

# HOD Backgrounder

## House of Delegates

August 2009

The House Leadership Team (HLT) biannually reviews the list of Mega Issues developed by the House of Delegates (HOD). Mega Issues are overriding issues of strategic importance that cut across multiple goal or outcome areas. They address key strategic questions the organization must answer, illuminating choices the organization must make and the challenges that will need to be overcome in moving toward the envisioned future. The need to practice based on scientific evidence was determined to be critical and needs to be addressed in order to influence policy makers to support the inclusion of RDs and DTRs in any health care reform.

### Why is evidence-based practice important?<sup>1</sup>

- *Explosion of literature:* Health care literature is published at a rate that is impossible for individual clinicians to keep up with. By using evidence-based practice (EBP) resources, evidence-based decisions can be made in a focused and time efficient manner.
- *Unmet information needs:* Information needs of practitioners are not currently being met. Questions from patients, clients and other stakeholders are continuously being generated. Due to lack of time, lack of information resources, limited search skills, and limited funding, many questions go unanswered. Synthesized EBP resources are easy to use and help to quickly connect evidence-based answers to questions.
- *Implementation delays:* Research findings are often delayed in implementation. EBP resources take into account evidence from a wide variety of fields and provide an opportunity for greater exposure to evidence.
- Evidence-based practice is also important due to the possibility that it will standardize practice so that outcomes data can be collected and analyzed to continue to improve the quality and effectiveness of practice.

*Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted.*

Albert Einstein

### Mega Issue Questions

How can delegates, members and ADA organizational units foster the incorporation of evidence-based practice in all areas of dietetics? What opportunities exist that would encourage incorporation by members?

### Expected Outcome

RDs and DTRs in all areas of dietetics will employ evidence-based practice to position the profession for improved reimbursement, recognition, and quality services when appropriate.

Knowledge-based Strategic Governance is a mechanism for consultative leadership. It recognizes that “strategy” is the necessary and appropriate link in the Board’s role to govern the organization, the House’s role to govern the profession and the staff’s role to manage implementation. To assist you in thinking about the issue to be addressed, four key background areas are presented as standard questions used for each Mega Issue. These questions create an environment of awareness of what we know and what is unknown. A wide range of resources have been used to provide you with what is known.

This backgrounder was developed by the HOD Leadership Team and the HOD Governance staff. Information in this Backgrounder includes quotes directly from resources which are cited in the body of the text and is not intended to be presented as original work. A list of references is included at the end of the Backgrounder.

### ADA Description/Definition<sup>2</sup>

- Evidence-based practice (EBP) “is an approach to health care wherein health practitioners use the best evidence possible, i.e. the most appropriate information available, to make decisions for individual patients”. EBP values, enhances and builds on clinical expertise, knowledge of disease mechanisms, and

pathophysiology. It involves complex and conscientious decision-making based not only on the available evidence but also on client characteristics, situations, and preferences. It recognizes that health care is individualized and ever changing and involves uncertainties and probabilities.

- Key Considerations:
  - It is practice based on successful strategies that improve client outcomes and are derived from various sources of evidence including research, national guidelines, policies, consensus statements, expert opinion, quality improvement data and client preference.
  - Evidence-based practice is about decision making in daily practice.
  - Placing the client's benefits first, providing evidence based practice requires adopting a process of lifelong learning that involves continually posing specific questions of direct practical importance to clients, searching objectively and efficiently for the current best evidence relative to each question, and taking appropriate action guided by evidence.
  - "Evidence-Based Health Care extends the application of the principles of Evidence-Based Medicine to all professions associated with health care, including purchasing and management"<sup>3</sup>.
- Evidence-Based Dietetics Practice is the use of systematically reviewed scientific evidence in making food and nutrition practice decisions by integrating best available evidence with professional expertise and client values to improve outcomes.
  - Key Considerations
    - Evidence-based dietetics practice is consistent with the general definition and key considerations of "Evidence-Based Practice" in healthcare outlined in the ADA Scope of Practice Dietetic Framework Definition of Terms.
    - Evidence-based dietetics practice is based on the best available evidence including research, national guidelines, policies, consensus statements, expert opinion and quality improvement data.
    - The determination of "best available evidence" is based on the hierarchy of evidence.
    - The systematic review of scientific evidence is an ongoing process.
    - Evidence-based dietetics practice involves continuing evaluation of outcomes which becomes part of the evidence base.
    - Evidence-based dietetics practice applies to individual clients, customers and communities.

### **Other Definition Considerations**

- Evidence-Based Practice (EBP) is a thoughtful integration of the best available evidence, coupled with clinical expertise<sup>4</sup>. As such it enables healthcare providers to address questions with an evaluative and qualitative approach. EBP allows the practitioner to assess current and past research, clinical guidelines, and other information resources in order to identify relevant literature while differentiating between high-quality and low-quality findings. The practice of Evidence-Based Practice includes five fundamental steps:
  - Step 1: Formulating a well-built question
  - Step 2: Identifying systematic reviews, individual studies and other resources that answer the question
  - Step 3: Critically appraising the evidence to assess its validity
  - Step 4: Applying the evidence
  - Step 5: Re-evaluating the application of evidence and areas for improvement
- A systematic review includes the following:
  - determining the problem and formulating it into a question
  - defining a search strategy
  - gathering and selecting relevant evidence
  - synthesizing and grading the evidence
  - formulating recommendations using the best available evidence and,
  - disseminating the findings.
- It should be noted that a systematic review as described above is different from a journalistic review which determines which looks at significance, originality, quality, clarity, and relevance.
- Evidence-based practice is a philosophical approach that is in opposition to rules of thumb, folklore, and tradition<sup>5</sup>. Examples of a reliance on "the way it was always done" can be found in almost every profession, even when those practices are contradicted by new and better information.

## Question #1: What do we know about the needs, wants and expectations of members, customers and other stakeholders related to this issue?

### ADA Members

- Challenges of Evidence-based Practice
  - RDs may be resistant to change their practice of dietetics; minimal support to collect outcomes; or have potentially limited knowledge of how to apply concepts and recommendations to practice.
  - External groups don't know what RDs do, or that RDs base practice decisions and judgment on research.
  - There is limited data on MNT effectiveness beyond diabetes and lipid disorders.
  - Relatively speaking there is limited nutrition research; especially research that targets the registered dietitian.
  - The process to produce the evidence-based nutrition practice guidelines and toolkits is 2-3 years with time required after development to conduct regular updates.
  - More RDs and DTRs are needed to adopt EBP into their activities, including the collection of outcomes data, so that the more evidence can be generated and practice refined.
- Opportunities of Evidence-based Practice
  - DPG involvement in funding, development of analysis and promotion among members.
  - The concept is becoming more common since payers, government etc. require it as the basis of policies. These policies can provide leverage for EBP implementation or data collection to build on the foundation of research.
  - ADA can develop new products to promote to internal and external groups.
  - In addition to members, work is underway between ADA Nutrition Services Coverage and Research and Strategic Business Development Teams to determine payer's interest in EAL information.
  - ADA's web re-design will assist in reaching consumers, other healthcare professionals and members with information.
  - The development of messages should incorporate evidence-based practice information.
  - Through ADA's work with the Alliance Healthcare Initiative, payers, and MDs are more aware of RD practice, and evidence-based nutrition practice guidelines.

## Question #2: What do we know about the current realities and evolving dynamics of our members, marketplace, industry, profession, that is relevant to this decision?

### ADA Members and the Profession

- In 2005, Byham-Gray conducted a study that measured dietitians' perceptions, attitudes, and knowledge of evidence-based practice<sup>6</sup>. Results indicated that dietitians' ability to incorporate an evidence-based approach is largely determined by their education and training, work experience, and professional association involvement. This study identified a need to integrate concepts and principles of evidence-based practice into dietetics curriculums so that practitioners are able to routinely apply research findings to clinical practice.
- An abstract published in the *Journal* provided a brief overview of a program that developed a model for teaching evidence-based nutrition practice skills to a nutrition degree program or continuing professional education<sup>7</sup>.

### Current Realities and Evolving Dynamics

- Despite repeated efforts to encourage health professionals to conduct practice-based research, including qualitative research, few practitioners have become active researchers<sup>8</sup>. Mentoring, networking, and hands-on experience have been identified as potential approaches for changing this situation. In the article, "Toward increased capacity for practice-based research among health professionals: implementing a multisite qualitative research project with dietitians", the authors describe how they implemented a research mentoring/training component in a national study exploring Canadian dietitians' attitudes and practices with regard to obesity and weight management. They discuss the successes and challenges experienced by mentors and trainees, and provide recommendations for future initiatives to enhance capacity for qualitative, practice-

based research among health care practitioners. Without the research, it is difficult to have the evidence on which to base practice.

- In all areas of health care, professionals are increasingly turning to evidence-based practice to both improve the quality of the health care they provide and to manage ever-escalating costs<sup>9</sup>. Evidence-based practice has emerged as a major core competency for dietetics practice in all practice settings and specialties.
- A study published in 2008 by Parker *et al* assessed the changes in registered dietitians' evidence-based practice (EBP) perceptions, attitudes and knowledge after completion of five web-based course modules<sup>10</sup>. The relationship between these changes and their demographic characteristics among registered dietitians who are members of the Dietitians in Nutrition Support and/or Renal Dietitians Dietetic Practice Groups of the American Dietetic Association in the United States was evaluated. Parker found that the majority of participants agreed that practicing an evidence-based approach improves patient care and they were interested in using EBP in the care of patients. Level of education, specialty certification, type of specialty certification and prior evidence analysis training were associated with higher knowledge scores. This study identified a need to provide education of EBP principles to integrate research evidence into clinical practice.
- Currently, there is a significant gap between the best research evidence in healthcare and application of this evidence to practice<sup>11</sup>. Consistent with this finding, nutrition support is not always applied effectively or consistently, despite available scientific evidence that could be used to enhance a given treatment protocol. Obstacles cited that prevent the incorporation of research evidence into daily practice include:
  - lack of time,
  - inadequate research skills, and
  - information overload.
- Identification and application of the most valid primary research and evidence summaries (guides to practice and meta-analyses) should be an integral part of appropriate nutrition care. Consequently, it is important that clinicians develop and improve upon the basic skills required to allow efficient and accurate searches and evaluations of the literature.
- For dietitians to remain competitive within the health care, education, and business arenas, they must incorporate evidence-based practice into their day-to-day activities and decisions.
  - What are some practical steps that dietetics practitioners can take to incorporate evidence-based practice into their professional roles<sup>12</sup>?
    - Learn the language of evidence-based practice. For example, evidence (research data) is graded on the basis of the type of research design, the rigor of the intervention used, and the strength of evidence (data) collected. For example, a large (n=1,500), well-designed, randomized, double-blind, placebo-controlled clinical trial rates a higher grade than does a small (n=35), poorly designed, cohort study.
    - Continuously read and evaluate the current literature in their field of specialization.
    - While evaluating the current literature, practitioners need to assess, without bias, both sides of controversial issues and remain open to new approaches.
    - As the overall body of evidence continues to build, the practitioner must come to a practice-related decision. Will the practice of recommending a specific supplement be continued or dropped? Will the contracted managers of the food service department be replaced with a self-operated unit? It is impossible to define the precise point at which the evidence tips the balance one way or the other for a given practitioner.
    - What remains constant, however, is the need for every dietetics practitioner to use the best available evidence to make and/or modify practice-related decisions that achieve optimal nutrition and well-being for all.
  - What will assure professional growth and competitiveness for dietetics practitioners?<sup>10</sup>
    - Work-site journal clubs and professional list-serves can serve as forums for discussion and critical evaluation of sources, further enhancing the evaluation process.
    - Experienced practitioners must orient new hires into the culture of evidence-based practice.
    - Dietetics educators must train their students to critically evaluate research and to emphasize the use of outcomes research as a key professional skill.

... many fine protocols are underutilized or never utilized.  
For protocols to be effective they must be utilized.  
GP Zaloga GP, *Chest*, 2004

- Nutrition therapies that may seem quaint to us now (e.g., BRAT diet) reflected the traditional origins of many medical practices that persist today. Knowledge of this history should motivate us to critically evaluate the research base that supports all aspects of nutrition therapy, develop protocols to assess practices that remain unexamined, and embrace the discipline of evidence-based practice<sup>13</sup>.

### **Marketplace/Industry Current Realities and Evolving Dynamics**

- In 1997, the Agency for Health Care Policy and Research, currently known as the Agency for Healthcare Research and Quality (AHRQ), began a national initiative to encourage health care practitioners to incorporate evidence-based practice into their day-to-day clinical decisions. This approach to health care promotes the use and application of evidence from well-designed clinical research. This paradigm has since spread to many disciplines, including dietetics.
- When all practitioners are actively involved in using evidence-based practice guidelines and protocols, we are in a much better position to deliver the state-of-the-art care and service our patients and clients expect and deserve<sup>7</sup>.
- Establishment of Evidence-based Practice Centers<sup>14</sup>
  - Under the Evidence-based Practice Centers (EPC) Program of the Agency for Healthcare Research and Quality, 5-year contracts are awarded to institutions in the United States and Canada to serve as EPCs.
  - The EPCs review all relevant scientific literature on clinical, behavioral, and organization and financing topics to produce systematic reviews and technology assessments. These reviews are used for informing and developing coverage decisions, quality measures, educational materials and tools, guidelines, and research agendas.
  - The EPCs also conduct research on methodology of systematic reviews.
- Barriers to Evaluating Studies in an Evidence-based Analyses<sup>15</sup>
  - Inadequate study design (e.g., no control group)
  - Inadequate analysis (e.g., no direct comparison between interventions)
  - Poor reporting of studies (e.g., missing data; inconsistencies between abstract, text, and tables)
  - Inadequate descriptions of the interventions, controls, and outcomes
  - Use of intermediate outcomes that either have not been shown to be associated with condition of interest, are not in standard use, or have not been validated
  - Small study size, which limits the ability to interpret "negative" findings
  - Inclusion of only highly narrow populations, which limits applicability
  - Short-term follow-up and lack of multiple testing for progression
  - Failure in crossover studies to adequately analyze or report results, including:
    - No reporting of outcomes at all stages of the study
    - Improper analytic techniques
    - No analysis of the comparison between intervention and control arms of the study
    - Inadequate reporting of safety data

### **Question #3: What do we know about the capacity and strategic position of ADA in terms of its ability to address this issue?**

#### **Evaluation of Evidence-based Practice in Nutrition<sup>15</sup>**

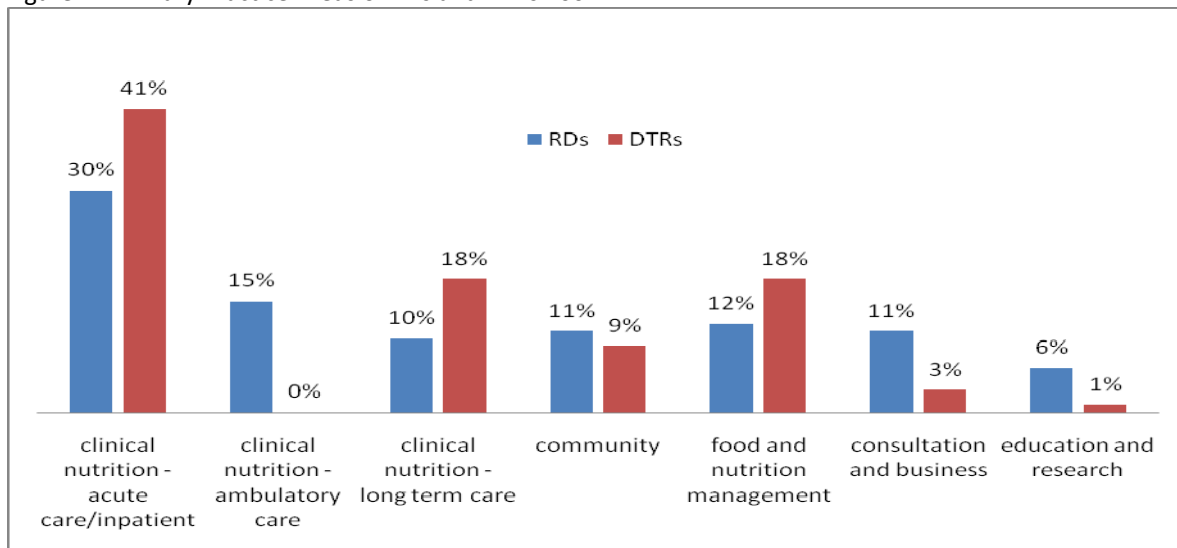
- The paper "Evaluation of Evidence-based Practice in Nutrition" published in 2007 shared lessons learned from collaboration among the 3 evidence-based practice committees, the Agency for Healthcare Research and Quality (AHRQ), the National Institutes of Health (NIH), and the technical experts.
- Evidence-based methods can be successfully applied to the evaluation of food and nutrition topics. These reports have highlighted the numerous clinical topics for which the evidence is inconclusive and on which further high-quality studies are needed.
- Demonstrated that the systematic review process can be resource- and time-intensive.
- The coordination among the EPCs allowed certain efficiencies and provided an excellent opportunity for each group to learn new approaches and improve its own processes.

- All groups found that conscientiously using a rigorous approach to define review parameters was essential to bringing focus to the clinically important questions being examined.
- The resource-intensive nature of systematic reviews also raises practical questions. The benefits of an overarching set of reviews continually need to be balanced with the costs and delays inherent in such a large endeavor. However, the breadth of these reviews should allow future updates to be sufficiently focused, both by clinical topic and on particular key questions, so that they can be completed relatively quickly. Systematic reviews are most useful when they are kept current, because evidence is continually evolving as new research becomes available.
- Health care interventions that are currently accepted as effective may in the future be shown to be ineffective or harmful, or vice versa. Ignoring the emergence of new information could undermine the validity of even the most current, high-quality systematic reviews.
- As the number of newly published studies grows, depending on their findings, the current systematic reviews may become less authoritative.

### Employment Setting and Practice Area for RDs and DTRs<sup>16</sup>

- The most common employment setting for both RDs and DTRs is a hospital (33% and 39%, respectively).
- Thirty-two percent of DTRs work in an extended-care facility, compared to only 11% of RDs. Twelve percent of RDs work in a clinical or ambulatory care center, versus 1% of DTRs.
- Nine percent of both groups work in a community or public health program. Practitioners also reported employment in a wide variety of other settings.
- The distribution of employment setting differs little from that seen in prior surveys. Dietetics practitioners are employed or self-employed across a variety of primary practice areas (Figure 1).

Figure 1. Primary Practice Areas of RDs and DTRs 2007



### American Dietetic Association's Strategic Plan<sup>17</sup>

- To achieve ADA's mission all RDs and DTRs need to engage in evidence-based practice<sup>9</sup>.
- The Board of Directors approved ADA's mission, vision, values and goals in 2008.
  - Mission - Empower members to be the nation's food and nutrition leaders
  - Vision - Optimize the nation's health through food and nutrition
- ADA Goals and Strategies
  - All three of ADA's goals rely on evidence-based practice or practice based on research.
    - Goal 1 of the plan states "The public trusts and chooses registered dietitians as food and nutrition experts" with one of the specific strategies to take proactive positions based on evidence.

- Goal 2 of the plan states “ADA improves the health of Americans” with one of the specific strategies to equip members to use research in their work.
- Goal 3 of the plan states “Members and prospective members view ADA as key to professional success” with one of the specific strategies to provide research and resources that can be translated into evidenced based practice.

### ADA’s Research Philosophy

- The ADA believes that research is the foundation of the profession providing the basis for practice, education and policy.
- Dietetics is the integration and application of principles derived from the sciences of nutrition, biochemistry, physiology, food science, food management and behavioral and social sciences to achieve and maintain people’s health; therefore, dietetics research is a dynamic collaborative and assimilative endeavor. This research is broad in scope ranging from basic to applied practice research.
- RDs and DTRs are responsible for practicing research based dietetics. Both the Code of Ethics and Standards of Professional Practice identify these principles and recognize the roles of the RD and DTR in research. The Code of Ethics states that the RD and DTR practices are based on scientific principles and current information. The Standards of Professional Practice states that each RDs and DTRs effectively applies, participates in or generates research to enhance practice.

Absence of evidence is not evidence of absence.  
J MacFie, *Nutrition*, 2000

- The Association uses research to make evidence-based decisions in generating policy, and communicating standards for practice in a variety of roles. The Association accomplishes these goals

by advocating, facilitating, convening, funding, disseminating and educating its members. The Association effectively collaborates with other scientists and organizations to best achieve the desired outcomes.

### ADA Priorities for Research<sup>18</sup>

- The Research Committee, which is comprised of members representing a variety of practice areas and practice settings, developed a priority list of areas of dietetics needing additional research support.
- *The Research Agenda to support the Future of Dietetics of the American Dietetic Association* identifies research priorities in the areas of dietetics, nutrition, behavioral and social sciences, management, basic science, and food science leading to the promotion of optimal nutrition, health and well-being for all people.
- The dietetics profession’s research priorities is substantiated by recent results from the Research Survey of that indicated that over 11 percent of those surveyed were involved in research to evaluate the effectiveness of evidence-based medical nutrition therapy.
- The most likely role(s) for ADA for this research priority is to serve as advocate for funding, and facilitator of partnerships and collaborations and disseminator of research findings. The most likely role(s) for ADA Foundation for this research priority is to serve as a funder of small research projects through the Dietetics Practice Based Research Network and advocate for funding from other foundations.

### Association Positions

- The Association Positions Committee recognizes the importance of developing positions that are evidence-based using an evidence analysis process. The development of evidence-based position papers provides important added benefits to earlier review methods. The major advantage of this approach is the systematic process for searching and analyzing research articles, which minimizes the likelihood of bias and increases the ease with which disparate articles may be compared.
- ADA develops 2-3 position papers per year using the evidence analysis projects. Position papers using the evidence analysis method including the following:
  - Published Position Papers:
    - Position of the American Dietetic Association: Weight Management. This paper endorsed by the American College of Sports Medicine. *J Am Diet Assoc.* 2009;109:330-346.
    - Position of the American Dietetic Association, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and Athletic Performance. *J Am Diet Assoc.* 2009;109:509-527.

- Position of the American Dietetic Association: Health Implications of Dietary Fiber. *J of Am Dietetic Assoc.* 2008; 108:1716-1731.
- Position of the American Dietetic Association: Individual, Family, School, and Community-based Intervention Programs for Pediatric Overweight. *J Am Diet Assoc.* 2006; 106:925-945.
- In Development:
  - Promoting and Supporting Breastfeeding
  - Fortification and Nutritional Supplements
  - Vegetarian Diets
  - Nutrition Across the Spectrum of Aging
  - Impact of Fluoride Health
  - Use of Nutritive and Non-nutritive Sweeteners
- Development to begin during 2009-10 program year:
  - Dietary Fatty Acids
  - Individual-, Family-, School- and Community-Based Interventions for Pediatric Overweight
  - Agricultural and Food Biotechnology

**Commission on Dietetic Registration**

- In regards to Professional Development Portfolio Learning Needs Codes, most of the codes under 9000 Research And Grants could apply to learning activities related to evidence-based practice:
  - 9010 Data analysis, statistics
  - 9020 Evaluation and application of research
  - 9030 Outcomes research, cost-benefit analysis
  - 9040 Proposal development, grant applications
  - 9050 Publication, communications of research outcomes
  - 9060 Research development and design
  - 9070 Research instruments and techniques.

**Articles Published in Dietetic Practice Groups Newsletters**

- Only 5 of 28 Dietetic Practice Groups have published articles discussing evidence-based practice in their newsletters (Table 1). Two of the articles were reprints.

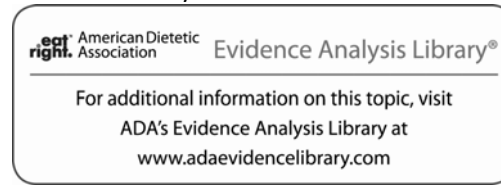
Table 1. DPG Newsletter Articles

DPG	Season	Year	Author	Title
Dietitians in Nutrition Support	June	1996	Morrow	Critiquing scientific literature: applying research to nutrition support practice
Dietetics in Developmental and Psych	Winter	1998	Morrow	Critiquing scientific literature: applying research to nutrition support practice
Dietetics in Developmental and Psych	Winter	1998	Isaacs	Outcome research is worth your time
Nutrition Educators of Health Professionals (NEHP)	Winter	2005/06	Marshall	Incorporating nutrition into problem-based learning: a dental school model
Diabetes Care and Education	Winter	2007	Black	Using the Evidence Analysis Library
Weight Management Newsletter	Spring	2007	Doucette and Kren	The efficacy of using the Therapeutic Lifestyle Changes diet for reducing comorbidities associated with overweight and obesity
Dietitians in Nutrition Support	April	2008	Roberts	Evidence-based Protocols: Why Protocols are Beneficial and Considerations for Implementation
Dietitians in Nutrition Support	February	2008	Malone	The Evidence Analysis Library and Critical Illness Guidelines: An application to practice
Diabetes Care and Education	Summer	2008	Bieseimer	Evidence Analysis Library: Adult Weight Management and Pediatric Overweight and Obesity Guidelines and Toolkit
Dietitians in Nutrition Support	October	2008	Malone	The Evidence Analysis Library and Critical Illness Guidelines: An Introduction to the Process

DPG	Season	Year	Author	Title
Dietitians in Nutrition Support	February	2009	Newton, Peoples	Implementing the Critical Illness Guidelines in a patient with necrotizing fasciitis and open abdomen
Dietitians in Nutrition Support	April	2009	Roberts, Reed	Understanding and applying evidence-based guidelines in clinical practice

### **The Journal of the American Dietetic Association**

- *The Journal of the American Dietetic Association* is the premier source for the practice and science of food, nutrition, and dietetics. The monthly, peer-reviewed *Journal* presents original articles prepared by scholars and practitioners and is the most widely read professional publication in the field.
- All *Journal* Research articles are peer-reviewed and scientifically-based (over 85 articles per year). Articles in which the topic matter is directly reflected in ADA's Evidence Analysis Library include the following icon, directing members to ADA's library. At least one article each month bears this icon.



### **Nutrition Services Coverage**

- The Coding and Coverage Committee (CCC) and Nutrition Services Coverage team promote, reinforce and educate members on evidence-based practice (relative to payer requirements) via:
  - Resources posted on the ADA Web site at [www.eatright.org/mnt](http://www.eatright.org/mnt).
  - MNT Works Kit: Medical Nutrition Therapy Coverage Guidelines
    - Text included in the MNT Works Kit: A registered dietitian's (RD) clinical judgment along with the American Dietetic Association's Nutrition Practice Guidelines\* and Protocols support evidence-based decision-making to achieve desired health outcomes and optimum implementation of nutrition services.
  - CCC speaker's bureau presentations
  - FNCE presentations
- The *Medicare MNT Provider* newsletter routinely includes articles on evidence-based practice (e.g., "Medicare Workshop Puts Outcomes Monitoring Front and Center", June 2008).
- Evidence-based practice was supported in the Alliance Healthcare Initiative as access to the Evidence Analysis Library was given to members of the alliance.
- The RD is promoted to Centers for Medicare & Medicaid Services (CMS) involved in regulatory and coverage activities within the agency highlighting the profession as one who practices based on evidence. The Medicare Part B MNT benefit specifies RDs must use nationally recognized protocols.

### **ADA Foundation**

- The Foundation provides funding support as it relates to evidence base research.
- Funding has been provided for sections of the EAL, the Dietetic Practice-based Research Network (DPBRN) and named research awards. A list of awards can be found at [http://www.adaf.org/cps/rde/xchg/adaf/hs.xsl/8459\\_ENU\\_HTML.htm](http://www.adaf.org/cps/rde/xchg/adaf/hs.xsl/8459_ENU_HTML.htm). For example the Foundation funded Childhood Overweight, Vegetarian Nutrition and Spinal Cord Injury projects.

...creation of a guideline does not automatically mean it will be accepted or followed.... Are researchers blind to needs and challenges of clinicians and are clinicians deaf to the evidence-based recommendations of the researchers?

N Vakil, *Am J Gastroenterology*, 2004

## Book Publishing

- ADA strives to ensure that all of our professional reference, client education and consumer titles use evidence/science-based data.
- *Research: Successful Approaches, 3rd Edition* is a text that ADA publishes and is designed to help RDs plan, execute and report research. *Chapter 12: Systematic Reviews to Support Evidence-Based Practice* specifically addressed EPB.

## Evidence-based Practice Committee (EBPC)

- The committee is comprised of nine members of the Association.
- The committee oversees the development and implementation of evidence-based practice, including the evidence analysis process development and maintenance of the Evidence Analysis Library, development and publication of all Evidence-Based Nutrition Guides for Practice (including those for Medical Nutrition Therapy) and other products based on the results of evidence analysis.
- The charge to the committee is related to ADA's strategic goals aimed at increasing demand for and utilization of services provided by members and empowering members to compete successfully in a rapidly changing environment.
- The EBPC committee's communication plan that provides an overview of communication methods to achieve their charge (Appendix A). This plan is a work in progress.

## Evidence-based Practice Guidelines & Tool Kits

- Timeline/History
  - 2001: First guidelines developed by ADA on 4 topics: Diabetes Type 1 and 2, CKD, Gestational Diabetes, Hyperlipidemia. Obtaining reimbursement for MNT for Diabetes and CKD was tied to having these in place to show that RDs can achieve expected outcomes.
  - 2004: Launch of EAL- with 3 topics; today there are over 36 projects in various stages.
    - Content has grown tremendously. This includes over 3400 articles analyzed, questions, evidence summaries, recommendations, most popular pages, top searches, page views, ADA members logged on, etc.
  - 2005: Evidence-based Practice Committee established to oversee evidence-based practice initiatives. Much of their work has been involved in the dissemination of the EAL- presentations/workshops at FNCE, DPG meetings, affiliate meetings, Dietetic Educators of Practitioners (DEP) DPG meetings, and external meetings. Examples of presentations given by the Evidence-based Practice Committee follow:
    - Spring 2006 HOD meeting: "Quality Plus Evidence in Dietetics: It's Priceless!!"
    - FNCE 2006 educational sessions: "Developing Evidence-based Guidelines Using the Nutrition Care Process and Model in the Bariatric Surgery Workgroup" and "Putting Evidence-based Guidelines into Practice: Examples from Critical Illness and Oncology."
    - 2007 spring meetings: all seven of the DEP Area meetings, Clinical Nutrition Managers DPG conference, Minnesota Dietetic Association District workshops, Massachusetts Dietetic Association, Illinois Dietetic Association, Georgia Dietetic Association, and Weight Management DPG Symposium.
    - FNCE 2007 educational sessions: "Implementing Evidence-Based Medical Nutrition Therapy for Diabetes and Using Evidence to Treat Overweight" and "Obesity: ADA's Adult and Pediatric Weight Management MNT Guidelines".
    - FNCE 2007 workshop: "Real-World Application of the Nutrition Care Process, Evidence-Based Nutrition Practice Guidelines and Toolkits"
    - 2008 spring meetings: Iowa Consultant Dietitians in Health Care Facilities, Weight Management DPG Symposium and the North East Pennsylvania, Central Pennsylvania, Michigan, North Carolina, South Carolina, Ohio and Vermont Dietetic Associations
    - FNCE 2008 educational sessions: "A Practitioner's Guide: Treating Hypertension Using the Evidence Analysis Library" and "The World of Hydration: An Evidenced-Based Evaluation"
    - 2009 spring meetings: Florida, Louisiana, Maryland, Michigan, Missouri, New York, Arizona –Central and Utah Dietetic Associations; DEP Areas I, III/IV and VII and Nebraska Veterans Administration.

- Products/tools resulting from evidence analysis projects include: educator modules, Evidence-based Toolkits and evidence-based presentations which are available on the EAL store:  
<https://www.adaevidencelibrary.com/store.cfm>
- Publications related to evidence analysis are:
  - EAL Project: Adult Weight Management
  - EAL Project: Nutrition in Athletic Performance
  - EAL Project: Diabetes 1 and 2
    - Perspectives in Practice: Evidence-Based Nutrition Practice Guidelines for Diabetes and Scope and Standards of Practice, *J Am Dietetic Assoc.* 2008;108(4):S52-S58.
    - Marion J. Franz, MS, RD, CDE. What Makes Diabetes Medical Nutrition Therapy Effective? *Review of Endocrinology.* 2008; April (2)4:16-19.
    - Raquel Franzini Pereira, MS, RD, LD and Marion J. Franz, MS, RD, LD, CDE. Prevention and Treatment of Cardiovascular Disease in People with Diabetes Through Lifestyle Modification: Current Evidence-Based Recommendations. *Diabetes Spectrum.* 2008; 21(3):189-193.
  - EAL Project: Disorders of Lipid Metabolism
    - Linda Van Horn, PhD, RD; Mikelle McCoin, MPH, RD; Penny M. Kris-Etherton, PhD, RD; Frances Burke, MS, RD; Jo Ann S. Carson, PhD, RD; Catherine M. Champagne, PhD, RD; Wahida Karmally, DrPH, RD; Geeta Sikand, MA, RD. Review: The Evidence for Dietary Prevention and Treatment of Cardiovascular Disease. *J Am Diet Assoc.* 2008; 108: 287-331.
    - Mikelle McCoin, MPH, RD; Geeta Sikand, MA, RD; Elvira Q. Johnson, MS, RD; Penny M. Kris-Etherton, PhD, RD; Frances Burke, MS, RD; Jo Ann S. Carson, PhD, RD; Catherine M. Champagne, PhD, RD; Wahida Karmally, DrPH, RD; Linda Van Horn, PhD, RD. Commentary: The Effectiveness of Medical Nutrition Therapy Delivered by Registered Dietitians for Disorders of Lipid Metabolism: A Call for Further Research. *J Am Diet Assoc.* 2008; 108:233-239.
  - EAL Project: Fiber
  - EAL Project: Childhood Overweight
  - EAL Project: Critical Illness and Nutrition
    - Kendra K. Kattelman, PhD, RD; Mary Hise, PhD, RD; Mary Russell, MS, RD; Pam Charney, MS, RD; Milton Stokes, RD; Charlene Compher, PhD, RD, FADA. Therapy Protocol: Enteral Feedings for Critically Ill Patients. *J of Amer Dietetic Assoc.* 2006; 106:1226-1241.
  - EAL Project: Energy Expenditure: Measurement versus Estimation
    - David Frankenfield, MS, RD; Lori Roth-Yousey, MPH, RD; Charlene Compher, PhD, RD, FADA; for the Evidence Analysis Working Group. Comparison of Predictive Equations for Resting Metabolic Rate in Healthy Nonobese and Obese Adults: A Systematic Review. *J Am Diet Assoc.* 2005; 105:775-789.

#### Commission on Accreditation for Dietetics Education

- Educators can teach evidence-based practice and the Nutrition Care Process to dietetics students, but they must be supported and used at the practice level<sup>19</sup>.

#### Question #4: What ethical/legal implications, if any, surround the issue?

##### Code of Ethics<sup>20</sup>

- Dietetics practitioners have voluntarily adopted a Code of Ethics to reflect the values and ethical principles guiding the dietetics profession and to outline commitments and obligations of the dietetics practitioner to client, society, self, and the profession.
- The following principle from the current Code of Ethics supports the dietetics practitioner practicing based on evidence where available:
  - Responsibilities to the Profession
    - Principle 12. The dietetics practitioner practices dietetics based on evidence-based principles and current information.

- Principle 13. The dietetics practitioner presents reliable and substantiated information and interprets controversial information without personal bias, recognizing that legitimate differences of opinion exist.

### Ethical/Legal

- If we lack evidence to support our practice decisions, how can the RDs and DTRs achieve the goals we have set for ourselves to be the preferred supplier of food, nutrition, and health services? Dietetics must rapidly become a truly evidence-based practice profession, utilizing a systematic, standardized care process such as ADA's Nutrition Care Process and carefully evaluating outcomes<sup>9</sup>. If we fail to enhance our evidence-based practice, we likely will find ourselves locked out of opportunities we have worked so hard to create, including jobs, recognition, and compensation.
- Regulatory bodies are demanding that policies are rooted in evidence-based information. If they are not evidence-based then facilities may get penalized during audits.
- There's quite often the misperception that EBP is the be all and end all of practice and we should strive to not only help members learn and use EBP but to also know the limitations of EBP.
- In spite of the enthusiasm for EBP evinced over the last decade or two, some authors have redefined EBP in ways that contradict, or at least add other factors to, the original emphasis on empirical research foundations<sup>5</sup>. For example, EBP may be defined as treatment choices based not only on outcome research but also on practice wisdom (the experience of the clinician) and on family values (the preferences and assumptions of a client and his or her family or subculture).
- Evidence-based medicine is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The Center for Evidence-based Medicine<sup>21</sup> states that "good doctors and health professionals use both individual clinical expertise and the best available external evidence, and neither alone is enough. Without clinical expertise, practice risks becoming tyrannized by evidence, for even excellent external evidence may be inapplicable to or inappropriate for an individual patient. Without current best evidence, practice risks becoming rapidly out of date, to the detriment of patients. Evidence-based medicine is not restricted to randomized trials and meta-analyses. It involves tracking down the best external evidence with which to answer our clinical questions".

The presence of passion does not replace the absence of data.

AL Buchman, *Am J Clin Nutr*, 2001

**Appendix A**

**Communication Plan for Evidence-Based Nutrition Practice Guidelines and Toolkits for Practice**

**Communication Objective:** Adoption and use of Evidence-Based Nutrition Practice Guideline and Toolkits.

Critical Audience	Key Messages	Potential Communication Channels	Timeline
Practitioners	<ul style="list-style-type: none"> <li>• “Gold standard” for practice</li> <li>• State of the art science</li> <li>• Usable and understandable</li> <li>• Improved patient care</li> <li>• Promotes implementation of Nutrition Care Process</li> <li>• Application results in outcomes data to demonstrate effectiveness</li> <li>• New and improved features of EAL/EBG (e.g. print reports feature)</li> <li>• Advantage over practitioners not using</li> <li>• Provides confidence for practitioners as they provide care</li> <li>• Meets JCAHO requirements</li> <li>• Assists in Medicare and other payers reimbursement</li> <li>• Decreases risk of liability</li> <li>• Promotes credibility among other professions</li> <li>• Provides rationale for services to patients and other professionals</li> <li>• Provides advantage for employment opportunities and promotions</li> </ul>	<ul style="list-style-type: none"> <li>• EAL website</li> <li>• FNCE:               <ul style="list-style-type: none"> <li>○ Educational Sessions: 2006, 2007, 2008</li> <li>○ Poster sessions: Coding and Coverage Committee: 2007</li> <li>○ EAL demos: 2005, 2006, 2007</li> <li>○ Workshops: 2007, 2008</li> <li>○ DPG sessions</li> </ul> </li> <li>• Blast email/listserves: standard upon publication of guideline or toolkit</li> <li>• ADA <i>Journal</i> Publications:               <ul style="list-style-type: none"> <li>○ Summary of guidelines, literature reviews, validation studies, surveys</li> <li>○ Diabetes supplement April 2008</li> <li>○ Position Papers</li> </ul> </li> <li>• Advertisements and Highlights of Workgroup Success Stories               <ul style="list-style-type: none"> <li>○ <i>Journal</i> ads</li> <li>○ Direct mail, postcards: Third Party Payer Brochure in collaboration with CDR, CCC</li> <li>○ Press releases for each guideline release</li> </ul> </li> <li>• Presentations at local, state and national association meetings (see below)</li> <li>• DPG, Affiliate and Networking Groups/meeting, Newsletters               <ul style="list-style-type: none"> <li>○ Meetings: Minnesota DA, CNM symposium WMPG (2006/2007), IDA, various Chicago DAs, Massachusetts DA, Georgia DA, Iowa CD-HCF, North East Penn DA, Michigan DA, NC DA, Ohio DA, Pennsylvania DA, Vermont DA, SC DA</li> <li>○ Multiple newsletter articles and ads</li> </ul> </li> <li>• Weight Management Certificate Programs</li> <li>• Clinical guidelines directories/clearinghouses (<a href="http://www.guidelines.gov">www.guidelines.gov</a>)</li> <li>• Professional Development opportunities: training sessions, workshops, teleseminars, conferences, webinars</li> <li>• Link from Nutrition Care Manual</li> <li>• Potential phone and email “help line” for practitioner responses/clarifications (pending availability of Knowledge Center)               <ul style="list-style-type: none"> <li>○ Help Email through EAL</li> </ul> </li> </ul>	2005/2006 2006/2007 2007/2008

		<ul style="list-style-type: none"> <li>• House of Delegates <ul style="list-style-type: none"> <li>○ Spring 2006 workshop</li> <li>○ Flyers 2007</li> </ul> </li> <li>• Public Policy Workshops <ul style="list-style-type: none"> <li>○ Distributed flyers: 2006, 2007</li> </ul> </li> <li>• Link from ADA website homepage</li> </ul>	
Educators	<ul style="list-style-type: none"> <li>• Helps to measure performance</li> <li>• Structure for teaching nutrition therapy skills</li> <li>• Logical framework helps students to learn</li> <li>• State of the art science</li> <li>• Promotes Nutrition Care Process</li> <li>• Use as an evaluation tool for students</li> <li>• Use to train preceptors</li> <li>• Can provide basis for curriculum</li> <li>• Meets CADE standards of education</li> <li>• Use will save time of summarizing research</li> <li>• Easy to incorporate into student assignments</li> <li>• Provides advantage for graduates seeking employment</li> <li>• May include in teaching profession tenure</li> </ul>	<ul style="list-style-type: none"> <li>• CADE Standards of Education</li> <li>• Nutrition Educators of Health Professional DPG</li> <li>• Dietetic Educators of Practitioners (DEP) area meetings (didactic, coordinated and practice programs) <ul style="list-style-type: none"> <li>○ Newsletters, listserves, website, area meeting presentations (seven area DEP meetings 2007)</li> </ul> </li> <li>• Webinar for preceptors/educators</li> <li>• House of Delegates <ul style="list-style-type: none"> <li>○ Spring 2006 workshop</li> </ul> </li> <li>• Public Policy Workshops <ul style="list-style-type: none"> <li>○ Distributed flyers: 2006, 2007</li> </ul> </li> <li>• Solution Center article – describing how implemented into programs and success stories</li> <li>• EAL Store - Educator Module</li> </ul>	2006/2007 2007/2008
Students	<ul style="list-style-type: none"> <li>• Professional leaders in the field</li> <li>• Logical for ease of learning</li> <li>• Structure for learning</li> <li>• Promotes understanding of Nutrition Care Process</li> <li>• Provides advantage for graduates seeking employment</li> <li>• Can use in Professional Development Portfolio</li> <li>• Provides body of analyzed research for paper writing and projects</li> <li>• Assists with RD exam preparation</li> </ul>	<ul style="list-style-type: none"> <li>• Student committee presentations</li> <li>• Student community of interest site</li> <li>• Student online newsletter</li> <li>• New Member Newsletter “Behind the Scenes”: 2006, 2007</li> <li>• Incorporate into textbooks</li> <li>• DEP Involvement</li> <li>• DEP Area meetings</li> <li>• Train the trainer workshops</li> <li>• Educator Module –EAL Store</li> </ul>	2006/2007 2007/2008
Management and Policy makers, External audiences: Hospital Administrators CMS JCAHO	<ul style="list-style-type: none"> <li>• Gold standard for practice</li> <li>• State of the art science</li> <li>• Improved patient care</li> <li>• Reimbursement improved</li> <li>• Patient validation for care</li> <li>• Functions as problem solving tool</li> <li>• Outcomes monitoring</li> <li>• Human Resource functions</li> <li>• Useful for position description and training materials for staff</li> <li>• Assists in clarifying the role of RD supervisors and employees</li> </ul>	<ul style="list-style-type: none"> <li>• Clinical Nutrition Management DPG <ul style="list-style-type: none"> <li>○ Spring 2007 symposium</li> </ul> </li> <li>• Management in Food and Nutrition Systems DPG</li> <li>• Train the trainer workshops: beginning CI Network</li> <li>• Coding and Coverage Committee <ul style="list-style-type: none"> <li>○ Brochure communication to third party payers</li> </ul> </li> <li>• Legislative and Public Policy Committee</li> <li>• QM Committee <ul style="list-style-type: none"> <li>○ Presentation to HFAP</li> </ul> </li> <li>• Affiliates</li> <li>• Articles: <i>Obesity Management</i>, International Confederation of Dietetic Associations –</li> </ul>	2006/2007 2007/2008

	<ul style="list-style-type: none"> <li>• Set of standards for skill set and competencies</li> <li>• Performance evaluation tool</li> <li>• Supports electronic medical record data collection</li> <li>• Supports standards for JCAHO accreditation</li> </ul>	<i>Dietetics Around the World Newsletter: 2006</i>	
Researchers	<ul style="list-style-type: none"> <li>• Identifies research questions</li> <li>• Provides analyzed evidence and reference lists</li> </ul>	<ul style="list-style-type: none"> <li>• Research DPG <ul style="list-style-type: none"> <li>○ Oncology DPG newsletter</li> </ul> </li> </ul>	
Insurance companies (e.g. Blue Cross/Blue Shield)	<ul style="list-style-type: none"> <li>• Reduces the use of medication which saves money for those participating in insurance plan</li> </ul>	<ul style="list-style-type: none"> <li>• Informational brochure/packet <ul style="list-style-type: none"> <li>○ Sent letter/supporting materials to BCBS Massachusetts: 2007</li> <li>○ Collaboration with CCC and CDR brochure communication to third party payers</li> </ul> </li> </ul>	2007/2008

## References

- <sup>1</sup> Why Evidence-Based Practice? University of Minnesota Biomedical Library. Accessed July 15, 2009 from <http://www.biomed.lib.umn.edu/learn/ebp/mod01/why.html>.
- <sup>2</sup> Definition/Description and Key Considerations of Evidence-Based Dietetics Practice. American Dietetic Association. Accessed July 1, 2009 from [http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/advocacy\\_11991\\_ENU\\_HTML.htm](http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/advocacy_11991_ENU_HTML.htm)
- <sup>3</sup> Centre for Evidence Based Medicine Glossary. Accessed July 23, 2009 from <http://www.cebm.net/index.aspx?o=1116>.
- <sup>4</sup> The 5-Step Process: Introduction. University of Minnesota Biomedical Library. Accessed July 15, 2009 from <http://www.biomed.lib.umn.edu/learn/ebp/mod01/index.html>
- <sup>5</sup> Evidence-based Practice. Wikipedia. Accessed June 24, 2009 from [http://en.wikipedia.org/wiki/Evidence\\_based\\_practice#Evidence\\_Based\\_Practice\\_v.\\_intuition](http://en.wikipedia.org/wiki/Evidence_based_practice#Evidence_Based_Practice_v._intuition)
- <sup>6</sup> Byham-Gray LD, Gilbride JA, Dixon LB, and Stage FK. Evidence-Based Practice: What Are Dietitians' Perceptions, Attitudes, and Knowledge? *J of Amer Dietetic Assc.* 2005;105(10):1574-1581.
- <sup>7</sup> Janas LM and Bernstein MA. Evidence-Based Nutrition Practice Skills as Taught in an Online Master of Science in Clinical Nutrition Curriculum. *J of Amer Dietetic Assc.* 2008;108(9):A77.
- <sup>8</sup> Chapman GE, Sellaeg K, Levy-Milne R, Barr SI. Qual Health Res. 2007 Sep;17(7):902-7. Toward increased capacity for practice-based research among health professionals: implementing a multisite qualitative research project with dietitians. *Qualitative Health Research.* 2007;17(7):902-907.
- <sup>9</sup> Laramée SH. Evidence-based practice: A core competency for dietetics. *J of Amer Dietetic Assc.* 2005;105(3):333.
- <sup>10</sup> Parker AR, Byham-Gray L, Touger-Decker R, O-Sullivan Maillet J, Rigassio Radler D. Impact of Evidence-Based Practice Web-Based Modules for Members of the Dietitians in Nutrition Support and Renal Dietitians Dietetic Practice Groups on Their Perceptions, Attitudes and Knowledge of Evidence-Based Practice. *J of Amer Dietetic Assc.* 2008;108(9):A83.
- <sup>11</sup> Hise ME, Kattelman K, Parkhurst M. Evidence-based clinical practice: dispelling the myths. *Nutr Clin Pract.* 2005 Jun;20(3):294-302.
- <sup>12</sup> Vaughan L and Manning C. Meeting the challenges of dietetics practice with evidence-based decisions. *J of Amer Dietetic Assc.* 2004;104(2):282-284.
- <sup>13</sup> Chima CS. Diet manuals to practice manuals: the evolution of nutrition care. *Nutr Clin Pract.* 2007 Feb;22(1):89-100.

- 
- <sup>14</sup> Evidence-based Practice Centers, Agency for Healthcare Research and Quality. Accessed July 20, 2009 from <http://www.ahrq.gov/clinic/epc/>.
- <sup>15</sup> Balk EM, Horsley TA, Newberry SJ, Lichtenstein AH, Yetley EA, Schachter HM, Moher D, MacLean CH, Lau J. A collaborative effort to apply the evidence-based review process to the field of nutrition: challenges, benefits, and lessons learned. *Am J Clin Nutr*. 2007 Jun;85(6):1448-56.
- <sup>16</sup> *Compensation & Benefits Survey of the Dietetics Profession*. American Dietetic Association, 2007.
- <sup>17</sup> American Dietetic Association's New Strategic Plan. Accessed May 19, 2008 from [http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/16879\\_ENU\\_HTML.htm](http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/16879_ENU_HTML.htm).
- <sup>18</sup> Priorities for Research: Agenda to Support the Future of Dietetics. American Dietetic Association, 2007.
- <sup>19</sup> Reeves R. Building the Structure of Dietetics Practice. *J of Amer Dietetic Assc*. 2005;105(12):1849.
- <sup>20</sup> Code of Ethics for the Profession of Dietetics. *J of Amer Dietetic Assc*. 2009;106(8):1461-1467.
- <sup>21</sup> The Center for Evidence-based Medicine. Accessed July 23, 2009 from <http://www.cebm.net/index.aspx?o=1914>.