

Changing the Way We Look at Agriculture:

Opportunities for RDNs

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eat right Academy of Nutrition and Dietetics Foundation
 Future of Food Initiative



Food Is Plentiful! Therefore Farming is EASY... right?

Jennie Schmidt, MS, RD
 Schmidt Farms, Inc.

Schmidt Farms Inc.

3rd Generation in USA

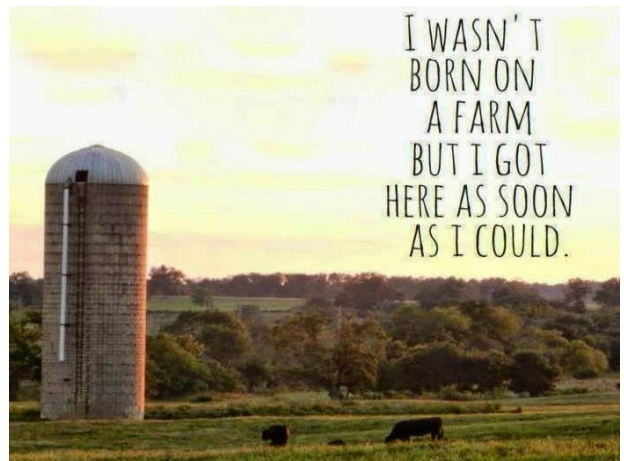
2000 Acres in Maryland

- Corn (biotech & conventional production; formerly certified organic)
- Soybeans (tofu, feed & seed)
- Wheat (flour, feed & seed)
 - Barley (seed)
- 150 acres Roma tomatoes
- 160 acres fresh market green beans
 - 250 acres of hay
 - 22 acres winegrapes



Our Farm Goal:

Synergistic Farming: using the best practices from all farming systems to maximize value per acre producing safe, high quality foods, while preserving and improving our soils and sustaining the family farm for the next generation





Disclosure

- 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.



Who Am I? Farmer, Dietitian, Promoter of Food & Farming

- 2011 America's Farm Mom of the Year
- CommonGround Volunteer
- Board Member
 - 1st Female & V.P. - Maryland Grain Producers
 - US Wheat Foods Council
 - Past-Pres, MD Grape Growers Assoc.
 - Past Chairman, Maryland Farm Bureau Specialty Crops
- Academy of Nutrition & Dietetics -
 - Advanced Food Technology workgroup
 - HEN member (since before it was HEN)



Introduction

- 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?

Future of Food Initiative

Academy of Nutrition and Dietetics Foundation



Future of Food

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



Future of Food Initial Accomplishments

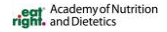
- 1 **Take Action to Fight Hunger**
Increase the awareness of hunger by educating families, and how to bridge the gap. View these 11 ways to prepare to work with a food bank and/or food drive.
 - Advocate for Increasing School Breakfast Programs
 - Educate Parent Groups about the Magnificat
 - Educate Others about Food Insecurity
 - Volunteer at a Local Food Bank
 - Advocate for Anti-Hunger Solutions
 - Invite Media to Experience Hunger by Virtue
- 2 **Hunger in Our Community**
What We Can Do.
 - **High-impact Summits:** Share and Act on the Best Hunger in Our Community
 - **Media to "lead us away?"**
 - Create stories on issues to all members of the press through a central, media-friendly location.
 - Invite the media to report on the summit.
 - Invite the media to report on the summit.
 - Call back on the summit.
- 3 **Future of Food CEU Webinars**
www.eatright.org/foundation/kidseatright
- 4 **Nourish to Flourish**
16 Food Insecure, 23 Malnourished
- 5 **Food Insecurity/ Food Banking Dietetic Internship Concentration**
- 6 **FOODS TO ENCOURAGE FOR HEALTHY LIVING**

www.healthyfoodbankhub.org

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
<http://bit.ly/1t4Lt1V>
- 3 **SMART CHOICES**
For a Healthy Planet
- 4 **32 Affiliate Presentations "Changing the Way We Look at Agriculture"**
- 5 **Agriculture Alliance**
- 6 **U.S. Farming 101**
Part 2
Future of Food Webinar
July 2014

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



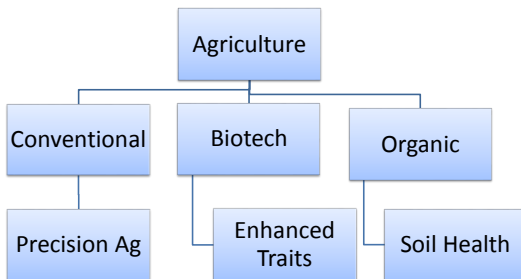
US Farmers & the State of US Farming



Objectives

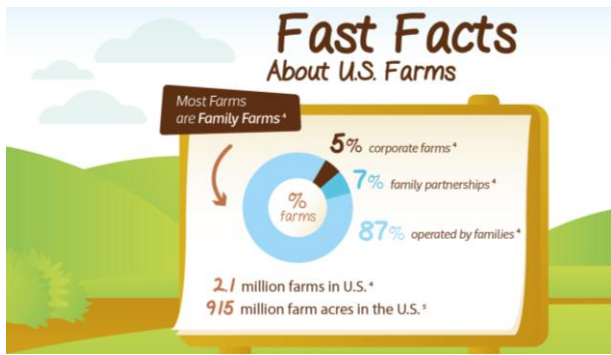


Synergistic Farming:
Using the best of each
Farming System

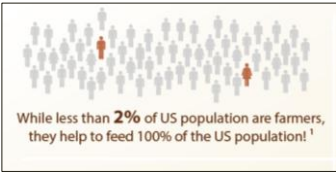


Comparison of Practices

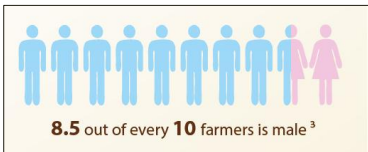
Practice	Conventional	Biotech	Organic
No-Till	√	√	(√)
Crop Rotation	√	√	√
Cover Crop	√	√	√
Green Manure	√	√	√
IPM	√	√	√
Fertilizers	√	√	√ Manure
Pesticides	√	√	√ OMRI
Precision Ag	√	√	(√)



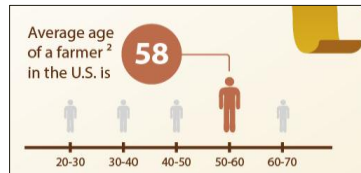
Who Grows Our Food? A Profile of American Farmers



Who Grows Our Food? A Profile of American Farmers



Who Grows Our Food? A Profile of American Farmers

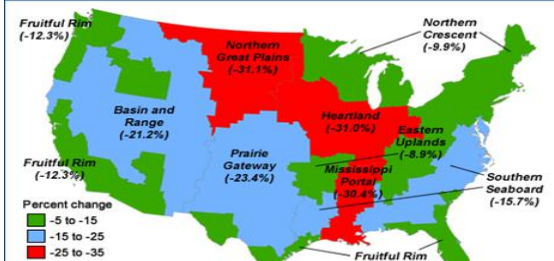




9 out of every 10 farmers have some college education or a 4-year degree

Forecasted Farm Economy

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



Note: F = forecast.
 Source: ERS partial budget model based on the 2012 Agricultural Resource Management Survey (ARMS) using parameters from the sector forecasts. The model is static and therefore does not account for changes in crop rotation, weather, and other location production impacts that occurred after the base year. Data as of February 11, 2014.

Future Farmer Trends

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

The Faces of U.S. Agriculture
 The 2012 Census of Agriculture tells us how this is changing in U.S. agriculture. From family farmers to hired labor, and from very large agribusinesses to small operations, farmers, ranchers, and growers are all part of the U.S. agricultural landscape.

- 3.2 MILLION** The number of all farm operators in the U.S. in 2012.
- 22 PERCENT** The percent of all farm operators in the U.S. who were beginning farmers in 2012.
- 58 YEARS** The average age of principal farm operators. The average age is generally highest in the north, and lowest in the upper plains.
- 87 PERCENT** The percent of all farms that are operated by family members.
- 969,672** The number of all family farm operators in 2012. More than 80% of all farm operators in the United States.
- 2.7 MILLION** The number of all farm operators in 2007.
- 257,454** The number of all farm operators in 2012 who were beginning farmers in 2012.

Source: 2012 Census of Agriculture, May 2014

Future Farmer Trends

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

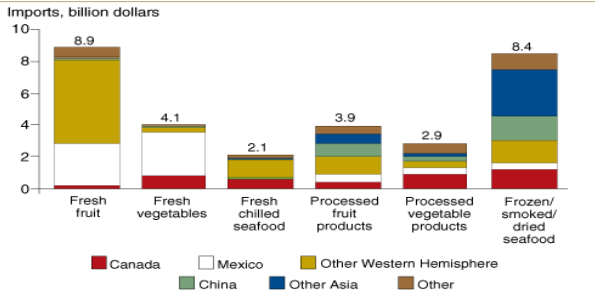
3.2 MILLION
 The number of all farm operators in the U.S. in 2012.
 That's more farmers than the entire population of Iowa.
 Down 3% from 2007.

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

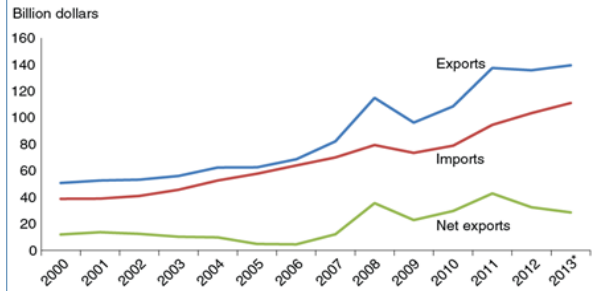
U.S. perishable food imports in 2007 mostly came from neighboring countries



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

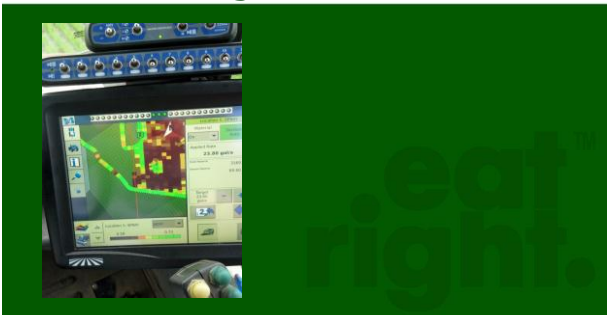
U.S. Agriculture Exports

U.S. agricultural exports, imports, and trade balance, 2000-13*



*2013 = forecast through September 2013.
Sources: USDA, Economic Research Service, Foreign Agricultural Trade of the United States; Outlook for U.S. Agricultural Trade: May 2013.

Advances in Agriculture



Benefits of Agriculture Advances

-  Access to healthy food
-  Food production
-  Environmental impact



USDA Sustainable Agricultural Systems

1. **Integrating sustainability** issues and approaches into a range of **USDA science priorities**
2. Building a **framework for sustainability data**
3. Advancing the understanding of local and regional food systems, a key part of the USDA strategy for rural prosperity
4. Improving the performance of organic agriculture



Our conventional family farm has been using No-till & cover cropping systems since 1965

WHO and FAO



World Health Organization (WHO)
 Authority for health within United Nations



Food and Agriculture Organization (FAO)
 • Works to achieve food and nutrition security globally



Examples from Academy Position Paper

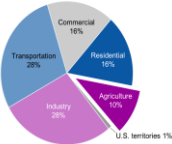


- Feed the Future
- Save & Grow
- Urban Harvest
- Bangladesh Homestead Food Production Program

Industry and farmers

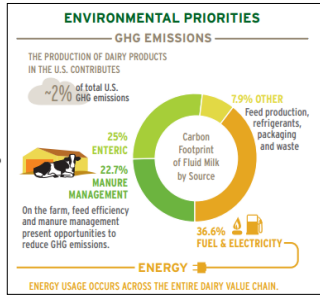
U.S. greenhouse gas emissions by economic sector, 2012

Total U.S. emissions in 2012 = 8,525.6 million metric tons of carbon-dioxide equivalent



Note: Electricity emissions are allocated to each end-use sector based on its consumption. Source: USDA, Economic Research Service using data from U.S. Environmental Protection Agency, 2014. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2012.

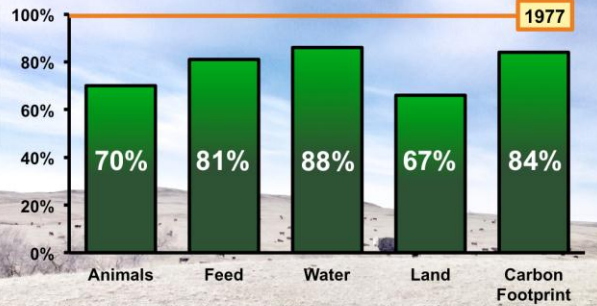
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Industry and farmers

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Environmental Impact of U.S. Beef Production has been Reduced by Improved Productivity



Examples of Agriculture Innovations

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Innovations in agriculture technology help to use fewer resources, including fertilizer, pesticides, 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



Precision Ag Technology





- Educate
- Advocate
- Communicate

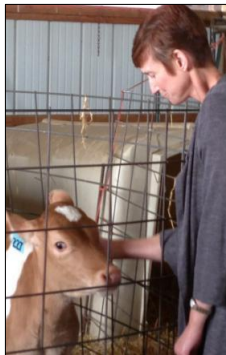
Educate:
Hold an event connecting RDs and Farmers

Maryland RDNs Connect with Farm Women through Common Ground™



Educate:
Hold an event connecting RDs and Farmers

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



Educate:
Hold an event connecting RDs and Processors

2014 Wheat Foods Council "Wheat Safari"



Educate:
Hold an event connecting RDs and Researchers

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2014 California Beef Council Beef Sustainability Event



Dr. Frank Mitloehner, UC Davis

Beef Sustainability CE Event
Attendees



Educate:
Get involved and learn more

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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
Future of Food Initiative

New toolkit (release date 3-2-15)

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

 Academy of Nutrition and Dietetics Foundation
Future of Food Initiative

New toolkit (release date 3-2-15)

Smart Choices. For a Healthy Planet.



About the Mini-Grants:

- Mini-grant application 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"

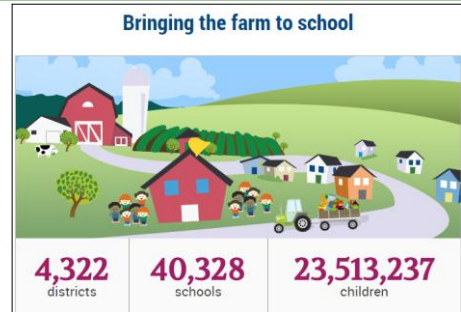
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www.agclassroom.org

Educate:
Volunteer for Farm to School programs

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www.fns.usda.gov/farmentoschool

Advocate:
Promote grower-buyer expos

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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:

To 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

Together:

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



Photo credit: Northern Colorado Food Cluster

Advocate:

Participate in public policy efforts



- 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 efforts, cont'd



The screenshot shows the Academy of Nutrition and Dietetics website. The header includes the logo and navigation links. The main content area is titled "The Academy Member Center" and features a "WELCOME TO THE GRASSROOTS MANAGER" section. Below this, there is a "WELCOME TO THE GRASSROOTS MANAGER" section with a "WELCOME TO THE GRASSROOTS MANAGER" heading and a "WELCOME TO THE GRASSROOTS MANAGER" sub-heading. There is also a "WELCOME TO THE GRASSROOTS MANAGER" section with a "WELCOME TO THE GRASSROOTS MANAGER" heading and a "WELCOME TO THE GRASSROOTS MANAGER" sub-heading. The page also includes a "WELCOME TO THE GRASSROOTS MANAGER" section with a "WELCOME TO THE GRASSROOTS MANAGER" heading and a "WELCOME TO THE GRASSROOTS MANAGER" sub-heading.

Communicate:

Promote the Food Waste Challenge!



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:

Host a "Farm to Table" dinner



Communicate:
Volunteer in your local community

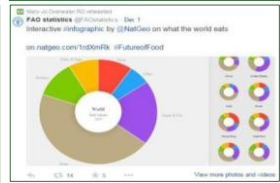
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California State University, Sacramento students volunteering at a "Nutrition Fuels Fitness" race. Race proceeds benefited local organizations working to reduce childhood obesity.

Communicate:
Engage in social media

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Communicate:
Share reputable resources

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



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

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



Food and Agriculture Organization of the United Nations
www.fao.org

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

Thank you!

Questions?

