

Changing the Way We Look at Agriculture

Opportunities for RDNs

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and Dietetics
Foundation
Future of Food Initiative

**North Dakota Academy of
Nutrition and Dietetics**
Bismarck Heritage Center
Bismarck, ND
Wednesday, March 11, 2015
12:00 -1:00 p.m.

Amy Myrdal Miller, MS, RDN
Founder & President
Farmer's Daughter Consulting, LLC
Carmichael, CA
@AmyMyrdalMiller







Disclosure

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and Dietetics
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Future of Food Initiative

- This presentation is part of the Academy of Nutrition and Dietetics Foundation's Future of Food initiative and is supported through an educational grant to the Foundation from Elanco and National Dairy Council.
- This presentation was developed in collaboration with the RDN Farmer expert group.
- Stipend and travel funds to present at this meeting was received from the Academy Foundation through Elanco and National Dairy Council.

Speaker's Financial Disclosures

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CLIENTS/CONSULTING FEES

- American Beverage Association
- The Culinary Institute of America
- Innovation Center for US Dairy
- McDonald's (Northern California Owner-Operators Cooperative)
- Monsanto Company
- Northarvest Bean Growers Association

HONORARIA

- Academy of Nutrition and Dietetics Foundation
- National Dairy Council Ambassador
- Bean Institute/Dry Bean Quarterly Nutrition Editorial Board
- Monsanto L.E.A.D. Network
- *And various speaking engagements...*

Objectives

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- Describe the current state of US farming.
 - Identify at least two advances in agriculture innovation that increase healthy food production and reduce environmental impact.
 - Name at least one action affiliates and DPGs can take to help members be more informed and involved in promoting and impacting healthy food systems.
-

Today's Food Conversation

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- How many of you feel more people want to know more about where their food comes from and how it was grown?
 - How many of you are getting questions about locally-grown, carbon footprint, or sustainable or organic food?
 - How many of you are seeing more farmers' markets in your neighborhoods?
 - How many of you have ever been on a farm?
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Improving Food Security: Dietitians Bring Nutrition Expertise to the Table

POSTED ON JUNE 14, 2012



Ethan Bergman, President of the Academy of Nutrition and Dietetics, addresses the Future of Food Conference in Washington, D.C. Photo courtesy of Washington Post Live.

By Ethan A. Bergman, PhD, RD, FADA, CD
President
Academy of Nutrition and Dietetics



NATIONAL DAIRY COUNCIL



FEEDING AMERICA



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Future of Food Initial Accomplishments

1 Take Action to Fight Hunger

Increase the awareness of hunger by educating families, and how to bridge the gap. View these h prepare to work with a food bank and/or food inse

- Advocate for Increasing School Breakfast Pa
- Educate Parent Groups about the Magnitud
- Educate Others about Food Insecurity »
- Volunteer at a Local Food Bank »
- Advocate for Anti-Hunger Solutions »
- Invite Media to Experience Hunger by Virtua

2 Hunger in Our Community.  kids eat right.

What We Can Do.

Rage against Rumbles: Student-led Actions to End Hunger in Our Community

What is "food security?"

- USDA defines an access by all people at all times to enough nutritious food for an active, healthy life.
- People who are hungry (or "food insecure") may:
 - o Skip meals
 - o Cut back on the amount or

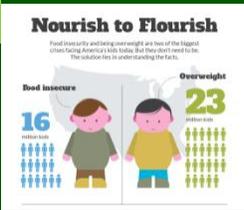
How Does Hunger Affect Kids?

3 Future of Food CEPU Webinars

www.eatright.org/foundation/kidseatright

www.healthyfoodbankhub.org

4 Nourish to Flourish



5 Food Insecurity/ Food Banking Dietetic Internship Concentration

6 



ELANCO



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Future of Food Expansion Accomplishments

1 RDN Farmer Expert Committee/ member survey

2 U.S. Farming 101 Part 1 Future of Food Webinar July 2014



3 SMART CHOICES For a Healthy Planet



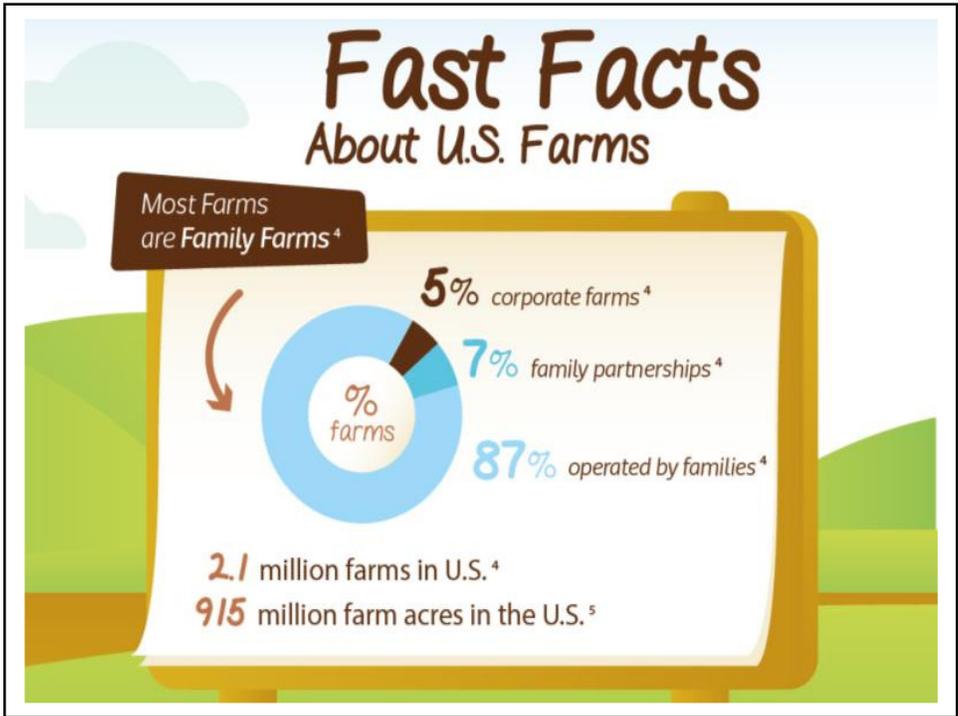
<http://bit.ly/1t4Lt1V>

4 32 Affiliate Presentations "Changing the Way We Look at Agriculture"

5 

6 Agriculture Alliance

US Farmers and The State of US Farming



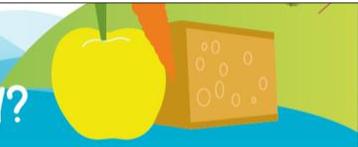


Who Grows Our Food?

A Profile of American Farmers

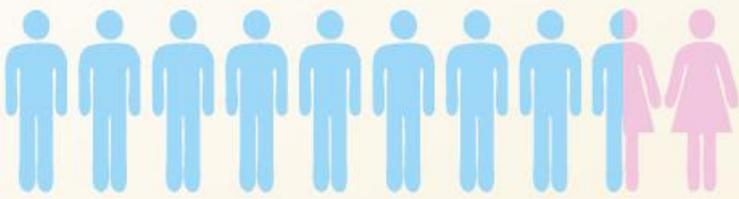


While less than **2%** of US population are farmers, they help to feed 100% of the US population! ¹

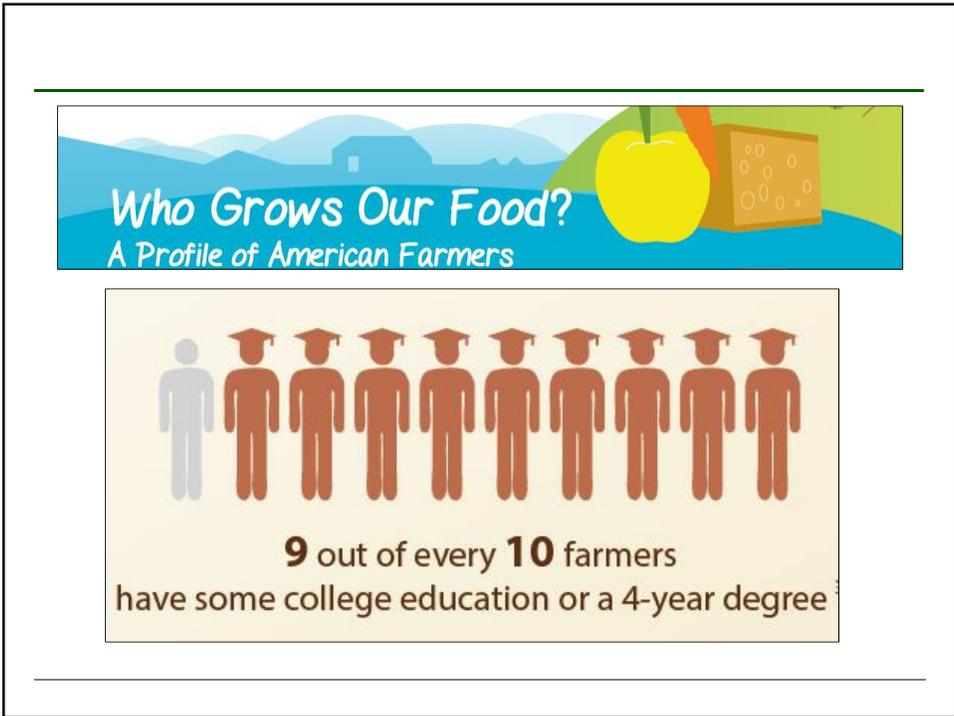
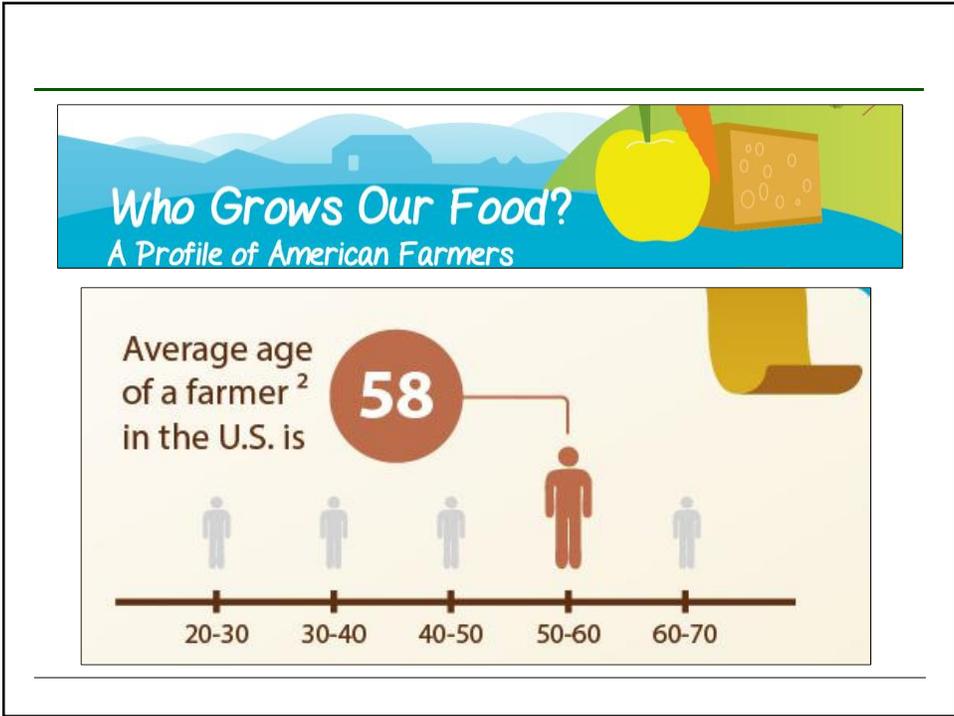


Who Grows Our Food?

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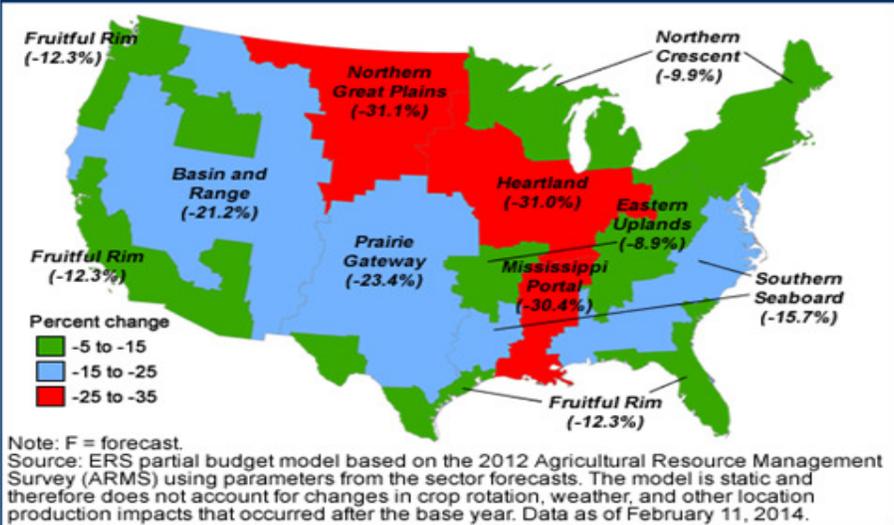
8.5 out of every **10** farmers is male ³



Forecasted Farm Economy

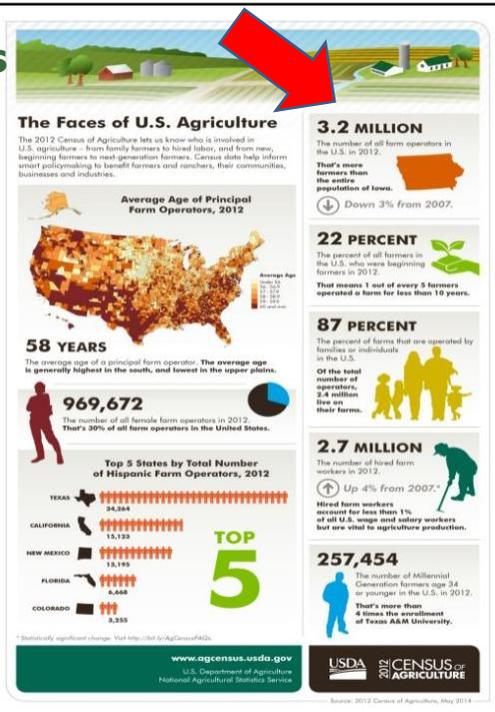
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Farm business net cash income, 2014F compared with 2013F



Future Farmer Trends

http://www.agcensus.usda.gov/Partners/Infographics/Faces_of_Agriculture.pdf



Future Farmer Trends

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http://www.agcensus.usda.gov/Partners/Infographics/Faces_of_Agriculture.pdf

3.2 MILLION

The number of all farm operators in the U.S. in 2012.

That's more farmers than the entire population of Iowa.



Down 3% from 2007.

22 PERCENT

The percent of all farmers in the U.S. who were beginning farmers in 2012.



That means 1 out of every 5 farmers operated a farm for less than 10 years.

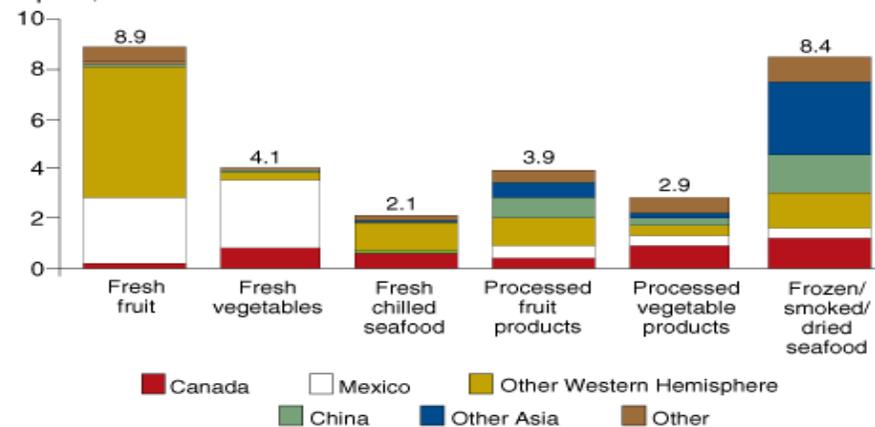


Source: 2012 Census of Agriculture, May 2014

U.S. Food Imports

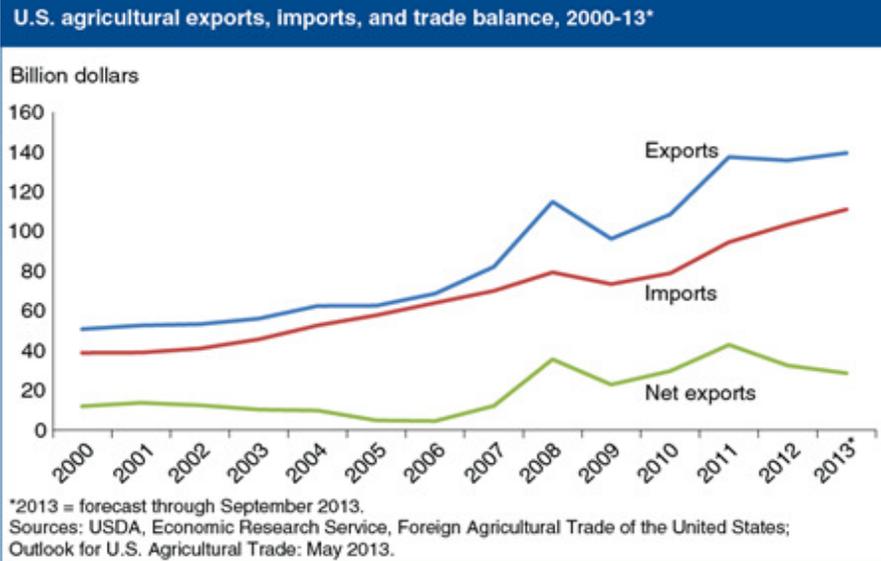
U.S. perishable food imports in 2007 mostly came from neighboring countries

Imports, billion dollars



Source: USDA, Economic Research Service classification using data from U.S. Department of Commerce, Census Bureau.

U.S. Agriculture Exports



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The State of Global Health & Nutrition



State of Global Health

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- **Undernutrition** is responsible for 3 million deaths each year. That's 45% of deaths in children under 5.
- In 2011 there were 165 million children under 5 with **stunted growth**.
- **Suboptimal breastfeeding** results in more than 800,000 child deaths annually.
- **Fetal growth restriction** causes 12% of annual neonatal deaths.

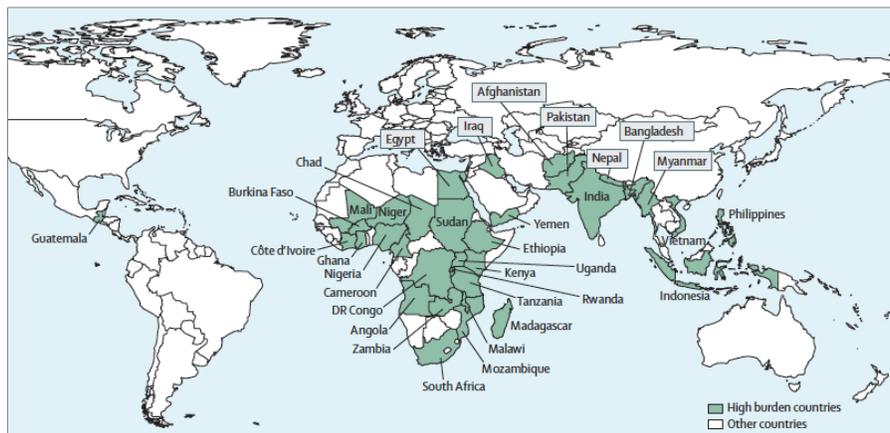
The Lancet – June 2013

Food Security & Nutrition: The Challenges & Opportunities for World Health

Understanding the Context

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34 countries bear **90%** of the global burden of undernutrition.



Lozano R. Lancet 2012; Lancet. 2012 Dec 15;380(9859):2095-128. Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study.

Food Security & Nutrition: The Challenges & Opportunities for World Health

Advances in Agriculture



Benefits of Agriculture Advances



Access to healthy food



Food production



Environmental impact

Who is advancing agriculture innovation to achieve food security and healthy food systems?

- Government
 - Nonprofit organizations/foundations
 - Industry and farmers
-

Government

Advances in Agriculture

USDA Sustainable Agricultural Systems

1. Integrating **sustainability** issues and approaches into a range of **USDA science priorities**, including food security, crop and animal production and protection, bioenergy, climate change, and natural resource management.
 2. Building a **framework for sustainability data** and information, and supporting research, education, and extension efforts to develop critical scientific and management information to fill gaps in the framework.
-

Sustainable Agricultural Systems, cont'd

3. **Advancing the understanding** of local and regional **food systems**, a key part of the **USDA strategy** for rural prosperity and a promising market for connecting producers with consumers, many of whom are interested in farmers and land management.
 4. **Improving** the performance of **organic agriculture** (the largest of the "transformative system" examples described in the NRC report).
-

WHO and FAO

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World Health Organization

World Health Organization (WHO)

•Authority for health within United Nations



Food and Agriculture Organization of the United Nations

for a world without hunger

Food and Agriculture Organization (FAO)

•Works to achieve food and nutrition security globally

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Government, Nonprofit Organizations, Foundations

Advances in Agriculture

Examples from Academy Position Paper





FROM THE ACADEMY

Position Paper

**Position of the Academy of Nutrition and Dietetics:
Nutrition Security in Developing Nations:
Sustainable Food, Water, and Health**

ABSTRACT

It is the position of the Academy of Nutrition and Dietetics that all people should have consistent access to an appropriately nutritious diet of food and water, coupled with a sanitary environment, adequate health services, and care that ensure a healthy and active life for all household members. The Academy supports policies, systems, programs, and practices that work with developing nations to achieve nutrition security and self-sufficiency while being environmentally and economically sustainable. For nations to achieve nutrition security, all people must have access to a variety of nutritious foods and potable drinking water, knowledge, resources, and skills for healthy living; prevention, treatment, and care for diseases affecting nutrition status; and safety-net systems during crisis situations, such as natural disasters or deleterious social and political systems. More than 2 billion people are micronutrient deficient, 1.5 billion people are overweight or obese; 870 million people have inadequate food energy intake; and 783 million people lack potable drinking water. Adequate nutrient intake is a concern, independent of weight status. Although this article focuses on nutritional deficiencies in developing nations, global solutions for excesses and deficiencies need to be addressed. In an effort to achieve nutrition security, lifestyles, policies, and systems (eg, food, water, health, energy, education/knowledge, and economic) contributing to sustainable resource use, environmental management, health promotion, economic stability, and positive social environments are required. Food and nutrition practitioners can get involved

POSITION STATEMENT

It is the position of the Academy of Nutrition and Dietetics that all people should have consistent access to an appropriately nutritious diet of food and water, coupled with a sanitary environment, adequate health services, and care that ensure a healthy and active life for all household members. The Academy supports policies, systems, programs, and practices that work with developing nations to achieve nutrition security and self-sufficiency while being environmentally and economically sustainable.

- Feed the Future
- Save & Grow
- Urban Harvest
- Bangladesh Homestead Food Production Program



Nonprofit organizations

World Wildlife Fund

Working with business, government and communities to find and influence the adoption of solutions that will improve efficiency in the use of natural resources, reduce waste, and eliminate illegality.

We have to do more with less. Much less.

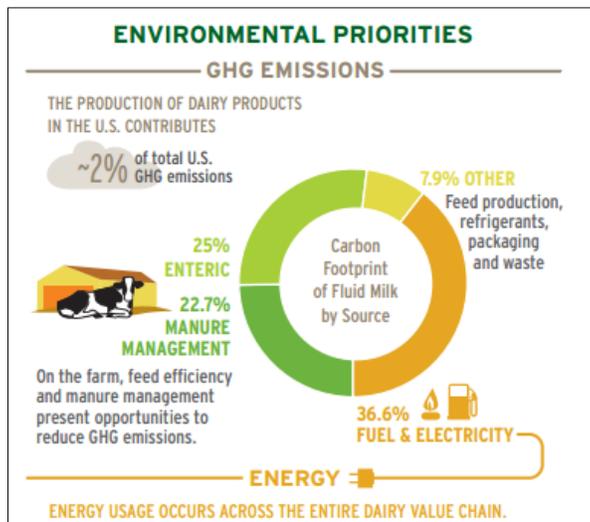
“Supply risk from unsustainable sourcing can destroy reputations, brands, biodiversity, communities and generate expensive legal disputes to companies and government”.

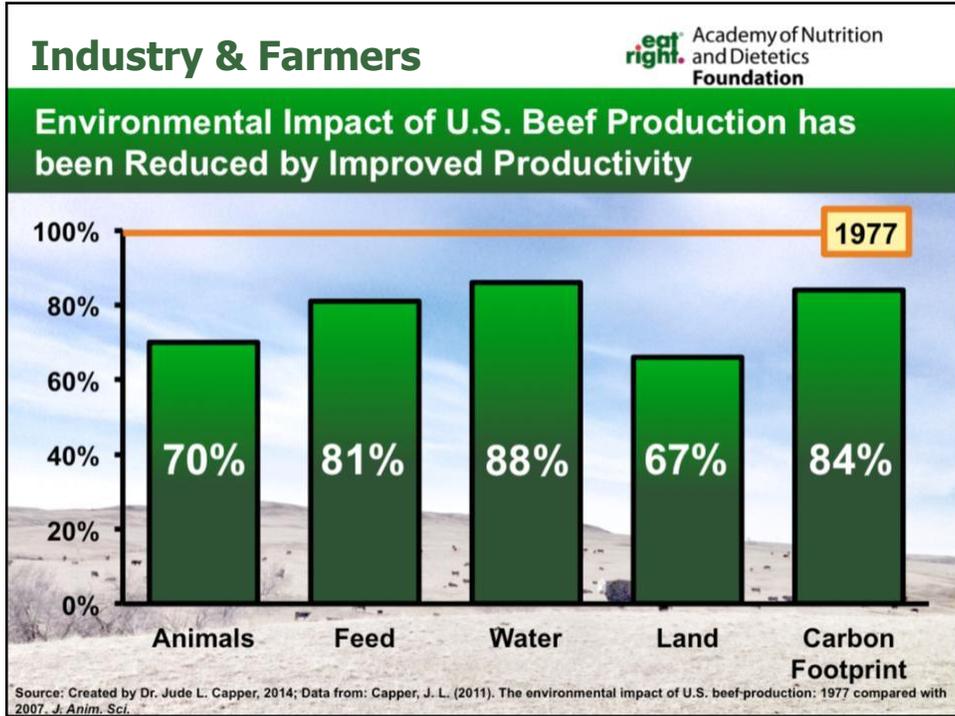


Industry & Farmers

Advances in Agriculture

Industry & Farmers





Examples of Agriculture Innovations

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Innovations in agriculture technology help to use fewer resources, including **less fertilizer, fewer pesticides, less water**, etc.

Examples:

- Technology to maximize crop space
- Satellite imagery to survey soil
- Technology to increase drought tolerance
- Precision agriculture tools to reduce inputs and improve efficiency

What Academy Members Can Do?



What Academy Members Can Do?



- **Educate**



- **Advocate**



- **Communicate**

Educate through Events

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Maryland RDNs Connect with Farm Women through Common Ground™



Educate through Events

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Ohio RDs Experienced the Journey of Milk from Farm to Lunch Tray



Educate through Events

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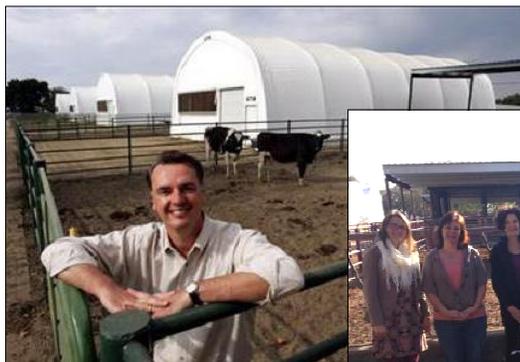
2014 Wheat Foods Council "Wheat Safari"



Educate through Events

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2014 California Beef Council Beef Sustainability Event



Dr. Frank Mitloehner, UC Davis

Beef Sustainability CE Event Attendees



Educate through DGPs

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- Get involved in DPGs strongly supporting agricultural issues, including:
 - Hunger and Environmental Nutrition (HEN)
 - Food & Culinary Professionals (FCP) Ag Subgroup
- Find out more about Future of Food and view recorded webinars
www.eatright.org/foundation/kidseatright

Educate Others!

Academy of Nutrition and Dietetics Foundation
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New toolkit (released March 2, 2015)

SMART CHOICES For a Healthy Planet

- 25-minute PowerPoint presentation plus 5-minute suggested activity
- Target audience: adults or mature teens
- Toolkit includes notes pages and downloadable handout
- Available in English and Spanish
- FREE!

www.kidseatright.org/volunteer

Educate: Apply for a Mini-Grant

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New toolkit (released March 2, 2015)
SMART CHOICES For a Healthy Planet

- Mini-grant applications due **May 1, 2015**
- Twenty-five (25) **\$200** mini-grants available
- Mini-grantees agree to complete:
 - 2 presentations
 - Short online survey report
- Access the mini-grant application at www.eatright.org/foundation/kergrants
- Questions? Email Kidseatright@eatright.org



Educate: Volunteer for Ag in the Classroom

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www.agclassroom.org

Educate: Promote Farm to School Programs  Academy of Nutrition and Dietetics Foundation
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Bringing the farm to school



4,322
districts

40,328
schools

23,513,237
children

www.fns.usda.gov/farmentoschool

Advocate: Promote Grower-Buyer Expos  Academy of Nutrition and Dietetics Foundation
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Grower-Buyer Expos

- Expand opportunities for more local products in schools, hospitals, institutions or supermarkets.
- Opportunity for growers to increase local distribution.
- Excellent way for RDs to connect with farmers.



Advocate: Organize a "Food Cluster"

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Mission

Create a healthy community through a resilient, local food system and to support and promote local food production, distribution and consumption.



Building Public/Private Partnerships

- Businesses
- Organizations
- Individuals



Photo credit: Northern Colorado Food Cluster

Together

- Influence public policy decisions
- Establish high impact projects
- Create a strong network of food system leaders

Advocate: Participate in Public Policy

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- Supplemental Nutrition Assistance Program (SNAP)
- The Emergency Food Assistance Program (TEFAP)
- Commodity Supplemental Food Program (CSFP)
- Fresh Fruit and Vegetable Program (FFVP)
- Supplemental Nutrition Assistance Program Nutrition Education (SNAP-Ed)
- Beginning Farmer and Rancher Development Program
- Conservation Stewardship Program (CSP)
- Environmental Quality Incentives Program (EQIP)
- IRS: Nonprofit hospitals can claim nutrition access aid

Advocate: Participate in Public Policy ^{eat}right Academy of Nutrition and Dietetics Foundation

Academy of Nutrition and Dietetics
The world's largest organization of food and nutrition professionals.

Welcome, Ms. Teresa A Nece
Log out | myAcademy | Renew Membership

Public Members Become an RD or DTR Media Health Professionals Shop FIND A REGISTERED DIETITIAN

Welcome to the
The Academy Member Center

In This Section

- Practice
- Careers
- Professional Development
- Public Policy
- Research
- Stroke
- Academy Groups
- Journal Publications
- Career Center
- Member Benefits
- Honors / Awards / Grants
- News Center
- Hot Eats Right
- Business Article Library

myAcademy Quicklinks

- myProfile
- myGroups

WELCOME TO THE GRASSROOTS MANAGER

Action Alerts Find My Legislators FAZC

Academy of Nutrition and Dietetics Action Center

ACTIONS COMPLETED

ALERT PLEASE SUPPORT HR 1074: NATIONAL DIABETES CLINICAL CARE COMMISSION ACT
Thank you for taking action.

Communicate: Help Reduce Food Waste ^{eat}right Academy of Nutrition and Dietetics Foundation Future of Food Initiative

Reduce food waste by improving product development, storage, shopping/ordering, marketing, labeling, and cooking methods.

Recover food waste by connecting potential food donors to hunger relief organizations like food banks and pantries.

Recycle food waste to feed animals or to create compost, bioenergy and natural fertilizers.

Communicate: "Farm to Table" Dinners

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Communicate: Volunteer

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California State University, Sacramento students volunteering at a "Nutrition Fuels Fitness" race. Race proceeds benefited local organizations working to reduce childhood obesity.

Communicate: Engage in Social Media

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Ashley Colpaart MS RD @ashleyrdx · Dec 1
Where Food Begins. First-ever World Soils Day by UN kickstarts 2015 International Year of Soils. #rdchat



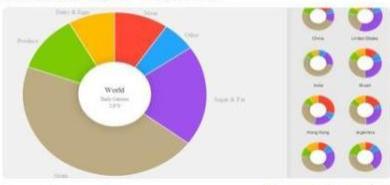
The Foodie Farmer Yesterday · 1/1
Sold 22,500 bushels of #RealFood fresh green beans from our #EasternShore #Maryland farm this year. #FarmToGroceryStore



Dayle Hayes @SchoolMealsForK Dec 1
Day #4 #RealSchoolFood: IT'S ALL ABOUT LOCAL wp.me/p27H7R-jR @FoodCorps makes @FarmtoSchool work @FoodCorpsMT



Marylin Overwater RD retweeted **FAO statistics** @FAOstatistics · Dec 1
Interactive #infographic by @NatGeo on what the world eats
on.natgeo.com/1rdXmRk #FutureofFood



Communicate: Share Resources

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<http://www.ers.usda.gov/>

<http://www.ars.usda.gov/main/main.htm>



<http://www.csrees.usda.gov/Extension/>



Food and Agriculture Organization of the United Nations

www.fao.org

<http://www.aplu.org/document.doc?id=780>

What Academy Members Can Do



- **Educate**
- **Advocate**
- **Communicate**

Take the Challenge!



Summary



- US Farmers & the State of US Farming
- State of Global Health & Nutrition
- Innovations in Agriculture
 - Government
 - Nonprofit organizations/foundations
 - Industry and farmers
- What Academy Members Can Do

Last year, donors' generosity helped us award:



\$141,000 in awards

\$357,000 in research grants and fellowships

\$505,000 in student scholarships

\$1,140,000 in grants to Kids Eat Right members

We need you!



Donate today! www.eatright.org/foundation/donate



Changing the Way We Look at Agriculture

Opportunities for RDNs

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QUESTIONS?

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