

# **Integrative Therapies for Cardiovascular Disease**

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# Integrative Medicine

## Definitions:

### – Integrative medicine

- Combines mainstream medical therapies and CAM therapies for which there is some high-quality scientific evidence of safety and effectiveness.

### – CAM

- Healing modalities not incorporated into Western Medicine
- Moving target!

# NCCAM CAM Categories

- **Biologically-Based Therapies**
- **Alternative Systems of Healing**
- **Mind-Body Therapies**
- **Body-Based Therapies**
- **Energy-Based Therapies**

# Evidence: Biologically-Based Therapies

## ■ Diet

- Achieve and maintain ideal body weight
- Eat a variety of fruits, vegetables, nuts, seeds, beans, and whole grains
- Eat baked or broiled fish at least twice/week
  - Daily if low in mercury, PCPs, and dioxins
- Avoid saturated and trans fats
- Choose oils and margarines low in saturated and trans fats and high in omega-3 fats (canola, soybean, walnut, and flaxseed oils), including those with plant stanols and sterols
- Alcohol-up to 1/day for women and 2/day for men

# Evidence: Biologically-Based Therapies

- **Diet (con't)**
  - **Omega-3 fatty acids**
    - Reduce cardiovascular events, sudden death, and overall mortality
    - Reduces triglycerides and blood pressure
  - **Garlic**
    - Marginal effect on lipids
  - **Soy**
    - Lowers LDL, raises HDL
    - Antioxidant
  - **Tea**
    - Significant reduction in MI in epidemiologic studies

# Evidence: Biologically-Based Therapies

## ■ Diet (con't)

### – Fiber

- Soluble (oat, psyllium, guar, pectin)-decreases total and LDL cholesterol
- Insoluble (wheat fiber and cellulose)-no effect on lipids
- Reduces cardiovascular disease, BP, obesity, insulin resistance, and clotting factors

### – Nuts

- Reduces cardiovascular disease risk by 40-50%

### – Alcohol

- Increases HDL

# Evidence: Biologically-Based Therapies

## ■ **Supplements**

- Vitamin E
- Vitamin C
- Beta Carotene
- Folic Acid, Vitamins B6 and B12
- Magnesium
- Coenzyme Q 10
- L Carnitine
- L Arginine

# Evidence: Biologically-Based Therapies

- **Herbs**

- Hawthorne
- Ginkgo biloba
- Horse chestnut
- Guggulipid
- Red yeast rice
- Policosinol
- Ephedra (Ma Huang)
- Oleander

# Evidence: Mind-Body Therapies

- **Stress**
  - Linked to progression of HTN, DM, and hypercholesterolemia
  - Twice the risk of MI
  - Higher mortality rates in depression after MI
    - Improved mortality if higher levels of social support
- **Relaxation techniques (meditation, biofeedback, music therapy)**
  - Decrease blood pressure
  - Improved outcomes in men with 2 or more risk factors

# Evidence: Alternative Systems

## ■ Acupuncture

- Reduces sympathetic nervous system outflow
- Reduces blood pressure

## ■ Spirituality

- No consensus on specific spiritual recommendations
- Notable consistency across reports suggesting efficacy
- No obvious safety issues

# Evidence: Body-Based Therapies

- **Massage, Chiropractic, Osteopathic manipulation**
  - **No specific studies in cardiovascular disease**

# Evidence: Energy-Based Therapies

- **Healing Touch**
  - Decreased anxiety in CCU patients
  - Reduced need for postoperative pain medications
  - Improved wound healing
- **Reiki**
  - Profound relaxation, but no studies on cardiovascular effect
- **Magnet therapy**
  - No studies

# Summary

- Anti-inflammatory diet (fish, nuts, seeds, beans, whole grains, and tea)
- Vitamin C 250mg twice daily for CHD
- Magnesium 500mg at bedtime for BP, CAD
- CoQ10 100mg/d for CHD/stroke/CHF
- L-Carnitine 1-2gm/d for CHF and claudication

# Summary

- L-Arginine 6mg/d for CHD
- Hawthorne 300mg/d for CHF
- Horse chestnut for chronic venous insufficiency
- Red yeast rice 2.4gm/d for lipids
- Policosinol 10-20mg/d for lipids

# Summary

- **Relaxation techniques to decrease BP**
- **Acupuncture to decrease BP and sympathetic outflow**
- **Spirituality**
- **Healing Touch/Reiki to decrease anxiety and pain meds**