Department of Family Medicine and Community Health



### Savvy about Complementary and Integrative Health: The "CIH Quiz"

This quiz was created to help you get a better sense of some of the big questions that are often asked about complementary and integrative health (CIH) therapies:

- 1. Who is most likely to use them?
- 2. What therapies are most frequently used?
- 3. For what reasons are they used?
- 4. What are some of the best indications for various CIH approaches?

Find out how many of the following 14 questions you can get right. The questions are repeated with answers and the explanations for the answers starting on page 4.

#### 1. What percent of American adults use complementary medicine?

- a. 85%
- b. 66%
- c. 33%
- d. <10%

#### 2. How much money do Americans spend on these approaches each year?

- a. \$3.3 trillion
- b. \$350 billion
- c. \$30 billion
- d. \$1 billion

#### 3. What are the most popular complementary approaches used by Americans?

- a. Energy medicine, osteopathy, dietary supplements
- b. Natural products, deep breathing, movement-based therapies
- c. Chiropractic/osteopathic manipulation, massage, yoga
- d. Natural products, yoga, meditation

### 4. What are the main health reasons for which Americans in general seek out complementary approaches?

- a. Musculoskeletal problems
- b. Anxiety and PTSD
- c. Cholesterol and high blood pressure
- d. Gastrointestinal (GI) problems

# 5. What percent of patients have discussed complementary therapy use with their physician?

- a. 85%
- b. 66%
- c. 33%
- d. 10%

#### 6. Who is most likely to use complementary approaches?

- a. Middle-aged, educated, white women
- b. Elderly men or women
- c. Only hippies
- d. It is fairly well distributed across the U.S. population

# 7. Based on the research as of 2018, which of the following conditions can benefit from biofeedback?

- a. Urinary incontinence
- b. Hypertension (high blood pressure)
- c. Headaches in adults
- d. Attention deficit disorder
- e. All of the above

#### 8. Which of the following is NOT true about when to use meditation?

- a. Meditation is always beneficial
- b. Meditation can be useful for people who do not have specific health problems
- c. Meditation is useful for people with chronic pain
- d. Meditation affects the immune system
- e. Additional research about meditation is needed to guide recommendations
- f. All of the above are actually true

#### 9. Which of the following statements about massage therapy is most accurate?

- a. There are no insurers in the US that currently cover massage therapy
- b. Massage has many adverse effects and should not be recommended
- c. Massage can reduce anxiety, lower blood pressure, and decrease heart rate
- d. Massage is not helpful in the management of pain

# 10. Which of the following mind-body approaches is most likely to elicit the "relaxation response" for a person?

- a. Guided Imagery
- b. Meditation
- c. Biofeedback
- d. Hypnosis
- e. All of these have benefit the key is to tailor the approach to each individual person

11. Tai chi and qi gong are particularly beneficial for which population group, according to the latest research?

- a. Women
- b. Men
- c. Children
- d. The elderly

12. True or False? Clinical hypnosis is a lot like stage hypnosis, where people can be encouraged to behave in strange ways without fully realizing it.

- a. True
- b. False

13. Which of the following has the potential to be beneficial in the treatment of pain?

- a. Acupuncture
- b. Therapeutic Massage
- c. Yoga
- d. Biofeedback
- e. All can have potential benefit. It depends on the type of pain, and more importantly, the therapy should be tailored to the specific person.

### 14. What are good criteria to keep in mind when you are talking with people about choosing whether or not to use a therapy?

- a. Effect, access, safety, and you (personal opinions, belief, and culture)
- b. How easily they can access a particular therapy
- c. It is never helpful to use them. There is no evidence supporting these therapies
- d. It is always okay. None of the therapies have any associated risk.
- e. A. & B.

ANSWERS BEGIN ON THE NEXT PAGE.

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### **Answers: Savvy About CIH Quiz**

1. What percent of American adults use complementary medicine?

- a. 85%
- b. 66%
- c. 33%
- d. <10%

**Answer: C.** Based on the National Health Interview Survey of 2012, 33% of American adults (83 million) and 11.6% of children use CIH approaches.<sup>1,2</sup> This is up from 34% in 1990.

#### 2. How much money do Americans spend on these approaches each year?

- a. \$3.3 trillion
- b. \$350 billion
- c. \$30 billion
- d. \$1 billion

**Answer: C.**<sup>3</sup> In 2016, \$3.3 trillion was the total health care spending in the United States.<sup>4</sup> Outof-pocket payments for conventional medicine were over \$350 billion.<sup>4</sup> Note that the \$30 billion spent on CIH is particularly remarkable if one considers these are primarily out-of-pocket expenses.

Out of the \$30.2 billion spent on CIH, an estimated \$28.2 billion was spent on CIH products, classes, and materials (self-care costs), and \$12 billion was spent on nonvitamin/nonmineral natural products. Nearly \$14 billion was spent on visits to CIH practitioners.

#### 3. What are the most popular complementary approaches used by Americans?

- a. Energy medicine, osteopathy, dietary supplements
- b. Natural products, deep breathing, movement-based therapies
- c. Chiropractic/osteopathic manipulation, massage, yoga
- d. Natural products, yoga, meditation

**Answer: B.** According to the 2012 National Health Interview Survey,<sup>2,5</sup> the CIH therapies most commonly used by U.S. adults in the past 12 months were:

- 1. Nonvitamin, nonmineral, natural products (17.7% of U.S. adults). Use of fish oil, probiotics, and melatonin increased between 2007 and 2012. Use of glucosamine/chondroitin, echinacea, and garlic decreased.<sup>6</sup>
- 2. Deep breathing exercises (10.9%)
- 3. Yoga, tai chi, and qi gong (10.1%)
- 4. Chiropractic or osteopathic manipulation (8.4%)
- 5. Meditation (8.0%)
- 6. Massage (6.9%)

In the 2012 survey, yoga was the therapy with the most dramatic increase (9.5% of US adults practiced it) relative to previous studies in 2007 (6.1% of adults) and 2002 (5.1%).

### 4. What are the main health reasons for which Americans in general seek out complementary approaches?

- a. Musculoskeletal problems
- b. Anxiety and PTSD
- c. Cholesterol and high blood pressure
- d. Gastrointestinal (GI) problems

**Answer: A**. Data indicate that American adults most often used CIH to treat musculoskeletal problems, including the following:<sup>5,6</sup>

- Back pain or problems (17%)
- Neck pain or problems (6%)
- Joint pain or stiffness, or other joint conditions (5%)
- Arthritis (3.5%)

# 5. What percent of patients have discussed complementary therapy use with their physician?

- a. 85%
- b. 66%
- c. 33%
- d. 10%

**Answer: C**. In a 2010 survey of over 1,000 people aged 50 and older, 33% of respondents reported they had discussed CIH with a health care provider, and 67% had not.<sup>7</sup>

In terms of which providers patients told about their CIH use, 28% reported discussing CIH with their physician (Figure 6). Roughly half as many reported discussing it with other types of clinicians.<sup>7</sup> In both 2006 and 2010, 26% of respondents reported that a health care provider raised the topic.<sup>7</sup> Given that at least 20% of people using CIH approaches are also taking medications,<sup>8</sup> paying attention to the potential for interactions between the two is essential, especially where dietary supplements are concerned.

What, specifically, was discussed during these visits? The following table from the AARP survey outlines various topics and the frequency with which respondents reported they arose.<sup>7</sup>

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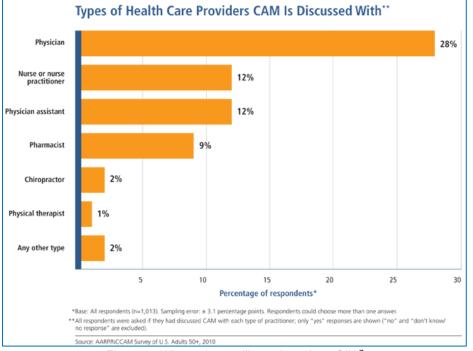
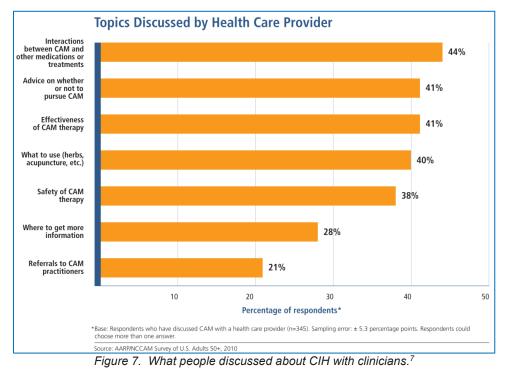


Figure 6. Who patients will speak to about CIH.<sup>7</sup>



Also worth noting were the reasons respondents gave for why they didn't bring up CIH use with their care provider:

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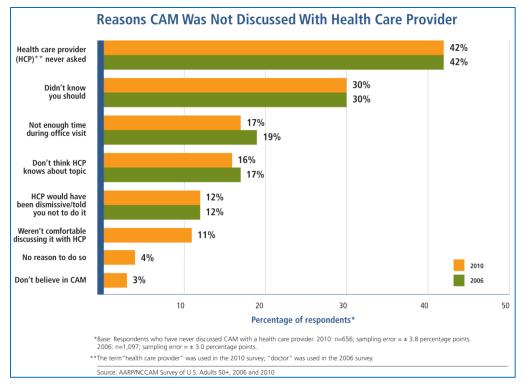


Figure 8. Why CIH was not discussed with clinicians.<sup>7</sup>

#### 6. Who is most likely to use complementary approaches?

#### a. Middle-aged, educated, white women

- b. Elderly men or women
- c. Only hippies
- d. It is fairly well distributed across the U.S. population

**Answer: A.** According to the National Health Interview Survey, CIH use was highest in those aged 50-59 years (Figure 9).<sup>1,8</sup>

In a landmark 1998 study,<sup>9</sup> Astin ascertained that patients who use CIH have:

- More education
- Poorer health status
- More anxiety, back problems, chronic pain, and urinary tract disease
- A stronger sense of being feminist and environmentalist

Eisenberg and colleagues<sup>10</sup> reported that CIH use is also higher in:

- Non-black patients
- Those with higher incomes

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• Women

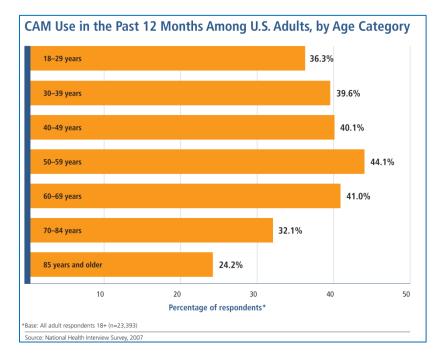


Figure 9. CIH use by age group.<sup>7</sup>

# 7. Based on the research as of 2018, which of the following conditions can benefit from biofeedback?

- a. Urinary incontinence
- b. Hypertension (high blood pressure)
- c. Headaches in adults
- d. Attention deficit hyperactivity disorder (ADHD)

#### e. All of the above

**Answer: E.** Biofeedback is showing promise for a number of indications. ADHD is treated mainly using neurofeedback, which involves monitoring and learning to consciously control EEG patters. Refer to Chapter 12 of the *Passport to Whole Health* for more information.

#### 8. Which of the following is NOT true about when to use meditation?

- a. Meditation is always beneficial
- b. Meditation can be useful for people who do not have specific health problems
- c. Meditation is useful for people with chronic pain
- d. Meditation affects the immune system
- e. Additional research about meditation is needed to guide recommendations

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#### f. All of the above are actually true

**Answer: A.** As with any therapy, certain people may not benefit or may experience adverse effects from meditation. For example, it should be used with care in people who are experiencing psychosis (e.g., hallucinating), or at high risk of having meditation trigger PTSD symptoms. In 2018, as series of articles criticized the strength of the methodologies used in many meditation research studies, and there was a call for more research, done more rigorously, on larger populations. Refer to Chapter 4 and Chapter 12 of the *Passport to Whole Health* to learn more about meditation.

#### 9. Which of the following statements about massage therapy is most accurate?

- a. There are no insurers in the US that currently cover massage therapy
- b. Massage has many adverse effects and should not be recommended
- c. Massage can reduce anxiety, lower blood pressure, and decrease heart rate
- d. Massage is not helpful in the management of pain

**Answer: C**. Massage can be offered by an array of different people, including licensed massage therapists who work in the local community. It does show benefit in the treatment of pain. Refer to Chapter 16 of the <u>Passport to Whole Health</u> for more information.

# 10. Which of the following mind-body approaches is most likely to elicit the "relaxation response" for a person?

- a. Guided Imagery
- b. Meditation
- c. Biofeedback
- d. Hypnosis

e. All of these have benefit – the key is to tailor the approach to each individual person **Answer: E**. The relaxation response was first described in detail by Herbert Benson in the 1970s to describe the body's natural state of relaxation. In this state, the sympathetic nervous system (fight or flight) is less active and the parasympathetic nervous system is more active. All of the mind-body approaches listed (and many others) can elicit the relaxation response. The key is to decide which approach may be best for any given person, based on what is available, their preferences, and your clinical judgment. For more information, refer to Chapter 12 of the *Passport to Whole Health*.

### 11. Tai chi and qi gong are particularly beneficial for which population group, according to the latest research?

- a. Women
- b. Men
- c. Children
- d. The elderly

**Answer: D.** The strongest research to date for tai chi is related to enhancing balance and preventing falls in the elderly. Tai chi and qi gong have many other benefits as well and can be used for all of the groups listed. For more information, refer to Chapter 5 of the <u>Passport to</u> <u>Whole Health.</u>

12. True or False? Clinical hypnosis is a lot like stage hypnosis, where people can be encouraged to behave in strange ways without fully realizing it.

- a. True
- b. False

**Answer: B.** Hypnotherapists not that the trance-like state they help a person to reach during hypnotherapy can indeed make them open to suggestions, but they are in control at all times during a session. (This is likely true with stage hypnotherapy as well, though there are not a lot of studies.)

#### 13. Which of the following has the potential to be beneficial in the treatment of pain?

- a. Acupuncture
- b. Therapeutic Massage
- c. Yoga
- d. Biofeedback
- e. All can have potential benefit. It depends on the type of pain, and more importantly, the therapy should be tailored to the specific person.

**Answer: E**. Increasing numbers of studies are finding that there is a role for CIH approaches for people with various types of pain, especially considering the risks related to taking opioids. A number of national groups, such as the American College of Physicians<sup>11</sup> and England's National Institute for Health and Care Excellence (NICE)<sup>12</sup>, have created guidelines that have added CIH approaches for management of chronic pain.

### 14. What are good criteria to keep in mind when you are talking with people about choosing whether or not to use a therapy?

- a. Effect, access, safety, and you (personal opinions, belief, and culture)
- b. How easily they can access a particular therapy
- c. It is never helpful to use them. There is no evidence supporting these therapies
- d. It is always okay. None of the therapies have any associated risk.
- e. A.&B.

**Answer: E.** A outlines the EASY criteria for choosing a therapy. Access is also an important consideration, especially in rural areas. It is not helpful to make blanket statements about this incredibly diverse array of approaches being either uniformly beneficial or harmful.



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### **Interpretation of Your Score**

1-8: That's why you are taking this module. This is your chance to learn more!

8-12: Not bad. You are on your way to having a good grasp of CIH trends.

12-16: Even better. You are well on your way to being "CIH-savvy"!

**16-20:** Tremendous! You seem to know this stuff already. Maybe you should focus on a different Whole Health topic...

### Author(s)

"Savvy about Complementary and Integrative Health: The 'CIH Quiz'" was adapted for the University of Wisconsin Integrative Health Program from the original written by J. Adam Rindfleisch, MPhil, MD (2014, updated in 2018). Modified for UW Integrative Health in 2021.

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