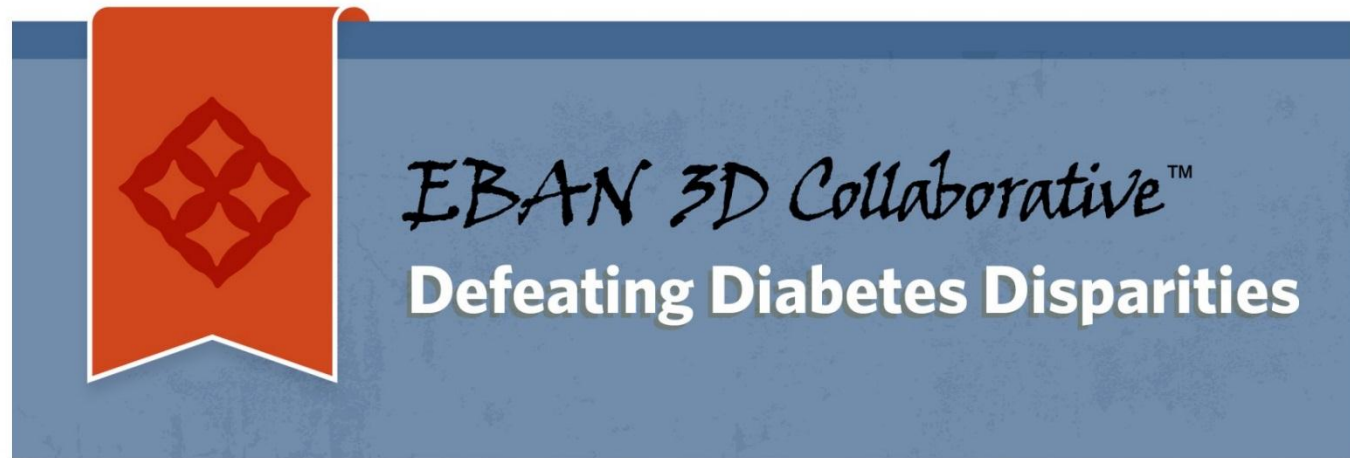


Complementary and Alternative Medicine in Diabetes



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Objectives

At the end of the presentation you will be able to:

- Discuss complementary and alternative medicine (CAM) with patients
- Provide patients resources to research CAM
- Identify a few common supplements used for diabetes

Framework

- Indication/Appropriateness
- Effectiveness
- Safety
- Convenience/Adherence

Indication

- What is the purpose or reason a patient is using a supplement?
- Is this a sign the patient is taking ownership of their condition?

Safety

- Just because its not in the literature *doesn't mean it's safe*
- General risks
 - Hypoglycemia
- Where to go to learn:
 - Patients
 - National Center for Complementary and Alternative Medicine (NCCAM)
 - <http://nccam.nih.gov/health/diabetes/supplements>
 - Clinic
 - Natural Standard
 - www.naturalstandard.com (Need subscription)
 - Natural Medicines Comprehensive Database
 - <http://naturaldatabase.therapeuticresearch.com/> (Need subscription)
 - Complementary & Alternative Medicine Supplement Use in People with Diabetes: A Clinicians Guide (Shane-McWhorter 2007)

Effectiveness

- Just because its not in the literature *doesn't mean it doesn't work*
- Where to go to learn:
 - Patients
 - National Center for Complementary and Alternative Medicine (NCCAM)
 - <http://nccam.nih.gov/health/diabetes/supplements>
 - Clinic
 - Natural Standard
 - www.naturalstandard.com (Need subscription)
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Convenience

- Cost!
- Pill burden
 - patients may be taking multiple medicines



Take-aways

- Always make it a discussion.
- Recognize the reason the patient is using a supplement and leverage that to motivate patient to manage diabetes.
- Generally, never discount something that does not have “evidence”.
 - Be sure to evaluate if its harming the patient or is adding undue financial strain.

Bitter Melon

Indication

- Natural product used for diabetes
- Popular in Asian and Indian cuisine

Effectiveness

- Contains poly peptide P
- Insulin like effect- onset 30-60 minutes, peak effect in 4 hours
- insufficient evidence from clinical trials



Bitter Melon

Safety

- Not for use with liver disease
- Not for use in patients deficient in glucose-6-phosphate dehydrogenase

Side Effects

- Headache
- Abdominal pain
- diarrhea

Convenience

- Vegetable
- available in capsule, tablet and liquid form

Fenugreek

Indication

- Cooking spice in European, Indian and Asian cuisine
- maple aroma and flavor
- Natural product use for Diabetes, Dyslipidemia, increase production of breast milk

Effectiveness

- Some evidence shown of lowering glucose
- Exact mechanism of action is still being studied
- may enhance insulin release
- lowering of glucose levels may be due to bulk laxative effect



Fenugreek

Safety

- Do not use in pregnancy
- May interfere with absorption of other medications
- Increased risk of bleeding in patients taking aspirin or warfarin
- Not recommended for patients with allergy to peanuts and soybeans

Side Effects

Abdominal distension
diarrhea

Convenience

- available as capsules, seed, extract, powder

Cinnamon

Indication

- cooking spice
- natural product that is used for:
 - type 2 diabetes, gas (flatulence), muscle and gastrointestinal spasms, preventing nausea and vomiting, diarrhea, infections, the common cold, and loss of appetite

Effectiveness

- works as an insulin sensitizer
 - similar to metformin
- current evidence is inadequate to come to a conclusion on Cinnamon



Cinnamon

Safety

- Caution in patients with liver disease
- Monitor for low blood sugars

Convenience

- available as spice and capsules

Other supplements/herbals you may see...

- Turmeric
- Prickly pear cactus
- Chia
- Ginseng
- Chromium
- Magnesium
- Selenium



Questions?

References

- Natural Medicines in the Clinical Management of Diabetes-Volume 10, No.107, Pharmacists Letter
- Natural Products Database, Lexicomp.com
- Natural Medicines Comprehensive Database. Cinnamon.
- Micromedex.com
- Check out: Shane-McWhorter L. Complementary & Alternative Medicine Supplement Use in People with Diabetes: A Clinicians Guide. American Diabetes Association (2007)