

# **New Paradigms in Nursing: CAM in Health Care**

***United States Public Health Service  
Scientific and Training Symposium***

*Josephine P. Briggs, M.D.  
May 25, 2010*



# Legislative Language

“The general purposes of the National Center for Complementary and Alternative Medicine (NCCAM) are the conduct and support of basic and applied research...research training, and other programs with respect to identifying, investigating, and validating complementary and alternative treatment, diagnostic, and prevention modalities, disciplines and systems.”

**P.L. 105-277**

**October 1998**

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AND YOU FALL DOWN



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# Our Mission

- Explore complementary and alternative healing practices *using rigorous scientific methods* and develop the evidence base for safety and efficacy of CAM approaches
- Support the development of the research
- Disseminate authoritative info to the public and professionals



# Public Information and Communications

Flu Resources [NCCAM Health Information] - Microsoft Internet Explorer

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Address http://nccam.nih.gov/healthy/flu.htm

NATIONAL INSTITUTES OF HEALTH  
**NCCAM** National Center for Complementary and Alternative Medicine

10 years of rigorous research

Home Health Info Research Grants Training News and Events About NCCAM

What Is CAM? Be Informed Topics A-Z Herbs Clinical Trials For Health Professionals En Español

## Flu Resources

**"Vaccination is the best protection against contracting the flu,"**  
— Dr. Josephine Briggs, NCCAM Director

Director's Message on the Flu  
[Protecting Yourself This Flu Season >](#)

**FLU.gov**  
Know what to do about the flu.  
[Visit FLU.gov](#)

Flu.gov Resources

- Vaccination
- Flu Myths and Realities
- Ask an Expert about the Flu

Other Resources

- 2009 H1N1 Flu Information (ccdc)
- FDA Fraudulent H1N1 Products List (fda)

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**Fraudulent H1N1 Flu Products** FDA  
Information correct as of 20 Oct 2009 16:00:00 GMT  
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NCCAM  
National Institutes of Health  
9000 Rockville Pike  
Bethesda, Maryland 20892 USA  
E-mail: [info@nccam.nih.gov](mailto:info@nccam.nih.gov)

National Institutes of Health (NIH)

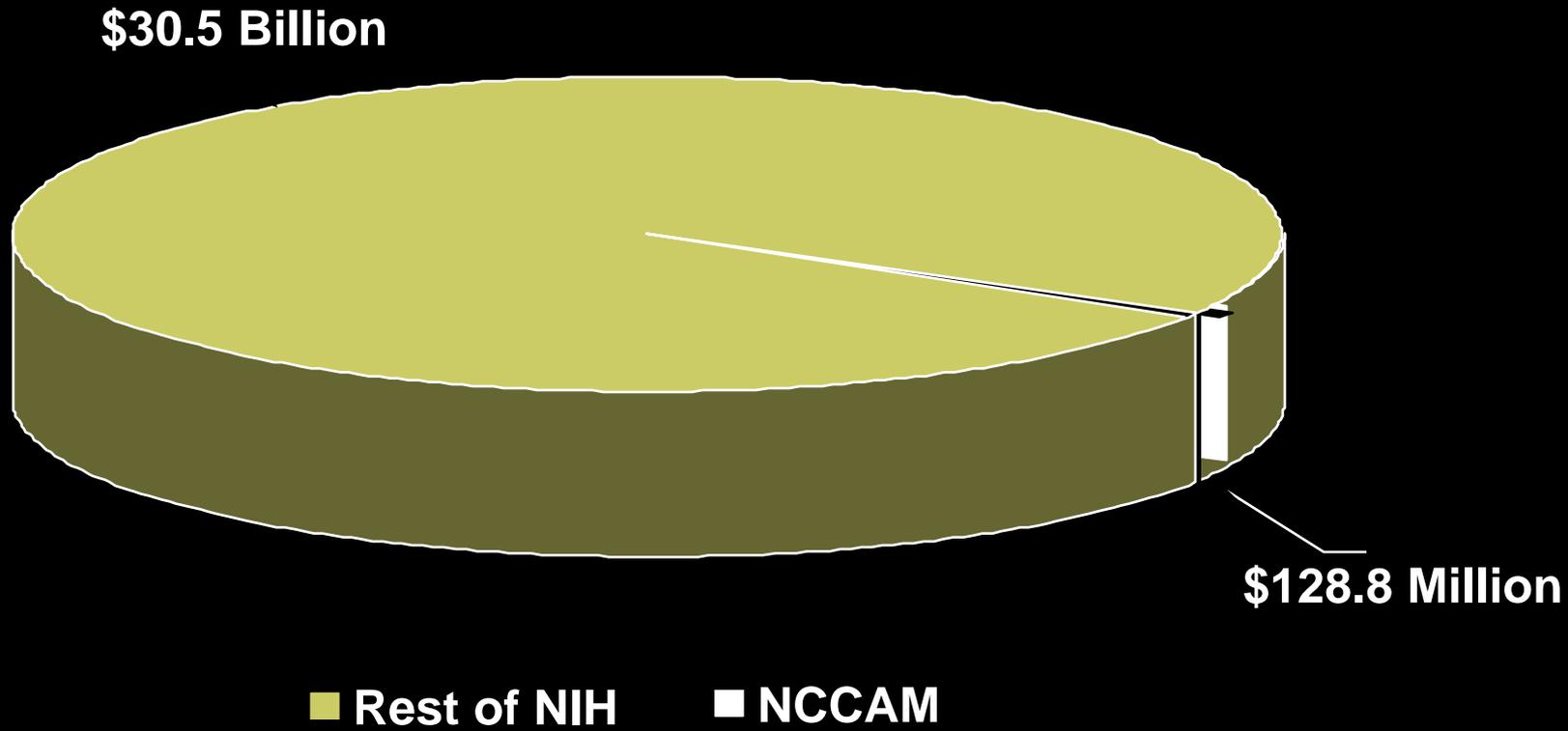
Department of Health and Human Services

USA.gov

Trusted sites

http://nccam.nih.gov/healthy/herbsatbalance.htm

# NCCAM's Budget: 0.4% of the NIH Total



# What is CAM?



... A group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine.

**Complementary:** together with conventional practices

**Alternative:** in place of conventional practices

# What is Integrative Medicine?

**Integrative medicine** combines treatments from conventional medicine and CAM for which there is evidence of safety and effectiveness.



# Why do people turn to complementary or alternative medicine?

To promote health and well being

To treat specific health conditions

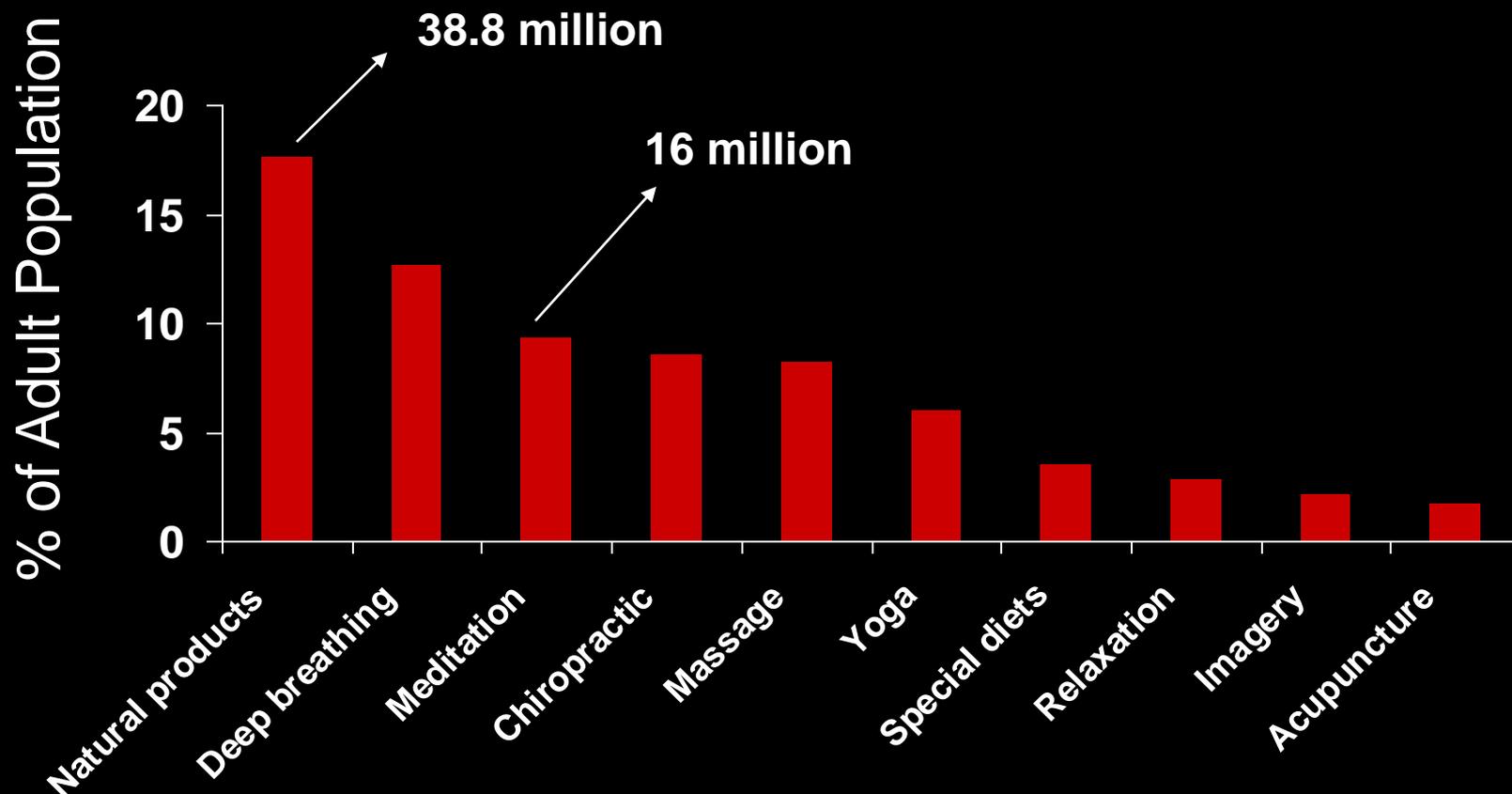
Mostly as an adjunct to conventional care

# NHIS CAM Modules: 2002 and 2007



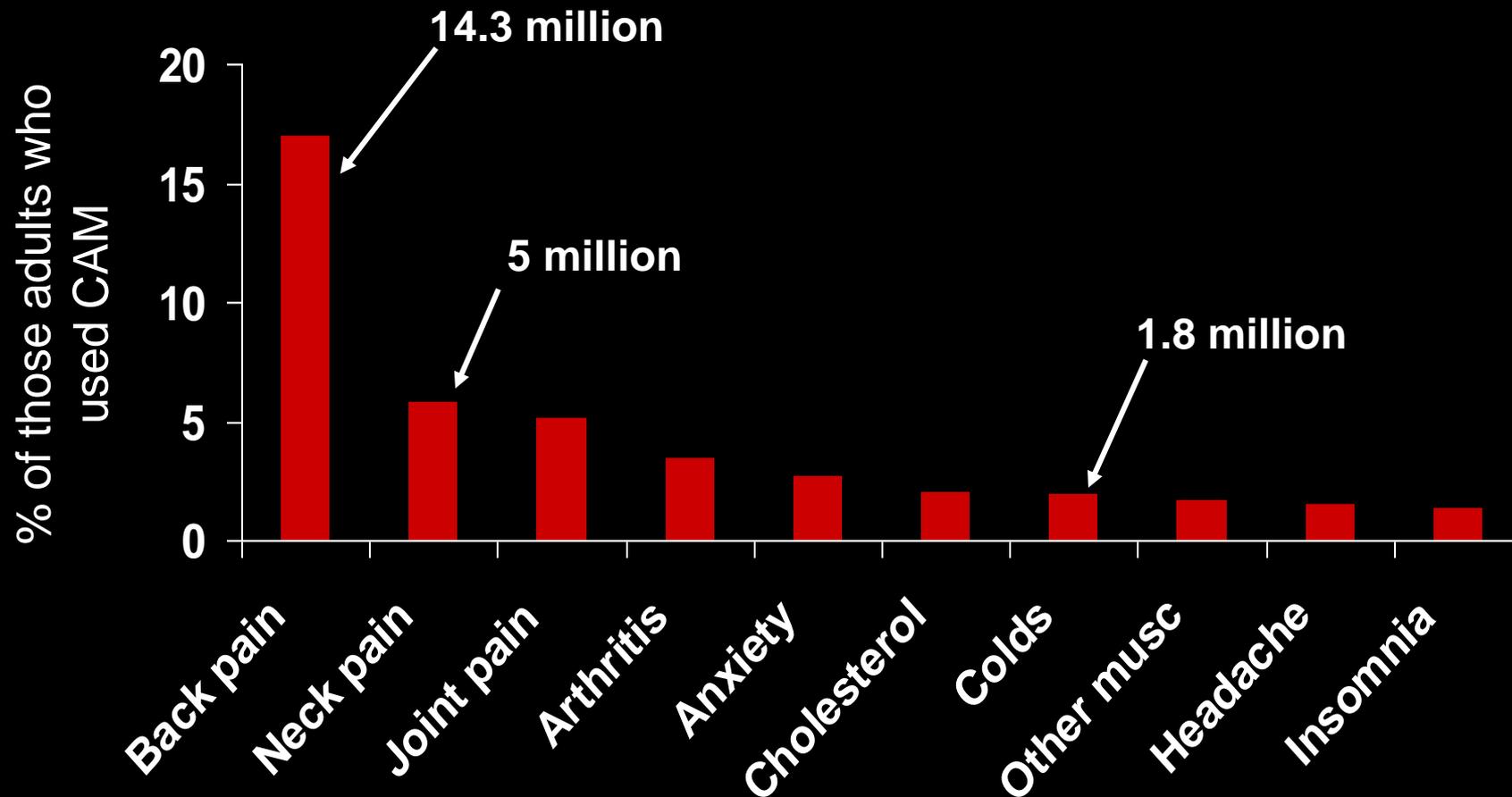
- 2007 Survey: 36 different CAM therapies for 81 different diseases/conditions
- Sample of 23,000 adults

# Adult Use of Selected CAM Therapies: United States, 2007



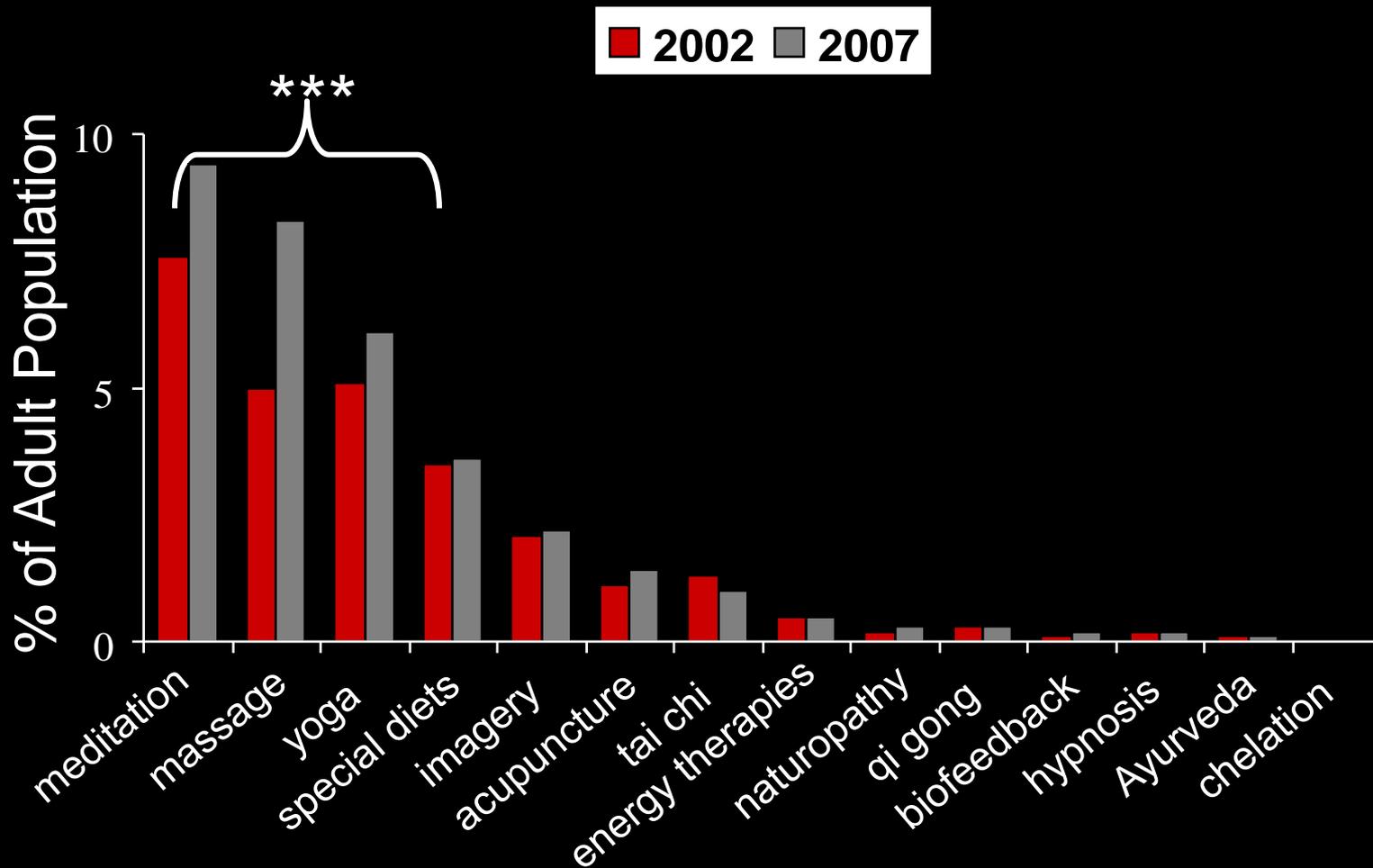
Barnes et al., 2008

# Adult Use of CAM for Selected Conditions: 2007



Barnes et al., 2008

# Adult Use of Selected CAM Therapies: 2002 vs. 2007



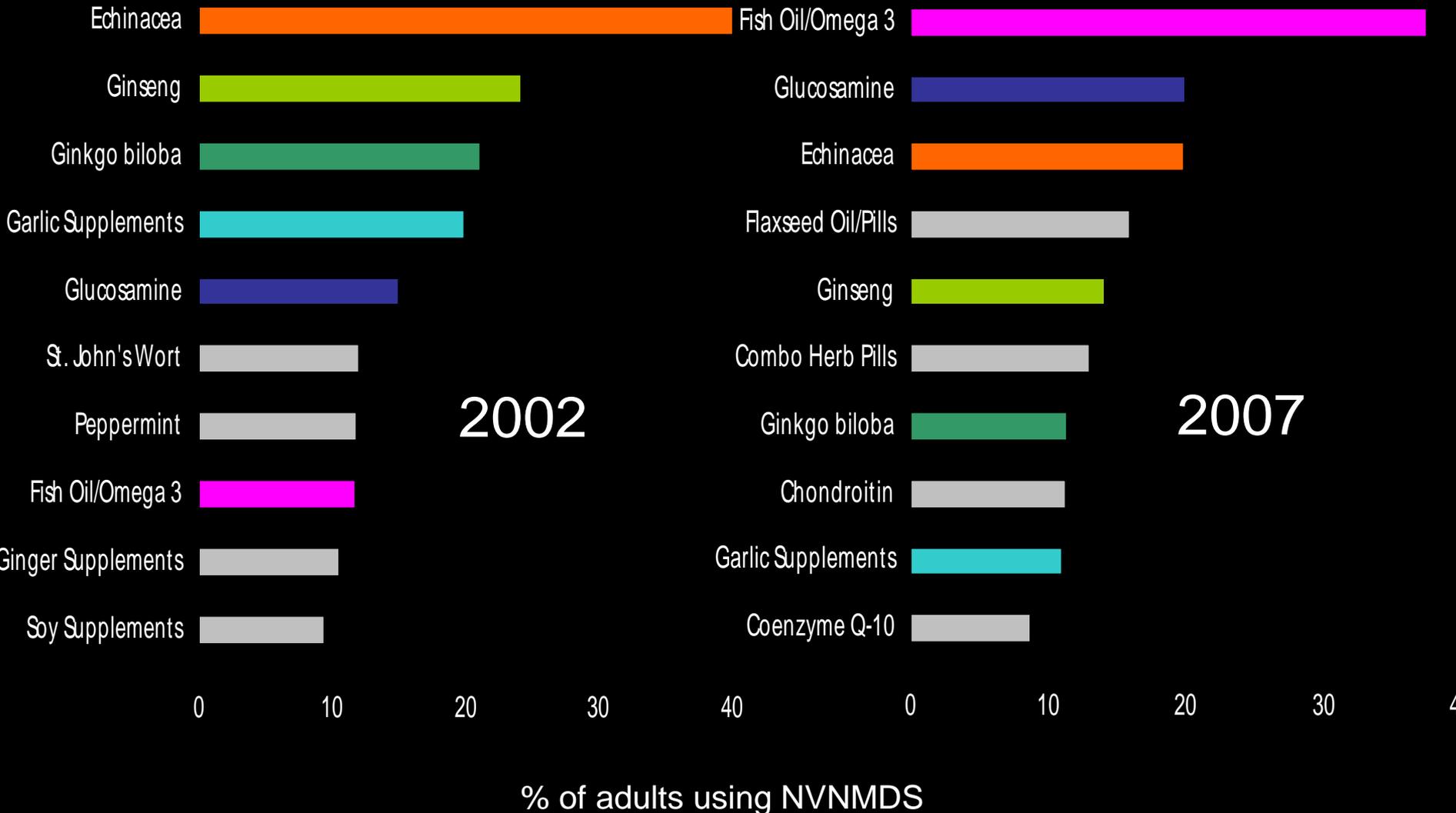
Barnes et al. 2004, 2008

# NHIS CAM Module Survey: Demographics and Costs of CAM, 2007

- Approx 40% of American public use some form of CAM, consistent with earlier surveys
- Widespread in all demographic groups
- Women > men
- West >Midwest >Northeast >South
  
- Greater use in people with higher education levels
- Largely paid for out of pocket
- Costs- approximately \$34 B – 1% of health care expenditures, 10% of out of pocket costs

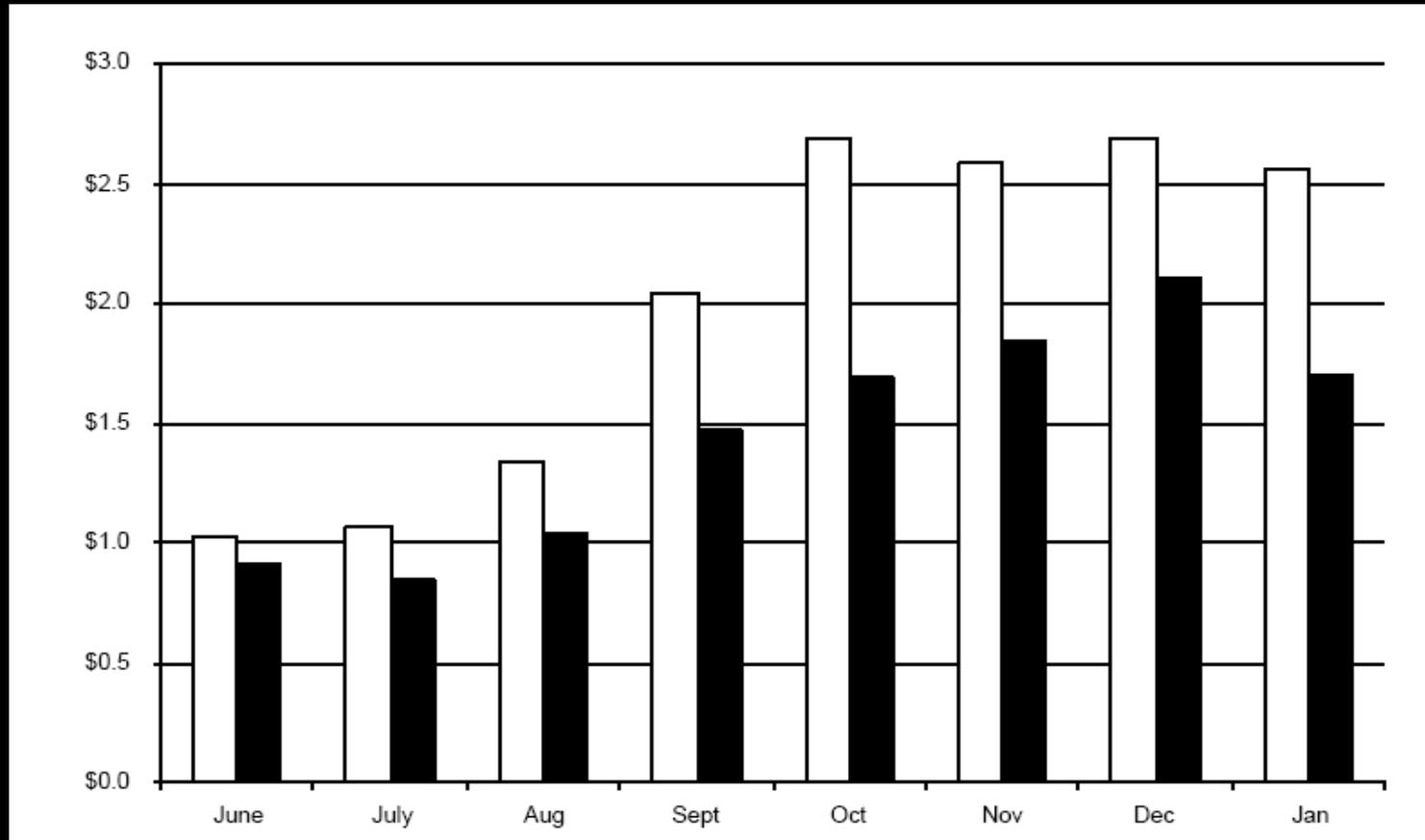
# Top Natural Products and other NVNMNPs

NVNMNP = non-vitamin/non-mineral natural products



# Echinacea Sales; 4-Week Periods: 2004 vs. 2005.

*NEJM Echinacea study – published July 2005*



**Source: Nutrition Business Journal 2006**

# New Findings from GEMS

***Ginkgo biloba for  
Preventing Cognitive  
Decline in Older Adults***  
**A Randomized Trial**

The logo for JAMA (The Journal of the American Medical Association) is displayed. It features the word "JAMA" in a large, bold, red, sans-serif font. To the right of the "A" is a registered trademark symbol (®). Below "JAMA" is the text "The Journal of the American Medical Association" in a smaller, blue, sans-serif font, arranged in three lines.

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# GEMS: *Ginkgo biloba* for Preventing Cognitive Decline in Older Adults

**Objective:** To determine whether *ginkgo biloba* slows the rates of global or domain-specific cognitive decline in older adults

**Design:** A randomized, double-blind, placebo-controlled clinical trial of 3,069 participants aged 72-96 years; median follow-up of 6.1 years

**Intervention:** Twice-daily dose of 120-mg extract of ginkgo (n = 1545) or placebo (n = 1524)

**Conclusion:** Compared with placebo, the use of ginkgo did not result in less cognitive decline in older adults with normal cognition or with mild cognitive impairment

# The New York Times

NEW YORK, WEDNESDAY, NOVEMBER 14, 2008

## Ginkgo Biloba Ineffective Against Dementia, Researchers Find

By IONIA CARMY RABIN  
Published November 19, 2008

The largest and longest independent clinical trial to assess ginkgo biloba's ability to prevent memory loss has found that the supplement does not prevent or delay dementia or Alzheimer's disease, researchers are reporting.

The study is the first trial large enough to accurately assess the plant extract's effect on the incidence of dementia, experts said, and the results dashed hopes that it is an effective preventative. In fact, there were more cases of dementia among participants who were taking ginkgo biloba than among those who were taking a placebo, though the difference was not statistically significant.

"We were disappointed," said Dr. Steven T. DeKosky, dean of the School of Medicine at the University of Virginia and the principal investigator. "We were hopeful this would work."



## Health Buzz: New Study Casts Further Doubt on Popular Osteoarthritis Supplements

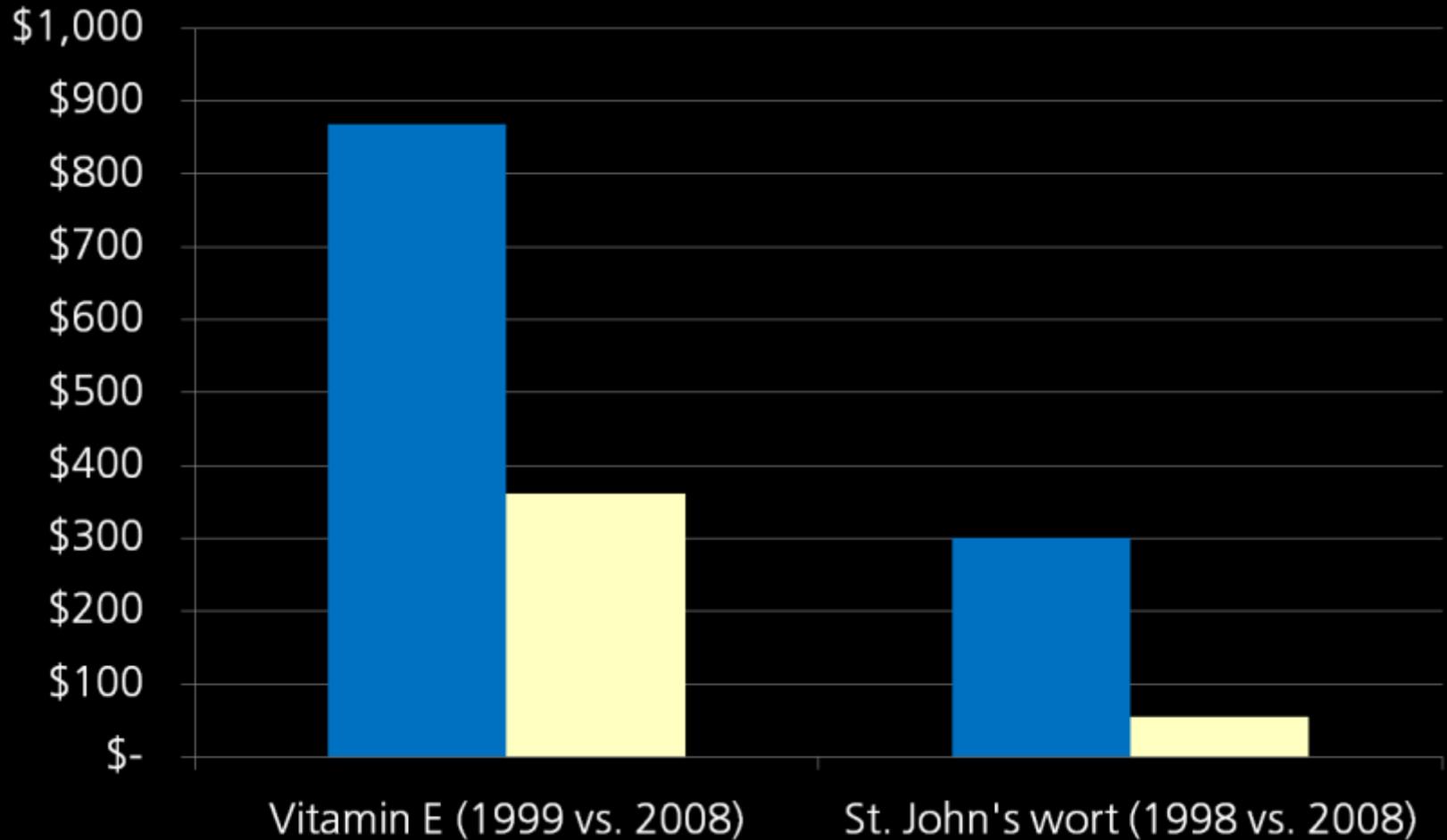
January W. Payne  
October 1, 2008

The popular supplements glucosamine and chondroitin sulfate don't appear to work any better than placebos in slowing down the loss of knee cartilage in osteoarthritis patients, Reuters reports. A new study, funded by the National Center for Complementary and Alternative Medicine and published this month in the journal *Arthritis & Rheumatism*, bolsters previous research that also cast doubt on the effectiveness of the supplements, though researchers said more study is needed to confirm this week's findings.

"The study actually says more about what we need to do for the next investigation than for what patients should do," researcher Allen Sawitzke, an associate professor of internal medicine at the University of Utah School of Medicine, told *HealthDay*.

A recent study found that arthroscopic surgery for knee osteoarthritis doesn't work any better than physical therapy and medications. U.S. News's Adam Voiland provided a list of six alternatives to arthroscopic knee surgery. Earlier, Katherine Holson encouraged runners to listen to their knees.

# Dietary Supplement Sales



\*Sales figures in millions

Source: Nutrition Business Journal 2010

# What do the numbers tell us?

- Complementary and alternative health practices, especially natural products, meditation, massage, manipulative therapies, and yoga are widely used by the American public
- Chronic pain, especially back pain, is the most common reason
- Media coverage and public interest is strong
- Data on natural product use from both NHIS and industry sources indicates significant public impact of research results

# Cheat death.

The antioxidant power of  
pomegranate juice:



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## For Consumers

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## Resources for You

- Sign up for Consumer Updates by E-mail
- Consumer Updates RSS Feed

## Warning on Body Building Products Marketed as Containing Steroids or Steroid-Like Substances

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Watch this video &gt;&gt;

Lea este artículo en Español

On July 28, 2009, the U.S. Food and Drug Administration (FDA) issued a public health advisory warning consumers to stop using any body building products that are represented to contain steroids or steroid-like substances. Many of these products are marketed as dietary supplements.

This advisory was issued along with a warning letter sent to American Cellular Laboratories Inc. for marketing and distributing body building products containing synthetic steroid substances. Although these products are marketed as dietary supplements, they are NOT dietary supplements, but instead are unapproved and misbranded drugs.

Examples of products affected by FDA's advisory.

**Q. What types of products are affected by this public health advisory?**

**A.** FDA is warning consumers about products that are being marketed for body building and that claim to contain steroids or steroid-like substances. These products are sold online and in retail stores and are promoted as hormone products and/or as alternatives to anabolic steroids for increasing muscle mass and strength. Many of these products are labeled as dietary supplements and make claims about the ability of the active ingredients to enhance or diminish androgen, estrogen, or progestin-like effects in the body. Consumers should be aware that these products are potentially harmful and that FDA has not approved them nor reviewed their safety before marketing.

**Q. What are some examples of these types of products?**

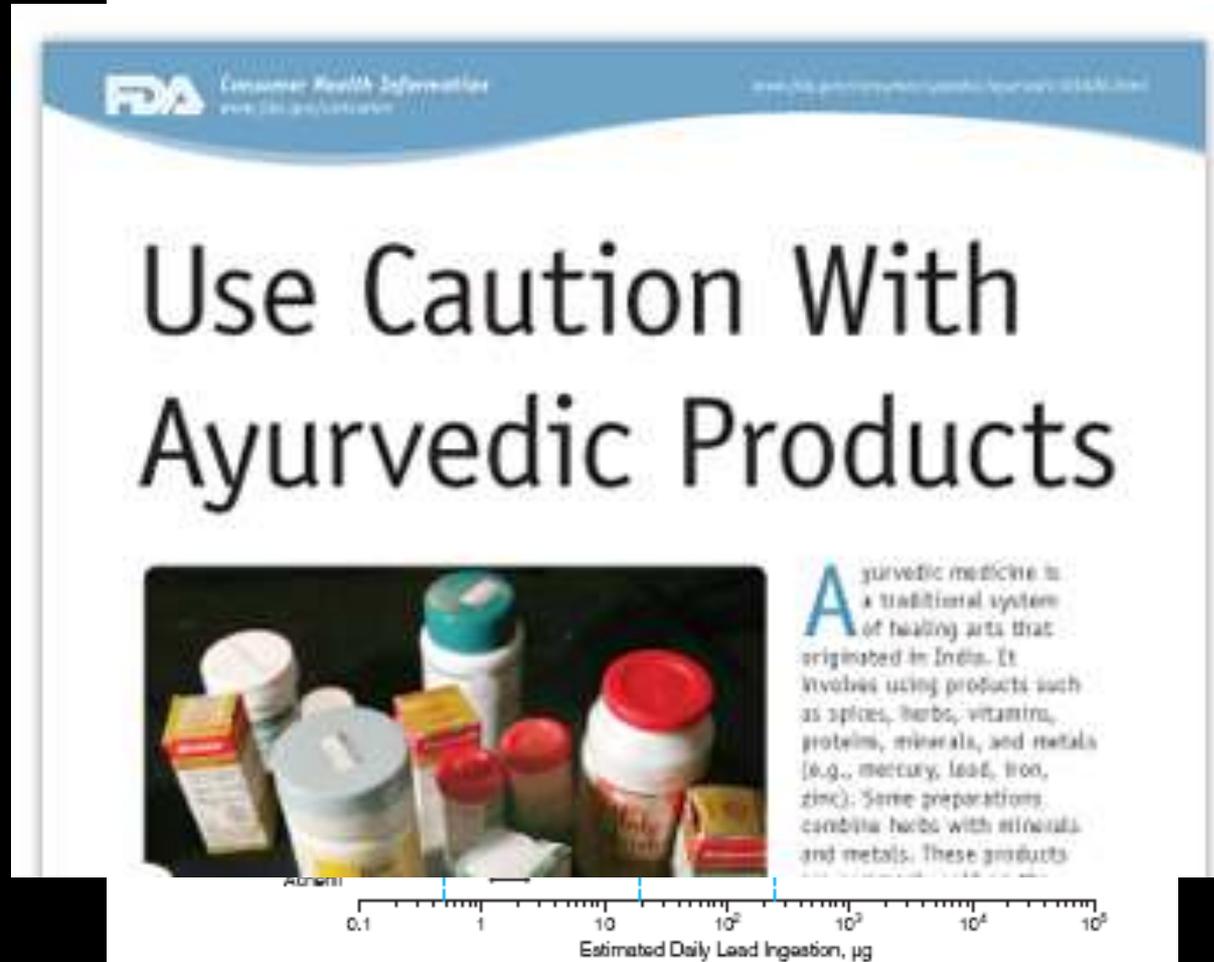
**A.** These body building products are often marketed as being anabolic (promoting muscle building) and/or being similar to anabolic steroids (such as testosterone). The products included in the warning letter to American Cellular Laboratories Inc. provide a few examples of the body

**JAMA**  
**August 27, 2008**

# Lead, Mercury, and Arsenic in US- and Indian-Manufactured Ayurvedic Medicines Sold via the Internet

Robert B. Saper, MD, MPH  
Russell S. Phillips, MD  
Anusha Sehgal, MD(Ayurveda)

**Context** Lead, mercury, and arsenic have been detected in a substantial proportion of Indian-manufactured traditional Ayurvedic medicines. Metals may be present due to the practice of *rasa shastra* (combining herbs with metals, minerals, and gems). Whether toxic metals are present in both US- and Indian-manufactured Ayurvedic medi-



... Ayurvedic medicines available via the Internet. We searched for arsenic and to compare the prevalence of arsenic in these medicines and between *rasa shastra* and the search terms *Ayurveda* and *herbs*. We identified 100 traditional Ayurvedic herbs, for-

... is and the search terms *Ayurveda* and *herbs*. We identified 100 traditional Ayurvedic herbs, for-

# Quirky Ideas From Outside the Mainstream

- Physical resistance training is good for people recovering from major physical trauma: Joseph Pilates, 1915
- Relaxation and breathing techniques help with pain of childbirth: Ferand Lamaze, 1940
- Breast feeding is good for babies: Edwina Froelich, La Leche League founder, 1950's
- Extensive palliative support, and reduced medical interventions should be provided to dying patients: Saunders, Wald, Kubler-Ross, 1960's

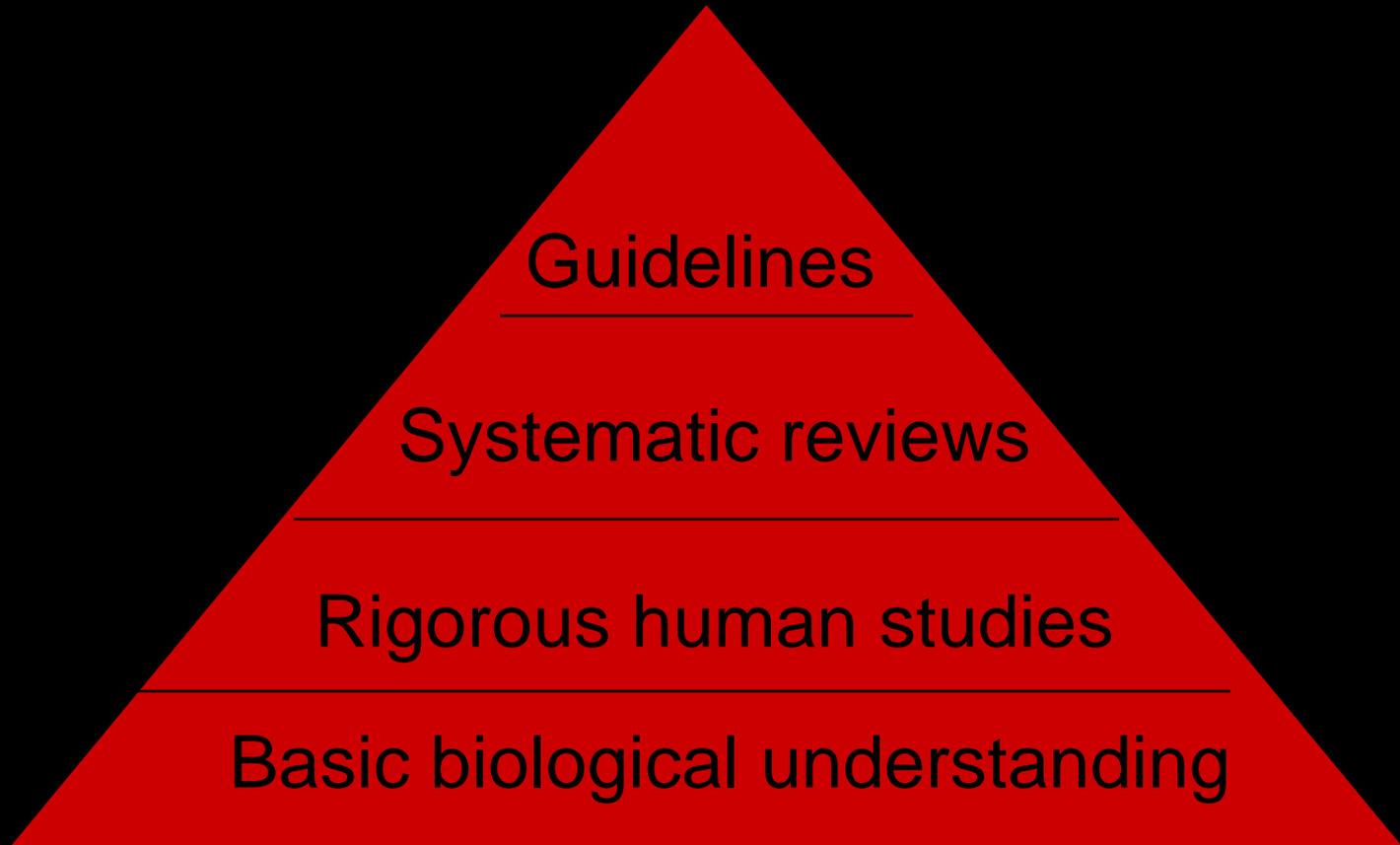
## ***Current Events:*** **Quirky Ideas From Outside the Mainstream**

- Meditative practices derived from ancient Buddhist traditions can help with eating disorders.
- Elements from ancient Asian practices of acupuncture can be effectively adapted to modern health care settings and contribute to management of a range of symptoms – especially PAIN, but also nausea and vomiting, substance withdrawal and others.

# Examples of NCCAM-funded, Nurse-led Research Projects

- Patient-Provider Communication: CAM Beliefs, Attitudes, and Practices
  - Maureen George, RN, University of Pennsylvania
- A Mindfulness-based Intervention To Reduce Diabetes Risk in Prediabetic African Americans
  - Cheryl Giscombe, RN, University of North Carolina, Chapel Hill
- Menopausal Symptoms Initiative: Finding Lasting Answers for Sweats and Hot Flashes
  - Andrea LaCroix, MPH, Fred Hutchinson Cancer Research Center

# Hierarchy of Evidence



## Nonpharmacologic Therapies for Acute and Chronic Low Back Pain: A Review of the Evidence for an American Pain Society/American College of Physicians Clinical Practice Guideline

Roger Chou, MD, and Laurie Hoyt Huffman, MS

## LITERATURE REVIEW

Journal of Manipulative and Physiological Therapeutics

## UNLOADED MOVEMENT FACILITATION EXERCISE COMPARED TO NO EXERCISE OR ALTERNATIVE THERAPY ON OUTCOMES FOR PEOPLE WITH NONSPECIFIC CHRONIC LOW BACK PAIN: A SYSTEMATIC REVIEW

Susan C. Slade, PT,<sup>a</sup> and Jennifer L. Keating, PhD, PT<sup>b</sup>

## Comparing Yoga, Exercise, and a Self-Care Book for Chronic Low Back Pain

A Randomized, Controlled Trial

Karen J. Sherman, PhD, MPH; Daniel C. Cherkin, PhD; Janet Erro, RN, MN, PNP; Diana L. Miglioretti, PhD; and Richard A. Deyo, MD, MPH

Symptoms matter

focus

Science  
Impact  
Use  
Promise

# NCCAM Strategic Plan Goals

- A high-level, long-range, strategic vision for:
  - Establishing research priorities and scientific directions
  - Building research capacity and collaboration
  - Disseminating information to achieve maximum impact
  - Ensuring responsible stewardship of the public trust
- Not an exhaustive list of opportunities and possibilities
- Draft in late summer, with publication in December 2010

# What We Are Hearing

- From CAM critics
  - Lack of scientific rigor
  - No cures
  - Advocacy
- From CAM proponents and researchers
  - Support for greater focus
  - Evaluate CAM as actually practiced
  - Focus on symptoms, healthy behavior (vs. diseases)
  - Invest in better tools, methods, and technologies to enable scientific rigor and measure outcomes
  - Continue emphasis on product integrity
  - Collaborate with other ICs, organizations, countries

# The Range of Research Questions

How does  
it work?

Can it be  
studied in  
people?

What are the  
specific  
effects?

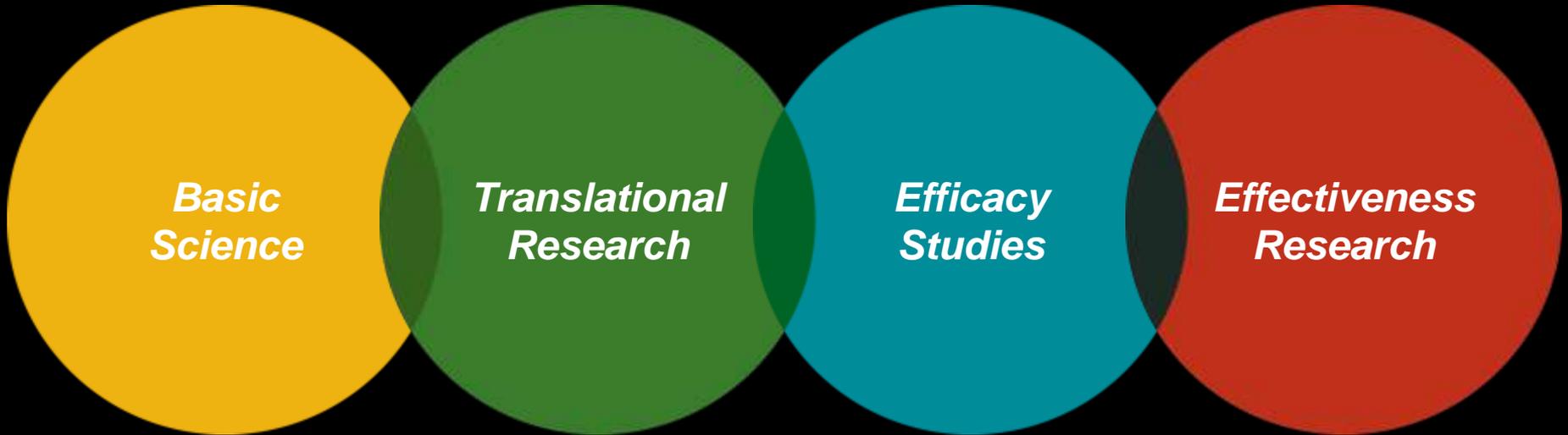
How effective is it in  
real world settings?

*Basic  
Science*

*Translational  
Research*

*Efficacy  
Studies*

*Effectiveness  
Research*



# Our Current 'Chicken or Egg' Quandary

Is the intervention efficacious?



Design of *definitive* efficacy studies  
requires mechanistic insight



We should only invest in fundamental  
mechanistic studies for interventions  
that are known to be efficacious

What are the mechanisms?

# The New York Times

A Doctor for Disease, a Shaman for the Soul



Jim Wilson/The New York Times

**A CULTURAL APPROACH** Va Meng Lee, a Hmong shaman, performs a ceremony intended to summon the runaway soul of Chang Teng Thao at Mercy Medical Center in Merced, Calif. [More Photos >](#)

By PATRICIA LEIGH BROWN

Published: September 19, 2009

SIGN IN TO

# Time To Talk

- Encourage dialogue between HCPs and patients regarding CAM use



# Direct your patients to reliable Internet resources

- [nccam.nih.gov](http://nccam.nih.gov)
- [Medlineplus.gov](http://Medlineplus.gov)
- [nccam.nih.gov/research/camonpubmed](http://nccam.nih.gov/research/camonpubmed)
- [www.cochrane.org](http://www.cochrane.org)



# Acknowledgements

- NHIS CAM Survey
  - Richard Nahin, NCCAM
  - Patricia Barnes, NCHS/CDC

# National Center for Complementary and Alternative Medicine

1.888.644.6226  
[nccam.nih.gov](http://nccam.nih.gov)

