Ethics is for Everyone:

Applying ethics principles across the dietetics profession

By

Dianne Polly, JD, RDN
dianepolly@gmail.com

Esther Myers, PhD, RDN, FADA, FAND
efmyers@efmyersconsulting.com

1. Slides for Presentation
2. Code of Ethics
3. Recommended Reading List/Bibliography
4. Funding food science and nutrition research: financial conflicts and scientific integrity.
Ethics is for Everyone:
Applying ethics principles across the dietetics profession

Objectives
As a result of this webinar the participants will be able to
• Identify guiding principles (fundamentals) used to resolve ethical dilemmas in dietetics
• Identify common situations across the full spectrum of dietetics profession that have ethical implications
  o e.g. food service management decisions, vendor relationships, educators and students situations, clinical practice decisions, billing practices, and research funding.
• Apply Academy professional resources in considering ethical implications of traditional practice issues as well as new frontiers such as genetics and social media

Definition of Ethics
• Ethics are standards of behavior you ought to live by
• Integrity is how consistent you are following your ethical standards
• Ethics are influenced by: Your values, your understanding of the roles you play; and your understanding of the obligations and dilemmas of those roles
• Integrity is influenced by your skills, knowledge and your character

Ethics is NOT...
• Ethics vs. Morals
• Ethics and morals are NOT always the same
• Morals = personal views of values
  o Beliefs related to moral issues such as drinking, sex, gambling
  o Can reflect influence of religion, culture, family and friends
  o Ethics transcends cultural, religious and ethnic differences
• The Law = Something can be legal and not ethical and vice versa
Ethics is NOT continued

- Ethics is not about “getting caught”
  - Even if you get away with something, it may still be unethical
  - Ethics is not defined by what happens to you, but by your thoughts and actions

- Ethics is not about placing blame
  - It is important not to judge other people based on their personal beliefs

General Guidelines for Ethics

- When trying to decide if something is ethical, try the gut test - if gut is working
- Could you do it in front of your mother or your children
- Would you want someone to act the same way to you
- Personal ethics can sometimes be different than acceptable professional ethics

Academy’s Code of Ethics

- Fundamental Principles
  - Dietetics Practitioners
    - Conduct themselves with honesty, integrity and fairness
    - Supports and promotes high standards of professional practice
- Code lists responsibilities to:
  - The public
  - To your clients
  - To the profession
  - To your colleagues and other professionals

Duties to the Public (3-7)

3 - Considers health, safety and welfare of public at all times
4 - Complies with all laws and regulations
5 - No false or misleading practices or communications
6 - Must withdraw when unable to fulfill his professional duties to clients and others
7 - These duties/responsibilities are inclusive for all areas of practice
Responsibilities to Clients (8-11)
8- Recognizes and exercises professional judgment within limits of his qualifications; makes referrals if necessary
9 - Treats clients and patients with respect and consideration
10 - Protects confidential information and makes full disclosure of any limitations
11 – Comply with all public principles (3-7)

Responsibilities to our Profession (12-18)
12 - Practices with evidence based principles and current information
13 - Presents reliable information without personal bias, recognizing legitimate differences of opinion exists
14 - Lifelong duty to keep competent in practice
15 - Avoids conflicts of interest or discloses as needed
16 - Permits use of name with products/services only if rendered by him or supervised by him
17 – Accurately represents credentials & qualifications
18 – Not invite, accept or offer gifts, monetary incentives or other considerations

Responsibilities to Colleagues and Other Professionals (19)
19 - Demonstrates respect for the values, rights, knowledge, and skills of colleagues and other professionals.

Using Academy resources
- Code of Ethics (See handout)
- Published articles (See handout)
- Website [http://www.eatright.org/codeofethics](http://www.eatright.org/codeofethics)
  - Ethics in Action Articles
  - Ethics Opinions
  - Instructions for Compiling Ethics Complaints and Violations

Handout Page 4
### Discussion cases

1. Review scenario

2. Polling Slides (Slides 14-16)
   1. Ask for your vote – Is this an ethics issue
   2. Ask for your vote – Who does it involve
   3. Ask for your vote – which of the code of ethics principles apply (Refer to handout for full description of each principle)

3. Review key application points

### First – Is it truly an ethical issue?

A. Legal Issue  
B. Employer Policy  
C. Personal Issue  
D. Business Dispute  
E. Ethics alone  
F. Ethics plus one or more of other issues

Remember it could also be a combination issue

---

### Next --- Who does it involve??

A. Public

B. Client

C. Profession

D. Colleagues and Other Professionals

### Select Principle(s) that apply (Code of Ethics)

- **Fundamental Principles**
  1. Honesty, integrity and fairness
  2. Standard of professional practice and Code of Ethics

- **Responsibilities to the public**
  3. Health, safety and welfare of public  
  4. Laws, regulations and Code of ethics  
  5. Objective and respect for needs and values  
  6. Not false or misleading  
  7. Withdraw when unable to fulfill duties/responsibilities

- **Responsibilities to Clients**
  8. Professional judgment and decision-making  
  9. Client/patient respect and confidentiality  
  10. Protect confidential information  
  11. Comply with all related to public (Check)

- **Responsibilities to the Profession**
  12. Evidence-based principles  
  13. Reliable/substantiated information & interprets w/o bias  
  14. Life-long learning  
  15. Real or potential conflict of interest  
  16. Use of name only for services rendered  
  17. Uses accurate professional qualifications & credentials  
  18. Gifts, monetary incentives or other considerations

- **Responsibilities to Colleagues and Other Professionals**
  19. Respect for other professionals
Scenarios

- End of Life
- Management Purchasing
- Social Media
- Conducting Research
- Business
- Private Practice

End of Life Case Scenario

- You work in a nursing home and have become friends with a young mother who has end stage cancer. She has shared with you that she did not want any extraordinary care once she could no longer eat solid food. She had been consuming very few calories for the last several weeks. She is heavily medicated and is now refusing to eat. The physician and her family believe she could live for several months with a tube feeding. Do you see this as an ethical issue?

Polling Slides

- See Slides 14 to 16
- Is this truly an ethical issue?
- Who does it involve?
- Which principles may be applicable
  - (based on who is involved)

Select Principle(s) that apply (Code of Ethics)

- Fundamental Principles
  - 1. Honesty, integrity and fairness
  - 2. Standard of professional practice and Code of Ethics
- Responsibilities to the public
  - 3. Health safety and welfare of public
  - 4. Laws, regulations and Code of ethics
  - 5. Objective and respect for needs and values
  - 6. Not false or misleading
  - 7. Withdraw when unable to fulfill duties/responsibilities
- Responsibilities to Clients
  - 8. Professional judgment within their limits
  - 9. Client/patient respect and consideration
  - 10. Protect confidential information
  - 11. Comply with all related to public
- Responsibilities to the Profession
  - 12. Evidence-based principles
  - 13. Reliable/substantiated information & interprets w/o bias
  - 14. Life-long learning
  - 15. Real or potential conflict of interest
  - 16. Use of name only for services rendered
  - 17. Use accurate professional qualifications & credentials
  - 18. Gifts, monetary incentives or other considerations
- Responsibilities to Colleagues and Other Professionals
  - 19. Respect for other professionals
As the manager of a large dietetics department, you have final approving authority on purchasing contracts for foods, medical foods, and dietary supplements. Recently at the FNCE exhibit hall, one company identified one of the benefits of using their product was the additional software programs provided to track patient outcomes. Is it ethical for you to choose this medical food supplement and use the software?

21. Polling Slides
   - See Slides 14 to 16
   - Is this truly an ethical issue?
   - Who does it involve?
   - Which principles may be involved (based on who is involved)

23. Select Principle(s) that apply (Code of Ethics)
   - Fundamental Principles
     1. Honesty, integrity and fairness
     2. Standard of professional practice and Code of Ethics
   - Responsibilities to the public
     3. Health Safety and welfare of public
     4. Laws, regulations and Code of ethics
     5. Objective and respect for needs and values
     6. Not false or misleading
     7. Withdraw when unable to fulfill duties/responsibilities
   - Responsibilities to Clients
     8. Professional judgment within their limits
     9. Client/patient respect and consideration
     10. Protect confidential information
     11. Comply with all related to public (based on who is involved)
   - Responsibilities to the Profession
     12. Evidence-based principles
     13. Reliable/substantiated information & interprets w/o bias
     14. Life-long learning
     15. Real or potential conflict of interest
     16. Use of name only for services rendered
     17. Uses accurate professional qualifications & credentials
     18. Gifts, monetary incentives or other financial benefits
   - Responsibilities to Colleagues and Other Professionals
     19. Respect for other professionals

24. Handout Page 7
   - Common Situations – Social media
     - You have a private practice in addition to working at an acute care hospital. In your private practice you have a blog and frequently comment on general nutrition practices. Recently you decided to enhance your blog by actually writing about a particular patient’s medical nutrition therapy. You think this might help others with similar conditions. You recommend specific nutritional supplements. You do not actually disclose the name of the patient you are writing about. Are there any ethical violations with doing this?

- Common Situations – Management
  - As a manager you have final approving authority on purchasing contracts for foods, medical foods, and dietary supplements. Recently at the FNCE exhibit hall, one company identified one of the benefits of using their product was the additional software programs provided to track patient outcomes. Is it ethical for you to choose this medical food supplement and use the software?
Polling Slides

- See Slides 14 to 16
- Is this truly an ethical issue?
- Who does it involve?
- Which principles may be involved
  - (based on who is involved)

Select Principle(s) that apply (Code of Ethics)

- **Fundamental Principles**
  - 1. Honesty, integrity and fairness
  - 2. Standard of professional practice and Code of Ethics
- **Responsibilities to the public**
  - 3. Health, safety and welfare of public
  - 4. Laws, regulations and Code of ethics
  - 5. Objective and respect for needs and values
  - 6. Not false or misleading
  - 7. Withdraw when unable to fulfill duties/responsibilities
- **Responsibilities to Clients**
  - 8. Professional judgement within their limits
  - 9. Client/patient respect and consideration
  - 10. Protect confidential information
  - 11. Comply with all related to public
- **Responsibilities to the Profession**
  - 12. Evidence-based principles
  - 13. Reliable/substantiated information & interprets w/o bias
  - 14. Lifelong learning
  - 15. Real or potential conflict of interest
  - 16. Use of name only for services rendered
  - 17. Uses accurate professional qualifications & credentials
  - 18. Gifts, monetary incentives or other considerations
- **Responsibilities to Colleagues and Other Professionals**
  - 19. Respect for other professionals

Common Situations- Conducting Research

- You applied for and received research funding from an industry associated foundation based on a sound research proposal that you submitted. The research is completed and a dietitian who is employed by the industry has contacted you outside the normal communication channels and asked to be shown the research findings in advance of submission of the manuscript with primary results.

Polling Slides

- See Slides 14 to 16
- Is this truly an ethical issue?
- Who does it involve?
- Which principles may be involved
  - (based on who is involved)
Select Principle(s) that apply (Code of Ethics)

- **Fundamental Principles**
  - 1. Honesty, integrity and fairness
  - 2. Standard of professional practice and Code of Ethics

- **Responsibilities to the public**
  - 3. Health safety and welfare of public
  - 4. Laws, regulations and Code of Ethics
  - 5. Objective and respect for needs and values
  - 6. Not false or misleading
  - 7. Withdraw when unable to fulfill duties/responsibilities

- **Responsibilities to Clients**
  - 8. Professional judgment within their limits
  - 9. Client/patient respect and consideration
  - 10. Protect confidential information
  - 11. - comply with all related to public (#3-7)

- **Responsibilities to the Profession**
  - 12. Evidence-based principles
  - 13. Reliable/substantiated information & interprets w/o bias
  - 14. Life-long learning
  - 15. Real or potential conflict of interest
  - 16. Use of name only for services rendered
  - 17. Uses accurate professional qualifications & credentials
  - 18. Gifts, monetary incentives or other considerations

- **Responsibilities to Colleagues and Other Professionals**
  - 19. Respect for other professionals

Common Situation – Using Genetics and Emerging Research

- You have been asked to be an advisory group member for an company that is marketing genetic testing whose results are then used to produce and market tailored dietary supplements of common vitamins, minerals and bioactive substances to the recipients of the test. Once you review the published research you are concerned that they are over-interpreting the published research that is cited as the basis of their business model to tailor the products for the clients.

Polling Slides

- See Slides 14 to 16
- Is this truly an ethical issue?
- Who does it involve?
- Which principles may be involved
  - (based on who is involved)
You are a recent graduate of an accredited dietetics internship. You want to start your own practice with a fellow student. She lives in Tennessee and you live in Mississippi, but only three miles apart. You want to specialize in eating disorders and nursing home contractors. Each of you are licensed in your respective states. You now want to do telemedicine medical nutrition therapy and work with an herbalist but your friend does not. You decide you will see these patients on the “side” and not let her know. Would this be an ethical violation?

Select Principle(s) that apply (Code of Ethics)

- **Fundamental Principles**
  - 1. Honesty, integrity and fairness
  - 2. Standard of professional practice and Code of Ethics

- **Responsibilities to the public**
  - 3. Health safety and welfare of public
  - 4. Laws, regulations and Code of ethics
  - 5. Objective and respect for needs and values
  - 6. Not false or misleading
  - 7. Withdraw when unable to fulfill duties/responsibilities

- **Responsibilities to Clients**
  - 8. Professional judgment within their limits
  - 9. Client/patient respect and consideration
  - 10. Protect confidential information
  - 11. Comply with all related to public

- **Responsibilities to the Profession**
  - 12. Evidence-based principles
  - 13. Reliable/substantiated information & interpretations w/o bias
  - 14. Life-long learning
  - 15. Real or potential conflict of interest
  - 16. Use of name only for services rendered
  - 17. Use accurate professional qualifications & credentials
  - 18. Gifts, monetary incentives or other considerations

- **Responsibilities to Colleagues and Other Professionals**
  - 19. Respect for other professionals

Summary

- Ethical issues are rarely “black or white”
- Code of Ethics provide guiding principles
  - Organized by who we have responsibilities to:
    - Fundamental
    - Public
    - Client
    - Profession
    - Colleagues
  - Situations with ethical considerations can span all practice settings and all areas of practice
  - Many resources are available
PREAMBLE
The American Dietetic Association (ADA) and its credentialing agency, the Commission on Dietetic Registration (CDR), believe it is in the best interest of the profession and the public it serves to have a Code of Ethics in place that provides guidance to dietetics practitioners in their professional practice and conduct. Dietetics practitioners have voluntarily adopted this Code of Ethics to reflect the values (Figure) and ethical principles guiding the dietetics profession and to set forth commitments and obligations of the dietetics practitioner to the public, clients, the profession, colleagues, and other professionals. The current Code of Ethics was approved on June 2, 2009, by the ADA Board of Directors, House of Delegates, and the Commission on Dietetic Registration.

APPLICATION
The Code of Ethics applies to the following practitioners:

(a) In its entirety to members of ADA who are Registered Dietitians (RDs) or Dietetic Technicians, Registered (DTRs);
(b) Except for sections dealing solely with the credential, to all members of ADA who are not RDs or DTRs; and
(c) Except for aspects dealing solely with membership, to all RDs and DTRs who are not members of ADA.

All individuals to whom the Code applies are referred to as “dietetics practitioners,” and all such individuals who are RDs and DTRs shall be known as “credentialed practitioners.” By accepting membership in ADA and/or accepting and maintaining CDR credentials, all members of ADA and credentialed dietetics practitioners agree to abide by the Code.

PRINCIPLES
Fundamental Principles

1. The dietetics practitioner conducts himself/herself with honesty, integrity, and fairness.
2. The dietetics practitioner supports and promotes high standards of professional practice. The dietetics practitioner accepts the obligation to protect clients, the public, and the profession by upholding the Code of Ethics for the Profession of Dietetics and by reporting perceived violations of the Code through the processes established by ADA and its credentialing agency, CDR.

Responsibilities to the Public

3. The dietetics practitioner considers the health, safety, and welfare of the public at all times.

   The dietetics practitioner will report inappropriate behavior or treatment of a client by another dietetics practitioner or other professionals.

4. The dietetics practitioner complies with all laws and regulations applicable or related to the profession or to the practitioner’s ethical obligations as described in this Code.

   a. The dietetics practitioner must not be convicted of a crime under the laws of the United States, whether a felony or a misdemeanor, an essential element of which is dishonesty.
   b. The dietetics practitioner must not be disciplined by a state for conduct that would violate one or more of these principles.
   c. The dietetics practitioner must not commit an act of misfeasance or malfeasance that is directly related to the practice of the profession as determined by a court of competent jurisdiction, a licensing board, or an agency of a governmental body.

5. The dietetics practitioner provides professional services with objectivity and with respect for the unique needs and values of individuals.

   a. The dietetics practitioner does not, in professional practice, discriminate against others on the basis of race, ethnicity, creed, religion, disability, gender, age, gender identity, sexual orientation, national origin, economic status, or any other legally protected category.
   b. The dietetics practitioner provides services in a manner that is sensitive to cultural differences.
   c. The dietetics practitioner does not engage in sexual harassment in connection with professional practice.

6. The dietetics practitioner does not engage in false or misleading practices or communications.

   a. The dietetics practitioner does not engage in false or deceptive advertising of his or her services.
   b. The dietetics practitioner promotes or endorses specific goods or products only in a manner that is not false and misleading.
   c. The dietetics practitioner provides accurate and truthful information in communicating with the public.
The dietetics practitioner withdraws from professional practice when unable to fulfill his or her professional duties and responsibilities to clients and others.

- a. The dietetics practitioner withdraws from practice when he/she has engaged in abuse of a substance such that it could affect his her practice.
- b. The dietetics practitioner ceases practice when he or she has been adjudged by a court to be mentally incompetent.
- c. The dietetics practitioner will not engage in practice when he or she has a condition that substantially impairs his or her ability to provide effective service to others.

Responsibilities to Clients

8. The dietetics practitioner recognizes and exercises professional judgment within the limits of his or her qualifications and collaborates with others, seeks counsel, or makes referrals as appropriate.

9. The dietetics practitioner treats clients and patients with respect and consideration.

- a. The dietetics practitioner provides sufficient information to enable clients and others to make their own informed decisions.
- b. The dietetics practitioner respects the client's right to make decisions regarding the recommended plan of care, including consent, modification, or refusal.

10. The dietetics practitioner protects confidential information and makes full disclosure about any limitations on his or her ability to guarantee full confidentiality.

11. The dietetics practitioner, in dealing with and providing services to clients and others, complies with the same principles set forth above in “Responsibilities to the Public” (Principles #3-7).

Responsibilities to the Profession

12. The dietetics practitioner practices dietetics based on evidence-based principles and current information.

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

14. The dietetics practitioner assumes a life-long responsibility and accountability for personal competence in practice, consistent with accepted professional standards, continually striving to increase professional knowledge and skills and to apply them in practice.

15. The dietetics practitioner is alert to the occurrence of a real or potential conflict of interest and takes appropriate action whenever a conflict arises.

- a. The dietetics practitioner makes full disclosure of any real or perceived conflict of interest.
- b. When a conflict of interest cannot be resolved by disclosure, the dietetics practitioner takes such other action as may be necessary to eliminate the conflict, including recusal from an office, position, or practice situation.

16. The dietetics practitioner permits the use of his or her name for the purpose of certifying that dietetics services have been rendered only if he or she has provided or supervised the provision of those services.

17. The dietetics practitioner accurately presents professional qualifications and credentials.

- a. The dietetics practitioner, in seeking, maintaining, and using credentials provided by CDR, provides accurate information and complies with all requirements imposed by CDR.
- b. The dietetics practitioner does not aid any other person in violating any CDR requirements, or in representing himself or herself as CDR-credentialed when he or she is not.

18. The dietetics practitioner does not invite, accept, or offer gifts, monetary incentives, or other considerations that affect or reasonably give an appearance of affecting his/her professional judgment.

Clarification of Principle:

a. Whether a gift, incentive, or other item of consideration shall be viewed to affect, or give the appearance of affecting, a dietetics practitioner’s professional judgment is dependent on all factors relating to the transaction, including the amount or value of the consideration, the likelihood that the practitioner’s judgment will or is intended to be affected, the position held by the practitioner, and whether the consideration is offered or generally available to persons other than the practitioner.

b. It shall not be a violation of this principle for a dietetics practitioner to accept a gift when the recipient has not offered or reasonably offered the gift.
professionals to accept compensation as a consultant or employee or as part of a research grant or corporate sponsorship program, provided the relationship is openly disclosed and the practitioner acts with integrity in performing the services or responsibilities.

c. This principle shall not preclude a dietetics practitioner from accepting gifts of nominal value, attendance at educational programs, meals in connection with educational exchanges of information, free samples of products, or similar items, as long as such items are not offered in exchange for or with the expectation of, and do not result in, conduct or services that are contrary to the practitioner’s professional judgment.

d. The test for appearance of impropriety is whether the conduct would create in reasonable minds a perception that the dietetics practitioner’s ability to carry out professional responsibilities with integrity, impartiality, and competence is impaired.

Responsibilities to Colleagues and Other Professionals

19. The dietetics practitioner demonstrates respect for the values, rights, knowledge, and skills of colleagues and other professionals.

a. The dietetics practitioner does not engage in dishonest, misleading, or inappropriate business practices that demonstrate a disregard for the rights or interests of others.

b. The dietetics practitioner provides objective evaluations of performance for employees and coworkers, candidates for employment, students, professional association memberships, awards, or scholarships, making all reasonable efforts to avoid bias in the professional evaluation of others.

PROCESS FOR CONSIDERATION OF ETHICS ISSUES

In accordance with ADA’s Code of Ethics, a process has been established for consideration of ethics issues. This process defines the procedure for review of and response to ethics complaints, including hearings, disciplinary action, and appeals. The process was approved on June 2, 2009, by the ADA Board of Directors, the House of Delegates, and the Commission on Dietetic Registration.

Committee

A three (3)-person committee, comprised of members of ADA and/or CDR-credentialed practitioners, will be appointed to handle all ethics matters. One person will be appointed each year by the president-elect of ADA, the chairperson of CDR, or the speaker-elect of the House of Delegates (based on the expired term). Terms of office will be for three (3) years. Terms will be staggered to allow for continuity. The chairperson will rotate among the three (3) committee members. The chairship will be awarded to the person moving into the third year of the three (3)-year term of office.

The Committee will have authority to consult with subject experts as necessary to conduct its business. The Committee may perform such other educational activities as might be necessary to assist members and credentialed practitioners to understand the Code of Ethics.

Ethics Opinions

The Committee may issue opinions on ethics issues under the Code of Ethics on its own initiative or in response to a member’s or credentialed practitioner’s request. These opinions will be available to members and credentialed practitioners to guide their conduct, and will also be available to the public. Situations may be factual or hypothetical, but no names will be disclosed.

Ethics Cases

Preamble. The enforcement procedures are intended to permit a fair resolution of disputes on ethical practices in a manner that protects the rights of individuals while promoting understanding and ethical practice. The Ethics Committee has the authority and flexibility to determine the best way to resolve a dispute, including educational means where appropriate.

1. Complaint

A complaint that a member or credentialed practitioner has allegedly violated the Code of Ethics for the Profession of Dietetics must be submitted in writing on the appropriate form to the Ethics Committee.

The complaint must be made within one (1) year of the date that the complainant (person making complaint) first became aware of the alleged violation or within one (1) year from the issuance of a final decision in an administrative, licensure board, or judicial action involving the facts asserted in the complaint.

The complainant need not be a member of ADA nor a practitioner credentialed by CDR.

The complaint must contain details on the activities complained of, the basis for complainant’s knowledge of these activities; names, addresses, and telephone numbers of all persons involved or who might have knowledge of the activities; and whether the complaint has been submitted to a court, an administrative body, or a state licensure board. The complaint must also cite the section(s) of the Code of Ethics for the Profession of Dietetics allegedly violated.

The complaint must be signed and sworn to by the complainant(s).

2. Preliminary Review of Complaint

The chair of the Ethics Committee, legal counsel for ADA, and appropriate staff will review the complaint to determine whether all the required information has been submitted by the complainant and whether an ethics question is involved.

If a complaint is made regarding an alleged violation of the Code of Ethics for the Profession of Dietetics and a similar complaint is already under consideration regarding the same individual by a state licensure board of examiners, an administrative body, or a court of law, the Ethics Committee will not process the complaint until a final decision has been issued.

3. Response

If the preliminary review determines that the process should proceed, the ADA staff or chair of
the Ethics Committee will notify the respondent (person against whom the complaint is made) that a complaint has been made.

The notice will be sent from the staff via certified mail, return-receipt requested. The respondent will be sent a copy of the complaint, the Code of Ethics for the Profession of Dietetics, the Review Process, and the Response to Complaint form.

The respondent will have thirty (30) days from receipt of the notification in which to submit a response. The response must be signed and sworn to by the respondent(s).

If the Ethics Committee does not receive a response, the chair of the Ethics Committee or his or her designee will contact the respondent by telephone. If contact with the respondent is still not made, a written notice will be sent. Failure to reach the respondent will not prevent the Committee from proceeding with the investigation.

The response submitted to the Ethics Committee by the respondent, may, upon request by the complainant, be provided to the complainant following the decision of the Committee.

4. Ethics Committee Review

The chair of the Ethics Committee will add the complaint and response to the Committee’s agenda, after consultation with legal counsel and appropriate staff. The complaint and the response will be reviewed by the Ethics Committee.

The Committee has broad discretion to determine how to proceed, including, but not limited to, dismissing the complaint, requesting further information from the parties, resolving the case through educational activities, holding a hearing as specified hereafter, or in any other way deemed advisable. The Committee may use experts to assist it in reviewing the complaint and response and determining further action.

At the appropriate time, the Ethics Committee will notify the complainant and the respondent of its decision, which may include the Committee’s preliminary opinion with a request that the respondent take certain actions, including, but not limited to, successful completion of continuing professional education in designated areas, or supervised practice based on the terms to be set forth by the Committee.

The Ethics Committee may also recommend appropriate remedial action to the parties, which if undertaken, would resolve the matter.

The Ethics Committee may recommend, in its discretion, that a hearing be held subject to the other provisions of these procedures.

5. Licensure Board Action or Final Judicial or Administrative Action

When the Ethics Committee is informed by a state licensure body that a person subject to the Code of Ethics for the Profession of Dietetics has had his or her license suspended or revoked for reasons covered by the Code, the Committee may take appropriate disciplinary action without a formal hearing.

When a person has been finally adjudged or has admitted to committing a misdemeanor or felony as specified in Principle 4 of the Code, the Committee may take appropriate disciplinary action without a formal hearing.

6. Hearings

A. General

Hearings shall be held as determined by the Ethics Committee under the following guidelines.

Hearing dates will be established by the chairman of the Ethics Committee. All hearings will be held in Chicago, IL.

The Ethics Committee will notify the respondent and the complainant by certified mail, return-receipt requested, of the date, time, and place of the hearing.

The respondent may request a copy of the file on the case and will be allowed at least one postponement, provided the request for postponement is received by ADA at least fourteen (14) days before the hearing date.

B. Conduct of Hearings

The chair of the Ethics Committee will conduct a hearing with appropriate staff and legal counsel present. Individuals who have no conflict of interest will be appointed.

In the event that any Ethics Committee member cannot serve on the hearing panel for any reason, a replacement will be appointed by the representative of the original body that made the appointment, either the ADA president, the CDR chairperson, or the speaker of the House of Delegates as appropriate.

The parties shall have the right to appear, to present witnesses and evidence, to cross-examine the opposing party and adverse witnesses, and to have legal counsel present. Legal counsel for the parties may advise their clients, but may only participate in the hearings with the permission of the chair.

The hearing is the sole opportunity for the participants to present their positions.

Three members of the Ethics Committee shall constitute a quorum. Affirmative vote of two thirds (2/3) of the members voting will be required to reach a decision.

A transcript will be prepared and will be available to the parties at cost.

C. Costs

ADA will bear the costs for the Ethics Committee, legal counsel, staff, and any other parties called by ADA. ADA will bear the travel costs and one (1) night’s hotel expenses for the complainant and respondent and one person that each chooses to bring, provided that such person is necessary to the conduct of the hearing as determined by the chair of the Ethics Committee. The Ethics Committee shall issue regulations to govern the payment of these expenses, which shall be incorporated and made part of these procedures.

The respondent and the complainant will be responsible for all costs and fees incurred in their preparation for and attendance at the hear-
A. The materials describing the ethics complaint process, including those materials provided to the complainants and respondents, shall be amended to disclose the fact that a respondent’s response may be made available to the complainant.

B. Any request to review the respondent’s response must be submitted in writing (electronic or mail) no later than thirty (30) days after final action by the Committee.

C. ADA staff will notify the Ethics Committee of the request and will provide a timeline for addressing it.

D. Within five (5) business days of the request being received, the Committee will advise the respondent that the complainant has made the request and is being given access to the response. The requested documentation will be sent to the complainant via express mail to ensure delivery.

E. The complainant will be required to commit in writing to maintain the confidentiality of the documentation by signing a statement to this effect.

F. Any comments, concerns, or issues with the respondent’s response must be communicated to ADA staff within twenty (20) days in writing (electronic or mail). ADA staff will add the complainant’s comments, concerns, or issues onto the agenda of the next Ethics Committee conference call or meeting. The Committee will determine whether further action is necessary and shall communicate its determination to the complainant.

G. The complainant will return the documents after review via UPS at the expense of ADA within twenty-five (25) days.

8. Definitions of Disciplinary Action

Censure: A written reprimand expressing disapproval of conduct. It carries no loss of membership or registration status, but may result in removal from office at the national, state, and district levels and from committee membership.

Suspension: Temporary loss of credential and all membership benefits and privileges for a specified period of time. It may include mandatory participation in remedial programs (eg, education, professional counseling, and peer assistance). Failure to successfully complete these programs may result in other disciplinary action being taken. It carries no loss of membership or registration status, but may result in removal from office at the national, state, and district levels and from committee membership.

Revocation of Credential: Loss of registration status and removal from registry; loss of all benefits and privileges. Upon revocation, the former credentialed practitioner shall return the registration identification card to CDR.

Time frame: Specified time for reapplication to be decided on a case-by-case basis.

Probation: A directive to allow for correction of behavior specified in Principle 7 of the Code of Ethics for the Profession of Dietetics. It may include mandatory participation in remedial programs (eg, education, professional counseling, and peer assistance). Failure to successfully complete these programs may result in other disciplinary action being taken. It carries no loss of membership or registration status, but may result in removal from office at the national, state, and district levels and from committee membership.

Time frame: Specified time to be decided on a case-by-case basis.
requirements would need to be met. A credential will not be issued until CDR determines that the reasons for revocation have been removed.

9. Appeals

A. General

Only the respondent may appeal an adverse decision to ADA. During the appeals process, the membership and registration status of the respondent remains unchanged.

The ADA president, the chairperson of CDR, and the speaker of the House of Delegates shall each appoint one person to hear the appeal. These individuals shall constitute the Appeals Committee for that particular case. Individuals who have no conflict of interest will be appointed.

B. Recourse to the Appeals Committee

To request a hearing before the Appeals Committee, the respondent/appellant shall notify the appropriate staff at ADA headquarters, by certified mail, return-receipt requested, that the respondent wishes to appeal the decision. This notification must be received within thirty (30) calendar days after receipt of the letter advising the respondent/appellant of the Ethics Committee’s decision.

C. Contents

The appeal must be in writing and contain, at a minimum, the following information:

1. The decision being appealed.
2. The date of the decision.
3. Why the individual feels the decision is wrong or was improperly rendered (See E, “Scope of Review”).
4. The redress sought by the individual.
5. The appeal will be signed and sworn to.

If the appeal does not contain the information listed above, it will be returned to the individual who will be given ten (10) calendar days to resubmit. Failure to furnish the required information within ten (10) calendar days will result in the appeal being waived.

D. Procedures

Upon receipt of this notification, appropriate staff shall promptly notify the chair of the Appeals Committee that the respondent/appellant is appealing a decision made by the Ethics Committee.

The Appeals Committee chair shall acknowledge the appeal and request a copy of the relevant written information on the case from appropriate staff.

1. Location and participants
   a. All appeals hearings will be held in Chicago, IL.
   b. The complainant/appellee, the respondent/appellant, and the chair of the Ethics Committee will have the opportunity to participate in the appeals hearing.
   c. The parties may have legal counsel present, who may advise their clients, but may only participate in the hearings with the permission of the chair.
   d. Attendance at the hearing will be limited to persons determined by the chair to have a direct connection with the appeal and appropriate staff and legal counsel.

2. Conduct of the hearing

The three (3) parties involved in the appeal will be given the opportunity to state why the decision and/or disciplinary action of the Ethics Committee should be upheld, modified, or reversed.

E. Scope of Review

The Appeals Committee will only determine whether the Ethics Committee committed procedural error that affected its decision, whether the Ethics Committee’s decision was contrary to the weight of the evidence presented to it, or whether there is new and substantial evidence that would likely have affected the Ethics Committee’s decision that was unavailable to the parties at the time of the Ethics Committee’s hearing for reasons beyond their control.

In reviewing the decision of the Ethics Committee, the Appeals Committee shall consider only the transcript of the hearing and the evidence presented to the Ethics Committee.

F. Record of Hearing

A transcript will be prepared and will be maintained in the case file.

G. Decision of Appeals Committee

1. The Appeals Committee shall prepare a written decision stating the reasons therefore. The decision shall be to affirm, modify, or reject the decision and/or disciplinary action of the Ethics Committee or to remand the case to the Ethics Committee with instructions for further proceedings.

2. Decisions of the Appeals Committee will be final.

H. Costs

ADA will bear the costs for the Appeals Committee, staff, and legal counsel, and any parties called by ADA. ADA will bear the travel and one night’s hotel expenses for the respondent/appellant, the complainant/appellee, and the chair of the Ethics Committee. The Ethics Committee shall issue regulations to govern the payment of these expenses, which shall be incorporated and made part of this procedure.

The respondent/appellant and the complainant/appellee will be responsible for all costs and fees incurred in their preparation for and attendance at the hearing, except expenses for travel and hotel as stated above.

10. Notification of Adverse Action

If the respondent is disciplined by the Ethics Committee and does not appeal the decision, the chair of the Ethics Committee will notify the appropriate ADA organizational units, CDR, the affiliate dietetic association, appropriate licensure boards, and governmental and private bodies within thirty (30) days after notification of the final decision.

In the event the respondent ap-
peals a decision to discipline him or her and the Ethics Committee decision is affirmed or modified, similar notification will be made by the chair of the Ethics Committee.

In response to an inquiry about registration status, the Office on Dietetic Credentialing will state only whether a person is currently registered.

11. Record Keeping
A. Records will be kept for a period of time after the disposition of the case in accordance with ADA's record retention policy.
B. Information will be provided only upon written request and affirmative response from ADA's legal counsel.

12. Confidentiality Procedures
The following procedures have been developed to protect the confidentiality of both the complainant and the respondent in the investigation of a complaint of an alleged violation of the Code of Ethics for the Profession of Dietetics:
A. The need for confidentiality will be stressed in initial communications with all parties.
B. Committee members will refrain from discussing the complaint and hearing outside of official committee business pertaining to the complaint and hearing.
C. If the hearing on a complaint carries over to the next Committee, the complaint will be heard by the original Committee to hear the complaint.
D. Communication with ADA witnesses will be the responsibility of the Committee chair or staff liaison.
E. Witnesses who testify on behalf of ADA will be informed of the confidentiality requirements and agree to abide by them.
F. The Committee chair will stress the importance of confidentiality at the time of the hearing.
G. To ensure confidentiality, the only record of the hearing will be the official transcript and accompanying materials, which will be kept at ADA offices. All other materials that were mailed or distributed to committee members should be returned to ADA staff, along with any notes taken by Committee members.
H. The transcript will be available if there is an appeal of the Ethics Committee's decision and only to the parties, Ethics Committee members, Appeals Committee members, ADA legal counsel, and staff directly involved with the appeal.

Recognition is given to the members of the Code of Ethics Task Force for their contributions: Marianne Smith Edge, MS, RD, LD, FADA, Chair; Alice Beth J. Fornari, EdD, RD; Cheryl A Bittle, PhD, RD, LD; Doris Derelian, PhD, JD, RD, FADA; Jana Kicklighter, PhD, RD, LD; Leonard Pringle, DTR; Harold Holler, RD, LDN, ADA Staff; Chris Reidy, RD, CDR Staff; J. Craig Busey, JD, former ADA Legal Counsel.
Code of Ethics

For Further Reading List

The “For Further Reading List” is a resource that can be used by educators to direct reading and learning objectives for students, both introductory and advanced, in the area of ethics and ethical behaviors as a professional in dietetics. The list will be useful for practitioners to keep current on ethics and the impact on practice. This list was prepared by the Academy’s Ethics Committee and will be updated twice per year (January and August).

Academy/CDR Code of Ethics

- Ethics resources are available on Academy Website: [www.eatright.org/codeofethics](http://www.eatright.org/codeofethics)

Categories for the Principles of the Code of Ethics

This list of ethics related articles have been divided between the five categories. The categorization of ethics principles will be used when the Code of Ethics is updated and republished in 2009. The categories should enhance the ability to identify articles of interest.

Key Words for Searching for Ethics Articles Related to the Profession of Dietetics

Ethical issues; legal issues; conflict of interest; ethical decision making; ethical theory; patient refusal; patient rights; confidentiality; end of life issues; business practices; ethical considerations; patient privacy; liability issues; morals; justice.

Fundamental Principles (Principles #1 and #2)


Responsibilities to the Public (Principles, #3, #4, #5, #6 and #7)


Responsibilities to Clients (Principles #8, #9, #10, #11)


Responsibilities to the Profession (Principles #12, #13, #14, #16, #17 and #18)


Responsibilities to Colleagues and Other Professionals (Principle #19)


7. Scope/ Standards of Practice—Additional information available on ADA Web site: www.eatright.org/scope.

Other Resources, Non-Academy


Academy of Nutrition and Dietetics Position Papers
Academy position papers are available on the Academy’s Web site at www.eatright.org/positions.

Request for Comments
The Ethics Committee requests that users of this should provided feedback on the effectiveness and usefulness of the “For Further Reading List”. Please direct feedback to the Ethics Committee mailbox at ethics@eatright.org.
Additional References used in NutriBytes Webinar

Ayres EJ. The impact of social media on business and ethical practices in dietetics. *J Acad Nutr Diet.* Nov;113(11):1539-1543.


San-Cristobal R, Milagro FI, Martinez JA. Future challenges and present ethical considerations in the use of personalized nutrition based on genetic advice. *J Acad Nutr Diet.* Nov;113(11):1447-

Funding Food Science and Nutrition Research: Financial Conflicts and Scientific Integrity

The International Life Sciences Institute (ILSI) North America Conflict of Interest/Scientific Integrity Guiding Principles Working Group: Sylvia Rowe, MAT; Nick Alexander; Fergus Clydesdale, PhD; Rhona Applebaum, PhD; Stephanie Atkinson, PhD; Richard Black, PhD; Johanna Dwyer, DSc, RD; Eric Hentges, PhD; Nancy Higley, PhD; Michael Lefevre, PhD; Joanne Lupton, PhD; Sanford Miller, PhD; Doris Tancredi, PhD; Connie Weaver, PhD; Catherine Woteki, PhD; Elaine Wedral, PhD

It has been said that “scientific ‘truth’ is the primary aim that all should pursue in the jungle of academic-industry interactions” (1). The point of scientific endeavor, in the first place, is and should be, the pursuit of truth—nothing more, nothing less—irrespective of financial or other interactions. It goes without saying that seekers of truth must not impose preconceptions on the method or result of their search: they must not have ulterior motives. Throughout modern history, scientists have been guided by rules that ensure the integrity of the pursuit of truth, rules that continue to evolve as the research and communication landscapes change. The purpose of this article is to articulate, in the sophisticated, industrialized, modern world in which we find ourselves, principles defining and protecting the integrity and maintaining the credibility of the scientific record, particularly that part of it devoted to health, nutrition, and food-safety science.

The agricultural, food, and nutrition sciences have come to be a crucial part of evolving health research, which, in turn, plays an ever-growing role in improving the human condition. Although regarded as important determinants of human health, agricultural practices, food processing and safety, and nutritional status do not receive the same attention and funding from the federal research agencies as biomedical research does. Federal funds allotted to agricultural, food, and nutrition research amount to approximately $1.8 billion annually (out of a total $2.3 billion US Department of Agriculture research budget), with most of this focusing on agricultural production; in contrast, * $28.6 billion is appropriated to the National Institutes of Health (2). Industry-funded research projects, large and small, comprise a large proportion of all food science and nutrition research (3-5) both for obvious and nonobvious reasons. US law places the responsibility for product safety and for the truthfulness of label claims on the manufacturer. Clearly, it is in the food industry’s interest to conduct the research necessary to meet the legal requirements as well as to improve food-product healthfulness, safety, accessibility, taste, cost, attractiveness. Most of this research falls outside of the mission of traditional federal funding agencies and would not be done without food industry support. Pursuant to an extensive web of laws and regulatory requirements concerning food and food ingredients that have evolved over the past century, industry scientists and academic researchers who work with industry strive to enhance food quality, studying everything from the safety of ingredients to the evidence in support of health claims that appear on food packaging.

The rationale for food industry funding of research may be less obvious for areas such as the following: research on microbiology (6), toxicoology (7-9), nutrient bioavailability (10,11), and fortification (12), all of which lead to enhancement of human health, as well as research on animal breeding and agricultural efficiency, which helps to feed more people. Some such research will be conducted by industry, in-house, while other

---

This is a reprint of an article by the same name that appears in Nutrition Reviews 2009;67:264-272. DOI: 10.1111/j.1753-4887.2009.00188.x.
projects will be contracted out to academic institutions or government or contract research laboratories. Scientists, especially novice researchers, conducting investigations in any of these settings, need principles upon which to rely in conducting their research ethically and with integrity. Clearly, it is essential to preserve the integrity and credibility of food and nutrition science for the benefit of public health and understanding.

In recent years, a growing body of literature has evolved on the subject of conflicts of interest and their potential influence on the integrity of researchers and the scientific record. In these discussions, conflicts are typically treated as disqualifying factors in scientific papers and research; that is, scientists with conflicts of interest are viewed in the literature as being at least partially integrity-compromised, and, even with complete and open disclosure, are regarded, at least to an extent, as of suspect scientific credibility. It is hoped that this article will define and clarify the highly complex issues involved in questions of conflict and scientific bias, particularly with regard to the portion of research funding that originates with the food industry.

In the interest of beginning this crucial dialogue in a sharply defined and dispassionate manner, the focus of this article will be limited to only one very specific issue and its relationship to bias: financial conflicts of interest and, specifically, funding-based conflicts. It must be pointed out that there is a potential for all funding, from whatever source, public or private, government or industry, to bias behavior, unconsciously or otherwise. The focus of the current article will be on the management of potential bias from industry funding of science. Our goal is to separate monetary considerations from the science—including research design, execution, reporting, publishing, and other factors.

HISTORICAL CONTEXT

From its beginning, the food industry has concerned itself with researching food products and ingredients from the perspective of safe and efficient delivery of food to a rapidly expanding population. Prior to World War II, the overwhelming bulk of food research was funded and carried out by food-industry scientists—there was little public funding of food safety and nutrition research. It was the evolution of American society from the laissez faire environment that existed during the industrial revolution to the complex, public/private sector mixed economy of the more recent past that transformed research funding and higher education in general.

Although the food industry first entered the era of managing financial conflicts in the late 18th century, with the development of proprietary technologies to enhance food preservation and safety, the post–World War II period saw an exponential increase in the administrative challenges of research funding. For example, the number of patents awarded to universities or academic researchers increased by a factor of 10 in the last two decades of the last century (13). Similarly, federal funding of research increased from $405 million to $1.7 billion in a single decade (1960-1970) after the launch of the space race between the United States and the Soviet Union (14).

In the decades after World War II, in addition to the significant increases in government funding of university research, the United States experienced, in general, rapid evolution of science and technology, transformation and consolidation of agricultural production, and the steady growth of industry, especially those companies involved in public health—in the medical/pharmaceutical, chemical, and food industries. In late 1980, the US Congress passed the Bayh-Dole Act, with the specific intention of stimulating the transfer of technology from government-funded university research to the private sector (15). This has not been without controversy—both over issues around the diversion of university faculty from basic research and around conflict of interest concerns due to the resulting university–industry partnerships.

The research community and individuals involved in health communications and public policy advocacy became increasingly concerned about the possibility that exogenous interests might influence published results of scientific research (16,17).\textsuperscript{8} By late 2000, this concern had become heightened around medical/pharmaceutical practice: a number of articles appeared in the major medical journals (18,19) exploring the financial relationships of the pharmaceutical industry and physicians and their possible effect on physicians’ decisions about patient treatment, researchers’ decisions concerning study design, and companies’ interference in publication, as well as on public health policy in general. Medical and other scientific journals began establishing rules for disclosure of financial conflicts, in an attempt to manage them.

In succeeding years, concern broadened to include other industries, more recently the food industry, with authorities questioning how financial conflicts might impinge on the outcomes of health, nutrition, and food safety research. It was generally acknowledged that the issue was complex and not susceptible to narrow or inflexible remedies, but that has not deterred some groups from concluding that industry-funded science is inherently biased (20,21), demanding that all industry-funded research be barred from serving on public policy advisory committees (22). It is this paper’s contention that such efforts are helpful neither to the public nor to the scientific community. Industry funding, while a major component of the scientific landscape, is only one piece of an extremely complex research environment. The twin issues of financial conflict and bias demand a more reasoned approach and skillful management.

\textsuperscript{8}A case in point, the Food and Drug Administration’s refusal in the early 1960s to approve the drug thalidomide, marketed in Europe as a tranquilizer, for use in pregnant women, despite the German manufacturer’s ‘scientific’ assurances of its safety. See Burkholz (16) and Silverman (17) for a case history.
DEFINING THE ISSUE
First of all, conflicts of interest are not, in themselves, determinants of bias. Even a massive multiplicity of conflicts, in and of itself, carries with it no certainty of bias.

Begin with definitions—although there are many, the simplest suffice:

Conflict of interest: “A conflict of interest is ‘a conflict between the private interests and the official responsibilities of a person in a position of trust.’

A conflict of interest thus arises when a person has to play one set of interests against another” (23).

Bias: From the online Oxford English Dictionary, bias is an “inclination or prejudice in favour of a particular person, thing, or viewpoint” (24). “A cognitive bias is something that our minds commonly do to distort our own view of reality” (25).

Or, more rigorously, bias is a deviation of either inferences or results from the truth, or any process leading to that kind of systematic deviation. This includes tendencies by which data are reviewed or analyzed, interpreted or published, in a way that yields conclusions that deviate systematically from the truth (26,27).

So, for example, for researchers, a conflict might describe a situation in which a funder has offered financial incentives for research and hopes for a particular research result; it might also describe a situation in which the researcher, for philosophical, religious, or professional reasons, wishes to achieve a certain result. Neither situation necessarily results in a biased result—that would depend on a measurable deviation of research results from the truth (26,27). For a discussion of bias and the distinction between bias and conflict of interest, see publications by the National Academy of Sciences (26) and the Federation of American Societies for Experimental Biology (27).

The multiplicity and variety of sources of bias in research and in public-health communications generally are extensive, complex, and yet of major importance to scientific research, the integrity of individual study, and the body of scientific literature as a whole. Strategies must be developed for addressing and managing all sources of bias, whether technical, statistical, cognitive, or emotional in origin. These are critically necessary, not just for the scientific community, but also for the well-being of the public. The interpretation of health research and the promotion of public policies resting on that research are far too important to be based on formulas that would address conflicts at the price of excluding the input of a large proportion of food-safety and nutrition scientists.

EXISTING CHECKS ON BIAS
As far as scientific research and communications are concerned, there exist a number of checks to ensure adherence to good practice and to avoid biased conclusions (of course, replication and coherence of scientific findings are the major mechanism by which bias in research is controlled—this section is intended to summarize post-research control mechanisms). First and foremost is the system of scientific peer review that is built not only into publication in scientific journals, but also into the promotion and tenure decisions for individual faculty conducting research at colleges and universities. There are the governance and review processes of academia, in exercising oversight, particularly on industry-funded research projects. Charges of irregularities, errors, and outright scientific fraud are usually investigated by the academic institutions where the research is conducted. However, in one noteworthy case in recent years, a distinguished nutrition researcher resigned his university position fully 9 years after initial charges of fraud were filed in connection with his infant-formula study. In the university’s subsequent report, the authors recommended the government monitor scientific misconduct through a new national agency “charged with all aspects of science, irrespective of fund-

This is a reprint of an article by the same name that appears in Nutrition Reviews 2009;67:264-272. DOI: 10.1111/j.1753-4887.2009.00188.x
ing sources, public or industry (emphasis added)” (32).

Most importantly, there is peer pressure as a check on bias, the peer pressure of meetings, conferences, e-mail listservs, and discussion boards run by scientific colleagues and, especially, the process of peer review, particularly relied upon by the thousands of scientific journals around the world, but also by other organizations (33).** For more than a century, peer review has served to provide a rigorous framework by which research papers and articles can be evaluated prior to their general dissemination—although not foolproof, scientists regard the process as a reliable safeguard against errors and biases, as well as scientific misconduct. However, in recent months a robust debate has been generated about peer review and whether it needs to be refined (34,35). Donald Kennedy, the former editor-in-chief of Science, the journal of the American Association for the Advancement of Science, has offered an eloquent defense of the current peer review process as “… a fair system of evaluating and publishing scientific work—one that offers high confidence in, though not an absolute guarantee of, the quality of the product” (36).

If all of these fail, there is a governmental oversight structure within the granting agencies, such as the Office of Research Integrity in the US Department of Health and Human Services, whose function it is to set policies for government research grants, establish reporting standards, and investigate misconduct (37). There are the national and local volunteer health organizations that review health science as it unfolds. And, finally, there are the following checks on bias: science writers and journalists, who attend scientific conferences, digest new studies, and communicate them to the public; science associations, such as the National Science Foundation and the National Academies of Science, which regularly review new research and publish articles that are, in turn, read and commented on by member scientists; Congressional hearings that bring to light and publicize the real or perceived biases arising from too-tight relations between industry and academia; and, ultimately, public disgrace when research is revealed as deeply flawed.

In any case, given the increasingly broad and complex nature of scientific research and communications, additional recommendations are appropriate for managing the extremely complex issues of financial conflicts and potential bias.

PROPOSED GUIDELINES ON INDUSTRY FUNDING OF RESEARCH

Recognizing that funding, whether through the private or public sector, does not automatically introduce bias into scientific research, it is nonetheless prudent to address both the possibility of bias and the perception of it through explicit guidelines. Based on work commissioned by the International Life Sciences Institute (ILSI) North America Working Group on Guiding Principles, a series of proposals was developed to manage potential biases resulting from conflicts of interest between research investigators and companies wishing to fund their work.

It is our view that disclosure is an essential, but no longer a sufficient, measure to safeguard research from undue influence exerted by funding organizations; managing conflicts, case by case, is the requisite step—managing, that is, by establishing procedures, like the following guidelines, for ensuring research integrity. This should apply across the array of mechanisms through which research is funded currently: in intramural industry and government laboratories; in sponsored grants and contracts; in cooperative agreements, Cooperative Research and Development Agreements, and “platforms” funded jointly by governments and industry, as is the case in the European Union and Australia. While there may be a multitude of mechanisms by which re-

**For an organizational example of applied peer review, visit the National Institutes of Health Office of Extramural Research Web site (33), where the process is used to sift through the many funding applications received by National Institutes of Health.

This is a reprint of an article by the same name that appears in Nutrition Reviews 2009:67:264-272. DOI: 10.1111/j.1753-4887.2009.00188.x

search is funded, designed, conducted, and communicated, these guidelines should be adhered to by all parties, in all respects, in the spirit of openness and honesty that are the aim of this paper (see the footnote to #2 in the following guidelines).

It is also our view that industry participation in the effort to disclose and manage financial conflicts of interest is crucial. Future university-level science students will find their way either into private-sector research occupations or public-sector careers. All need a set of principles to guide their interaction with funding organizations, whether public or private, just as those organizations need principles to guide them in their interactions with academic scientists. Consequently, we propose the following guidelines to serve as a checklist in achieving unbiased research results from industry-funded activities—just as they might be useful guidance in public- or foundation-funded projects (38)††.

In the conduct of public/private research relationships, all relevant parties shall:

1. conduct or sponsor research that is factual, transparent, and designed objectively; according to accepted principles of scientific inquiry, the research design will generate an appropriately phrased hypothesis and the research will answer the appropriate questions, rather than favor a particular outcome;

2. require control of both the study design and the research itself to remain with scientific investigators (39-42)‡‡;

††Note the issues raised in the public health research community over a perceived disproportionate influence of one foundation’s funding, documented in recent media coverage (38).

‡‡This guideline, separating the science from the funding of it, will be fulfilled in a variety of ways, depending on the specific funding mechanism utilized in a given research project. For descriptions of the significant variety of research arrangements currently used, see guidance offered by the National Institutes of Health (39); an excellent analysis of conflict of interest management with respect to the varied research fund-
3. not offer or accept remuneration geared to the outcome of a research project;
4. prior to the commencement of studies, ensure that there is a written agreement that the investigative team has the freedom and obligation to attempt to publish the findings within some specified timeframe;
5. require, in publications and conference presentations, full signed disclosure of all financial interests;
6. not participate in undisclosed paid authorship arrangements in industry-sponsored publications or presentations;
7. guarantee accessibility to all data and control of statistical analysis by investigators and appropriate auditors/reviewers; and
8. require that academic researchers, when they work in contract research organizations or act as contract researchers, make clear statements of their affiliation; require that such researchers publish only under the auspices of the contract research organization.

IMPORT AND IMPLICATIONS OF THE GUIDELINES

Obviously, guidelines are just . . . guidelines. They are not law, but if the research community embraces them, or even embraces their spirit, we believe there will be a profoundly beneficial effect on the quality and integrity of research—encouraging responsible oversight and stewardship of scientific research by all funding organizations. Following the guidelines will doubtlessly lead to closer and more open communication between funding bodies and researchers, resulting in a new spirit of collaboration. Still, it must be stressed that each organization wishing to adopt these guidelines needs to develop its own quality-control mechanism to ensure significant compliance.

A strong peer-review system coupled with open declarations of research sponsorship in all scientific communications is a mandatory prerequisite for these guidelines to be effective. The second prerequisite is that university and industry policies be promulgated to address the issues raised in these guidelines regarding control of the design and conduct of the research and its publication. It is the responsibility of both the funding entity and the researcher(s) being funded to adhere to the guidelines; existing oversight structures are also encouraged to endorse and adhere to them. Furthermore, it should be understood that failure to embrace the guidelines would raise serious questions about any research project so conducted.

It has been suggested that, in the past, industry-funded research may have revealed a bias toward results favored by the food industry (21,43). The authors of one publicized study (4) reaching that conclusion proposed several explanations: 1. that food industry companies may wish to demonstrate the superiority of their products to those of competitors; 2. that investigators are influenced by their funding in formulating their research design and/or hypotheses; 3. that industry sponsors of research may suppress unfavorable results; 4. that authors of scientific reviews may deliberately bias their searches and interpretations to the benefit of their industry funders; and 5. that scientific reviews may disproportionately represent studies “arising from industry-supported scientific symposia.” Such criticism overlooks the fact that most university research is basic in nature and that companies frequently enter into research agreements with university faculty at a point at which preliminary experiments (whether conducted in the faculty member’s lab or the company’s lab) have established the proof of concept and, therefore, the likelihood that the research will have positive results is enhanced. Notwithstanding the obvious observation that scientific reviews conducted by non–industry-supported authors are also subject to many potential biases, the eight principles articulated in this paper address all of these possible sources of skewed research. Indeed, if these principles are vigorously adopted as the guidelines they are intended to be, there would be virtually no reason to quarrel with a research conclusion except by disputing the science itself.

In fact, the eight principles articulated here are intended to provide a clear statement of responsibility on all sides—those that are funding activities as well as those being funded—when academic institutions or academicians are recipients of industry funding for research, publication, or presentation. The principles are intended to offer guidance for the food industry and academic researchers who work with industry, when industry-funded research projects are involved. They may be thought of as a checklist to help ensure insulation of any research project from the provision of the resources enabling the project.

Finally, the guidelines are offered as only a first step in creating a firewall against bias in research: this paper is intended to be a dynamic document, prompting ongoing discussion and refinement of the guidelines it presents.

A CHALLENGE TO THE BROADER COMMUNITY

The objectives outlined above may be worthy, though not easy to achieve. But these principles can also serve as an invitation to the broader scientific, science communications, and public policy communities to embrace similar pledges to immunize their work against the myriad potential sources of bias—nonfinancial as well as financial conflicts. The present article has been necessarily confined to one relatively small aspect of an extremely complex issue. But future discussions could be much wider ranging and much more comprehensive, by embracing all sources of bias and expanding the focus from the very narrow issue of potential bias due to financial conflicts of interest.

Consider the extensive list of biases touched on at the end of section on

This is a reprint of an article by the same name that appears in Nutrition Reviews 2009;67:264-272. DOI: 10.1111/j.1753-4887.2009.00188.x.
definitions above: how constructive might it be for the broader scientific, communications, and public policy communities to adopt guidelines to ensure that their work is free from bias? For example, such guidelines might include pledges of transparency (e.g., voluntary disclosure of all previous research, published articles, and/or policy positions that might influence the present research, article, policy position); disclosure of sources of funding (both of the project at hand and overall funding); disclosure of other potential biases (such as philosophical, religious, ethical, or political orientation; intention to publish or otherwise garner public or political authority or power through publicity; previously announced public positions that might be relevant to the work at hand) and so forth.

Other researchers or groups that are not supported by the food industry (e.g., nongovernmental organizations, foundations, advocacy, and consumer groups) might include in their public communications appropriate promises that their work, to the extent possible, is open and objective (not skewed to a particular conclusion or philosophical view) and controlled by the researcher or cited authority (rather than by a hidden funder or interested party). The checklist provided in the section above on the guidelines’ import and implications might prove helpful in designing similar guidelines for other groups.

EXCLUDED ISSUES

It is important to state explicitly what this paper has excluded from consideration. Notwithstanding that all scientific research, whether funded by industry or not, should be subject to the same ethical rules, discussion of all of the following potential institutional sources of bias that can affect the integrity of the published scientific record has been specifically excluded from this paper: foundation-funded research; government-funded research; and work by academicians on advisory panels to industry, grant panels, government advisory panels, nongovernmental organization panels, and voluntarism on behalf of professional societies.

This is a short list of organizational work and funding situations that routinely pose profound challenges to the independence and integrity of scientific research—the list could certainly be lengthened. All these potential sources of bias are outside and beyond the scope of this article, but it is suggested that future papers might explore the ramifications for inappropriate influence of such organizational bias on research or public policy. And it is strongly urged that future investigations into this area be sufficiently broad as to include the many nonscientific and other institutions that routinely play a communications role in science-based public policy.

CONCLUSION

We could lament that this entire effort to manage conflicts of interest and to banish bias in science, is, alas, insufficient. It would be easy to complain that the financial and other pressures on research are too great to channel them neatly. And there are those who will argue that a mere set of guidelines cannot immunize science from error, misinterpretation, or deliberate miscalculation. We have deliberately left aside, for the time, the matter of enforcement mechanisms for these or any guidelines, believing instead that achieving a consensus on best practices in managing conflicts must certainly come before establishing sanctions for failing to adhere to best practices. As professional scientific societies, industry groups, and other organizations that engage regularly with researchers adopt a common set of rules by which to manage these difficult issues, enforcement of guidelines will automatically become increasingly less problematical.

In the end, management of conflicts of interest, and, for that matter, management of scientific biases altogether is a matter of consensus building, not enforcement. And if our choice is to indulge in more of the self-recriminations that have gone on for far too long already, or to construct a workable start to a solution, the path is obvious: it is time to act.

The interpretation of health research and the promotion of public policies resting on that research are far too important for us not to address and try to manage the myriad potential biases that can intrude. Let this effort be a start.

This paper is the product of a working group on conflict of interest/scientific integrity organized by the North American branch of the International Life Sciences Institute (ILSI North America). It was supported in part by educational grants from Cadbury Adams USA, LLC; the Coca-Cola Company; ConAgra Foods Inc; General Mills; Kraft Foods; Mars Snackfoods US, LLC; PepsiCo Inc; Procter & Gamble; Sara Lee; and Tate & Lyle. Authors Sylvia Rowe and Nick Alexander served as consultants to this project and received funds from ILSI North America for their work on this paper.

References

10. Davey MW, Van Montagu M, Inzé D, Sammartin M, Kanelis A, Smirnoff N, Benzie IJJ, Strain JJ, Favell D, Fletcher J. Plant L-ascorbic acid: Chemistry, function, me-
Authors: Sylvia Rowe, MAT (President, SR Strategy LLC, Washington, DC); Nick Alexander (Media Consultant, SR Strategy LLC, Washington, DC); Fergus M. Clydesdale, PhD (Distinguished Professor and Director of Food Science Policy Alliance, University of Massachusetts at Amherst); Rhona S. Applebaum, PhD (Vice President/Chief Regulatory Officer, The Coca-Cola Company, Global Scientific and Regulatory Affairs, Atlanta, GA); Stephanie Atkinson, PhD (Professor, Department of Pediatrics, McMaster University, Hamilton, ON, Canada); Richard M. Black, PhD (Vice President, Nutrition, Kraft Foods Global, Inc, Glenview, IL); Johanna T. Dwyer, DSc, RD (Director, Frances Stern Nutrition Center, New England Medical Center, Boston, MA); Eric Hentges, PhD (Executive Director, ILSI North America, Washington, DC); Nancy A. Higley, PhD (Vice President, Scientific & Regulatory Affairs, PepsiCo, Inc, Valhalla, NY); Michael LeFevre, PhD (Professor and Director of the Human Nutrition Research Group, Utah State University, Center for Advanced Nutrition, Logan, UT); Joanne R. Lupton, PhD (Regent’s Professor, University Faculty Fellow and William W. Allen Endowed Chair in Nutrition, Texas A&M University, College of Agriculture and Life Sciences, Department of Nutrition and Food Science, College Station, TX); Sanford A. Miller, PhD (Senior Fellow, University of Maryland Center for Food, Nutrition and Agriculture Policy, College Park, MD); Doris L. Tancredi, PhD (Vice President, Scientific Services, Cadbury Schweppes plc, Science & Technology, Wapping, NY); Connie M. Weaver, PhD (Head, Department of Foods & Nutrition, Purdue University, West Lafayette, IN); Catherine E. Woteki, PhD (Global Director of Scientific Affairs, Mars, Inc, McLean, VA); Elaine Wedral, PhD (President, ILSI North America, Washington, DC).

Corresponding Author and to Whom Requests for Reprints Should Be Addressed: Eric Hentges, PhD, Executive Director, ILSI North America, 1156 Fifteenth St, NW, Suite 200, Washington, DC 20005-1743. Phone: 202/659-0074. E-mail: ehentges@ilsi.org


This is a reprint of an article by the same name that appears in Nutrition Reviews 2009;67:264-272. DOI: 10.1111/j.1753-4887.2009.00188.x.