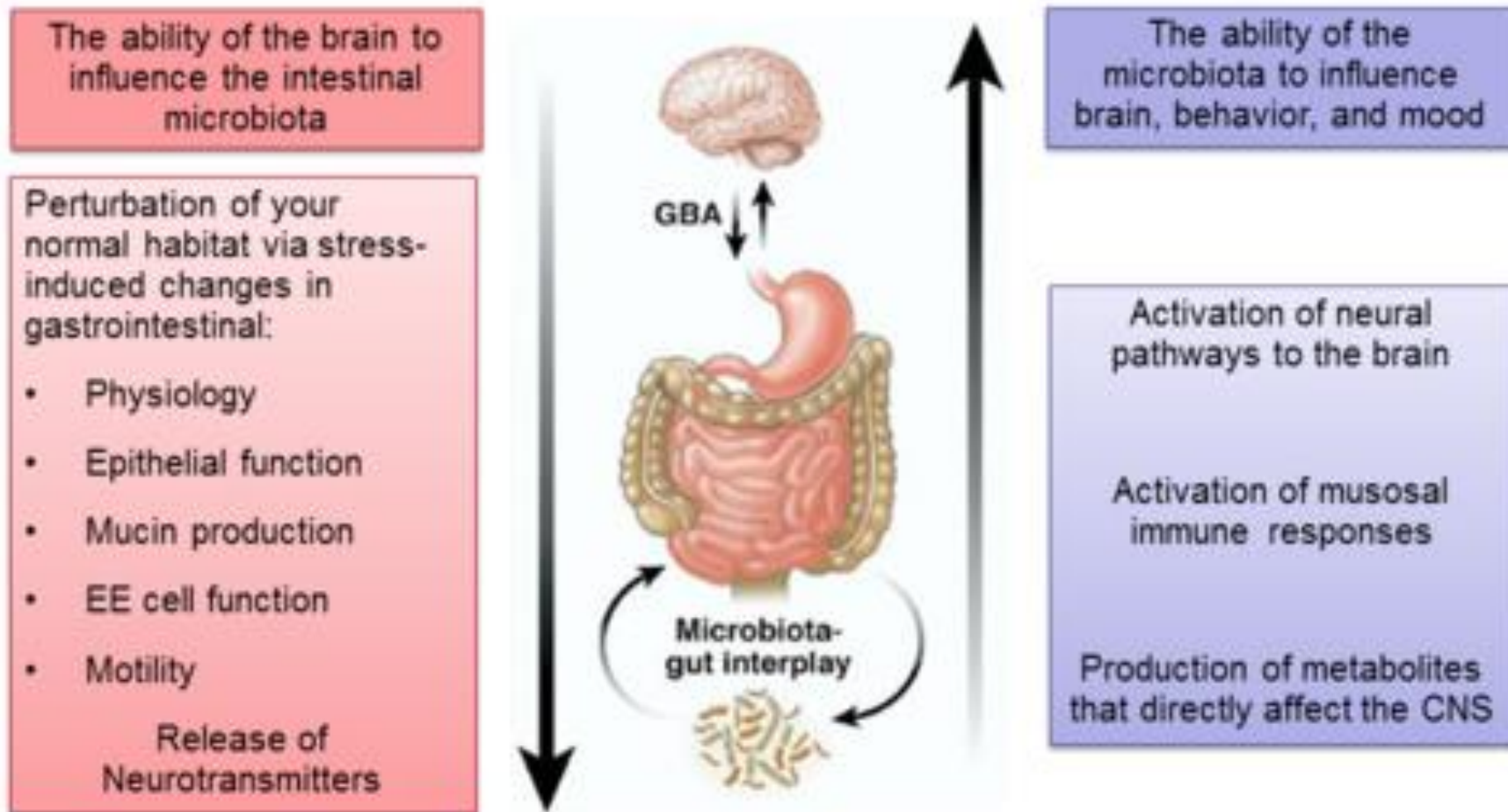


- Deficiency in Serotonin (Neurotransmitter of happiness and wellbeing,) and of Melatonin (Hormone of Parapsychism and sleep, and detoxicating and antiinflammatory molecule)
- Increase of Glutamate: Emotional Hyperreactivity



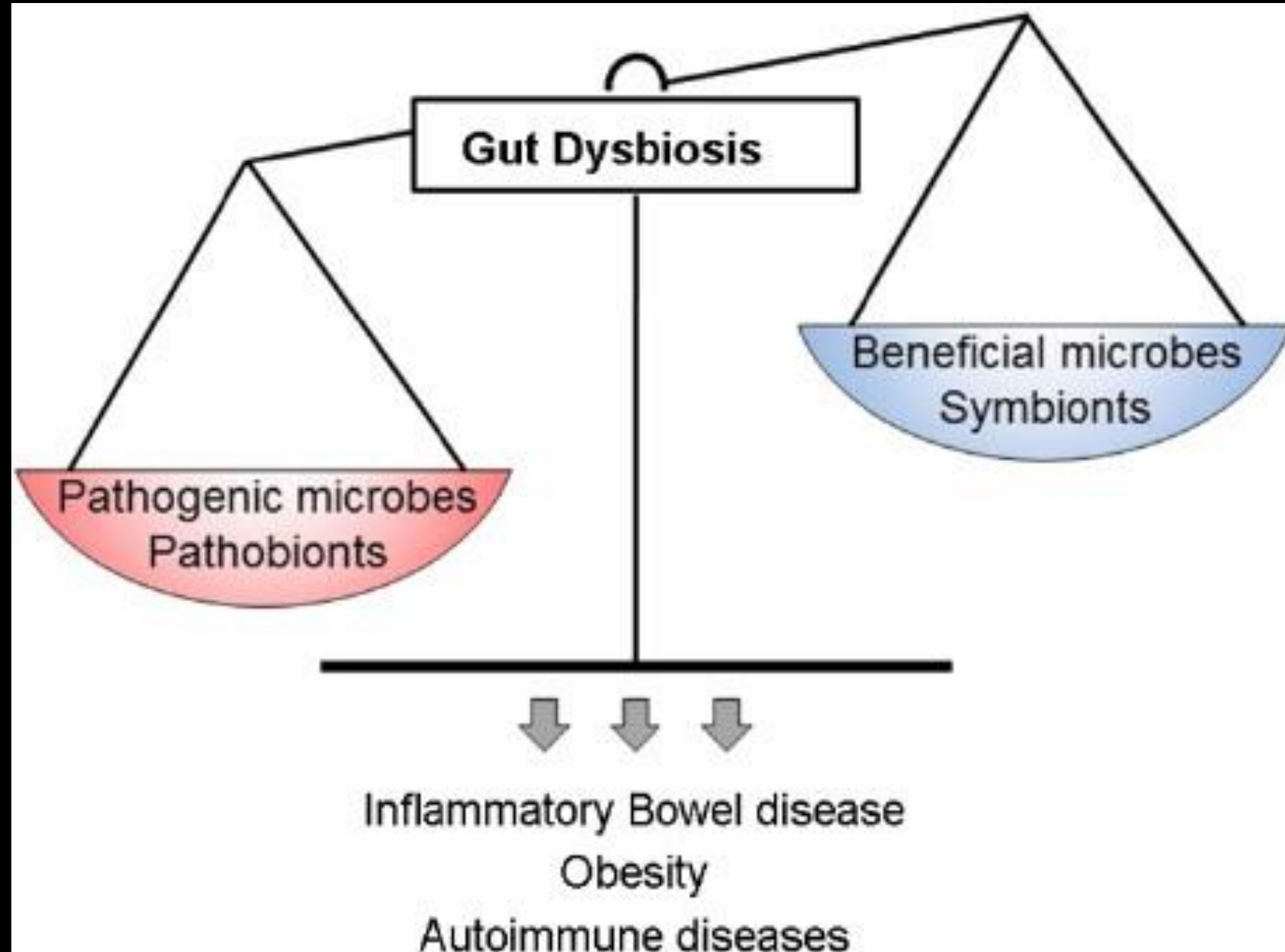
WHERE DOES
INFLAMMATION
COME FROM??

The Bidirectional Gut-Brain Axis



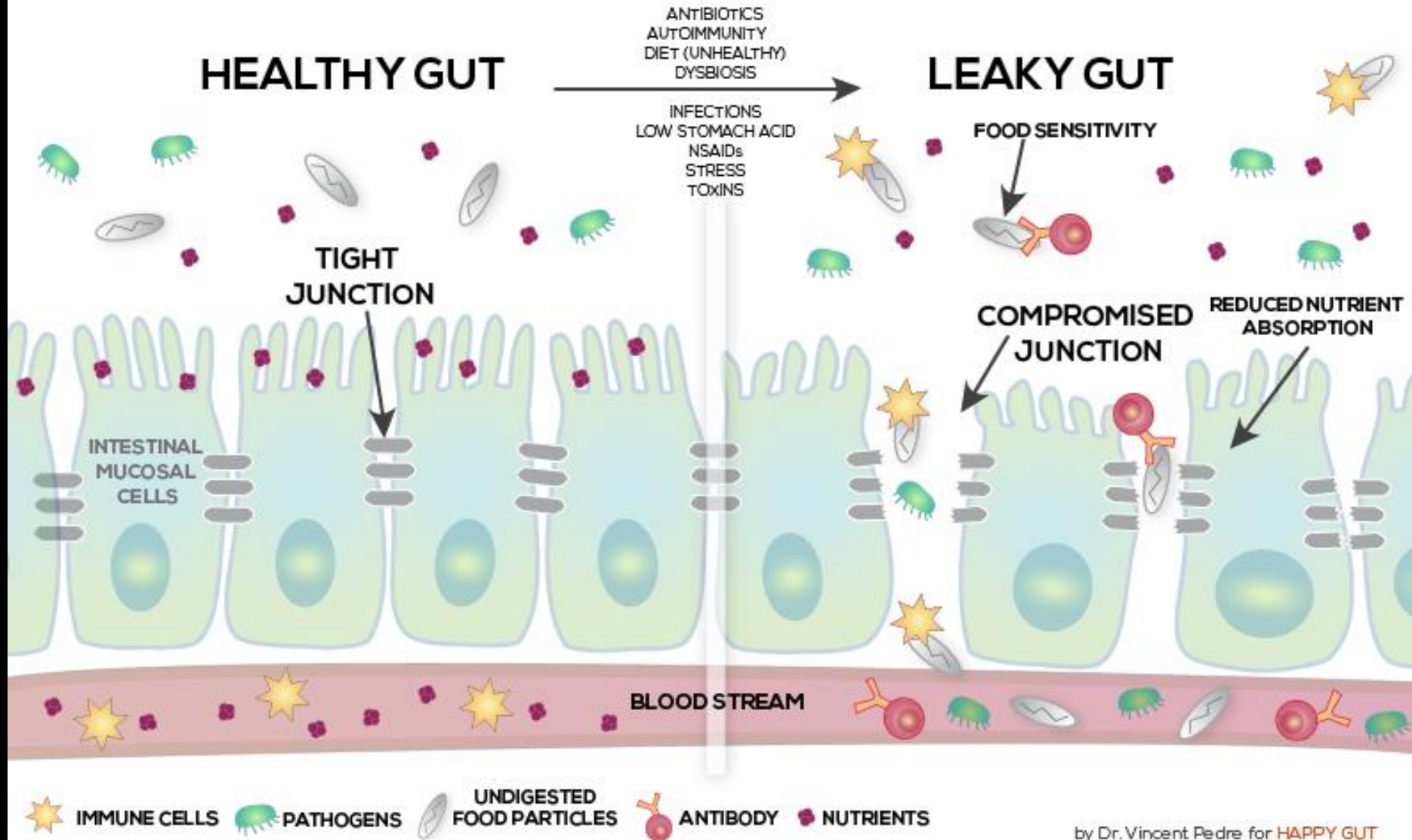
10% HUMAN?

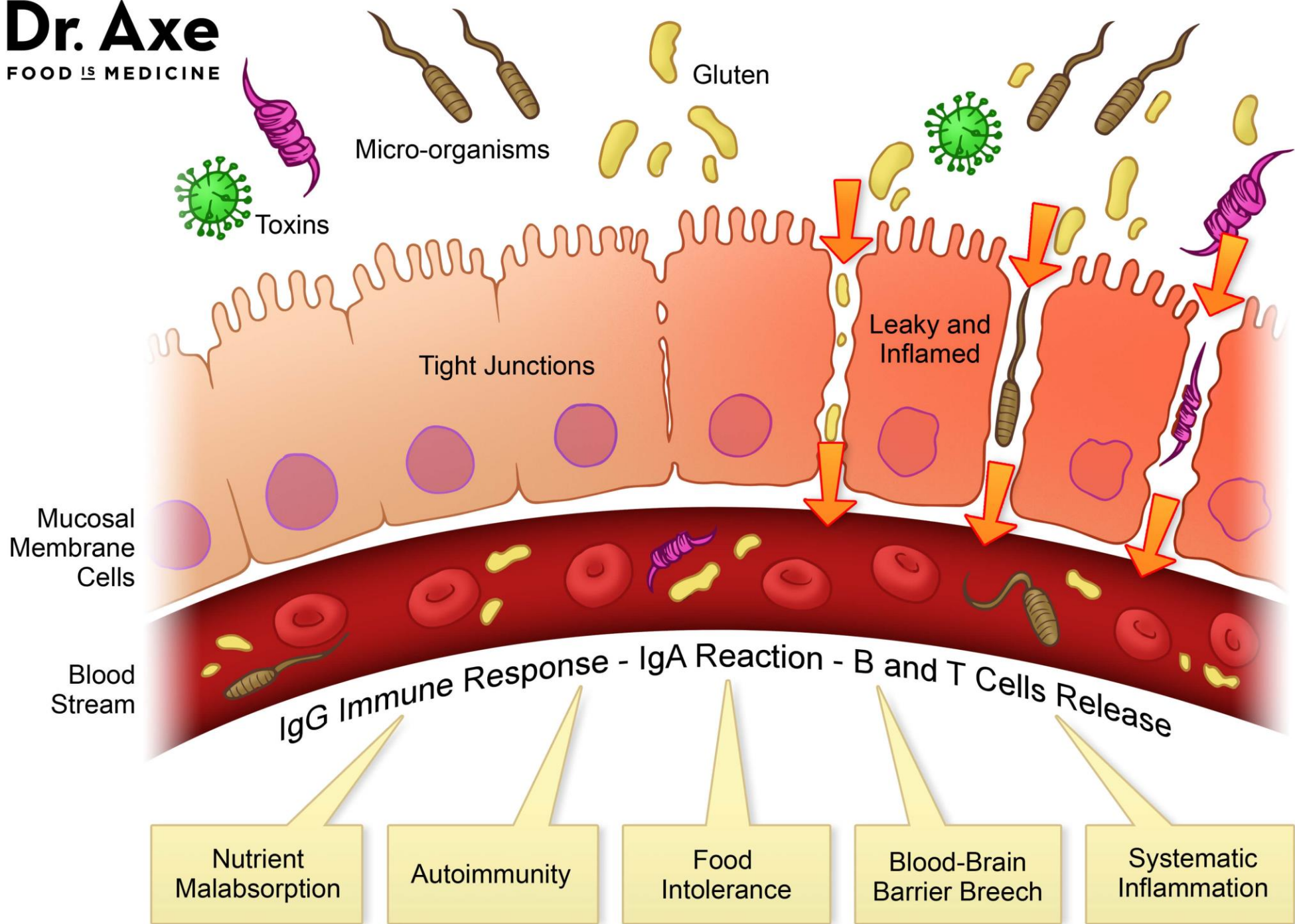
- Microbiome: 100 Trillion Bacteria inside us
- Influence our humour states, physiology, health and behaviour: desire for sweet, aggression
- MicroIntruders or MicroHelpers



HEALTHY GUT VERSUS LEAKY GUT

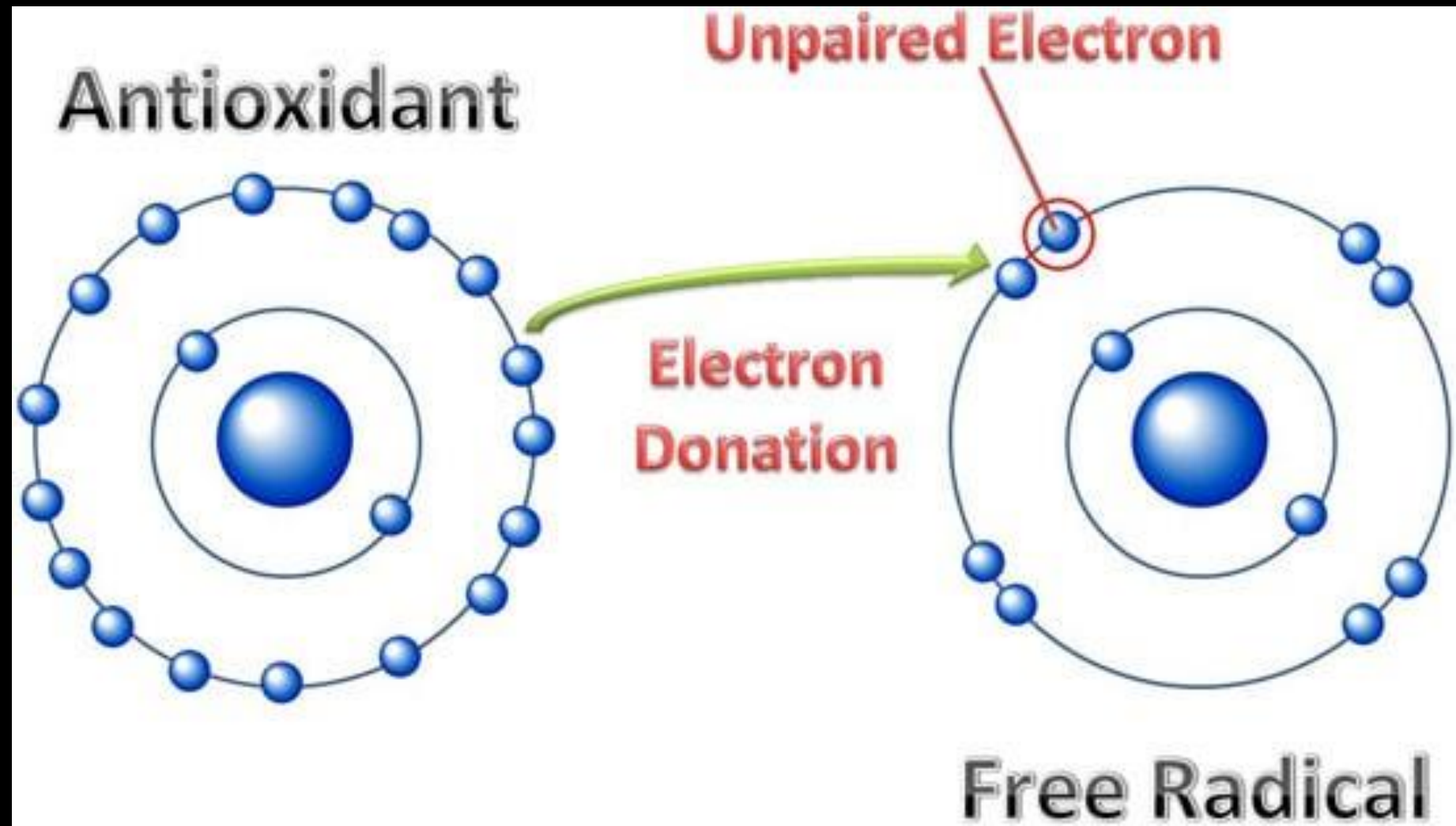
A healthy gut works like a cheese cloth, allowing only nutrients through, but keeping larger food particles and pathogenic bacteria, yeast and parasites out. In a leaky gut, the tight junctions are loosened so undigested food particles and pathogens can get through and activate the immune system, causing inflammation and food sensitivities.





INFLAMMATION = FREE RADICALS

- Free radicals: molecules with an unpaired electron, overreactive
- In excess, conduct to Oxidative Stress, or, in popular terms: RUST (corrosion)
- Are we Antioxidant or Inflamed persons?





Junk food

Vs

Healthy food



RECOMMENDED DIET

- Gluten Free Casein Free
- Soy free, Corn Free, Sugar Free
- No Industrial Food
- Prefer: Organic and Antiinflammatory foods: vegetables, legumes, fruits
- Lifestyle Medicine: Exercises, Social meaningful relations, Healthy Emotional Life