Case-Focus: Homeopathic Remedies vs Dietary Supps

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Dietary supplements and Homeopathy

Question 1: Myth or Fact:

"Even though a supplement or homeopathic prep may not help, at least it won't hurt..."

H/C profs need to identify where a product falls on spectrum of "fact vs fiction" before having a conversation on it with a patient—part of professionalism.

Objectives

- ID homeopathic products vs dietary supps --and a bit about medical foods
- Evaluate each for benefit vs risk, learn to search each product for available info
- Assess recommendations, examples in wt loss, energy enhancement, and performance products

Healthy Living



Zipfizz Healthy Energy Drink Mix, 30 Tubes Limon fever \$100018793 \$29.99 Delivered

yalic Page

reViva Liquid Calcium or Liquid Multi Valid 5/11/18-5/27/18 Search*: PETVIVA18MC

Calcium E

\$19.99 Dolivered After \$4 OFF

trunature Lutein & Zeaxanthin or Grape Seed & Resveratrol Valid 4/19/16-0/13/18 Secrot: TRLANISMO \$4 OFF Delivered

etrunature

trunature Verisol Collagen Powder
PO 2,500 mg, 10,62 Ounces
#1215667
\$19.99 Delivered



Cosamin ASU for Joint Health, 230 Capsules Valid 4/27/18-6/25/18 #007654 \$41,99 Delivered After \$8 OFF

Natiol Fruit & Veggle or Melatonin Time Release 5 mg Valid 5/4/16-5/27/18 Secret*: NATROL 18MO S4 OFF Delivered



Irwin Naturals Brain Awake or Garcinia HCA Extract Search* IRWIN IRMC \$21.99 Delivered



Gardnia HCA
Carlonia HCA
Carlon

FOCUStactor Kids, 150 Chewable Tublets Valid 5/4/18-6/20/18 #629140 \$14.99 Delivered After \$3 OFF





Yummi Basirs Organics Complete Multi-Vitamin, 180 Gummy Bears 5/4/18-5/20/18 WITERS 515.99 Delivered After \$4 OFF



Regulations: Dietary Supps

DSHEA Act-1994: treated as supplements to food/no risks/ingested Not for prevention, treatment or cure FDA-can act assertively if >100 are harmedany health claims must be approved FTC-regulates advertisement and labels **GMP-requirement** HARD TO MONITOR Many poor quality products-false claims, counterfeit, and adulterated products FDA Medwatch: 1-800-FDA-1088

Homeopathy

- "Let likes be cured by likes" Samuel Hahnemannfather of homeopathy-High dose- cause disease, low dose-cure: cinchona bark fever, chills, diarrhea, malaria-like
- The treatment of disease by minute doses of natural substances that in a healthy person would produce symptoms of disease
- usually provided in alcohol or purified water solution—products are not just ingested

Efficacy of Homeopathy

- Increase in use is dramatic-no longer just a small outlying group
- Recent studies: efficacy no better than placebo effect-BMJ, Cochrane, Harvard, etc
- Use more frequent in respiratory, ENT, musculoskeletal and pain disorders
- Users: more educated than non-users
- More benefit when recommended by homeopath vs self-treatment

Case

- L.O., 10 year old female asthma sufferer,
- Receiving arsenic album, ipecac sambucus nigra, lobelia inflata as necessary for cough, inability to breathe especially at night
- School RN identified products when concern arose over child's ability to breathe in class
- Aqueous arsenic trioxide dilution
- Ipecac, sambucus nigra
- Lobelia inflata -pukeweed (Indian tobacco)

FDA Crackdown

- Homeopathy: teething products which when investigated contained various doses mislabeled belladonna harming babies – banned 2016
- Since 1988 homeopathic products mfred and distributed without FDA approval
- FDA 2017-scrutinizing homeop. products in certain categories-enforcement where unproven remedies being marketed for serious conditions or diseases

Case

- ▶ 40 y.o. Hispanic Male, DX: OA ACR criteria-VAS pain rating 7-9, usually 5 days a week.
- Patellofemoral PS on radiograph, no history of secondary OA, 15 lb overwt.
- Smoker, stage 1 hypertension, BP at home this week—144/94
- Meds: acetaminophen or Percocet q 6-8 hr, enalapril, hydrochlorthiazide.
- Has been taking "Botany Bay" to relax when it hurts bad—but it is no longer easy to buy on the internet.

Acquiring info on Botany Bay

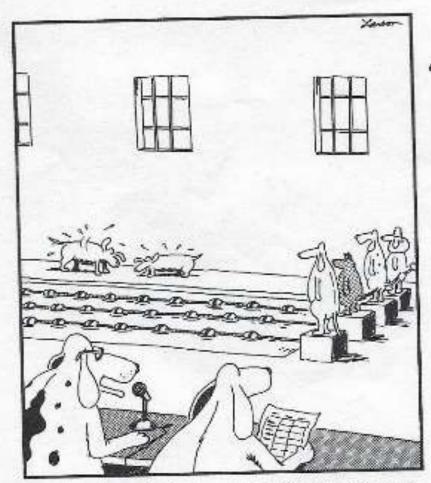
- Google "Botany Bay supplement"
- Reuters Feb 21, 2018 US FDA says recall, destroys certain kratom-containing dietary supps
- FDA oversees kratom purge after Salmonella outbreak
- FDA recalls products containing increasingly popular opioid
- www.ods.od.nih.gov -good choice for example conversations with patients

Botany Bay (kratom)

- FDA recalled and destroyed kratom containing dietary sup made by Missouri company.
- Natural plant grown in Asia—to ease pain and reduce symptoms of opioid withdrawal, which critics say can lead to addiction and death
- FDA has data on numerous deaths— has addictive effects—similar to morphine, has NO therapeutic benefit as dietary sup/ and now is assoc with salmonella outbreak

FDA Crackdown

- Dietary SUPPS: where serious harm has occurred
- --pulling: kratom, DMAA, kava kava, contaminated probiotics, etc.
- BUT often the INTERNET continues to allow consumers access to the riskier products



"Well, we're ready for the males' 100-meter freestyle, and I think we can rest assured that most of these athletes will select the dog paddle."

Communication ask-tell-ask

Majority of patients use -- but do not tell us...

H/C profs-identify implicit bias and overcome it....

- -why is pt considering this option?
- -help patient recognize both sides of the equation
- _
- -interactions or contraindications
- -existing diseases/chronic cond.-Diabetes, cystic fibrosis, heart disease, etc

Communicating risks/benefits

- Exaggerated claims of "miracle" productsoften have hidden interactions
- Potential harm- mega-doses
- Do not exceed recommended daily allowances of vits/minerals (Ca/Vit D)
- Products may not be what they say or seem
 - (heavy metals, Rx, or illegal drugs)
- Natural doesn't mean safe
- Pregnant, nursing, peds, chronic disease (DM) should be more vigilant

Specific treatments

- Be concerned when product promoted for disease—by replacing medications, easing blood sugar variations, curing
- —that is not what dietary supp/herb, etc is supposed to be used for....health claims are not allowed (that would require a New Drug Application)

Fashion is negotiable. Nutrition isn't.



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Supps/Herbs/Homeopathy for DM

- Cinnamon (cinnamaldehyde)
 - High doses 1-6gm studied for Bld Sugar lowering and lipid reduction—Pakistani study in 2003 has never been replicated
- Omega 3 Fatty Acids/fish oil-mixed results
 - Eat fatty fish-or 1 gm/day of EPA/DHA
 - With high triglycerides-value in Rx products
 - Not shown to be beneficial in 2ndary prevention CVD
 - DHA actually increases LDL (1/31/18 JAMA Cardiology)
- Garlic active ingredient–allicin—not possible to eat enough to get effect–supps never been shown to be helpful

Specific treatments

- Ginseng-no evidence of lipid or blood sugar lowering—may increase/decrease bld sugar
- Magnesium keep levels within normal range mild supplementation can be helpful
- Chromium-can increase metabolism-higher dose than 200mcg per day increase lung cancer risk
- Bitter orange-DMAA can increase metabolismcauses respiratory and cardiac stimulation like ephedra
- Green tea extract-no evidence that this increases immune benefits over drinking a cup of green tea

Wt Loss/Energy/Performance

- Products to improve strength or endurance
 - Commonly adulterated-seek out FDA alerts Amino acids, protein, creatine, CAFFEINE and caffeine-amphetamine alternatives to boost metabolism

College kids alone, 2009–2010: 66% reported using some sort of supplement ___20% enhanced muscle strength, 19% performance enhancement, 7% increased endurance

Wt Loss/Energy/Performance

- Military personnel in 2007–2008
 - Body building in and out of theatre 22.8% M and 5.3% F
 - 2011-2012- several soldiers died from DMAA use

Some young people and athletes in general get bad advice from coaches and trainers—H/C profs need to take up these conversations

Many of the substances do work to BOOST metabolism-but often Side Effects or interactions HARM—heart and respiratory side effects

American Cancer Society Guidelines 2012 to present

NO evidence that phytochemicals taken as supplements are as beneficial for long-term human health as the vegetables, fruits, beans, and grains from which they are extracted.

Case

- E.G., 74 y.o. female
- Seasonal rhinitis, dyslipidemia, osteoarthritis in fingers and wrists, hemorrhoids
- Fluticasone nasal spray BID, Celecoxib 100mg BID, atorvastatin 10mg QD, pramasone ointment as needed for hemorrhoids.
- 3 weeks ago, skin started turning yellow, BP increasing, not remembering things, liver transaminase levels elevated
- Nothing has changed in her life...oh by the way— I am taking a food from the rheumatologist-I need to call the pharmacist for more

Medical Foods

- Medical Food: food specially formulated for dietary management of disease under supervision of a physician that has distinctive nutritional needs not met by diet alone.
- Caprylic triglyceride in coconut oil, example for Alzheimer's—unlike dietary supp
- Limbrel/flavocoxid, plant blend, probably cox 1 and cox 2 inhib—baicalin (from skullcap)/catechin flavonoids creating not just minor serum aminotransferase but acute liver toxicity-acute hepatitis with jaundice
- FDA banned

trunature® CoQ10

trunature CoQ10 is a smart choice for anyone who
wants to help support their heart function, cellular
energy production and antioxidant activity.*

helps support antioxidant activity and heart function

helps support normal CoQ10 levels in the blood

> helps support cellular energy production[†]

trunature AFRESHAPPRONCH TO HEALTHY JOING

CoQ10

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heart suncassi antioxidant activity portral CoUND loss s

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USP has tested and verified backst Kirkand Signature supplements for their ingredients, patiently and manufacturing process USP sets official etanlands for dietary supplements. Set Leptom.

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Sources of Info—ID'ing the facts

- H/C profs and consumers are getting accurately labeled ingredients ONLY when seal of approval :
 - USPharmacopeia (USP)
 - Consumer lab
 - NSF International
- False claim—"extremely beneficial to..", "can treat or cure disease", "secret ingredient or proprietary blend", "scientific breakthrough", personal testimonials, NO RISK STATED or advance payment required

Sources of Info

- RPh counseling
- Avoid purchase from online sources, unless verisign seal of a valid pharmacy in compliance with US drug laws
- Internet information—FDA advises against conducting blind searches; instead connect with respected organizations-federal agencies, academic associations, google scholar

Internet sources

www.nccam.nih.gov NCCAM
www.nia.nih.gov National institute on Aging
www.ods.od.nih.gov/factsheets/list-all

Office of Dietary Supplements

www.fda.gov FDA

NIH and National Library of Medicine, medline PLUS, at www.nih.gov

Cochrane/CAM: www.cochranelibrary.com

More internet info

- National Center for Complementary and Alternative Medicine
 - www.nccam.nih.gov

National Institute on Aging

www.nia.nih.gov

Office of Dietary Supplements www.ods.od.nih.gov/factsheets/list-all/

Articles that might be helpful

- Sang MK, et al. Efficacy of omega-3 fatty acid supplements (EPA and DHA) in secondary prevention of CVD. *Arch Intern Med* 2012;172(9)686-696.
- American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention, 2012
- Ashbar BH, et al. Advising patients who use dietary supplements. Am J Med 2008;121,91– 97.

Articles that might be helpful

- Owens C, et al. Online Sources of Herbal Product Information. Am J Med 2014;127(2),109–115.
- Diabetes Care.2003;26(12):3215-8.
- Ann Fam Med.2013;11(50):452-9.
- Nutrition. 2013;29(10):1192-6.
- Fortmann, et al. Vitamin and Mineral Supplements in the Primary prevention of CVD and Cancer; An Updated Systematic Evidence Review for the US preventive Services Task Force, Ann Internal Med2013;159(12):824-834.
- American Pharmacists Assn, www.pharmacist.com
 Medication and Dietary Supplements: Safe and Effective Care Through Appropriate Product Selection October 2013

SO.....

- Herbs, dietary supps, and homeopathy are here to stay....more investigation underwaynot paid for by manufacturers.....
- Powerful lobbies and wealthy manufacturers are helping to support the myths
- Know and use FDA's BeSafeRx campaign to identify and avoid fraudulent online pharmacies
- Verisign seal -USP seal
- Learn all you can



"Oh boy! ... It's dog food again!"

Post test

- Patients feel more comfortable disclosing product use information to physicians who:
- ▶ 1. have little time to chit chat
- 2. show a judgmental approach to discussing supplements and the lack of proof associated with their use
- 3. show an honest attempt at assisting patients in finding out facts about various treatments

Anyone who doesn't think there are two sides to an argument, is probably in one—

Unknown