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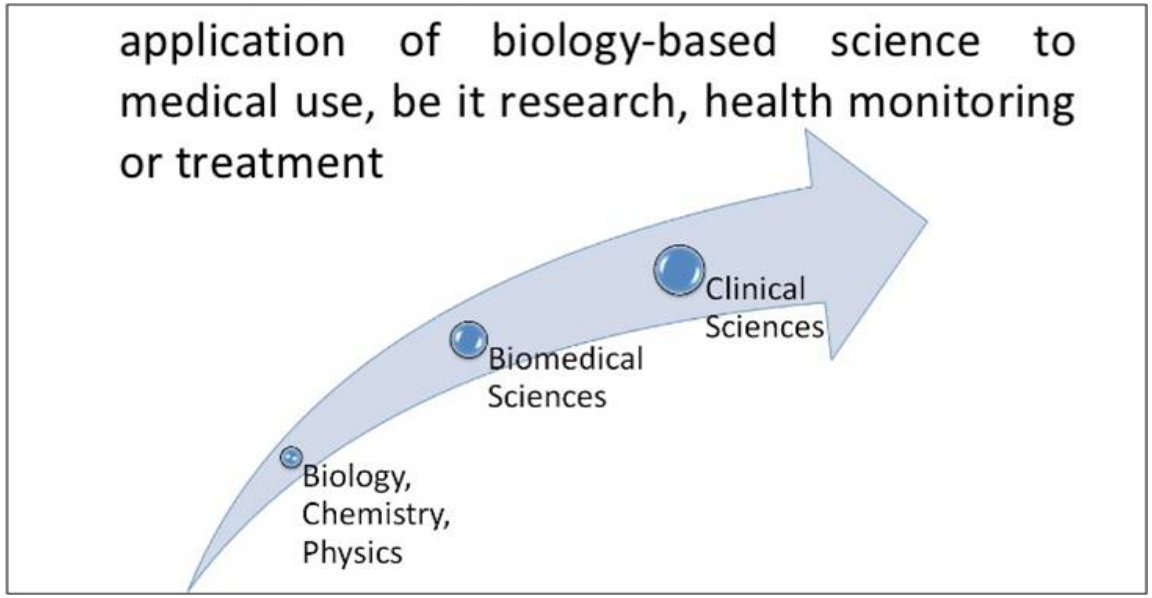
Principles of Health Restoration

Introduction

Background

Biomedical Science

Application of biological and physiological (natural) sciences to clinical medicine for diagnosing and treating disease



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Introduction

Background

Prevalence of Disease

Chronic diseases with greatest public health burden:

- Obesity
- Diabetes
- Cardiovascular diseases
- Cancer
- Osteoporosis
- Dental Diseases

According to the **World Health Organization**, chronic disease prevalence is expected to rise by 57% by the year 2020.

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WHY?

Introduction

Background

Biomedical Science Model

Diagnosis - identification of disease/illness through doctor's observation and/or specific diagnostic tests:

- Blood tests
- Scans
  - X-rays, U/S, MRI etc
- Tissue analysis
  - Pap smears, biopsies etc

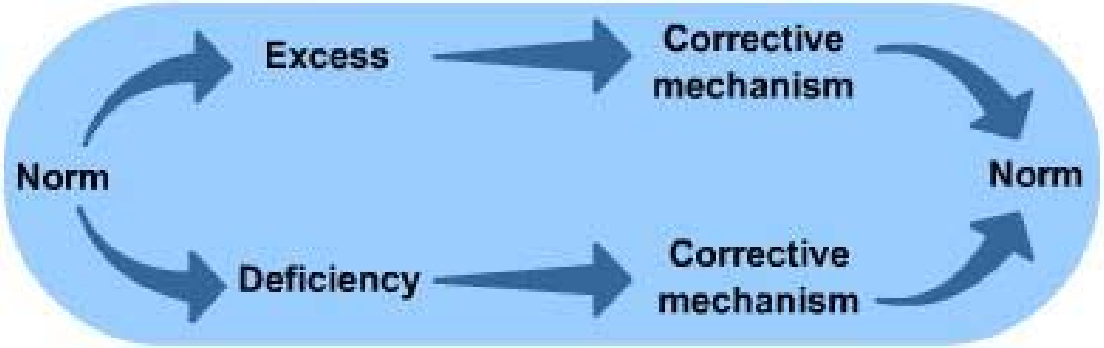
Intervention - any action taken to deal with the disease/illness:

- Medication
- Surgery
- Nuclear medicine

Homeostasis is health!

A property of cells, tissues, and organisms that allows the maintenance and regulation of the stability and constancy needed to function properly.

Homeostasis is a healthy state that is maintained by the constant adjustment of biochemical and physiological pathways.



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Principles of Health Restoration

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RESTORATION

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Effect of principles on homeostasis

Rationale:

Providing the cells with what they need (**RESTORATION**) is necessary for the well-being of individual cells and of the entire body!

Principle: REST

Effect on homeostasis

Sleep increases chromosome dynamics to enable reduction of accumulating DNA damage in single neurons.

D. Zada, I. Bronshtein, T. Lerer-Goldshetein, Y. Garini & L. Appelbaum ;; Nature Communications 10, Article 895 (2019)

<u>The restorative function of sleep is nuclear maintenance</u>!

- Muscle cells recovery
- Cardiac cell rest between heartbeats
- Liver cells adapt to cycles of day and night (University of Geneve, 2017 May 4)
- Sleep deprivation reduces insulin sensitivity by 30% (Impaired Insulin signalling in human adipocytes, Annals of Internal Medicine, 2012 Oct 16)

Principle: EXERCISE

Effect on homeostasis

Effects well known:

- Improved circulation & respiration
  - Clears toxins and provides nutrients
- Improved insulin sensitivity and weight loss
- Muscle (incl. cardiac) & bone strengthening
- Increase energy levels
- Stimulates production of hormones for mood regulation & brain health
- Postmeal walking improves 24hr glycemic control
  - (Diabetes Care 2013 Oct;36(10);3262-3268)

Principle: SUNSHINE

Effect on homeostasis

- Provides light for circadian rhythm and heat (IR)
- Production of serotonin
- Conversion of cholesterol to Vit D
- Production of Nitric Oxide from health blood vessels (lowering BP)
- Germicidal properties of UVC

Principle: TEMPERANCE

Effect on homeostasis

Def: Avoiding that which is harmful; doing the healthful in moderation

- Harmful effects of illegal substances
- Harmful effects of chronic use of coffee, alcohol, refined foods, drugs
- "Potential adverse cardiovascular effects from excessive endurance exercise" Mayo Clinic Proceedings, 2012 July: (87)7; 704
- Certain habits cause a "hijacking" of the brain's reward circuitry, resulting maladaptive behaviours (addiction) & damage/thinning of Frontal lobe cortex.
  - Dual role of nicotine in addiction and cognition: A review of neuroimaging studies in humans; Neuropharmacology; 2014 September; (84) 111-122

Principle: OXYTOCIN & IMAGINATION

Effect on homeostasis

How we feel, affects our health at a physiological level.

Feelings are physiologically:

- a combination of various chemicals (neurotransmitters and hormones)
- made by the nervous & endocrine system
- in response to our thoughts and perceptions about something (consciously or unconsciously)

- There are two basic emotions:
  - Fear - encompassing anxiety, hate, jealousy, depression, stress, unforgiveness, etc.
  - Love - encompassing joy, happiness, enthusiasm, peace, etc.

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Principle: Oxytocin & Imagination

Effect on homeostasis

Fear

Cortisol, Adrenaline, Noradrenaline

- supresses the immune system,
- overworks the cardiovascular system,
- disrupts the ability of the stomach to digest
- raises blood sugar levels

Love

Oxytocin, Dopamine, Serotonin & Endorphins

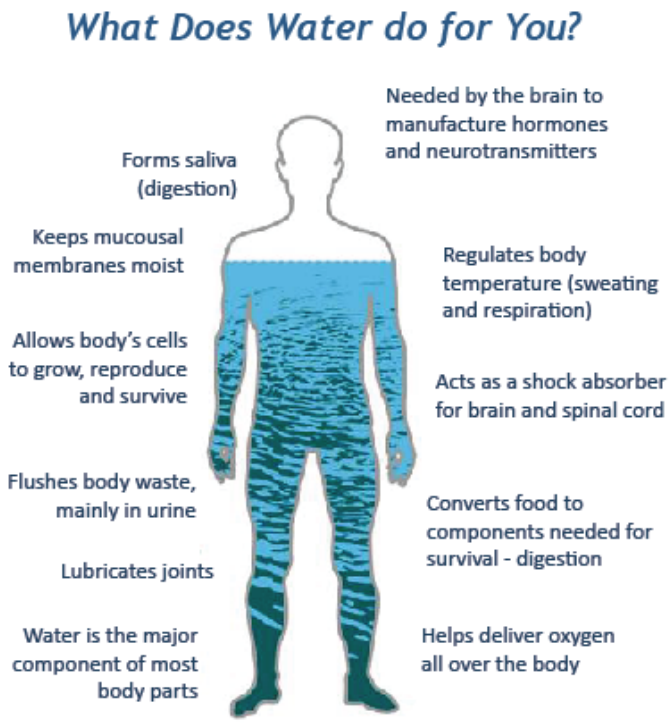
- buffer the effects of stress,
- reducing anxiety,
- enhance memory, attention & social bonding
- operates in the reward system of the brain

Principle: REHYDRATE

Effect on homeostasis

Up to 70% of the human body is water.

- All our physiological activities depend on water.
  - It is a vital nutrient to every cell.
  - It acts as a building material.
  - It assists in flushing out waste materials from our body (from a cellular level, right up to and preventing constipation and stone formation in the body).



Principle: AIR

Effect on homeostasis

The respiratory system responsible for gas exchange:

Draws in O_2 needed for cellular respiration - to produce ATP for energy for body functions incl. nerve conduction

…and pH balance by:

balancing levels of bicarbonate and CO_2 through elimination of CO_2 (waste product of cellular respiration)

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Principle: OUTFITS

Effect on homeostasis

- Any fixtures added to the body should not:
  - interfere with the structure and function
    - Especially blood flow, lymphatic drainage, and breathing
  - place excessive weight or pressure
    - Pressure on abdomen and stomach affecting digestion
  - restrict free movement.
- Shoes should give support and protection to the feet
- Clothing to allow sweating and not interfere with thermoregulation

Teach patients not to sacrifice health at the altar of fashion.

Principle: NUTRITION

Effect on homeostasis

- Our bodies need certain nutrients to function, material to repair & grow.
- Food choice to primarily depend on nutritional needs and secondarily on pleasure
- Need to re-study the human body design…are we herbivores or carnivores?
- To teach: what, when, how, how often etc
- Many disease stem from: Deficiency & Toxicity

Principle: NUTRITION

Effect on homeostasis

The human body needs the following elements:

- Macronutrients:
  - **Glucose**
  - **Amino acids**
  - **Fatty acids**
- Micronutrients – for proper functioning of body cells and organs:
  - **Vitamins** – fat soluble vitamins (A, D, E & K) and water soluble (C & variety of B)
  - **Minerals** – 5 major minerals & 55 trace minerals, all of them essential
- Other body needs:
  - **Fibre**
  - **Water & Sunlight**

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Practical effect of application of principles in clinical setting

A retrospective study of our own patients to be conducted.

Blue Zones project www.bluezones.com

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Recommendation:

- Inclusion of the science of lifestyle changes into medical curriculum
- Incorporation into mainstream clinical medicine practices
- Change in the diet of patients in hospital to focus on nutrition therapy
- Adoption as primary model of health prevention and restoration from disease

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Benefits:

- Healthier, more productive communities and population
- Improved quality of life with less suffering
- Reduction in disease incidence and prevalence over time
- Reduction in cost of health care

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Conclusion:

Effect on life

True knowledge and understanding of the human body design, together with these principles should:

- have a renewing effect on our minds, to change our thinking and our actions as custodians of the health of the people.
- fundamentally change how we our lives AND practice medicine.

We cannot, with impunity, continue to live outside of Truth, because there are consequences to living outside of Truth.

Acknowledgements:

- Researchers in anatomy, physiology, molecular biology and all aspects of the human organism
- Kwamqemane Institute of Wellness
- SAMA

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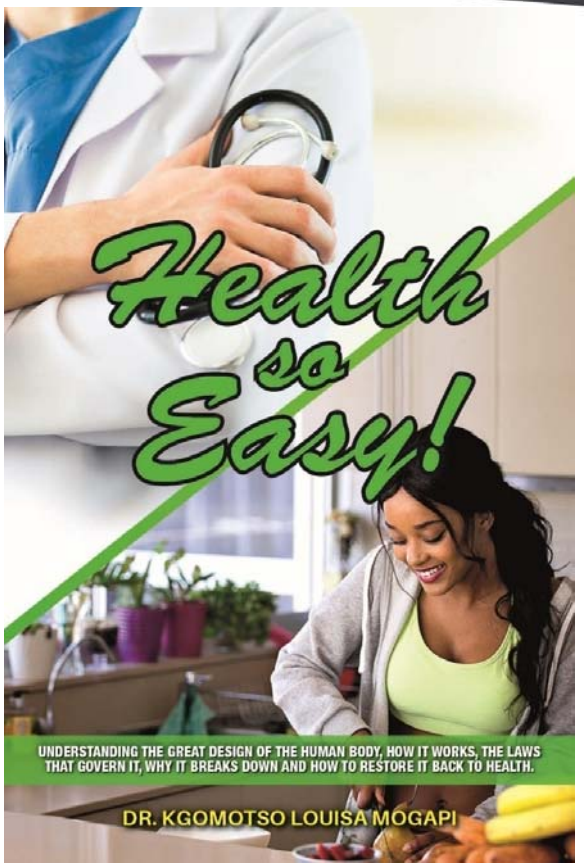
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