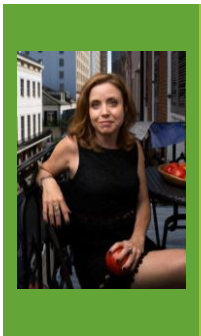


1-CEU WEBINAR PRESENTATION

The Sustainability and Nutrition Connection



Presented by Danielle Nierenberg, founder of FoodTank, and Chris Vogliano, MS, RD



Danielle Nierenberg

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 @DaniNierenberg, #FoodTank
 www.foodtank.com



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Food Tank: The Food Think Tank



- ❖ Fastest Growing Nonprofit in the Food Movement
- ❖ Highlight what's working on the ground both domestically and internationally
- ❖ Providing platform for individuals and organizations to learn more about:
 - Sustainable agriculture
 - Climate change
 - Food loss and waste
 - Role of youth and women in the food system
 - Nutrient dense agriculture
 - True cost accounting



Food Waste



- ❖ Up to 40 percent of food is wasted
- ❖ Two-thirds of residential food waste is edible
- ❖ Top Reasons for tossing:
 - Food was considered spoiled
 - People did not want to eat leftovers
 - 79 percent think they produce less waste than av
- ❖ Average family could save US \$2,200 annually
- ❖ FAO estimates that wasted food could feed every hungry person in the world —four times over



Food Waste Reduction Efforts



- ❖ "Save The Food" Campaign
- ❖ Better meal planning
- ❖ Standardized date labeling
- ❖ Food recovery/donation
- ❖ Upcycling for insect/animal feed
- ❖ Compost and urban gardening



Farm Bill



- ❖ Covers federal farm, food, fiber, forestry, and rural policies/programs
- ❖ SNAP might face cuts
- ❖ Conservation programs might face cuts
- ❖ USDA and EPA set goal of reducing food waste by half by 2030



Other U.S. Legislation



"Everyone who cares about the quality of the air we breathe, the water we drink, and the food we eat has an interest in reforming federal farm policy." -Earl Blumenauer

- ❖ The Food Date Labeling Act (waiting reintroduction)
- ❖ The Food Recovery Act (H.R. 3444, S. 1680)
- ❖ Urban Agriculture Act of 2016 (S. 3420)
- ❖ Organic Farmer and Consumer Protection Act (H.R. 3871)
- ❖ Organic Agriculture Research Act (H.R. 2436)
- ❖ The Food and Farm Act (waiting introduction)
- ❖ Zero Waste Development and Expansion Act (H.R. 1034)



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Other U.S. Activities



- ❖ Sonny Perdue appointed Sec. of USDA
- ❖ Organic Livestock and Poultry Practices Rule in National Organic Program threatened
- ❖ Agricultural water requirements delayed while Des Moines suffers
- ❖ Nationwide growing interest in CSAs, urban agriculture



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In The News



- ❖ [Grabbing the bull by the horns: it's time to cut industrial meat and dairy to save the climate](#)
GRAIN, January 30, 2017
- ❖ [115th Congress Starts Farm Bill Discussions by Focusing on the Farm Economy](#)
Illinois Farm Policy News, February 16, 2017
- ❖ [More Than 10 Percent of World's Population Is Obese, Study Finds](#)
The New York Times, June 12, 2017

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In The News



- ❖ [World hunger again on the rise, driven by conflict and climate change, new UN report says](#)
Food and Agriculture Organization of the United Nations, September 15, 2017
- ❖ [The evidence is clear: insecticides kill bees. The industry denials look absurd](#)
The Guardian, July 3, 2017
- ❖ [Statement from FDA Commissioner Scott Gottlieb, M.D., on the FDA's role in ensuring Americans have access to clear and consistent calorie and nutrition information; forthcoming guidance will provide greater clarity and certainty](#)
U.S. Food & Drug Administration, August 25, 2017
- ❖ [Glyphosate Listed Effective July 7, 2017, as Known to the State of California to Cause Cancer](#)
OEHHA, June 26, 2017

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Current Dietary Guidelines



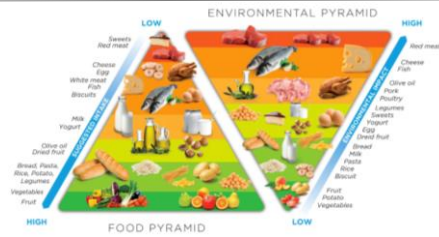
- ❖ New Dietary Guidelines released in 2016
- ❖ Dietary Guidelines Advisory Committee 2015 scientific report
 - **Consistent evidence** indicates that, in general, a dietary pattern that is **higher in plant-based foods**, such as vegetables, fruits, whole grains, legumes, nuts, and seeds, and lower in animal-based foods is **more health promoting** and is associated with **lesser environmental impact** (GHG emissions and energy, land, and water use) than is the current average U.S. diet."



The guidelines are "a betrayal of the diligent work of nutrition scientists, and a willful sacrifice of public health on the altar of profit for well-organized special interests."
-David Katz, founder of the True Health Initiative

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The BCFN Double Pyramid



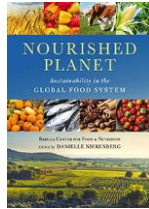
The double pyramid for growing children and adolescents
BDN, 2015.

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Nourished Planet



- ❖ Collaboration with Barilla Center for Food & Nutrition (BCFN)
- ❖ Current global food system undermines human and environmental health
 - Obesity paired with malnutrition
 - Crops for animal feed and biofuels
 - 30 percent of food wasted while 795 million are malnourished
- ❖ Draws on renowned international experts to develop global plan for sustainably feeding ourselves



Nourished Planet: Food for All



We need government and NGOs to:

- ❖ Invest in research and technical support
- ❖ Introduce nutritious diets
- ❖ Foster the use of environmentally friendly practices and appropriate technologies
- ❖ Provide training in management skills

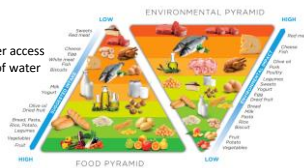


Nourished Planet: Food for Sustainable Growth



Action Plan:

- ❖ Use the Double Pyramid
- ❖ Address water scarcity
 - Develop more democratic policies on water access
 - Increase the productive and efficient use of water
- ❖ Combat climate change
 - Switch to sustainable sources of energy
 - Small changes to diets
- ❖ Reengineer agricultural system
 - Soil regeneration
 - Reduce synthetic fertilizers
 - Train and educate farmers in more sustainable practices



Nourished Planet: Food for Health



Eaters can take control of their health and their future by:

- ❖ Encouraging good behaviors and lifestyles early in a child's life
- ❖ Monitoring a child's exposure to food and beverage advertising
- ❖ Maintaining a healthy diet and an active lifestyle throughout the child's life
- ❖ Recognizing the "true costs" of foods and trying to make the best food choices possible for their own health, the health of the foods' producers, and the health of the planet



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Nourished Planet: Food for Culture



Action Plan:

- ❖ Research indigenous and traditional foods
- ❖ Rethink meat and other animal products
 - Focus on breeds that are hardy and resistant to drought and disease
 - Consumer focus on quality, health, sustainability, and humane treatment
- ❖ End land grabbing
- ❖ Value the work of women
- ❖ Value the Mediterranean Diet
- ❖ Value the roles of farmers



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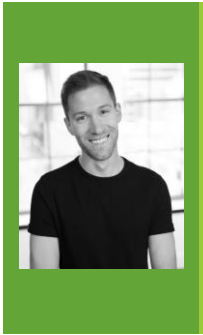
Thank You!



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Chris Vogliano, MS, RDN

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- ❖ **PhD Student**
 - Sustainable Food Systems
 - Massey University, New Zealand
- ❖ **Leadership Positions**
 - Nutrition Policy Council – Northwest Harvest Food Bank Council on Future Practice – Academy of Nutrition and Dietetics
- ❖ **Speaker's Bureau**
 - Vegetarian Nutrition DPG
 - Hunger and Environmental DPG

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Can a Sustainable Diet Also be Nutritious?

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What's Good for Us is Good for the Planet, Too ^{1,2}

- ❖ Diets can be healthy for people while reducing our greenhouse gas emissions
- ❖ Dietary greenhouse gas reductions ≤30 % were compatible with
 - Nutritional adequacy
 - Affordability
 - No major food group shifts

1. Springmann M, Godfray HCJ, Rayner M, Scarborough P (2016b). Analysis and valuation of the health and climate change cobenefits of dietary change. *Proceedings of the National Academy of Sciences of the United States of America* (PNAS). 113(15): 4346-4351.

2. Perignon, Marlene, et al. "How low can dietary greenhouse gas emissions be reduced without impairing nutritional adequacy, affordability and acceptability of the diet? A modelling study to guide sustainable food choices." *Public health nutrition* (2016): 1-13.

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Top 3 Ways to Make Our Diets More Sustainable



#1 Option for Sustainable Protein

TOP 3 WAYS TO MAKE OUR DIETS MORE SUSTAINABLE



GHG Emissions of Protein

❖ The scientific literature is clear. Eating more sustainable sources of protein can improve our health and ease our impact on the planet.



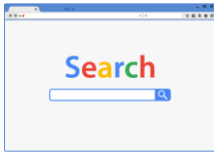
* Higher GHG values associated with agricultural production. Better study these products than best case change.

World Resources Institute. www.wri.org/resources/data-visualization/protein-scorecard



Aim to Eat Sustainable Seafood

Seafood Search at <http://www.seafoodwatch.org>



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Give Your Meals a Plant Slant



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Steak Dinner



Salmon Dinner

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Beef/Pork Tacos

Fish Tacos

Black Bean Tacos





Hamburger



Blender Burger



The Blended Burger Project™

The **Blended Burger Project™** is a movement in partnership with the James Beard Foundation to make burgers better by blending mushrooms with meat – creating a more delicious, nutritious and sustainable burger.

www.Blenditarian.com



Health Care Without Harm

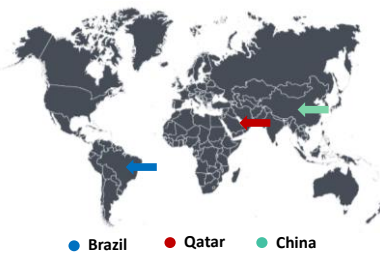
- ❖ Working with hospitals to procure higher quality meat, and less of it.
- Buying meat free from non-therapeutic usage of antibiotics
- More plant-based protein options
- ✓ Use meat as a condiment

Redefining Protein
 ADJUSTING DIETS TO PROTECT PUBLIC HEALTH AND CONSERVE RESOURCES

<https://noharm-uscanada.org/RedefiningProtein>

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Global Dietary Guidelines: Promoting Sustainable Protein



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BDA (The Association of UK Dietitians) Policy Statement – Sustainable Diets

British Dietetic Association

- ❖ "Sustainability should form part of dietetic training for all dietitians, be they in a clinical or public health role."
- ❖ "Meat and dairy products are leading contributors to Green House Gas (GHG) emissions and other environmental impacts and emphasis should be on reduction of meat (red and processed meat in particular) and processed meat products (PMP)... and replaced with appropriate plant based proteins such as beans and pulses, and plant based dairy alternatives."

British Dietetic Association: Policy Statement on Sustainable Diets (2017)

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Council on Future Practice

- ❖ Future visioning report 2017
- ❖ "Meat and dairy make the greatest dietary contribution to greenhouse gas emissions, with a substantial loss of caloric efficiency since they require the growth of crops to feed livestock."
- ❖ "Mediterranean, pescatarian, and vegetarian diets have the potential to reduce chronic disease rates, global greenhouse gas emissions, and land clearing."

Kicklighter, Jana R., et al. "Visioning report 2017: A preferred path forward for the nutrition and dietetics profession." *Journal of the Academy of Nutrition and Dietetics* 117.1 (2017): 110-127.

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#2 Promote Dietary Biodiversity

TOP 3 WAYS TO MAKE OUR DIETS MORE SUSTAINABLE

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Food Biodiversity ^{1,2}

- ❖ Is the diversity of plants, animals and other organisms used for food, both cultivated and from the wild.
- ❖ Is a critical element in response to global nutrition security and towards sustainable food systems.



1. Frison, Emile A., Jeremy Cherfas, and Toby Hodgkin. "Agricultural biodiversity is essential for a sustainable improvement in food and nutrition security." *Sustainability* 3.1 (2011): 238-253.
 2. Kennedy, G., et al. "Agricultural biodiversity for healthy, diverse diets." *Biodiversity International*, 2016.

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#3 Reduce Food Waste

TOP 3 WAYS TO MAKE OUR DIETS MORE SUSTAINABLE

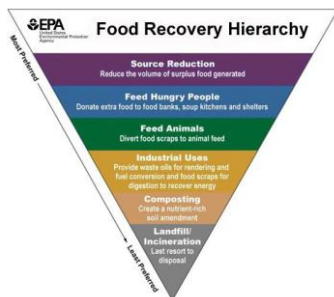


Food Waste Facts

- ❖ One third of the global food supply ends up being lost or wasted. ¹
 - Number is even higher for developed countries like America ²
- ❖ 1,250 calories per person per day is being wasted
- ❖ Food waste accounts for 2.6% of all U.S. Greenhouse gas emissions annually ³
 - That's ~37 million passenger vehicles worth

1. Gustavsson, J., Cederberg, C., Sonesson, U., Van Otterdijk, R., & Meybeck, A. (2011). Global food losses and food waste. *Food and Agriculture Organization of the United Nations, Rome*.
 2. <https://www.usda.gov/soe/foodwaste/facts.htm>
 3. <https://www.epa.gov/sites/default/files/updates/2012-report.pdf>





US Environmental Protection Agency Web site: <http://www.epa.gov/sustainable-management-food/food-recovery-hierarchy>. Accessed February 15, 2016.

Consumer At-Home Strategies

- ❖ Shop the fridge first, and make a list
- ❖ Eat leftovers
- ❖ Study your trash
- ❖ Use smaller dishes (portion control)
- ❖ Buy frozen fruits and vegetables
- ❖ Fridge 101 – organize, properly cool, and utilize FIFO
 - Download the A-Z Food Storage Guide from makedirtnotwaste.org
 - Check out [the Produce for Better Health Fruit and Veggie Storing Guide](#)



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Help Decode the Label

- ❖ Standardizing food date labels
 - Over 90% of consumers throw out food too early, leading to massive food waste¹
- ❖ Solutions
 - Consumer education on what sell by, use by, best by actually mean
 - <http://www.stilltasty.com/>
 - Some manufacturers have experimented with adding “freeze by”, or “best if used by” language onto packaging to encourage customers to take active steps to preserve food in the freezer instead of throwing it in the trash



<http://www.refcd.com/solutions/standardized-date-labeling>

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Summary

Top 3 ways to make our diets more sustainable:

1. Choose Sustainable Protein Options
2. Promote Dietary Biodiversity
3. Reduce Wasted Food



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Food Waste Resources

Natural Resource Defence Council

Wasted: 2nd Edition (2017)

<https://www.nrdc.org/sites/default/files/wasted-2017-report.pdf>



Environmental Protection Agency (EPA)

Food - Too good to Waste: Implementation Guide and Toolkit

<https://www.epa.gov/sustainable-management-food>

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Food Waste Resources, Cont.

Academy of Nutrition and Dietetics Foundation

The State of America's Wasted Food and Opportunities to make a difference

www.eatrightpro.org

ReFED

Is a multi-stakeholder non-profit organization that uses data to drive change by promoting top solutions to reducing food waste

www.refed.com

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Organizations Focused on Sustainable Diets

- ❖ CGIAR Research Program on Agriculture for Nutrition and Health
- ❖ Food and Agriculture Organization of the United Nations
- ❖ Health Care Without Harm
- ❖ World Resources Institute



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BCFN: Sustainable Diet Publications



<https://www.barillaefn.com/en/publications/>

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Thank You!

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Credit Claiming

You must complete a brief evaluation of the program in order to obtain your certificate. The evaluation will be available for one year; you do not need to complete it on January 24, 2018.

Credit Claiming Instructions:

1. Go to CE.TodaysDietitian.com/NutritionConnection OR log on to CE.TodaysDietitian.com, go to "My Courses" and click on the webinar title.
2. Click "Take Course" on the webinar description page.
3. Select "Start/Resume Course" to complete and submit the evaluation.
4. Download and print your certificate.

Please Note: If you access the Evaluation between 3-4 pm ET on January 24, you may experience a slow connection due to a high volume of users.

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