

# INTRODUCTION TO ANTI-AGING MEDICINE

---

DR. ORNKAMOL INKONG-NGAM,

ABAARM, MS IN ANTI-AGING, PREVENTIVE MEDICINE

# DISCLOSURES

---

- Currently working in Anti-Aging Department and Aesthetic Clinic
- I have nothing to disclose

# OUTLINES

---

- Why Anti-Aging Medicine?
- What is Anti-Aging Medicine?
- Other Categories of Non-conventional medicine
- Anti-Aging Educational Pathway
- Anti-Aging Basic Knowledge
- Anti-Aging Practicing Pathway

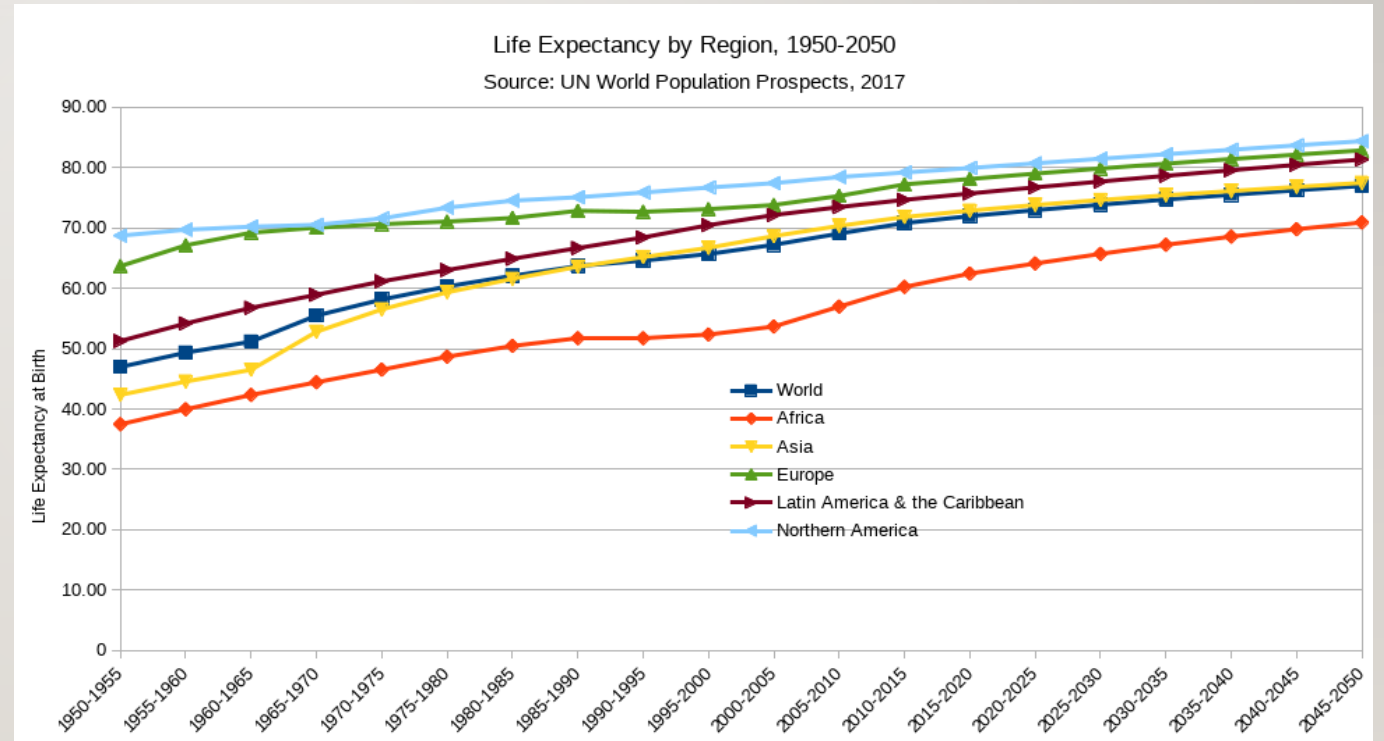
# WHY ANTI-AGING MEDICINE ?

---



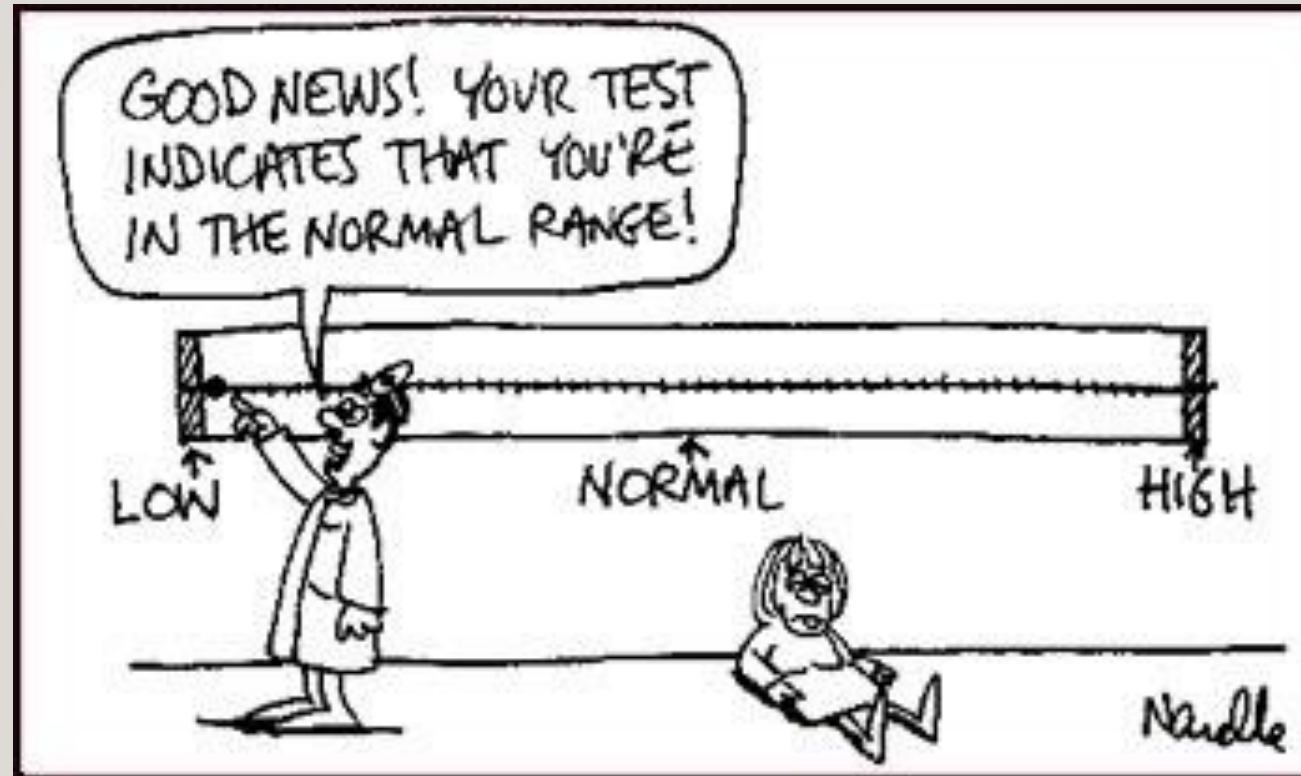
# LIFE EXPECTANCY

- Life expectancy ↑
- Quality of life ↔
- Disease-free years ↔



# NORMAL $\neq$ OPTIMAL

---



# WHAT IS ANTI-AGING MEDICINE?

---



# THE AMERICAN ACADEMY OF ANTI-AGING MEDICINE (A4M)

---

- Dedicated to the advancement of tools, technology, and transformations in healthcare that can **detect**, **treat**, and **prevent** diseases associated with aging
- The research of practices and protocols that have the potential to **optimize** the human aging process
- Since 1992 by Robert Goldman & Ronald Klatz



# ANTI-AGING MEDICINE

---

- An evolving branch of medical science and applied medicine
- Treats the **underlying causes of aging**
- Aims at alleviating any **age related ailment**.
- Extend the **healthy lifespan** and **youthful characteristics**.

# ANTI-AGING MEDICINE

---

- Any intervention that **delays** the development of **age-dependent pathology** and other **adverse age-related changes** that are **not officially listed as diseases**.
- The term “**Longevity medicine**” should be considered.

# ANTI-AGING MEDICINE

---

- Apply to **all means that would extend healthy life**
  - Including health promotion, disease prevention, diet, exercise, and cessation of tobacco use
  - As well as advanced medical care and new discoveries that result from basic research.

# OTHER CATEGORIES OF NON-CONVENTIONAL MEDICINE

---



# OTHERS

---

- **Complementary and Alternative Medicine (CAM)**
  - Used together, or instead of standard medical treatments
  - TMC, Homeopathy, Ayurveda, Acupuncture

# OTHERS

---

- **Functional Medicine**

- A systems biology–based approach that focuses on identifying and addressing the root cause of disease.
- The Institute for Functional Medicine (IFM)
- <https://www.ifm.org/>

- **Lifestyle Medicine**

- Uses evidence-based lifestyle therapeutic approach to prevent, treat and reverse lifestyle-related chronic diseases
- American College of Lifestyle Medicine (ACLM)
- <https://lifestylemedicine.org/>

# OTHERS

---

- Homeopathy
- Naturopathic Medicine
- Osteopathic Medicine
- Chiropractic Medicine

# ANTI-AGING EDUCATIONAL PATHWAY

---





# MAIN PATHWAY

---

- MSc in Anti-Aging and Regenerative Medicine
  - MFU 2 years
    - <http://anti-aging.mfu.ac.th>
  - DPU 2 years
    - <https://www.dpu.ac.th/antiaging>

# MAIN PATHWAY

---

- A4M
  - American Academy of Anti-Aging Medicine
  - Written Exam + Oral Exam + Document Submission (2 conferences + Membership + Case Study) = Board Certification
  - [www.a4m.com](http://www.a4m.com) [www.a4mthailand.org](http://www.a4mthailand.org)

# ALTERNATIVE PATHWAY

---

- WOSAAM

- World Society of Anti-Aging Medicine
- [www.wosaam.ws](http://www.wosaam.ws)

- IFM

- Completion of 6 modules + Case Report + Written Exam

- Short Course

- DPU
- MFU : Fellowship 1 year, Sport Medicine

# CONFERENCES

---

- **A4M** \*\*\*\*
  - [www.a4mthailand.org](http://www.a4mthailand.org)
  - Sep 2020
- **H.E.A.T**
  - <https://www.heatantiaging.com>
  - Aug 2020

# CONFERENCES

---

- TAARM (Thai Society of Anti-Aging and Regenerative Medicine)
  - Feb 2020
- CMAT Chelation Therapy
  - May 2020
- TIMA (Thai Integrative Medicine Association)
  - Nutraceuticals, Cell Therapy, Enzyme therapy, Integrative Oncology

# BASIC KNOWLEDGE IN ANTI-AGING

---



# KEY ANTI-AGING THEORIES

---



# FREE RADICALS

---

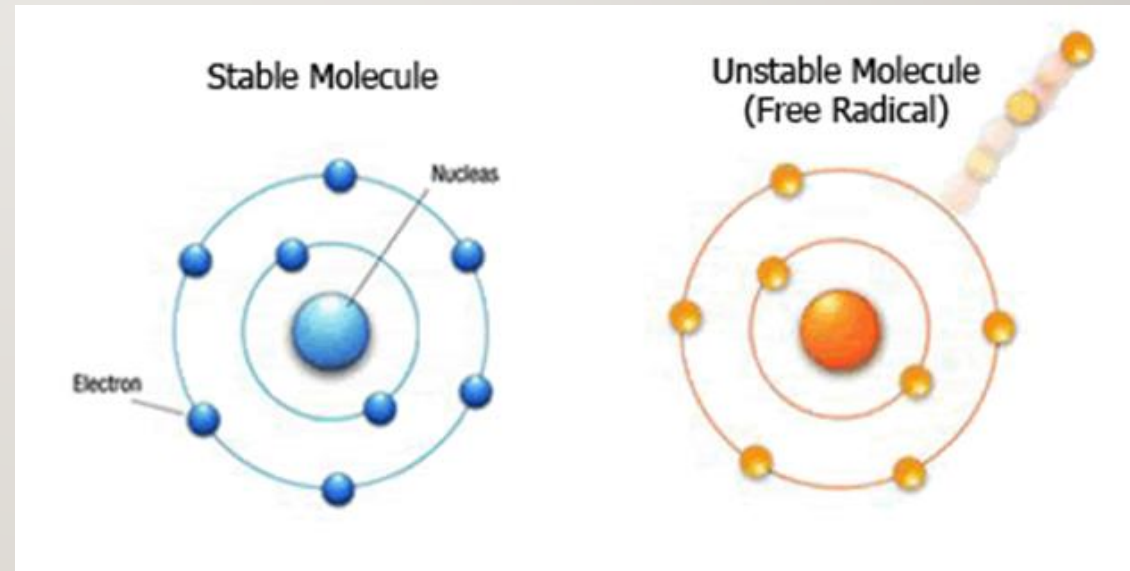




# FREE RADICALS

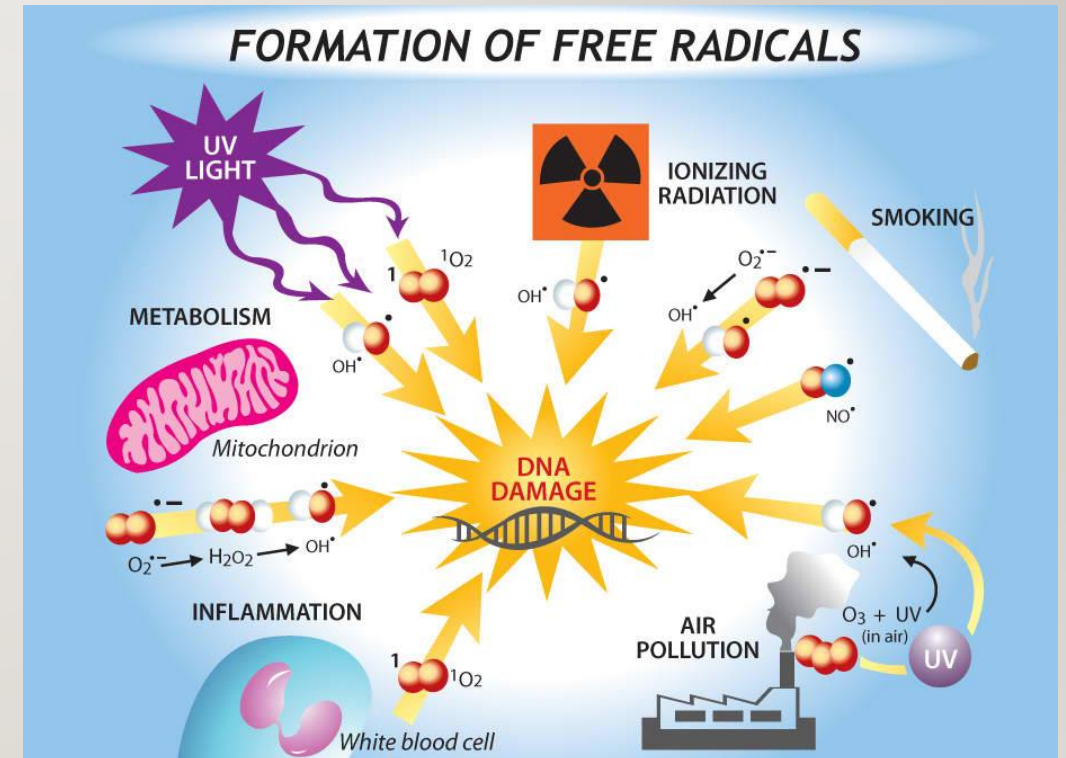
---

- A group of simple compounds with an **electron missing** from their chemical structure
- Makes them **unstable**



# FREE RADICALS

- Internal
  - Metabolism within the cells
  - White Blood Cell
- External
  - Pollution, UV, Smoking, Radiation



# FREE RADICALS

---

## Reactive Oxygen Species (ROS)

### Radicals:

$\text{O}_2^{\cdot-}$	Superoxide
$\cdot\text{OH}$	Hydroxyl
$\text{RO}_2^{\cdot}$	Peroxyl
$\text{RO}\cdot$	Alkoxy
$\text{HO}_2^{\cdot}$	Hydroperoxyl

### Non-Radicals:

$\text{H}_2\text{O}_2$	Hydrogen peroxide
$\text{HOCl}$	Hypochlorous acid
$\text{O}_3$	Ozone
$^1\text{O}_2$	Singlet oxygen
$\text{ONOO}^-$	Peroxynitrite

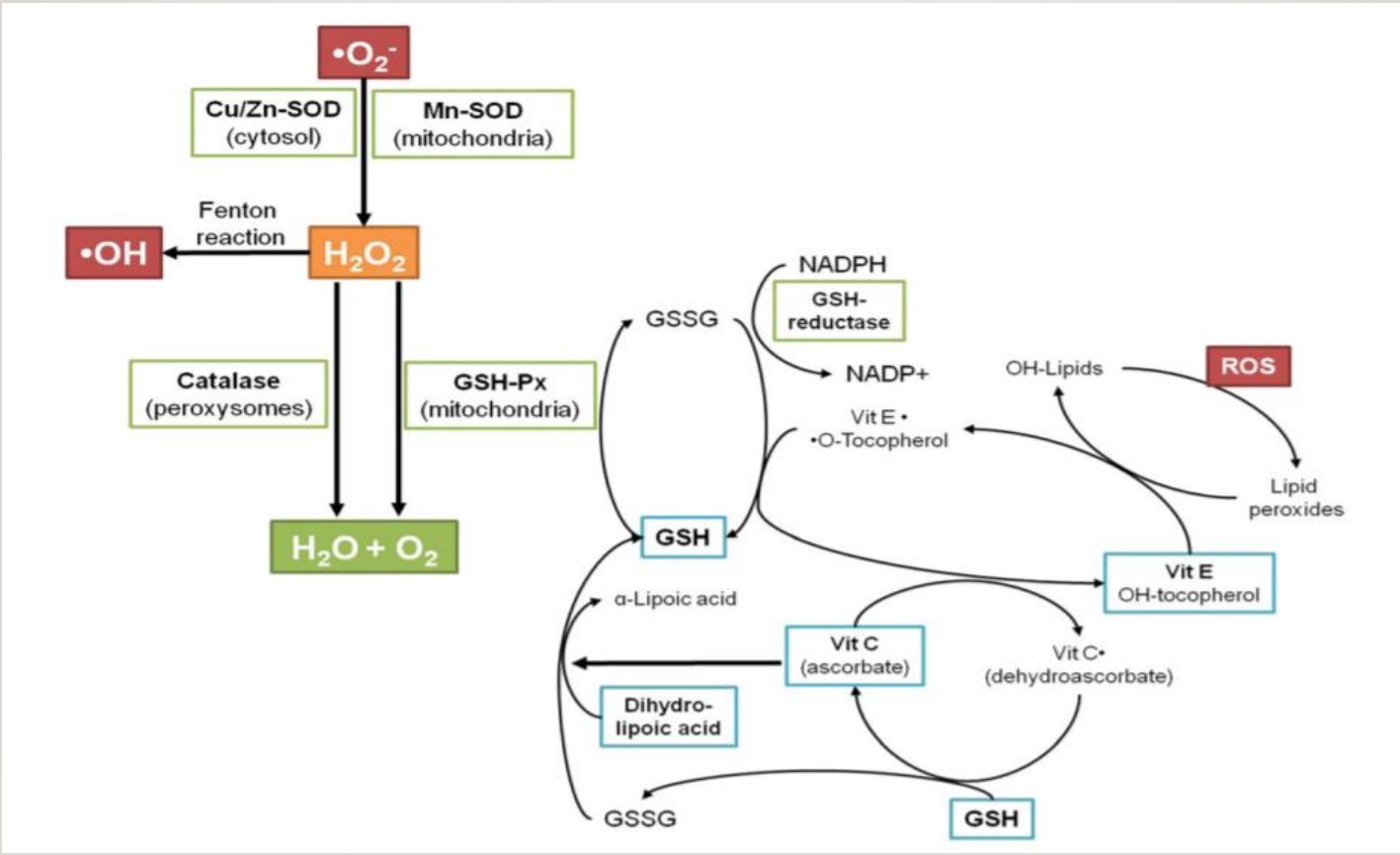
# THE DEFENSE MECHANISMS

---

1. **Inactivating** them within the cells soon after production
2. Removing them by scavenging **antioxidants**
3. Increasing the elimination of material already damaged by free radicals.



# THE DEFENSE MECHANISMS

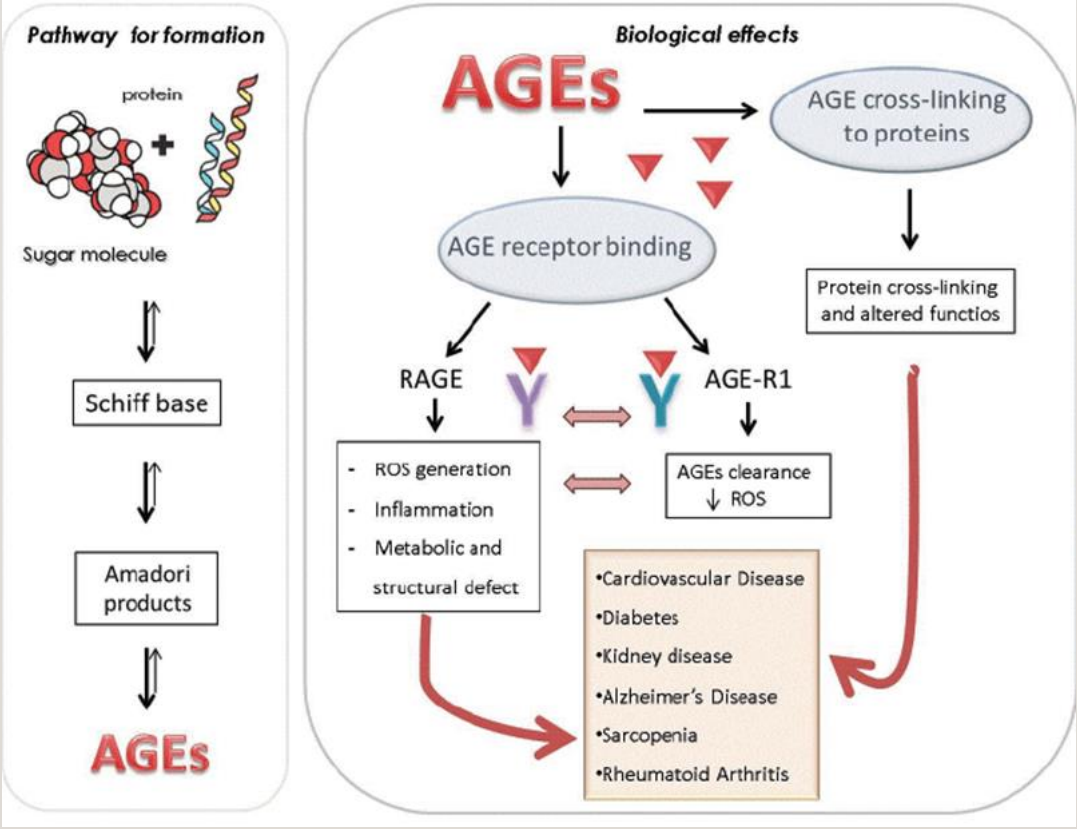


# CROSS-LINKAGE THEORY

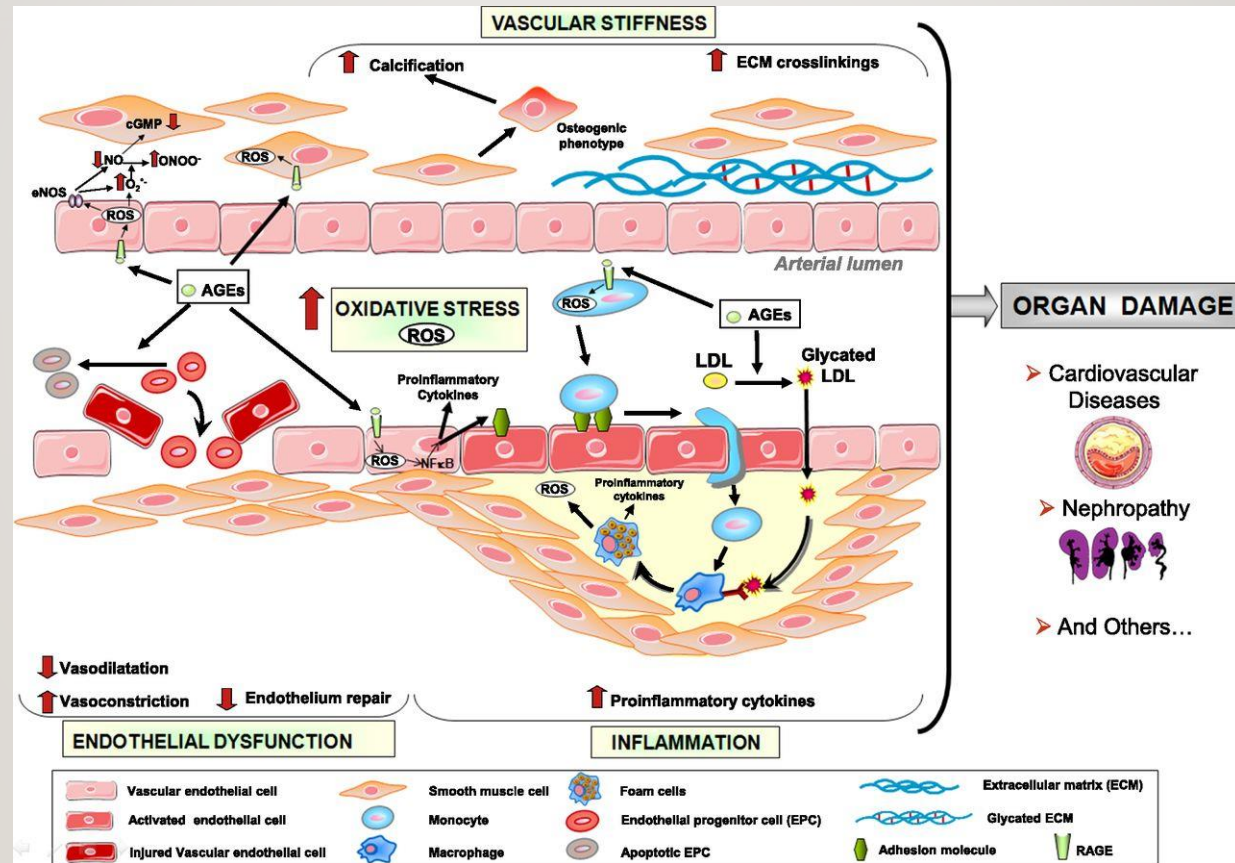
---



# ADVANCED GLYCATION END PRODUCTS

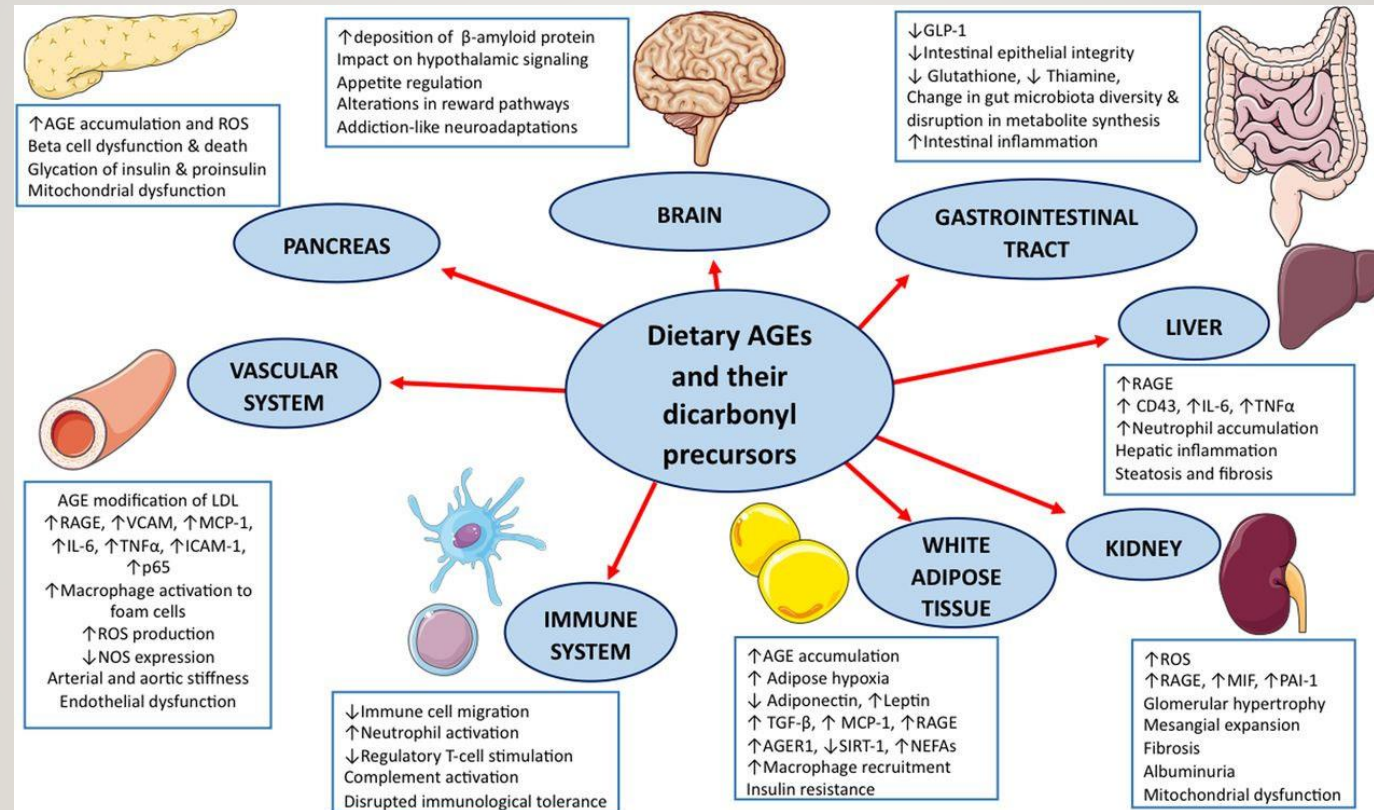


# EFFECTS OF AGEs





# EFFECTS OF AGEs



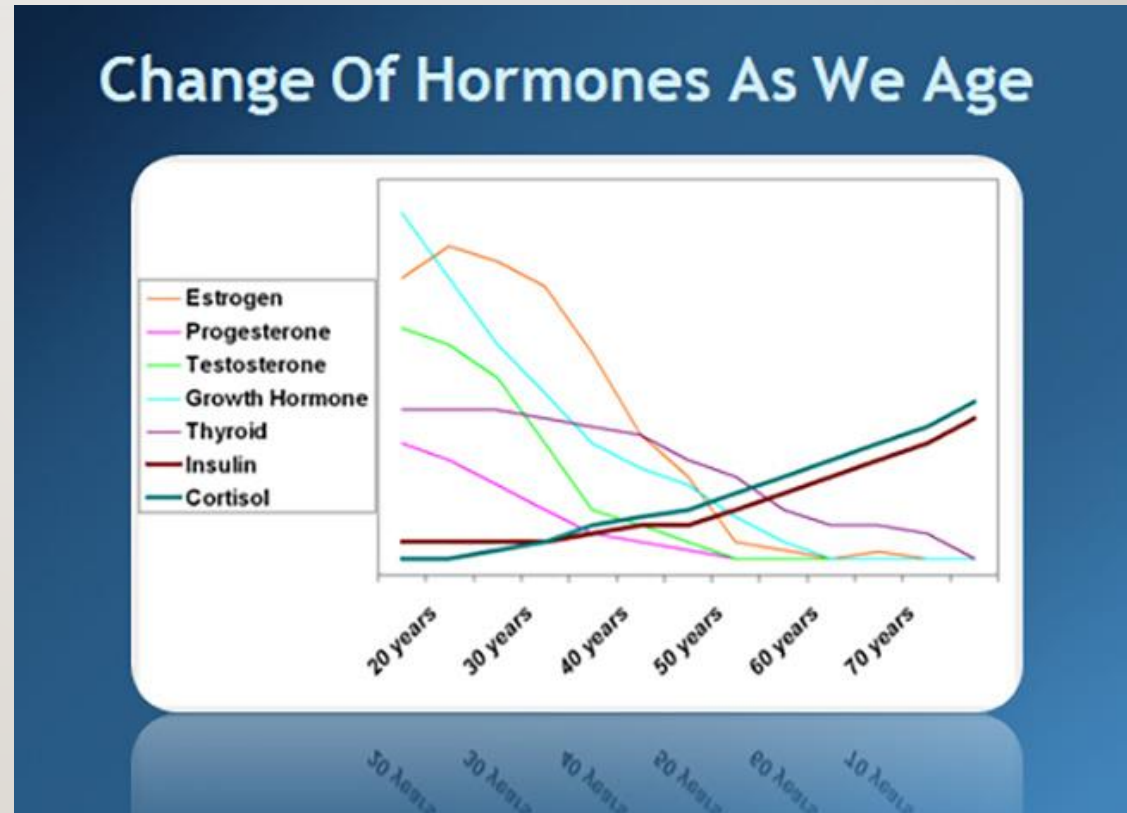
# NEUROENDOCRINE THEORY

---



# HORMONAL DYSREGULATION

- Thyroid Hormone
- Growth hormone
- Adrenal Hormone
  - Cortisol, DHEA
- Sex Hormones
- Melatonin



# HORMONES

---

- Bioidentical hormones (BHRT)
  - Same as the hormones we have in our body
  - Bring them to the level of youth



# MODIFIABLE LIFESTYLE FACTORS

---

Lifestyle and Environmental Factors



# SENSR

---

- **Sleep**
- **Exercise**
- **Nutrition**
- **Stress**
- **Relationships**

# ANTI-AGING PRACTICING PATHWAY

---



# WHAT DO WE ACTUALLY DO ? .... **EVERYTHING**

---

- Advanced Blood Check
- Disease prevention
- Nutrition, Vitamins, Micronutrients
- Antioxidants
- Hormones
- Exercise
- Sleep
- Stress management
- Energy medicine
- Stem cells, Peptide therapy, IV therapy
- Heavy metal, Chelation
- Detoxification
- Colon hydrotherapy
- Precision medicine



# HOSPITAL SETTING

---

- Comprehensive Check Up
- Weight Loss Program
- Disease prevention
- Wellness and Health concern

# COMMON CONCERNS IN HOSPITAL SETTING

---

- Fatigue
- Insomnia
- Difficulty to lose weight
- PMS, Menopause, Andropause
- Chronic Allergy, Skin Problem
- Early Metabolic Problem ex. Pre-DM, DLP, Elevated BP
- Just Want to Know .....

# TREATMENT IN HOSPITAL SETTING

---

- Lifestyle intervention
- Nutritional supplement
- Conventional medicine prescription if needed
- IV therapy

# WELLNESS CLINIC SETTING

---

- Vitamin & Micronutrients and Hormone Program
- Weight Loss Program
- Health concern
- Nutritional supplements and IV Therapy
- PRP and Cell Therapy
- Integrative : Energy Med, Colon Hydrotherapy, Integrative Cancer Treatment

# COMBINED AESTHETIC AND ANTI-AGING SETTING

---

- Skin Problems (Acne, Eczema, Psoriasis, Melasma)
- Weight Loss Program
- Vitamin and Nutrition Blood Check
- Nutritional Supplement and IV Therapy
- PRP, Cell Therapy

# WELLNESS RETREAT / SPA SETTING

---

- Comprehensive Check-up Programs
- Lifestyle Interventions
  - Nutrition
  - Exercise
  - Rehabilitation
  - Stress Management :Yoga ,Aromatherapy, Massage, Energy medicine

THANK YOU &

SEE YOU IN HORMONE SESSION 😊

---



Q&A

---

