



One Medicine

Integration of East and West

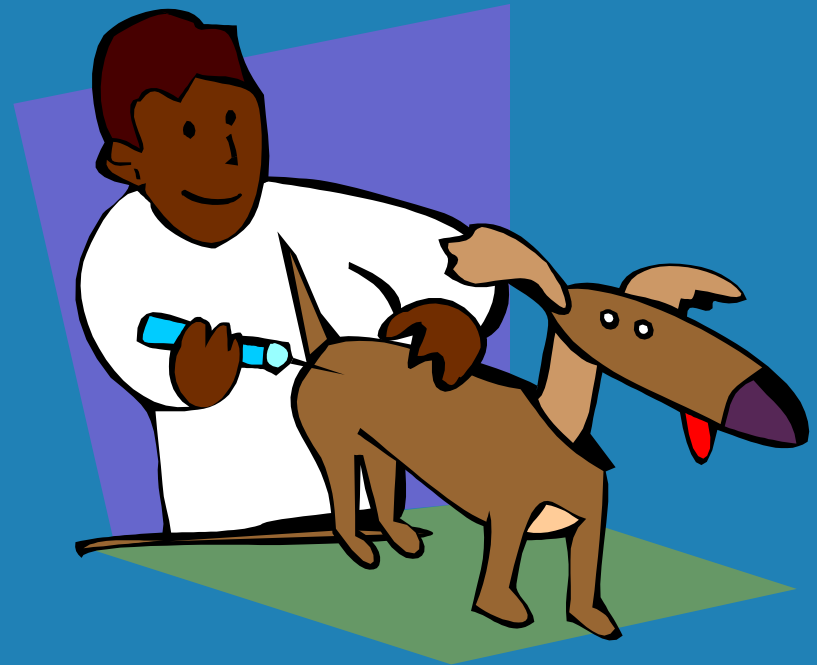
One Medicine

- Proven medicine or unproven medicine
- Scientific or unscientific
- Good or bad



What is Integrative Medicine?

- Term coined in Human Medicine for utilizing both traditional and non-traditional modes of therapy
- Same as Holistic Veterinary Medicine



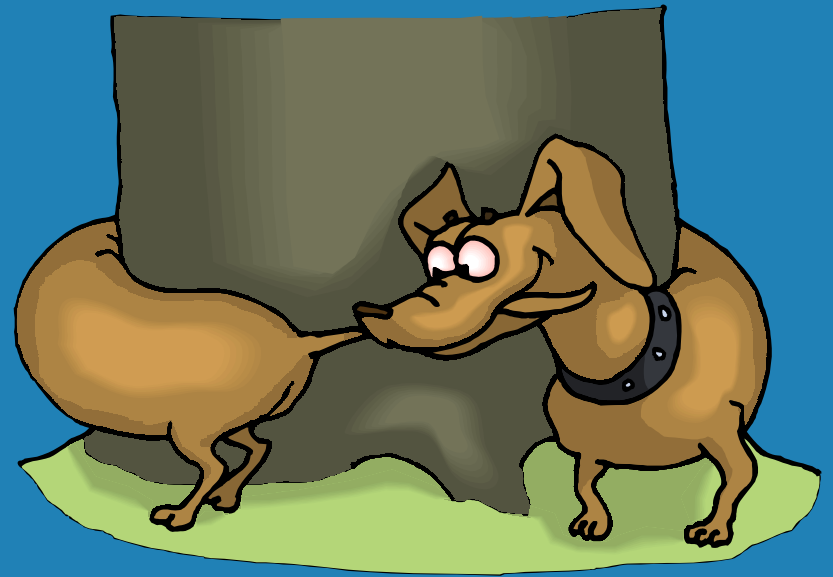
Integrative Medicine

- Treatment of MIND, BODY & SPIRIT
- Employs both traditional and non-traditional therapies for the patient's benefit



Integrative Medicine

- May be to advise about exercise program
- Recommend a form of alternative therapy
- Or offer a cheaper herbal equivalent



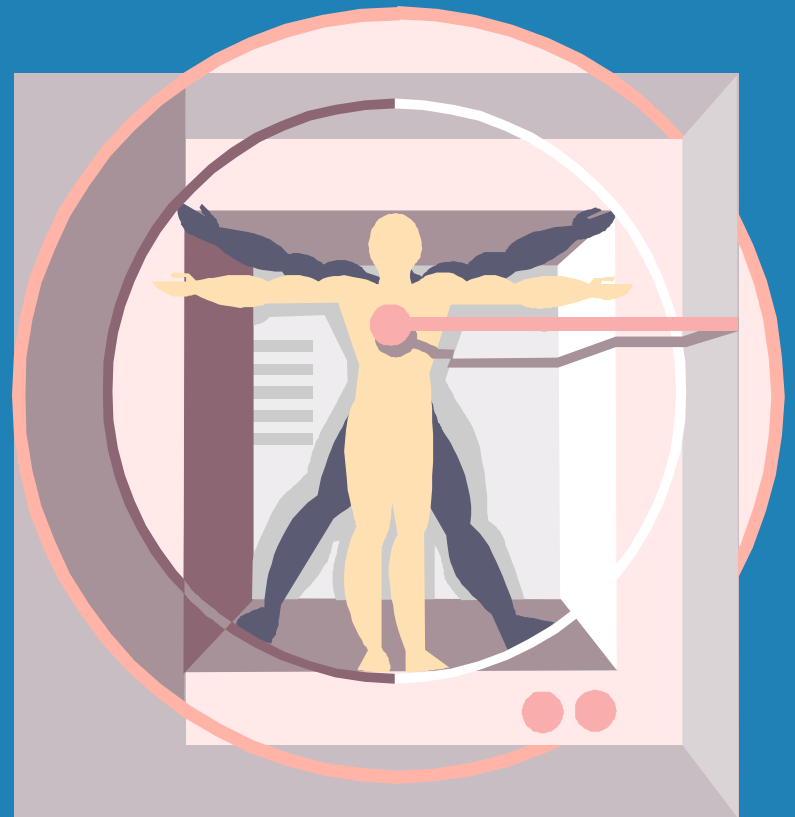
A Look Back at the Last 100 Years

- Antibiotics
- Immunizations
- Discovery of DNA
- Computers
- CAT Scan
- 2-D Ultrasound
- MRI



Definition of Medicine

- The science and *art* dealing with the maintenance of health and the prevention, alleviation, or cure of disease.





Science versus Art

- Over the last 10 years, there has been no change in mean life expectancy in human beings, dog or cats
- There is an increase in incidence of inflammatory diseases and cancer over our ability to detect the conditions

Why Alternative Medicine?

- People are asking for it for themselves and for their pets
- Offers approaches which might work when traditional medicine fails



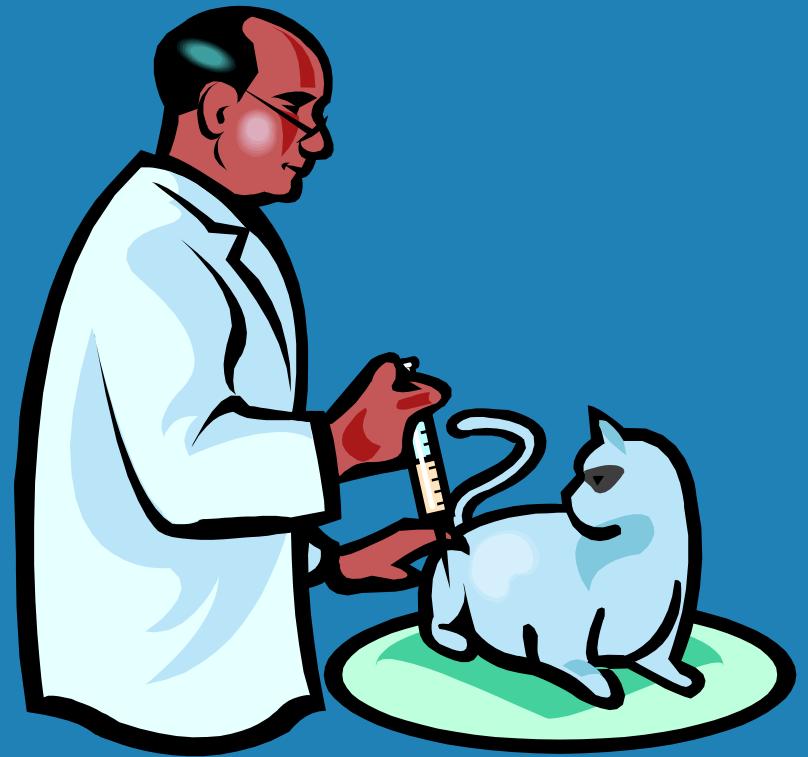
Use of Alternatives in Human Medicine

- Most patients are usually women who are between 35-49 years of age, affluent and well educated
- Results in around \$278 billion in annual sales



Use of Alternatives in Human Medicine

- 629 million visits to alternative medicine practitioners in 1997
- Exceeds the number of visits to primary care physicians





NIH Classification of Alternative Therapies

- Mind-Body Interventions
- Bioelectromagnetics
- Alternative Systems of Medical Practice
- Manual Healing Methods
- Alternative Pharmaceuticals and Biologics
- Herbal Medicine



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Bioelectromagnetics

- Effects of nonthermal, nonionizing radiation on the body
- Bone repair, nerve regeneration, wound healing and immune stimulation



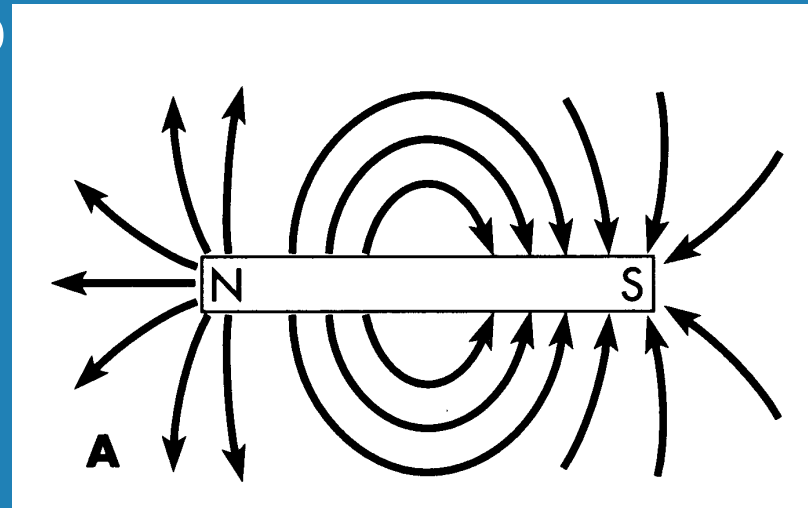
Static Magnet Therapy

- As old as the earth
- Egyptian scrolls (circa 2800 BC) contained references to loadstones
 - Cleopatra used them on her forehead to prevent aging
- Hindus used magnets 1000s of years BC



Static Magnet Therapy

- Magnetism is defined as the alignment of a permeable material so that the molecules face in a uniform direction (i.e., north facing one direction and south facing the opposite).



Bar Magnet (unipolar)



Static Magnet Therapy

- North Pole

- alkaline (\downarrow pH)
- suppresses mitosis
- (-) energy pole
- \downarrow bacteria & viruses
- stops bleeding
- shrinks tumors
- \uparrow bone healing
- \downarrow inflammation

- South Pole

- acid (\uparrow pH)
- stimulates mitosis
- (+) energy pole
- \uparrow bacteria & viruses
- vasodilation
- \uparrow tumor growth
- \downarrow bone healing
- \uparrow inflammation



Static Magnet Therapy

Medical Uses

- Stimulation of acupuncture points
- Treatment of arthritis
- Reduction of inflammation
- Adjunct to cancer therapy
- Increase bone healing (non-union)
- Increase psychic (mental) abilities



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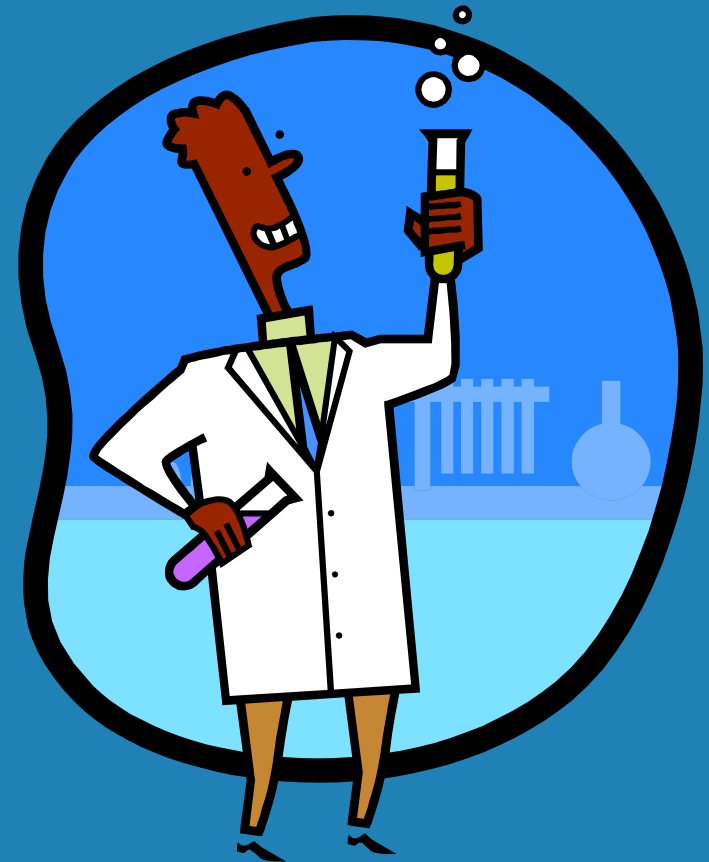
Alternative Pharmaceuticals and Biologics

- Medicines and Vaccines which are not yet Mainstream
 - Bee venom therapy
 - Plant extracts (mistletoe, Venus fly trap, etc.)
 - Orthomolecular medicine



Orthomolecular Medicine

- The preservation of health and prevention of disease through the provision of the optimum molecular constituents of the body



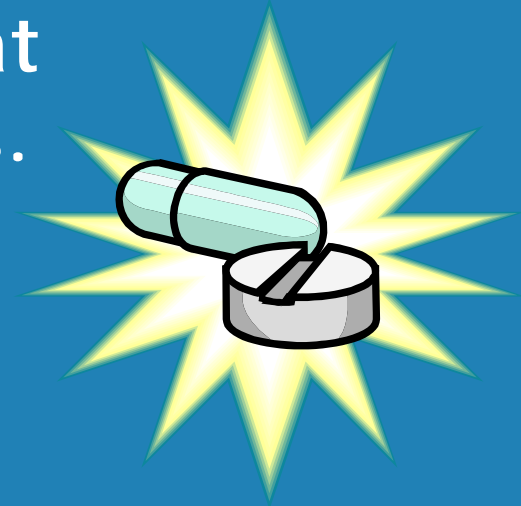
Basic Principles of OM



- Nutrition First
- Biochemical Individuality
- Drugs can be Toxic
- Inescapability of Pollution
- Hope reigns Supreme

OM Therapy

- Prescribed in quantities sufficient to prevent, treat or control certain diseases.
- Includes
 - Antioxidants
 - Membrane Stabilizers
 - Cofactors

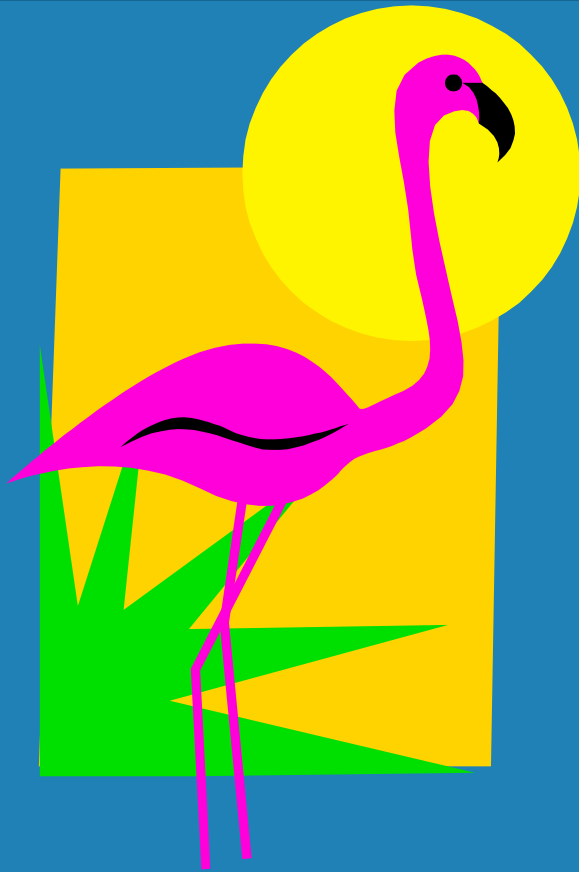


Antioxidants



- Vitamin E
- Vitamin C
- Selenium
- Beta Carotene (Vitamin A)
- Superoxide dismutase
- Glutathione peroxidase
- Acetylcysteine
- L-methionine

Membrane Stabilizers



- Omega-3 fatty acids
- Gamma-linolenic acid
- Coenzyme Q-10
- L-carnitine
- L-taurine



Cofactors

- B Vitamins
 - niacin
 - folic acid
 - thiamin
 - cyanocobalamin
- Trace Minerals
 - zinc
 - iron
 - copper
 - cobalt

Vitamin E



- antioxidant against lipid peroxides
- also a membrane stabilizer
- boosts immune defenses
- can affect primary hemostasis
- therapeutic dose is around 20–50 IU/kg

Vitamin C



- regenerates vitamin E
- stimulates synthetic enzymes (for repair)
- antioxidant against nitrosamines and many free radicals
- can cause flatulence and diarrhea
- 4-8 mg/kg or to gastric tolerance level

Orthomolecular Medicine



- Monitor for signs of excessive vitamins or trace minerals
- Make sure that there are no drug interactions.
- Develop specie and disease specific treatments
- Validate clinical data



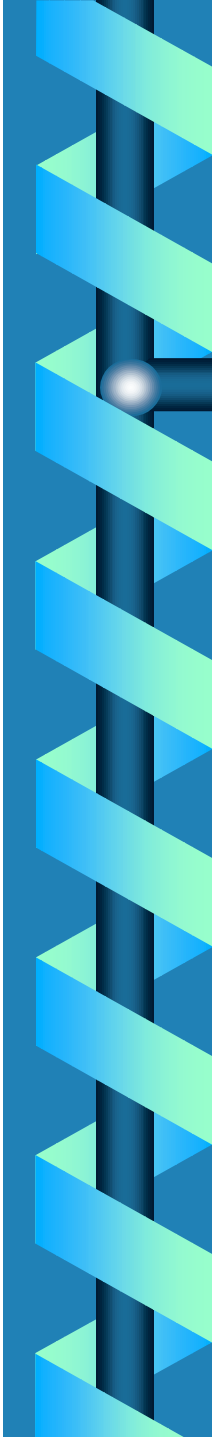
NIH Classification of Alternative Therapies

- Mind-Body Interventions
- Bioelectromagnetics
- Alternative Systems of Medical Practice
- Manual Healing Methods
- Alternative Pharmaceuticals and Biologics
- **Herbal Medicine**



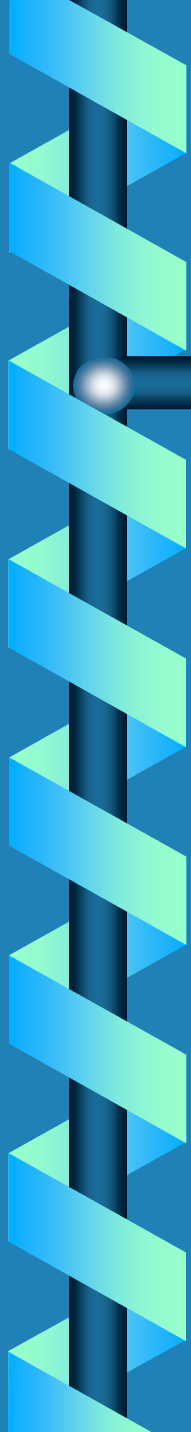
Western Herbal Medicine

- 3000 BC (Bronze Age)
 - Sumerians used laurel, caraway and thyme
- 2700 BC
 - Oldest herbal book- -China
- 300 BC
 - Hippocrates taught that health could be maintained using a few simples herbs, with rest and with proper diet



Western Herbal Medicine Regulatory Status

- Drugs
 - must meet strict requirements
 - ingredients must be identified
 - safety must be demonstrated
 - effectiveness must be shown
 - regulated by the FDA



Western Herbal Medicine

Regulatory Status

- Herbs

- harder to meet drug requirements
 - ingredients may not all be known
 - safety may not be established
 - efficacy may not be shown
- sold as dietary supplements under the Dietary Supplement Health and Education Act of 1994
- must be proven unsafe by the FDA



Western Herbal Medicine

Controversial Issues

- **Safety**

- most on FDA's GRAS (generally recognized as safe) list
- safe for everybody (culinary herbs)
 - basil, sage, peppermint
- safe except with existing medical conditions
 - St. John's wort, ginkgo biloba
- safe if used under supervision
 - hawthorn berry



Hawthorn

Crataegus oxyacantha

- Common Uses
 - heart tonic
 - lower blood pressure
 - reduce incidence of chest pain
 - treat tachycardia or arrhythmias
 - control atherosclerosis
- Effectiveness
 - increases coronary circulation 20-140% after 1 mg of dry extract



Hawthorn

- **Actions**
 - inhibits vasoconstriction and dilates blood vessels
 - proanthocyanidins (bioflavonoid) inhibits angiotensin-converting enzyme
 - other flavonoids dilate blood vessels
 - antiarrhythmic
 - inotropic effect
- **Dosage**
 - 1-2 mg/kg 2-3 times a day



Integrative Medicine

- Enter a partnership with client to help maintain animal's optimal health
- Pay attention to:
 - Exercise
 - Diet
 - Supplements
 - Vaccinations



Integrative Medicine

- Emphasize the need for human-animal bond
- Consider need for vaccination and reduce where possible
- Offer choices of therapy, particularly for chronic disease
- Keep an open mind