

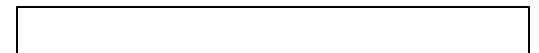
# CAM and Diabetes

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# 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

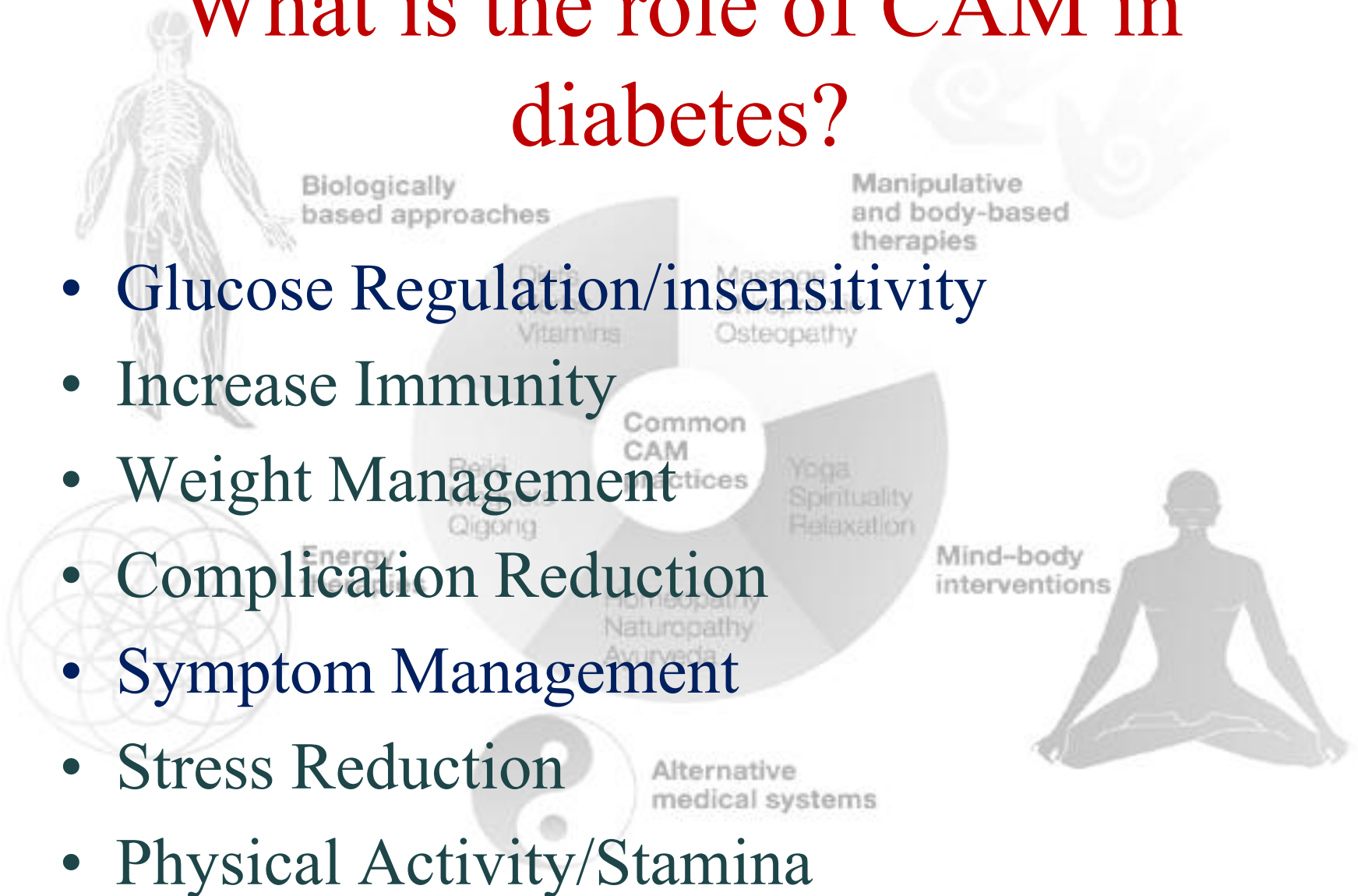
- CAM Modalities generally include:
  - Supplements (dietary, herbal and vitamins)
  - Mind-body Practices (Yoga, Tai Chi, Relaxation)
  - Prayer/Spirituality/Energy Healing
  - Alternative Medicine Practices
    - Ayurveda
    - Chiropractic
    - Homeopathy
    - Massage
    - Naturopathy
    - Traditional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

Biologically based approaches

Manipulative and body-based therapies

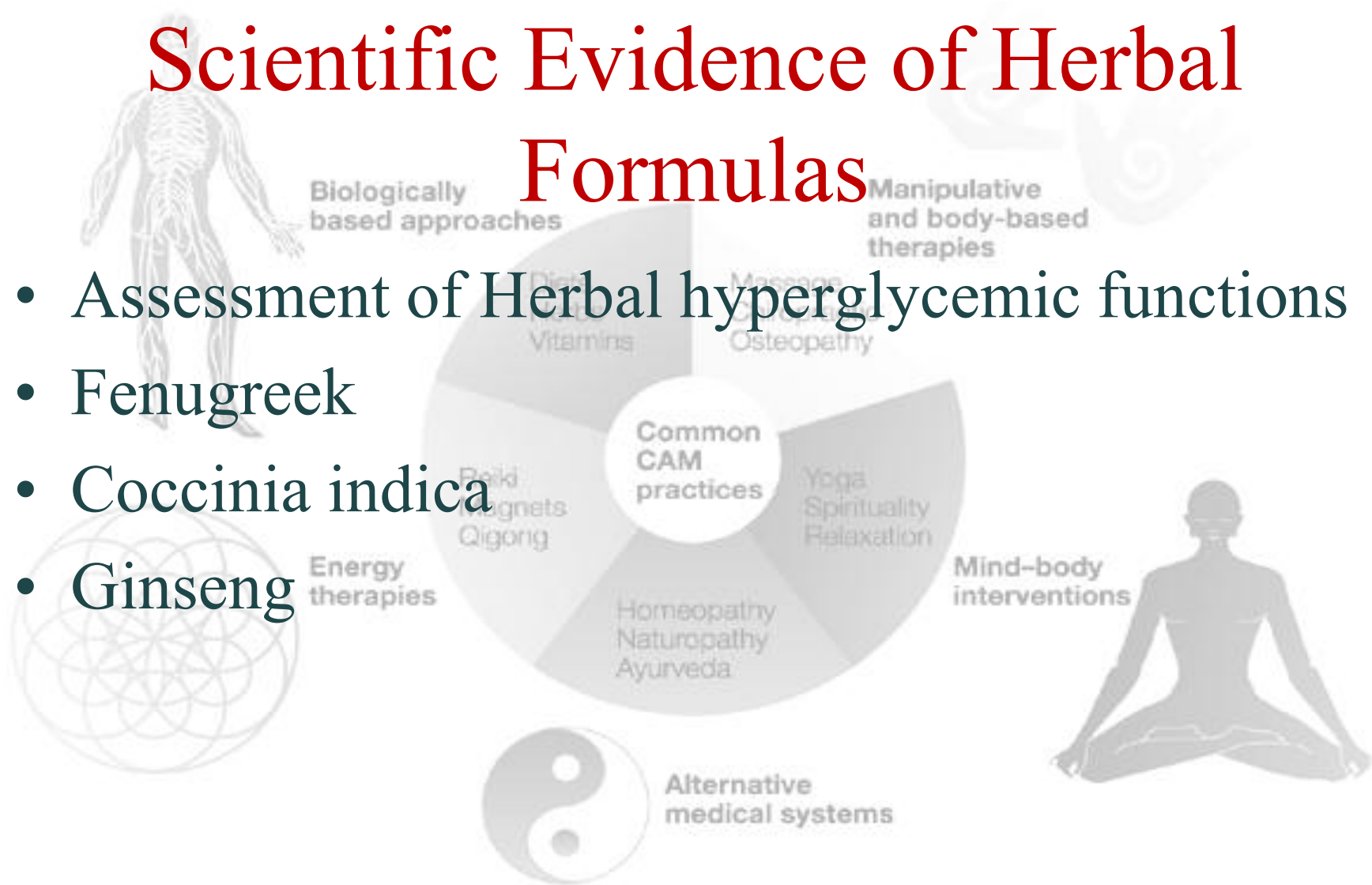
Common CAM practices

Alternative medical systems

Body interventions

# Scientific Evidence of Herbal Formulas

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

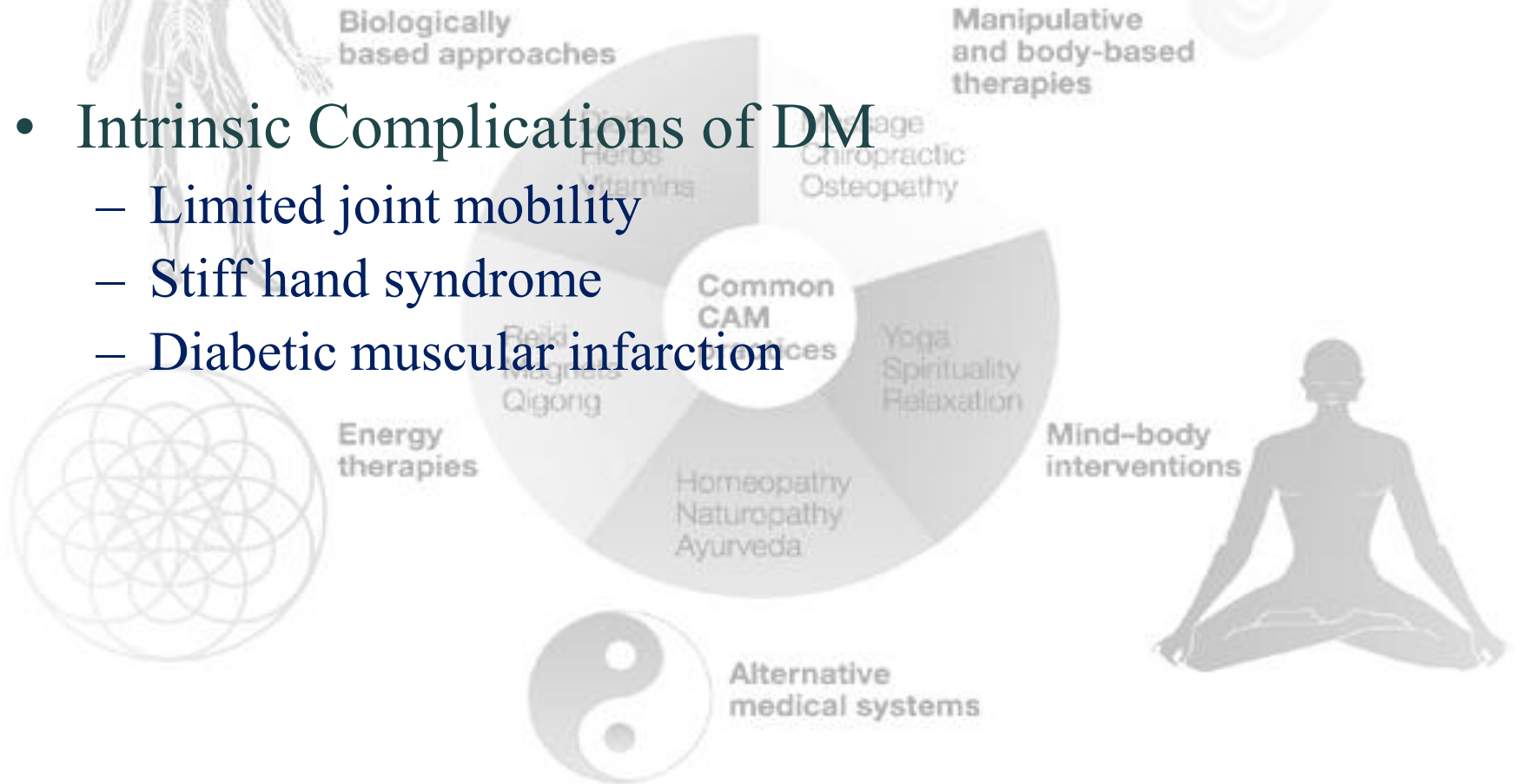


# Chiropractic Care

- 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

Dietary  
Vitamins

Manipulative and body-based therapies

Massage  
Chiropractic  
Osteopathy

Common  
CAM  
practices

Reiki  
Magnets  
Qigong

Yoga  
Spirituality  
Relaxation

Herbal  
therapies

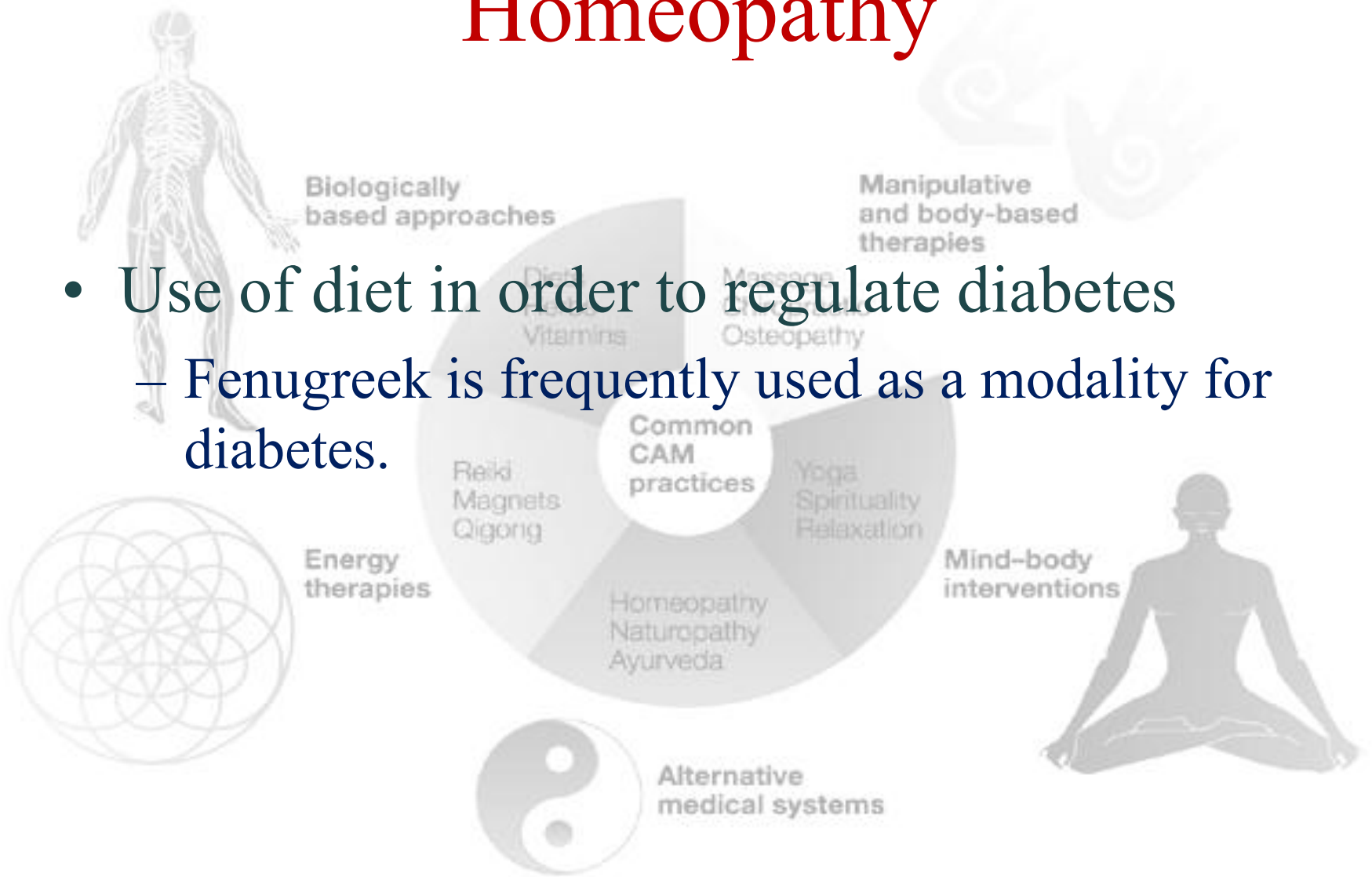
Homeopathy  
Naturopathy  
Ayurveda

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  
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Energy therapies

Acupuncture  
Naturopathy  
Ayurveda

Mind-body interventions

Alternative medical systems

# Mind-body Techniques

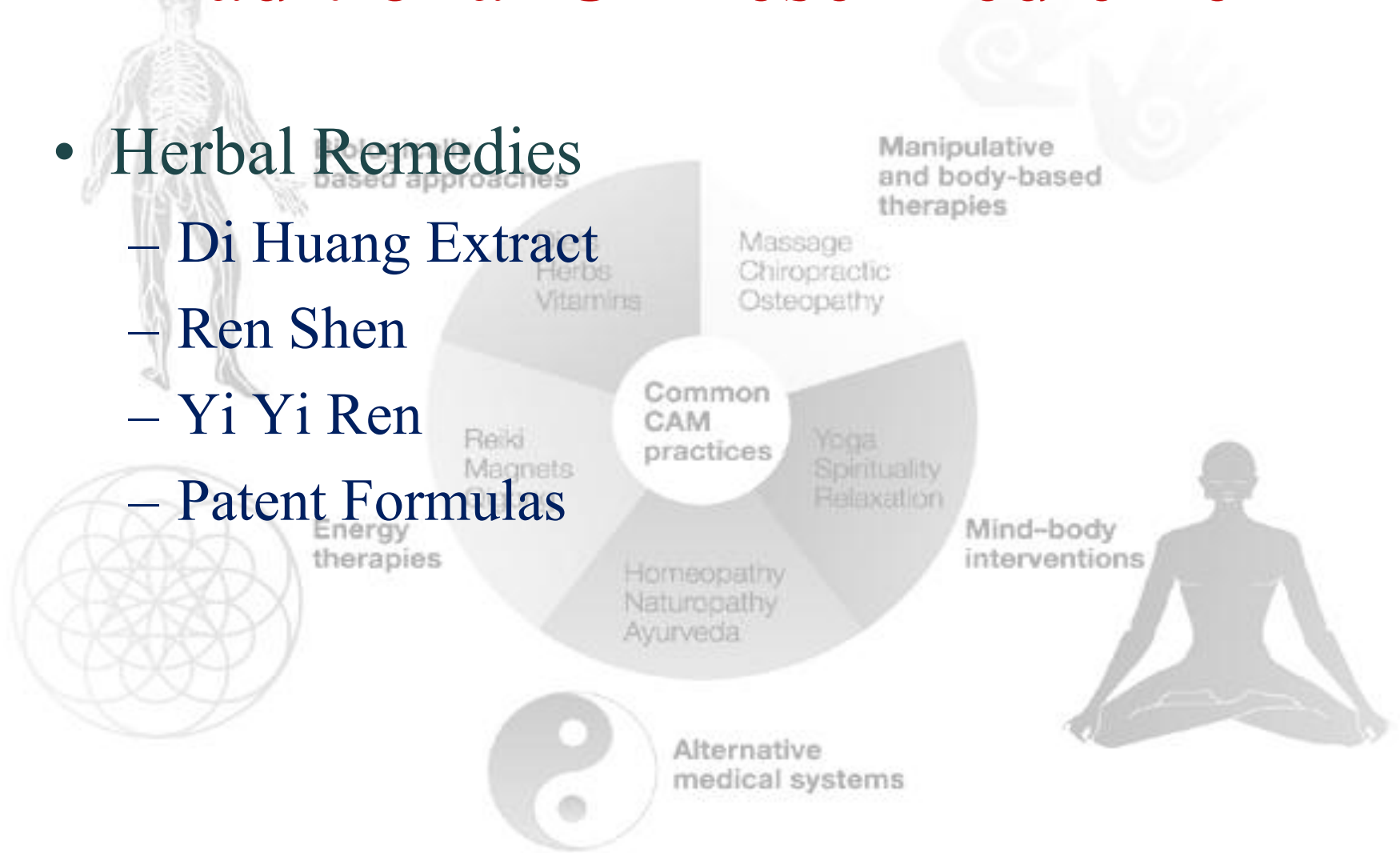
- Tai Chi/Qi Gong
  - Improves fasting glucose levels
  - Improves circulation to help with complications of neuropathy
    - Possible prevention of diabetic neuropathy
  - Improvements in total cholesterol levels
  - Stress management
  - Improved physical activity and longevity
    - Mobility
    -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

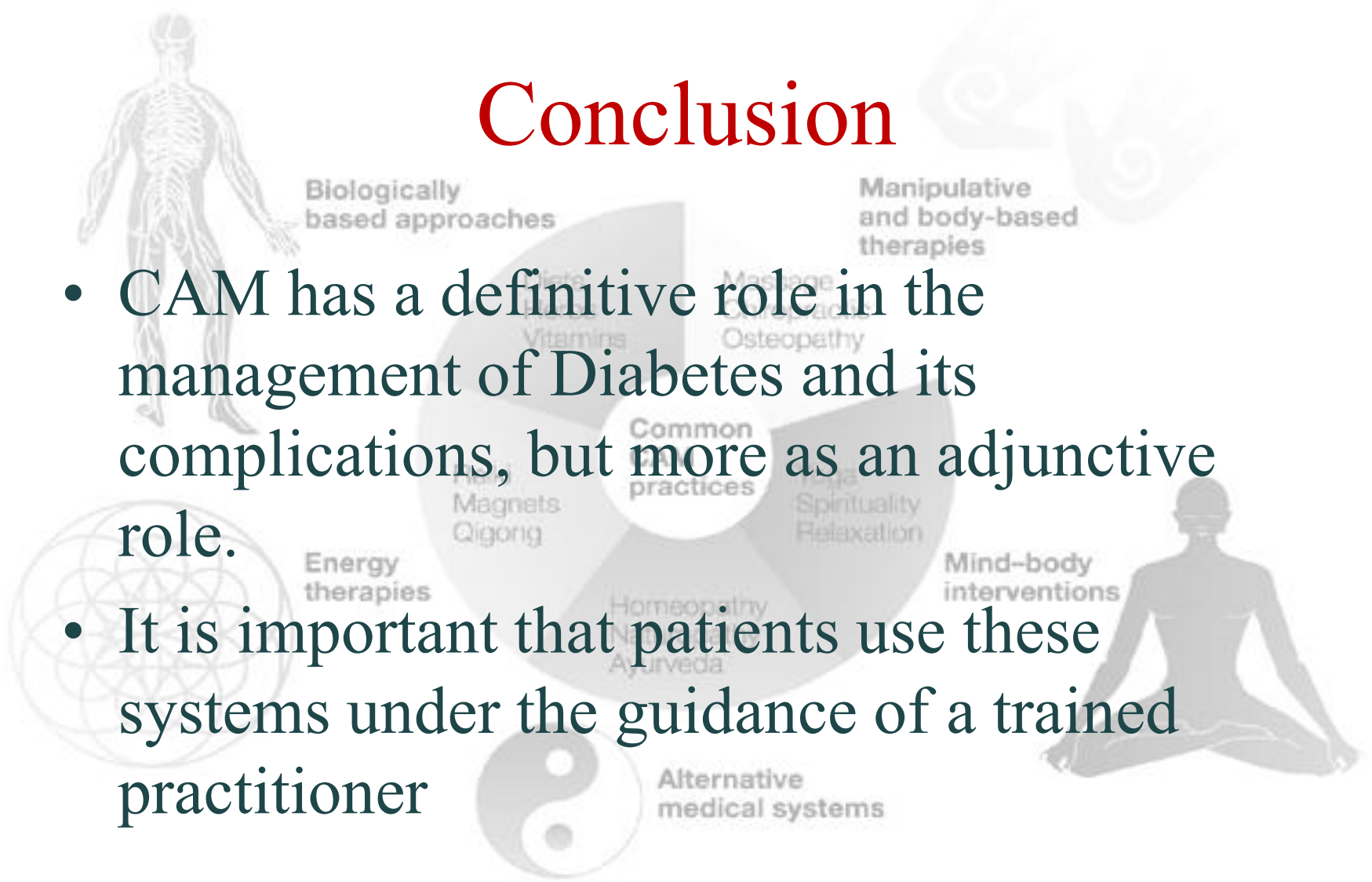


# Further Research

- 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.

# Conclusion

- CAM has a definitive role in the management of Diabetes and its complications, but more as an adjunctive role.
- It is important that patients use these systems under the guidance of a trained practitioner



# Thank You!

• Questions???



Biologically based approaches

Diets  
Herbs  
Vitamins

Manipulative and body-based therapies

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Common CAM practices

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Energy therapies

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Mind-body interventions



Alternative medical systems

