



The Journal of the American Osteopathic Association

The purpose of this quiz is to provide a convenient means for osteopathic physicians to assess their understanding of the scientific content in the February 2016 issue of *The Journal of the American Osteopathic Association (JAOA)*.

To apply for 2 Category 1-B continuing medical education (CME) credits, AOA members may take this quiz online at <https://www.osteopathic.org/docmeonline>, where this and other JAOA quizzes can be accessed. Quizzes that are completed online will be graded and credited to members' CME activity reports.

Alternatively, osteopathic physicians can complete the quiz below and mail it to the following address by August 31, 2017:

American Osteopathic Association
Division of CME
142 E Ontario St
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If you mail or fax this form to the Division of CME Policy & Accreditation, the AOA will record the fact that you have submitted this form for Category 1-B CME credit. Osteopathic physicians who are not members of the AOA and who forward hard copies of completed JAOA quizzes to the Division of CME Policy & Accreditation will be charged a fee of \$25 per quiz for staff time to grade the quiz, record the credits, and provide a letter to the osteopathic physician as documentation.

For each of the questions below, place a checkmark in the box provided next to your answer so that you can easily verify your answers against the correct answers, which will be published in the March 2016 issue of the JAOA.

Effectiveness of the Complete Health Improvement Program in Reducing Risk Factors for Cardiovascular Disease in an Appalachian Population

Christopher Leibold, OMS III;
Jay H. Shubrook, DO;
Masato Nakazawa, PhD;
and David Drozek, DO

1. Approximately what percentage of US adults have at least 1 chronic disease?

- (a) <10%
- (b) 25%
- (c) 50%
- (d) 75%
- (e) 100%

2. The Complete Health Improvement Program is...

- (a) a high-protein, low-carbohydrate diet focused on reducing intake of breads.
- (b) a low-protein diet focused on simple carbohydrates to improve digestion.
- (c) a high-intensity, low-duration physical activity program.
- (d) a low-intensity, high-duration physical activity program.
- (e) a plant-based whole food diet.

3. In the Complete Health Improvement Program, glucose levels...

- (a) improved in participants with prediabetes but not established type 2 diabetes mellitus (T2DM).
- (b) improved in participants with established T2DM but not in those with prediabetes.
- (c) did not improve in participants with prediabetes or established T2DM.
- (d) improved in participants with prediabetes and in those with established T2DM.
- (e) were not a measured variable.

How to Monitor and Advise Vegans to Ensure Adequate Nutrient Intake

Heather Fields, MD; Barbara Ruddy, MD;
Mark R. Wallace, MD; Amit Shah, MD;
Denise Millstine, MD; and Lisa Marks, MLS

4. Which of the following nutrients are commonly deficient in vegans:

- (a) vitamin B₁₂, calcium, and iron
- (b) iron, vitamin C, and docosahexaenoic acid (DHA)
- (c) amino acids, vitamin K, and vitamin B₁₂
- (d) phytates, organic acids, and iron

5. Which of the following statements is true:

- (a) Vegans fail to meet the Institute of Medicine recommendations for protein intake.
- (b) High animal protein intake decreases renal calcium excretion.
- (c) Vegans are at risk for dementia because of low DHA intake.
- (d) Iron deficiency is more prevalent among young vegan women compared with those on other diets.

6. Which of the following supplements improves cardiovascular parameters in vegans:

- (a) iron
- (b) calcium
- (c) vitamin D
- (d) vitamin B₁₂
- (e) eicosapentaenoic acid (EPA) and DHA

Burnout Among Osteopathic Residents: A Cross-sectional Analysis

Amanda Michele Chan, MS, DO;
Shawn T. Cuevas, DO;
and James Jenkins II, PhD

7. Which of the following is *not* an element of the Maslach Burnout Inventory:

- (a) emotional exhaustion
- (b) apathy
- (c) depersonalization
- (d) personal achievement

8. According to this study, which of the following factors had protective effects for burnout in residents?

- (a) male sex
- (b) surgical-based program
- (c) marriage
- (d) none of the above

Establishing a Professionalism Score in an Osteopathic Manipulative Medicine Curriculum

Karen T. Snider, DO

9. A professionalism score assessing first- and second-year osteopathic medical students' timeliness and appropriate attire in osteopathic manipulative medicine has been positively correlated with which of the following:

- (a) academic performance
- (b) licensure board examination scores
- (c) specialty board examination scores
- (d) state medical board complaints
- (e) osteopathic medical school expulsions

Abdominal Trigger Points and Psychological Function

Roy R. Reeves, DO, PhD,
and Mark E. Ladner, MD

10. Trigger points are thought to represent impaired or altered function of which of the following systems:

- (a) circulatory
- (b) lymphatic
- (c) myofascial
- (d) neural
- (e) all of the above

11. Compression or massage of a trigger point may cause which of the following:

- (a) localized pain
- (b) referred pain
- (c) autonomic phenomena
- (d) all of the above

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Answers to the January 2016 JAOA CME Quiz

Discussion answers to JAOA continuing medical education quizzes appear only when authors have included discussions with the quiz questions and answers they must provide to meet the requirement for submission to and publication in the JAOA.

Hepatitis C Virus Infection Screening Within Community Health Centers

Nicole Cook, PhD; Erica P. Turse, DO, MPH; Angela S. Garcia, PharmD, MPH, CPh; Patrick Hardigan, PhD; and Saint Anthony Amofah, MD

- (c) The current US Preventive Services Task Force recommendation for screening for hepatitis C virus (HCV) infection is to screen patients at high risk for infection and offer 1-time screening to adults born between 1945 and 1965.
- (c) The anti-HCV antibody should be used to screen adults for HCV infection.

Primo Vascular System: A Unique Biological System Shifting a Medical Paradigm

Bruno Chikly, MD, DO (France); Paul Roberts, DOMP; and Jürgen Quaghebeur, DO (Belgium), PhD

- (c) The primo vascular system carries mainly lymphocytes.
- (c) The primo vessels were part of the ancient Indian Ayurvedic system.
- (d) Dynamic structural integrity is not a known function of the primo vascular system.

Gamification and Multimedia for Medical Education: A Landscape Review

Lise McCoy, EdD; Joy H. Lewis, DO, PhD; and David Dalton, DO

- (a) A medical educator designs an educational game to involve collaborative learning. "Collaborative skills are necessary for modern day clinical practice" provides the best rationale for emphasizing the benefits of teamwork during an educational game or virtual patient simulation.
- (b) A faculty member implemented an educational game last week. The game session resulted in learner analytics, which is defined as a report that tracks learner scores and performance during the game.
- (d) One of the main advantages of electronic games, mobile applications, and virtual patient simulations for distance training is that they may be integrated with the learning management system.

Linking Community Hospital Initiatives With Osteopathic Medical Students' Quality Improvement Training: A Pilot Program

Grace D. Brannan, PhD; Ronald Russ, DO; Terry R. Winemiller, BSN, RN, CPHQ; and Eric Mast, DO

- (a) *To Err Is Human* is one of the landmark studies documenting the occurrence of preventable medical errors that resulted in many deaths.
- (b) The Institute for Healthcare Improvement provides students, residents, and faculty free access to quality improvement training modules.

Management of Acute Isolated Soleal Vein Thrombosis in a Pregnant Patient With an Osteopathic Approach to Evaluation

Daniel Martingano, DO; Justin Eisenberg, DO; and George C. Agliatoro, DO

- (c) Venous thromboembolism is 5 times more likely to develop in a pregnant patient than in a nonpregnant patient.
- (a) In pregnant patients, venous thromboembolisms are most often found on the left side of the body.