

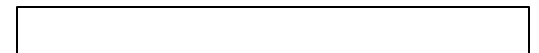
CAM and Diabetes

S. Prasad Vinjamury

MD(Ayurveda), MAOM, MPH

Southern California University of Health Sciences

Whittier, CA



CAM Usage

- **Complementary and Alternative Medicine (CAM)**
 - All healing practices that “do not fall under the realm of conventional medicine”
- **According to NHIS (2007)**
 - it is estimated that 4 of out 10 adults had used CAM in the past 12 months. (Current population in 2007 was approximately 302.2 million)
 - 38% of the population had used at least one kind of CAM modality. (approximately 114.8 million)
- **Among this, 0.7% were people with diabetes. (approximately 2.2 million)**

CAM Modalities Utilized

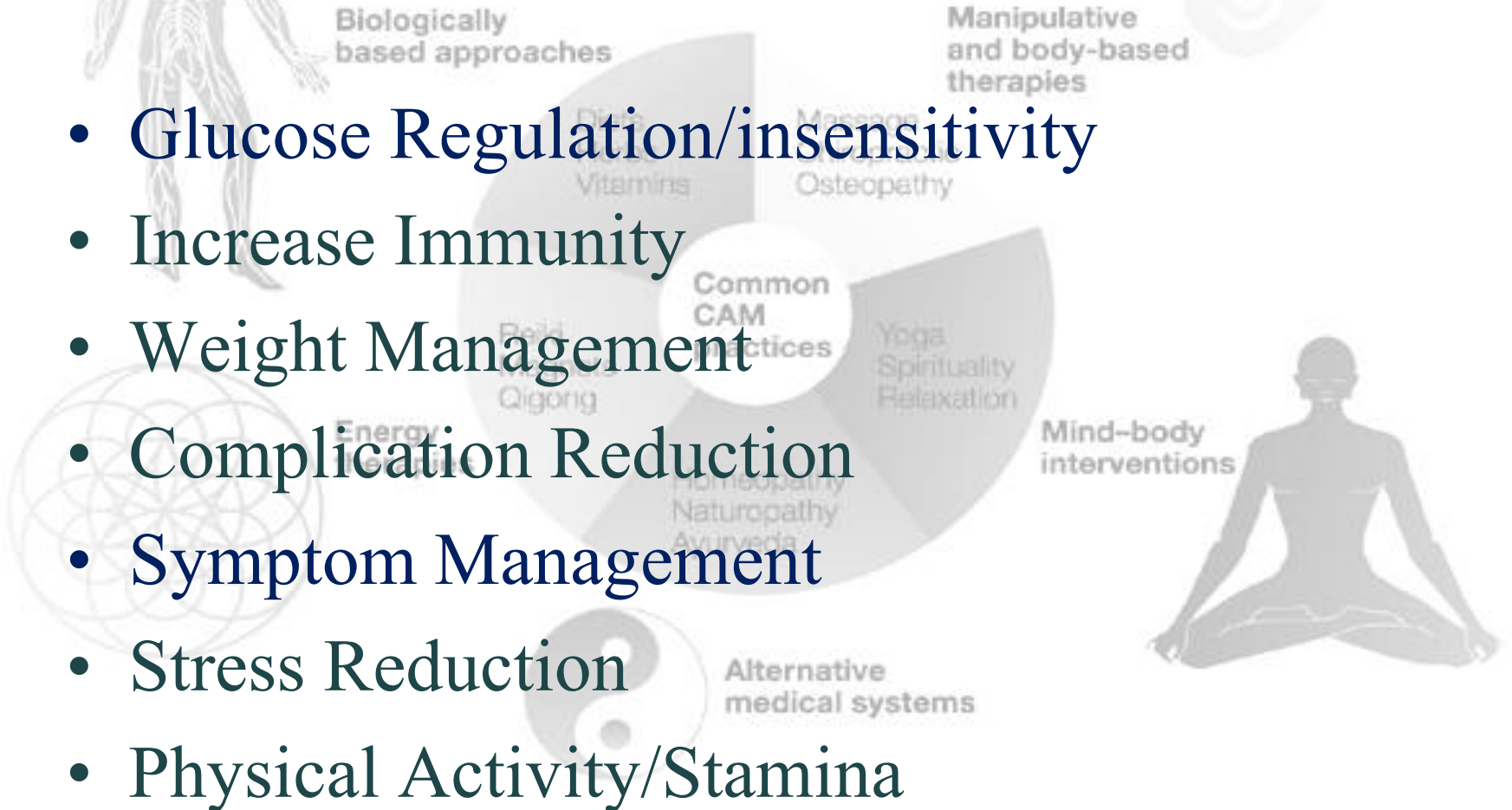
- CAM Modalities generally include:
 - Supplements (dietary, herbal and vitamins)
 - Mind-body Practices (Yoga, Tai Chi, Relaxation)
 - Prayer/Spirituality/Energy Healing
 - Alternative Medicine Practices
 - Ayurveda
 - Chiropractic
 - Homeopathy
 - Massage
 - Naturopathy
 - Traditional Chinese Medicine

CAM Modalities for Diabetics

- Currently, at least 8% of the US have diabetes. (approx. 25.8 million)
- Around 48% of diabetic patients use some form of CAM modality
- CAM modalities are generally used as an adjunctive therapy with Western healthcare
 - Complement to current care
 - Preventive care
 - Assist with complications
 - Self-health Management
 - Affordable Alternative

What is the role of CAM in diabetes?

- Glucose Regulation/insensitivity
- Increase Immunity
- Weight Management
- Complication Reduction
- Symptom Management
- Stress Reduction
- Physical Activity/Stamina

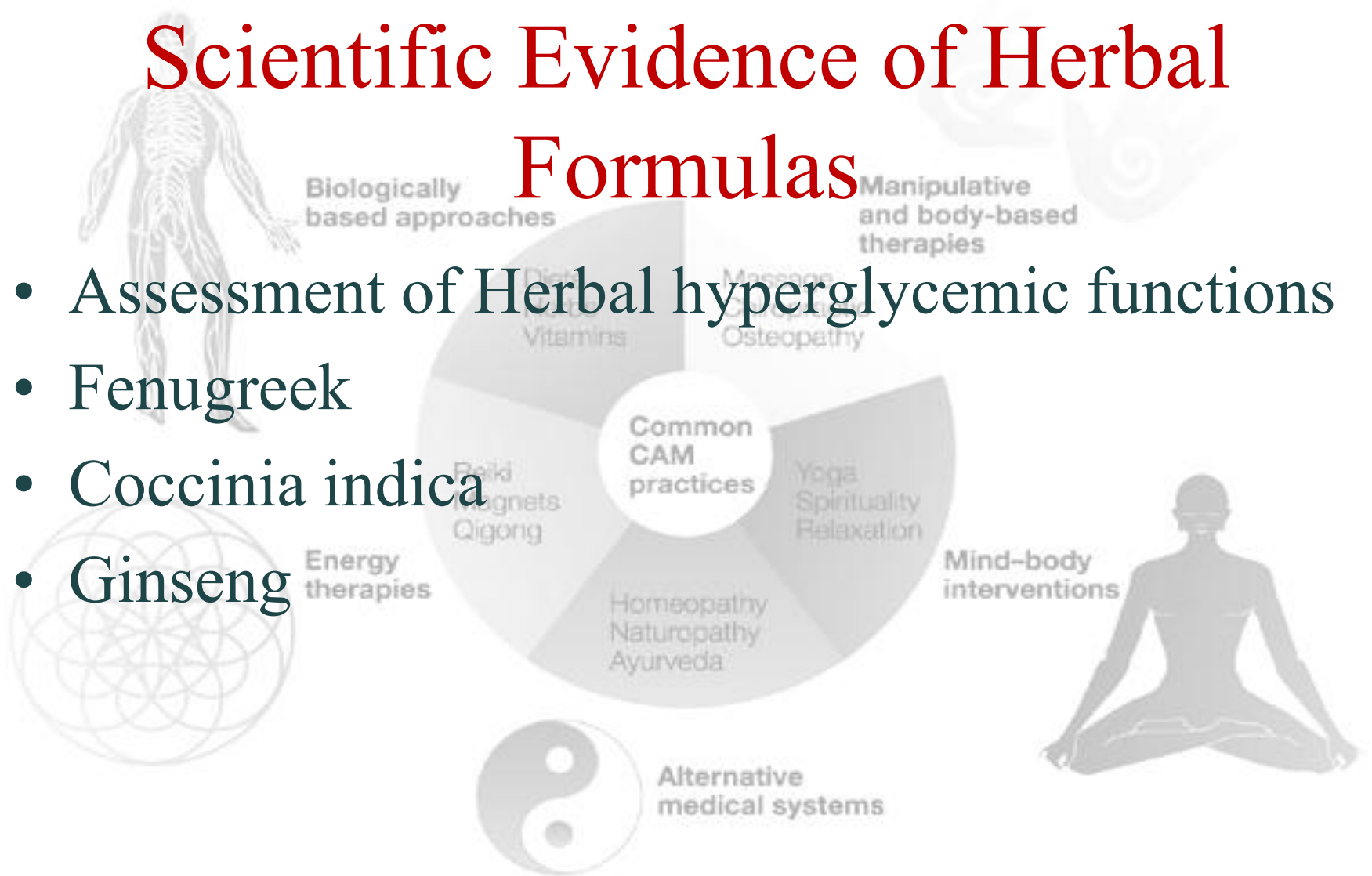


Ayurveda and Diabetes

- Most commonly utilized modality is herbal remedies (singular or herbal formula)
 - Used to help control and regulate glucose levels
 - Many herbs clinically reveal having hypoglycemic properties
 - Most common herbs used:
 - Fenugreek
 - Coccinia indica
 - Bitter Melon
 - Turmeric and Goose Berry

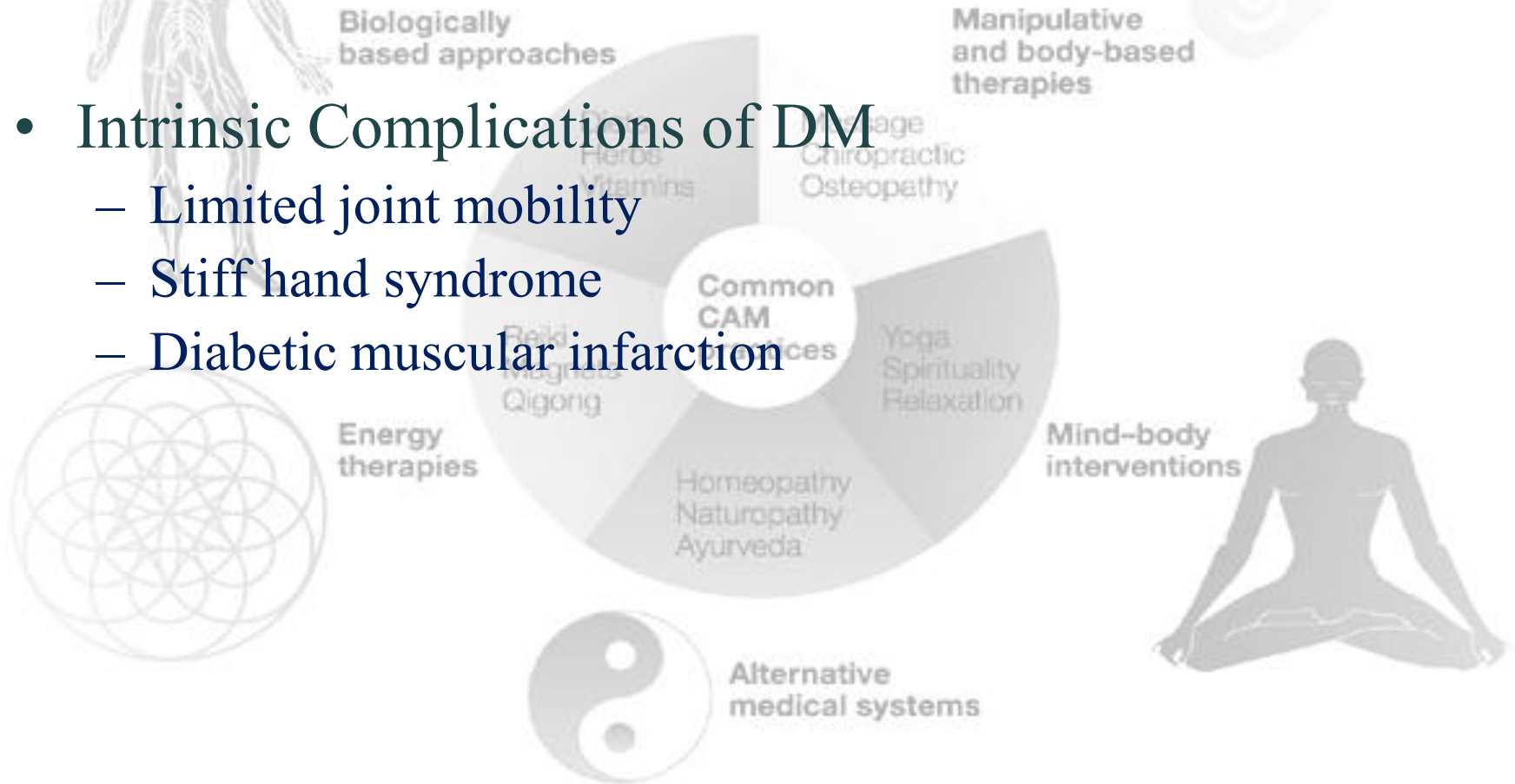
Scientific Evidence of Herbal Formulas

- Assessment of Herbal hyperglycemic functions
- Fenugreek
- Coccinia indica
- Ginseng



Chiropractic Care

- Used for managing musculoskeletal effects of diabetes
- Intrinsic Complications of DM
 - Limited joint mobility
 - Stiff hand syndrome
 - Diabetic muscular infarction



Chiropractic Care

- Increased Incidence With DM
 - Neuropathic arthroplasty
 - Osteopenia (in type I)
 - Flexor tenosynovitis
 - Neuropathy(acute proximal/motor)
 - Proximal motor neuropathy
- Possible Association With DM
 - Osteoarthritis
 - Carpal Tunnel Syndrome



Dietary Supplements

- Used to improve blood glucose control, manage symptoms, and lessen the risk of developing serious complications such as heart problems or neuropathy
- ALA - improve insulin sensitivity and treats diabetic neuropathy
- Chromium - glucose/insulin reduction
- Omega-3 fatty acids - lower triglycerides, helps with neuropathy and reduces heart complication
- Polyphenols - anti-hyperglycemic effect and anti-oxidant effects (found in tea - green or oolong)

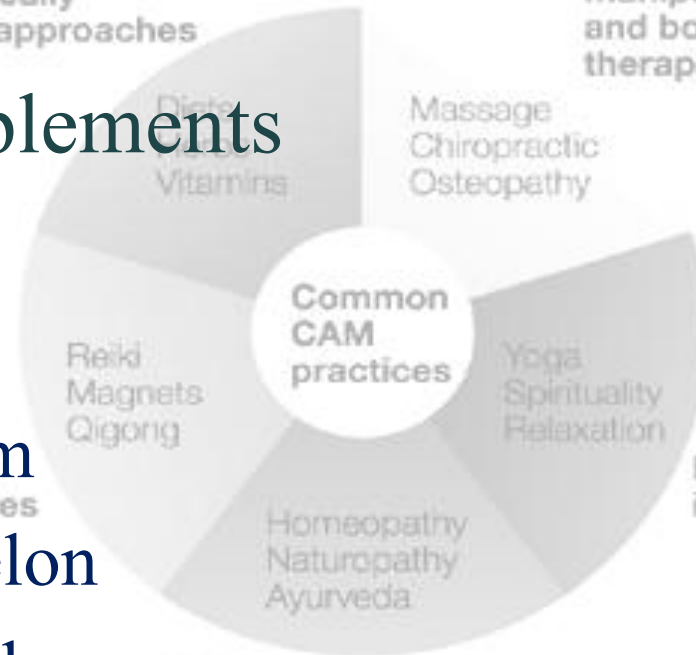
Dietary Supplements

- Other supplements

- Garlic
- Ginseng
- Vanadium
- Bitter melon
- Fenugreek
- Barley

Biologically based approaches

Manipulative and body-based therapies



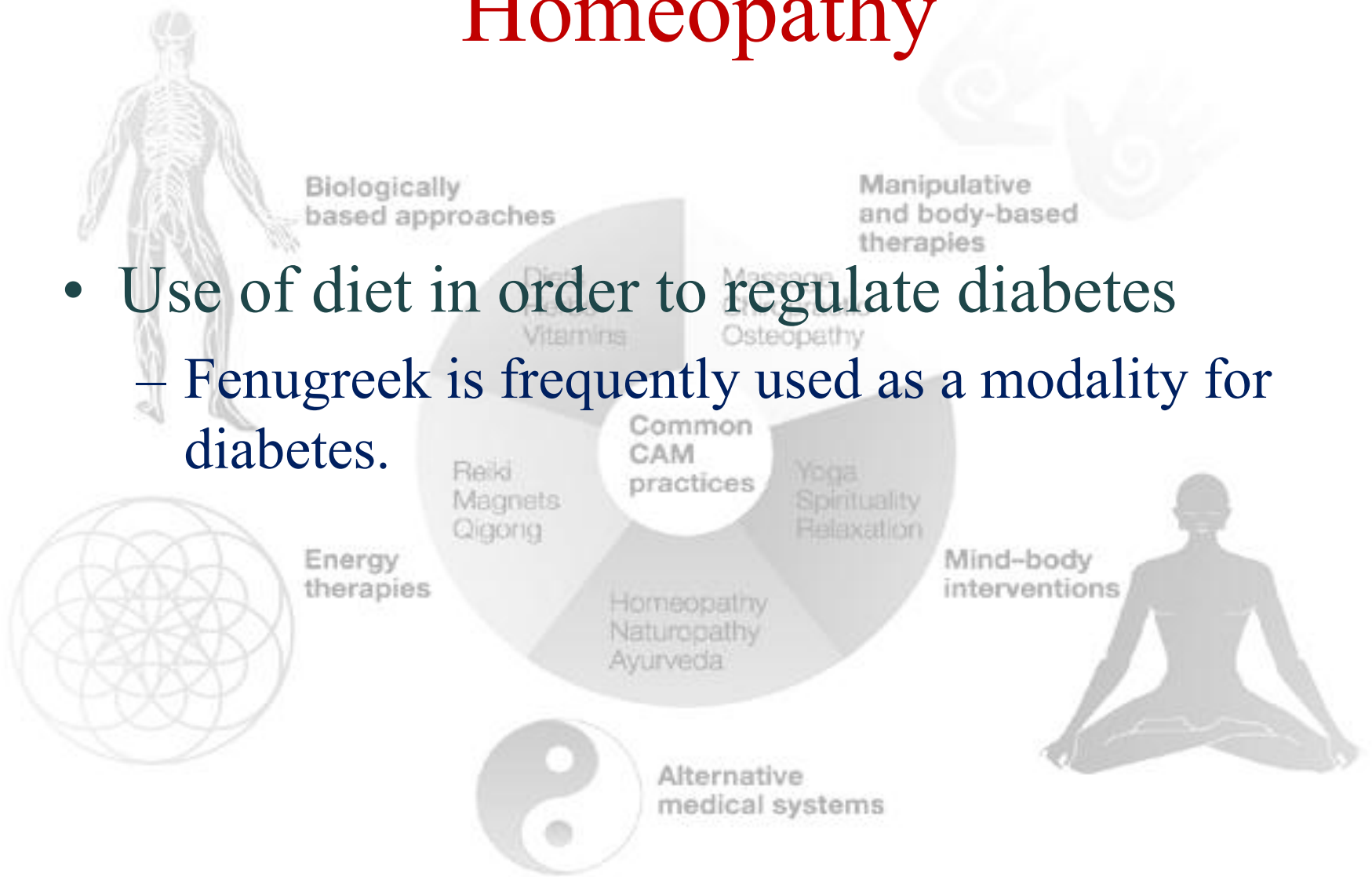
Energy therapies

Mind-body interventions

Alternative medical systems

Homeopathy

- Use of diet in order to regulate diabetes
 - Fenugreek is frequently used as a modality for diabetes.



Mind-body techniques

- Yoga

- Improves cognitive function
- Improves blood glucose levels
- Stress Management
- Decreased weight gain
- Prevention of chronic illness
- Increase socialization
- Promotes better quality of life

Biologically based approaches

Diets
Herbs
Vitamins

Manipulative and body-based therapies

Massage
Chiropractic
Osteopathy

Common
practices

Reiki
Magnets

Yoga
Spirituality
Relaxation

Energy therapies

Acupuncture
Naturopathy
Ayurveda

Mind-body interventions

Alternative medical systems

Mind-body Techniques

- Tai Chi/Qi Gong
 - Improves fasting glucose levels
 - Improves circulation to help with complications of neuropathy
 - Possible prevention of diabetic neuropathy
 - Improvements in total cholesterol levels
 - Stress management
 - Improved physical activity and longevity
 - Mobility
 - Balance impairment
 - Weight loss

Naturopathy

- More Research is needed but current studies are showing promising results
- Goal is to heal the “whole” body thru diet, exercise and addressing mental health
 - Balance glucose levels with diet/exercise
 - Remove the cause of disease and promote well-being
- Possibility of reducing the risk factors of diabetes with long-term naturopathic care
 - notable improvement changes in
 - HbA1c
 - SBP and DBP
 - May also see improvement in:
 - LDL
 - HDL
 - Triglycerides

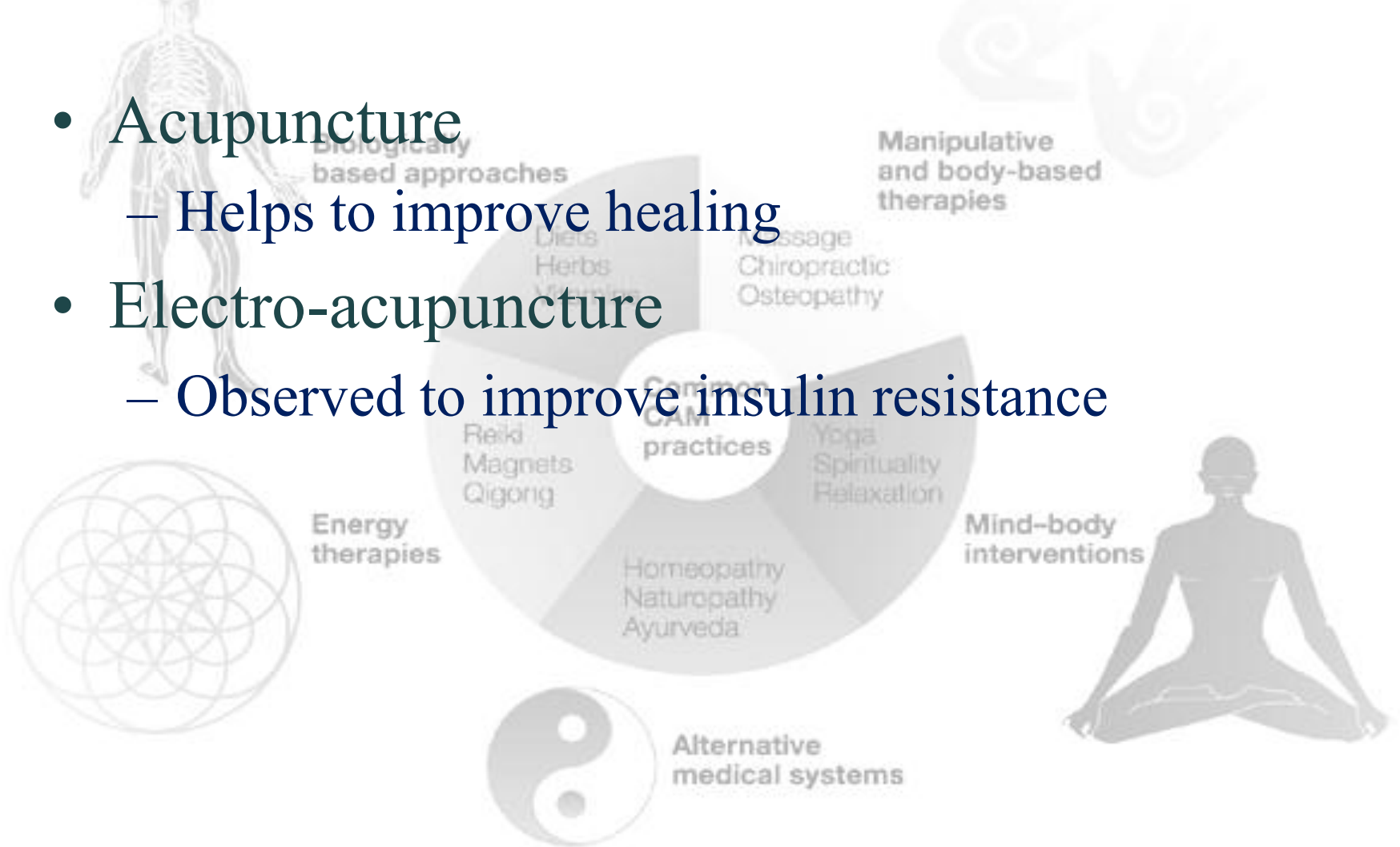
Traditional Chinese Medicine

- Herbal Remedies
 - Di Huang Extract
 - Ren Shen
 - Yi Yi Ren
 - Patent Formulas



Traditional Chinese Medicine

- Acupuncture
 - Helps to improve healing
- Electro-acupuncture
 - Observed to improve insulin resistance



Traditional Chinese Medicine

- **Moxibustion**

- Helps with healing diabetic sores on extremities



Further Research

- CAM as an adjunct therapy needs to be promoted.
- Many of the benefits of CAM are not being utilized by western medicine
- More research investigating the effectiveness of CAM need to be researched.

Thank You!

• Questions???

