HUNGER AND ENVIRONMENTAL NUTRITION DPG

Webinar Series

Transparency in GMO Labeling and Seed Saving: What Dietitians Need to Know

January 16, 2014
Moderator

Beth Falls, Ph.D., R.D

HEN Education Co-Chair
Thank You to Health Care Without Harm

*This Webinar Series is brought to you in collaboration with Health Care Without Harm*

www.healthyfoodinhealthcare.org
www.noharm.org
Thank You To Our Sponsor

This Webinar Series is brought to you with generous support of our ethical sponsors, Stonyfield, Organic Valley, and Clif Bar
Hunger and Environmental Nutrition (HEN)
Dietetic Practice Group

**HEN Vision**
Optimize the nation’s health by promoting access to nutritious food and clean water from a secure and sustainable food system.

**HEN Mission**
Empower members to be leaders in sustainable and accessible food and water systems.

**Sustainability**
HEN defines sustainability as: "A sustainable and resilient food system [that] conserves and renews natural resources, advances social justice and animal welfare, builds community wealth, and fulfills the food and nutrition needs of all eaters now and in the future."

*(Harmon A. & Tagtow A., 2008)*
Hunger and Environmental Nutrition (HEN)
Dietetic Practice Group

Member Benefits

- FREE Online access to the *Journal of Hunger and Environmental Nutrition*
- Quarterly newsletter and webinars with CPE opportunities
- Lively Electronic Mailing List (EML)
- Strategic network relationships
- Educational Resources on Food System Topics: *Organic Talking Points, Antibiotic Use in Agriculture, and more...*
- HEN awards and recognition
- Scholarship opportunities for international members

Reduced rate for student members!
Introduction of Speakers

Rebecca Spector, MS
West Coast Director at the Center for Food Safety

Matthew Dillon
Agricultural Policy and Programs Manager at Clif Bar & Company
Labeling of Genetically Engineered Foods

Rebecca Spector, West Coast Director
January 2014
Center for Food Safety (CFS):

- National nonprofit membership organization
  - Washington, DC
  - San Francisco, CA
  - Portland, OR

- Works to protect human health and the environment from potentially harmful food technologies
CFS Initiatives: Protecting Food, Farmers & the Environment

- Litigation and Administrative Process
- Legislation and Policy (federal and state)
- Market Initiatives
- Public Education and Grassroots Outreach
What Are GMOs?

Potential Health and Environmental Effects
Genetically Engineered Foods (GE Foods or GMOs)

- Genetic Engineering: Novel process that allows DNA from one species to be inserted into another species.

- Process involves creating new combinations of plant, animal, bacteria, and viral genes that do not occur in nature or through traditional methods of crossbreeding.
Potential Human Health Hazards

Toxicity
Allergenicity
Antibiotic Resistance
Immuno-suppression
Cancer
Loss of Nutrition
Environmental Concerns

- Biological Pollution
- Genetic Contamination
- Superweeds
- Bt Resistance
- Harm to Non-target Organisms
- Terminator Technology
- “Pharm” Crops
The State of GMO Crops

- Main Crops Commercialized:
  - Corn, Soy, Cotton, Canola, Sugar Beets, Alfalfa
  - More than 80% are herbicide tolerant plants designed to withstand greater amounts of herbicides
  - Consumer demand has kept new commercializations at bay

- CFS Work Has Resulted In:
  - Four year ban on GMO alfalfa
  - Prevented commercializations of GE potatoes, tomatoes, wheat, rice, fish, pharmaceutical crops, and others.
  - Requiring environmental review of crops before approval by USDA
State of GMO Labeling

- Internationally: Labeling requirements in 64 countries— including Japan, South Korea, Russian, China and all countries in European Union

- Nationally:
  - No requirement to label foods containing GMOs
Why Do We Need Labeling?

- **Consumer Expectations**
  - Right to know

- **Potential Health Concerns / Tracking of Adverse Effects**
  - Allergenicity concerns
  - Tracking of potential adverse health effects

- **Prevalence of Contamination**
  - Pollen transfer and co-mingling
Consumer Attitudes Toward
GMO Labeling

- Polls consistently show more than 90% of the U.S. public want foods containing GMOs to be labeled.
- 91% believe that GE fish and meat should not be allowed in the marketplace (Lake Research, 2010).
- 95% believe food from genetically engineered animals should be labeled (Consumers Union, 2008).
Why No Labeling in the U.S.?

- 1992: FDA determined that GE foods need not be labeled because they were not “materially” different from other foods.
  - Limited what it considered “material” to only changes in food that could be noted by taste, smell, or other senses.
  - Remains a political decision, not a scientific one.

- 2000: FDA announced that labeling of GE foods would remain voluntary.
  - Companies that have eliminated GE ingredients to add “NON-GE” labels have faced tight regulations,
  - FDA lets other companies continue to use GE ingredients in secret.
GMO Labeling Options

- **Voluntary**
  - Food producers can choose to participate in voluntary labeling programs
    - “USDA Organic”
    - “Non-GMO Project Verified”

- **Mandatory**
  - Labeling laws established by state or federal governments to label foods containing GMO ingredients (e.g. European Union)
    - Federal or state legislation
    - State voter ballot initiatives
GMOs Labels in the Marketplace

- Types of Voluntary Labels
  - Certification Based, independent and third-party verified (e.g. organic, Non-GMO Project)
  - Unverified, self-declaration claims (e.g. “GMO-free”)
  - Third-party reports (e.g. “GMO-free Shoppers Guide”)

Source: International Standards Organization (ISO)
GMOs Labels in the Marketplace

- **Organic**
  - Follows stringent, independently established criteria (govt. regulated; open to public comment)
  - Third-party verified by independent certification organizations such as CCOF
  - Use of GMOs in production is prohibited (process standard)

- “GMO-Free”
  - self-declared terms by food companies – no transparent definition or standard; not third-party verified

- **Other GMO Eco-labels**
  - The Food Alliance
  - The Non-GMO Project
Legal Initiatives

CFS Legal Petition to FDA
Legal Initiatives: Labeling

CFS Legal Petition to FDA, October 2011

The petition calls on FDA to:

- Issue new regulations requiring labeling of all foods produced using genetic engineering; and

- Issue a new policy redefining a “material” fact as a change in food at the atomic, molecular, or genetic level that a significant share of consumers would find relevant to their purchasing decisions.
Legal Initiatives: Labeling

- Working with *Just Label It!* campaign – coalition of more than 450 groups that support mandatory GE food labeling

- To date, more than 1.2 million public comments have been submitted to FDA in support of labeling
Legislative Initiatives

Federal
State
Mandated GMO Labels

- **Federal Legislative Efforts**
  - Bills in Congress (Boxer-DeFazio Bill)

- **State Legislative Efforts**
  - GMO labeling – introduced in 26 states in 2012

- **State Voter Ballot Initiatives**
  - Washington/California
  - Oregon and Colorado
Legislative Initiatives: Federal & State

- **FEDERAL**: Senator Barbara Boxer (D-CA) and Rep. Peter DeFazio (D-OR) “Genetically Engineered Food Right-To-Know Act” would require the labeling of GE foods. (HR 1699 - 48 cosponsors – Senate Bill 809 - 14 cosponsors)

- **STATE**: In 2012-2013, 26 states including California, Hawaii, Illinois and New York introduced bills that would require the labeling of GE foods.
State Voter Ballot Initiatives

California
Washington
Oregon
Colorado
GE Food Labeling: What You Can Do

- **CFS Legal Petition**
  - SEND IN COMMENTS TO FDA IN SUPPORT OF THE LEGAL PETITION!
  - [www.centerforfoodandsafety.org](http://www.centerforfoodandsafety.org)

- **Legislative Initiatives**
  - If in state with pending legislation, WRITE YOUR LEGISLATOR in support of the bill!
  - If in state with no legislation, CONTACT YOUR LEGISLATOR and request he/she introduce GE labeling bill.

- **State Ballot Initiatives**
  - Sign up to help gather signatures
  - Spread the word!
GE Food Labeling: What You Can Do

- **Market Initiatives/Consumer Demand**
  - Write to Food Companies
    - pledge to source non-GMO ingredients
    - participate in eco-labeling programs
  - Pressure retailers, restaurants, institutional buyers (hospitals and schools, etc) to source non-GMO ingredients and demand point of purchase labeling.

- **Litigation Strategies**
  - Support CFS and others
How to Get Involved

○ Join and Support the Center for Food Safety!
  www.centerforfoodsafety.org

○ Join The True Food Network!
  • Join 400,000 Members Nation Wide
  • Action Alerts on Critical Food Issues
  • Current news stories on critical food issues
  www.truefoodnow.org
Contact Information

Rebecca Spector

West Coast Director
Center for Food Safety
San Francisco, CA
(415) 826-2770

rspector@centerforfoodsafety.org
Why Seed Matters
The first link in food and fiber
The seed we sow affects...

• Yield
• Nutrition
• Environmental impact
History of Seed Development

- **Landraces**
- **Heirlooms**
- **Modern Breeds (Mendelian Genetics)**
- **Genetic Engineering**
- **Organic Breeding**
Impact of industrial breeding

• Varieties that thrive on high inputs of chemicals and fertilizer (prima donnas)

• Foundation of an extractive systems

• Dilution of nutrients (Texas A&M study)
Declining Fruit and Vegetable Nutrient Composition: What Is the Evidence?

Nutrient Decline in Table Beets

Nutrient Decline in Carrots
State of Seed 2014

• Lack of options for organic growers
• Concentration of ownership & patents
• Insufficient public funding
• Seed integrity risks
Organic seed research average of less than $1 million/year
What do we need from seed?

- Resiliency – shifts in resources, climate, changing markets
- Quality – flavor, nutrition, aesthetics
- Diversity – in seed, farming systems decision makers
Sow More Good

• Organic Seed Grant Program
• Seed Matters Fellowships
• Farmer Seed Stewardship
• Community Seed Resources
Community Seed Resources

- Created 5 educational resource guides - Over 2,300 distributed
- Created toolkit - sent out to 102 projects
- Supported over 75 public seed libraries
Farmer Seed Stewardship
Graduate Fellowships

- Quinoa
- Barley
- Oats
- Wheat
- Tomato/broccoli
- Carrots/beets
- Sweet Corn
- Field Corn
- Cotton
- Squash
Hunger and Environmental Nutrition Webinar Series
Transparency in GMO Labeling and Seed Saving: *What Dietitians Need to Know*

Rebecca Spector, MS  
West Coast Director  
Center for Food Safety

Matthew Dillon  
Agriculture Policy and Programs Manager  
Clif Bar & Company

Q & A
Hunger and Environmental Nutrition 2014 Webinar Series

The Food Climate Connection
*In collaboration with Vegetarian Nutrition DPG*
Date: January 30, 2014 at 3pm EST

The Role of Dietitians in the Local Food Movement
Date: Feb 11, 2014 at 3pm EST

Pesticides in our Food: The How, What, and Why Dietitians Need to Know.
Date: March 11, 2014 at 3pm EST