

3-arm trial comparing active treatment, placebo, and no treatment. Their alternative design may suggest placebo effects but still leaves open the critical question of whether either the active treatment or placebo-control is better than no treatment.

Dr Jonas and colleagues question who determines the social value of CAM research and advocate for public input. For biomedical research in general, the public's position on an approach is expressed through participation on institutional review boards, data and safety monitoring boards, and certainly in their willingness to serve as research participants. In the case of government agencies, such as the National Center for Complementary and Alternative Medicine, the research mission and budget is accountable to elected representatives of the public. Moreover, their research priorities are set with the approval of their chartered national advisory councils, whose members are appointed by the Secretary of the Department of Health and Human Services and include representatives of diverse stakeholder groups including patient advocates.

We argued for placebo-controlled trials of CAM treatments, when they are feasible, but did not argue that this is the only valid research design. Active-controlled superiority trials evaluating 2 CAM therapies or a CAM therapy vs a conventional treatment would also provide valuable and valid data. An adequately powered, randomized, active-controlled trial would demonstrate the superiority of their proposed first treatment over their second.

The legitimacy of recommending low-risk therapies that benefit patients solely or mainly by virtue of the placebo effect is controversial but deserves further inquiry and debate. We agree with Drs Kaptchuk and Lembo that well-designed research is needed to assess the potential clinical benefits of placebo treatments and better understand the mechanisms that account for placebo effects.

We disagree with Dr Marusic that it is necessary to lie to patients when recommending a treatment that is believed to work by virtue of a placebo effect. If solid evidence exists to support the efficacy of a placebo, the clinician can truthfully communicate to the patient that the treatment has been found to be superior to no treatment in relieving symptoms.

We disagree with Dr Millea that we misinterpreted the findings of the study by Smith et al regarding acupuncture to treat nausea and vomiting in early pregnancy.¹ His claim that we over-reported negative studies of CAM misses the point of our article, which was to examine ethical issues relating to rigorous research on CAM. We selected specific studies to illustrate methodological and ethical issues; we were not attempting a systematic review or meta-analysis of the evidence for the therapeutic value of specific CAM treatments.

Franklin G. Miller, PhD
Ezekiel J. Emanuel, MD, PhD
Department of Clinical Bioethics
National Institutes of Health
Donald L. Rosenstein, MD
Office of the Clinical Director
National Institute of Mental Health

Stephen E. Straus, MD
sstraus@nih.gov
National Center for Complementary and Alternative Medicine
National Institutes of Health
Bethesda, Md

Disclaimer: The opinions expressed are those of the authors and do not reflect the position or policy of the National Institutes of Health, the Public Health Service, or the Department of Health and Human Services.

1. Smith C, Crowther C, Beilby J. Acupuncture to treat nausea and vomiting in early pregnancy: a randomized controlled trial. *Birth*. 2002;29:1-9.

RESEARCH LETTER

Nutritional Content of Hospital Diets

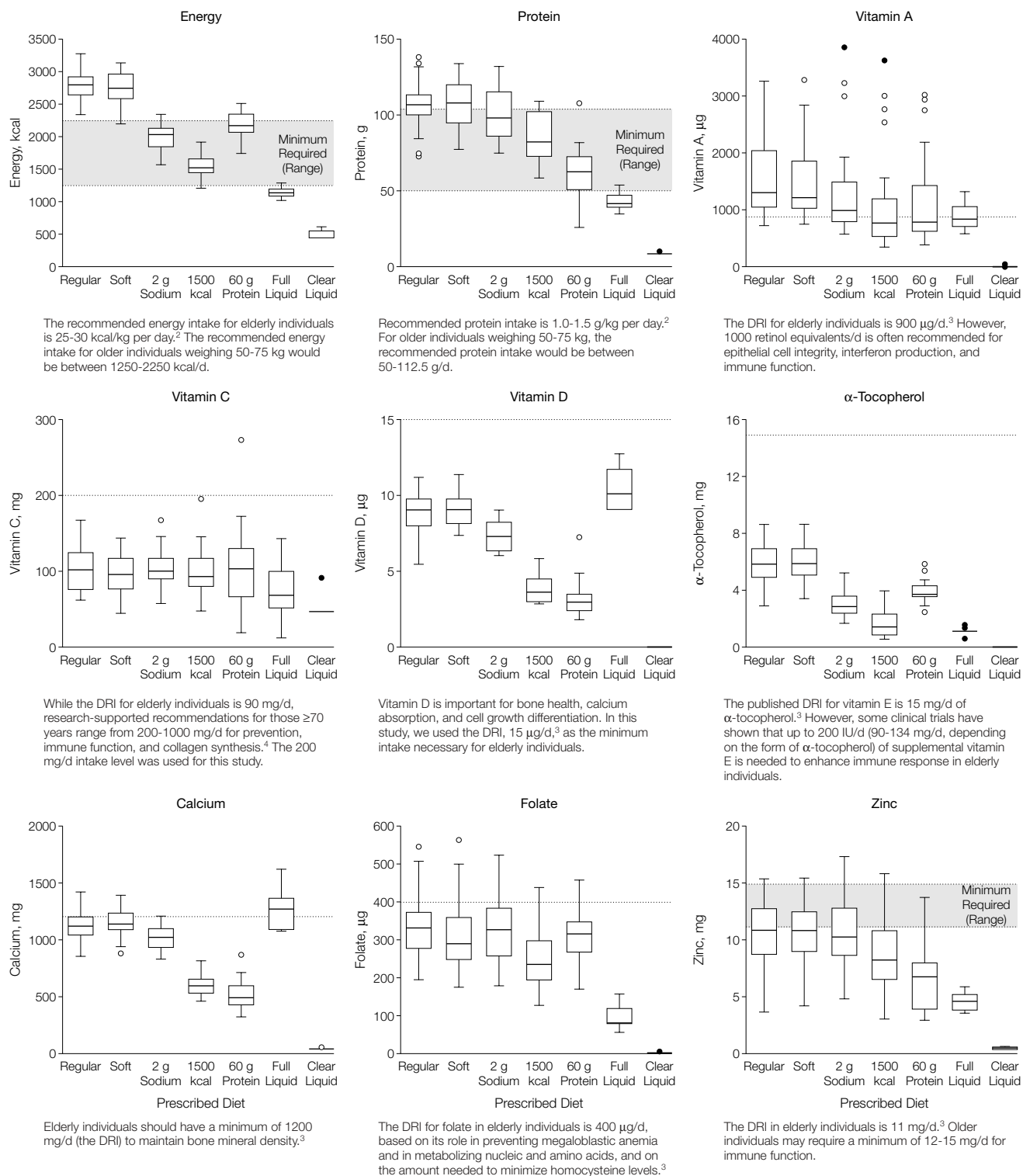
To the Editor: Hospitalized elderly patients have a relatively high risk for malnutrition.¹ While some of this problem may be related to factors such as preexisting malnutrition, lack of appetite, or inability to eat, it is not known to what degree clinically indicated restricted diets contribute to such deficiencies.

Methods. We analyzed commonly prescribed diets served in 2 US hospitals. One was a large private not-for-profit academic research-oriented medical center serviced by a well-known commercially contracted hospital food service and the other was a large metropolitan Veterans Affairs medical center with an in-house dietary department. Amounts of ingredients for recipes for every item served in the 7 prescribed meal plans in both hospitals were recorded in a comprehensive database that allowed precise nutritional analyses by weight of food serving. The data included ingredients used in literally thousands of recipes; for instance, 1 hospital had more than 50 different recipes for green beans. Nutritional information supplied by the manufacturer of prepackaged foods was used when available.

To analyze these meals, we weighed each item with an electronic scale accurate to the nearest 0.1 g. Two weeks of breakfast, lunch, and dinner meals made up of standardized portion sizes for each prescribed diet were analyzed for daily nutrient content using the United States Department of Agriculture Database, 1997. The Nutritionist V nutrition analysis software package (First Databank Inc, San Bruno, Calif) was used for data analysis.

Results. The FIGURE displays the amount of nutrients supplied each day by the different diets in relation to published age-specific minimum daily intake requirements. Although most diets supply adequate energy, protein, and vitamin A, they are generally deficient in terms of a number of additional vitamins and minerals.

Conclusion. Hospital-prescribed diets, especially the restricted diets, may often lack important nutrients. Nutrient deficits in hospital meals could have serious consequences for elderly patients, especially those hospitalized for extended periods. Older patients frequently present with advanced nutritional deficiencies and, when hospitalized, rarely eat everything they are served. Moreover, age-, disease-, or treatment-related changes

Figure. Nutrient Availability in Prescribed Diets

Horizontal lines within boxes indicate the median; boxes indicate the interquartile range (IQR); upper limits of error bars, values ≤ 75 th percentile plus 1.5 times the IQR; lower limits of error bars, values ≥ 25 th percentile minus 1.5 times the IQR. Open-circle outliers are >1.5 times the IQR above or below the upper or lower hinge, respectively. Closed-circle extreme outliers are >3 times the IQR above or below the upper or lower hinge, respectively. DRI indicates daily reference intake.

in digestion, absorption, and metabolism further increase demand and decrease utilization of critical nutrients. When restricted diets are necessary, alternative methods of delivering essential nutrients should be considered.

Jonelle E. Wright, PhD
jonelle-wright@ouhsc.edu

Donald W. Reynolds Department of Geriatric Medicine

Garth J. Willis, MHS

University of Oklahoma College of Medicine
Oklahoma City

Marilyn S. Edwards, PhD, RD

Department of Internal Medicine

University of Texas Medical School

Houston

Funding/Support: This research was funded by National VA Merit Award #E2117, the Retirement Research Foundation, and the National VA Center for Healthy Aging with Disabilities. It was supported by grants M01 RR02719 and MO1 RR-14467 from the National Institutes of Health, National Center for Research Resources, General Clinical Research Center.

Acknowledgment: Biostatistical assistance was provided by Donald E. Parker, PhD, and Christie E. Burgin, PhD, of Applied Research Consultants and the Department

of Biostatistics and Epidemiology, University of Oklahoma Health Sciences Center, Oklahoma City. We also thank Ji H. Park, BS, for her help with organizing the data and constructing the Figure.

1. Sullivan DH. The role of nutrition in increasing morbidity and mortality. *Clin Geriatr Med.* 1995;11:661-674.

2. McGee M, Jensen GL. Nutrition in the elderly. *J Clin Gastroenterol.* 2000;30:372-380.

3. Panel on Micronutrients, Subcommittees on Upper Reference Levels of Nutrients and of Interpretation and Use of Dietary Reference Intakes, Institute of Medicine. *Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc.* Washington, DC: National Academies Press; 2002.

4. Levine M, Dhariwal KR, Welch RW, Wang Y, Park JB. Determination of optimal vitamin C requirements in humans. *Am J Clin Nutr.* 1995;62:1347S-1356S.

CORRECTION

Investigator Omitted: In the Original Contribution entitled "Major Outcomes in High-Risk Hypertensive Patients Randomized to Angiotensin-Converting Enzyme Inhibitor or Calcium Channel Blocker vs Diuretic: the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT)" published in the December 18, 2002, issue of THE JOURNAL (2002;288:2981-2997), Pasquale F. Nestico, MD, was inadvertently omitted from the list of ALLHAT investigators. His name should appear on page 2996 under "Pennsylvania."