

## Reference List

### Title:

Sustainable Food Systems Master Class, by Sharon Palmer, MSFS, RDN, Chris Vogliano, MS, RD, Kate Geagan, MS, RD, and Sherene Chou, MS, RD

### References:

#### Part 1: A Food System Transformation

1. International Food Information Council Foundation. 2018 Food & Health Survey. <https://foodinsight.org/wp-content/uploads/2018/05/2018-FHS-Report-FINAL.pdf>. Accessed April 22, 2020.
2. Agriculture and the environment: changing pressures, solutions and trade-offs. Food and Agriculture Organization of the United Nations website. <http://www.fao.org/3/y4252e/y4252e14.htm>. Accessed May 4, 2020.
3. Amadeo K. Farm subsidies with pros, cons, and impact: how farm subsidies affect you. The Balance website. <https://www.thebalance.com/farm-subsidies-4173885>. Updated July 4, 2019. Accessed May 4, 2020.
4. Food and Agriculture Organization of the United Nations; Biodiversity International. Sustainable diets and biodiversity: directions and solutions for policy, research and action. <http://www.fao.org/3/i3004e/i3004e.pdf>. Published November 2010. Accessed April 22, 2020.
5. World Health Organization. Children's health and the environment. <https://www.who.int/ceh/capacity/Pesticides.pdf>. Updated July 2008. Accessed May 4, 2020.
6. Dimitri C, Effland A, Conklin N. The 20th century transformation of U.S. agriculture and farm policy. United States Department of Agriculture, Economic Research Service website. <https://www.ers.usda.gov/publications/pub-details/?pubid=44198>. Published June 1, 2005. Accessed April 22, 2020.
7. Donley N. The USA lags behind other agricultural nations in banning harmful pesticides. *Environ Health*. 2019;18(1):44.
8. British Dietetic Association; One Blue Dot. Eating patterns for health and environmental sustainability: a reference guide for dietitians. <https://forwardeating.org/wp-content/uploads/2019/05/One-Blue-Dot-BDA.pdf>. Published November 2018. Accessed April 22, 2020.
9. Ervin RB, Ogden CL. Consumption of added sugars among U.S. adults, 2005-2010. *NCHS Data Brief*. 2013;(122):1-8.
10. Frequently asked questions. United States Department of Agriculture, Office of the Chief Economist website. <https://www.usda.gov/oce/foodwaste/faqs.htm>. Accessed April 22, 2020.
11. Food and Agriculture Organization of the United Nations; Centre for Indigenous Peoples' Nutrition and Environment. Indigenous peoples' food systems & well-being: interventions & policies for healthy communities. <http://www.fao.org/3/i3144e/i3144e.pdf>. Published 2013. Accessed April 22, 2020.
12. Martin E. 90% of Americans don't like to cook — and it's costing them thousands each year. *USA Today*. September 27, 2017. <https://eu.usatoday.com/story/money/personalfinance/2017/09/27/90-americans-dont-like-cook-and-its-costing-them-thousands-each-year/708033001/>. Accessed April 22, 2020.

13. Mejía NV, Reyes RP, Martínez Y, Carrasco O, Cerritos R. Implications of the Western diet for agricultural production, health and climate change [published December 20, 2018]. *Front Sustain Food Syst*. doi: 10.3389/fsufs.2018.00088.
14. Mozaffarian D, Rosenberg I, Uauy R. History of modern nutrition science — implications for current research, dietary guidelines, and food policy. *BMJ*. 2018;361:k2392.
15. Nourish Life. Nourish Food System Map. [https://www.nourishlife.org/pdf/Nourish\\_Food\\_System\\_Map\\_11x14.pdf](https://www.nourishlife.org/pdf/Nourish_Food_System_Map_11x14.pdf). Published 2014. Accessed May 4, 2020.
16. Ocean issues. Monterey Bay Aquarium Seafood Watch website. <https://www.seafoodwatch.org/ocean-issues>. Accessed April 22, 2020.
17. Poore J, Nemecek T. Reducing food's environmental impacts through producers and consumers. *Science*. 2018;360(6392):987-992.
18. Popkin BM, Adair LS, Ng SW. Global nutrition transition and the pandemic of obesity in developing countries. *Nutr Rev*. 2012;70(1):3-21.
19. Poti JM, Mendez MA, Ng SW, Popkin BM. Is the degree of food processing and convenience linked with the nutritional quality of foods purchased by US households? *Am J Clin Nutr*. 2015;101(6):1251-1262.
20. Routley N. Ranked: biggest fast food chains in America. Visual Capitalist website. <https://www.visualcapitalist.com/biggest-fast-food-chains-in-america/>. Published December 7, 2019. Accessed April 22, 2020.
21. Planetary boundaries research. Stockholm Resilience Centre website. <https://www.stockholmresilience.org/research/planetary-boundaries.html>. Accessed May 4, 2020.
22. Subsidizing waste: how inefficient US farm policy costs taxpayers, businesses, and farmers billions. Union of Concerned Scientists website. <https://www.ucsusa.org/resources/subsidizing-waste>. Published August 4, 2016. Accessed May 4, 2020.
23. Sustainable Development Goals. United Nations Foundation. [https://unfoundation.org/what-we-do/issues/sustainable-development-goals/?gclid=EAIaIQobChMIpZaV7eiQ6AIVD9NkCh18vwGWEAAYASAAEgLLV\\_D\\_BwE](https://unfoundation.org/what-we-do/issues/sustainable-development-goals/?gclid=EAIaIQobChMIpZaV7eiQ6AIVD9NkCh18vwGWEAAYASAAEgLLV_D_BwE). Accessed April 22, 2020.
24. Vapnek J, Pagotto I, Kwoka M; Food and Agriculture Organization of the United Nations. Designing national pesticide legislation. <http://www.fao.org/3/a-a1467e.pdf>. Published 2007. Accessed May 4, 2020.

## Part 2: Sustainable Diet Patterns

1. Aleksandrowicz L, Green R, Joy EJ, Smith P, Haines A. The impacts of dietary change on greenhouse gas emissions, land use, water use, and health: a systematic review. *PLoS One*. 2016;11(11):e0165797.
2. Buettner D. *The Blue Zones: 9 Lessons for Living Longer From the People Who've Lived the Longest*. 2<sup>nd</sup> ed. Washington, D.C.: National Geographic Society; 2012.
3. Burlingame B, Dernini S, eds. *Sustainable Diets: Linking Nutrition and Food Systems*. Boston, MA: CABI; 2019.
4. Convention on Biological Diversity. Cooperation with other conventions, international organizations and initiatives. <https://www.cbd.int/doc/meetings/wgri/wgri-05/official/wgri-05-08-en.pdf>. Published June 2014. Accessed April 2, 2020.
5. Dernini S, Berry EM. Mediterranean diet: from a healthy diet to a sustainable dietary pattern. *Front Nutr*. 2015;2:15.

6. Díaz S, Demissew S, Carabias J, et al. The IPBES Conceptual Framework — connecting nature and people. *Curr Opin Environ Sustain*. 2015;14:1-16.
7. Food and Agriculture Organization of the United Nations. Agriculture, forestry and other land use emissions by sources and removals by sinks. <http://www.fao.org/3/a-i3671e.pdf>. Published March 2014.
8. Food and Agriculture Organization of the United Nations. Estimating greenhouse gas emissions in agriculture: a manual to address data requirements for developing countries. <http://www.fao.org/3/a-i4260e.pdf>. Published 2015.
9. Food and Agriculture Organization of the United Nations. Food wastage footprint: impacts on natural resources. <http://www.fao.org/3/i3347e/i3347e.pdf>. Published 2013.
10. Food and Agriculture Organization of the United Nations. Tackling climate change through livestock: a global assessment of emissions and mitigation opportunities. <http://www.fao.org/3/a-i3437e.pdf>. Published 2013.
11. Food and Agriculture Organization of the United Nations; Biodiversity International. Sustainable diets and biodiversity: directions and solutions for policy, research and action. <http://www.fao.org/3/i3004e/i3004e.pdf>. Published November 2010. Accessed April 22, 2020.
12. Kicklighter JR, Dorner B, Hunter AM, et al. Visioning report 2017: a preferred path forward for the nutrition and dietetics profession. *J Acad Nutr Diet*. 2017;117(1):110-127.
13. Melina V, Craig W, Levin S. Position of the Academy of Nutrition and Dietetics: vegetarian diets. *J Acad Nutr Diet*. 2016;116(12):1970-1980.
14. Perignon M, Masset G, Ferrari G, 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 Nutr*. 2016;19(14):2662-2674.
15. Searchinger T, Waite R, Hanson C, Ranganathan J, Dumas P, Matthews E. Creating a sustainable food future: a menu of solutions to feed nearly 10 billion people by 2050. World Resources Institute website. <https://www.wri.org/publication/creating-sustainable-food-future>. Published December 2018.
16. Springmann M, Godfray HCJ, Rayner M, Scarborough P. Analysis and valuation of the health and climate change cobenefits of dietary change. *Proc Natl Acad Sci U S A*. 2016;113(15):4146-4151.
17. Springmann M, Clark M, Mason-D'Croz D, et al. Options for keeping the food system within environmental limits. *Nature*. 2018;562(7728):519-525.
18. What is happening to agrobiodiversity? Food and Agriculture Organization of the United Nations website. <http://www.fao.org/3/y5609e/y5609e02.htm#bm2>. Accessed March 23, 2020.
19. Whitmee S, Haines A, Beyrer C, et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation-Lancet Commission on planetary health. *Lancet*. 2015;386(10007):1973-2028.
20. World Health Organization; Food and Agriculture Organization of the United Nations. Sustainable healthy diets: guiding principles. <http://www.fao.org/3/ca6640en/ca6640en.pdf>. Published 2019.

### Part 3: Food Systems for All

1. HEAL Food Alliance website. <https://healfoodalliance.org/>. Accessed May 4, 2020.
2. World Health Organization; Food and Agriculture Organization of the United Nations. Sustainable healthy diets: guiding principles. <http://www.fao.org/3/ca6640en/ca6640en.pdf>. Published 2019.
3. Burke J, Spiller K. Food Solutions New England: racial equity, food justice, and food system transformation. *J Agric Food Syst Community Dev*. 2015;(4):1-7.

4. Food Chain Workers Alliance. The hands that feed us. <https://foodchainworkers.org/wp-content/uploads/2012/06/Hands-That-Feed-Us-Report.pdf>. Published June 6, 2012. Accessed May 4, 2020.
5. JBS International. Findings from the National Agricultural Workers Survey (NAWS) 2015-2016: a demographic and employment profile of United States Farmworkers. [https://www.doleta.gov/naws/research/docs/NAWS\\_Research\\_Report\\_13.pdf](https://www.doleta.gov/naws/research/docs/NAWS_Research_Report_13.pdf). Published January 2018. Accessed May 4, 2020.
6. Oxfam America. Lives on the line: the human cost of cheap chicken. <https://www.oxfamamerica.org/explore/research-publications/lives-on-the-line/>. Published 2015. Accessed May 4, 2020.
7. Sustainable Development Solutions Network; Barilla Center for Food & Nutrition. Sustainable agri-food system and eating patterns: enabling transformation. <https://www.barillacfn.com/m/publications/sustainable-agri-food-system-and-eating-patterns-sept2018.pdf>. Published 2018. Accessed May 4, 2020.
8. NRDC. CAFOs: what we don't know is hurting us. <https://www.nrdc.org/sites/default/files/cafos-dont-know-hurting-us-report.pdf>. Published September 2019. Accessed May 4, 2020.
9. Animal feeding operations. Centers for Disease Control and Prevention website. <https://www.cdc.gov/healthywater/other/agricultural/afo.html>. Updated October 11, 2016. Accessed May 4, 2020.
10. Immigrant worker safety and health in the poultry industry. Centers for Disease Control and Prevention. <https://www.cdc.gov/niosh/topics/poultry/immigrant.html>. Published April 8, 2014. Accessed May 4, 2020.
11. Canning P. Follow the food dollars. United States Department of Agriculture, Economic Research Service website. <https://www.ers.usda.gov/amber-waves/2017/october/follow-the-food-dollars/>. Published October 30, 2017. Accessed May 4, 2020.
12. Health Disparities & Inequalities Report 2013. Centers for Disease Control and Prevention website. <https://www.cdc.gov/minorityhealth/chdireport.html>. Updated November 26, 2013. Accessed May 4, 2020.
13. Hunger in America Study. Feeding American website. <https://www.feedingamerica.org/research/hunger-in-america>. Accessed May 4, 2020.
14. Seligman H, Schillinger D. Hunger and socioeconomic disparities in chronic disease. *N Engl J Med*. 2010;363(1):6-9.
15. Key statistics & graphics. United States Department of Agriculture, Economic Research Service website. <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics/>. Updated September 4, 2019. Accessed May 4, 2020.
16. Tilley G. Food insecurity is an LGBTQ+ issue—proposed SNAP rule would worsen disparities. California Food Policy Advocates website. <https://cfpa.net/food-insecurity-is-an-lgbtq-issue/>. Published March 21, 2019. Accessed May 4, 2020.
17. Coleman-Jensen A, Nord M. Disability is an important risk factor for food insecurity. United States Department of Agriculture, Economic Research Service website. <https://www.ers.usda.gov/amber-waves/2013/may/disability-is-an-important-risk-factor-for-food-insecurity>. Published May 6, 2013. Accessed May 4, 2020.
18. O'Toole TP, Roberts CB, Johnson EE. Screening for food insecurity in six Veterans Administration clinics for the homeless, June–December 2015. Centers for Disease Control and Prevention website. [https://www.cdc.gov/pcd/issues/2017/16\\_0375.htm](https://www.cdc.gov/pcd/issues/2017/16_0375.htm). Published January 12, 2017. Accessed May 4, 2020.
19. Majority of college students experience food insecurity, housing insecurity, or homelessness. Association of American Colleges & Universities website. <https://www.aacu.org/aacu->

- [news/newsletter/majority-college-students-experience-food-insecurity-housing-insecurity-or](#). Published 2019. Accessed May 4, 2020.
20. Who pays - the true cost of incarceration on families, Ella Baker Center for Human Rights, 2015. Prison Legal News website. <https://www.prisonlegalnews.org/news/publications/who-pays-true-cost-incarceration-families-ella-baker-center-human-rights-2015/>. Published February 11, 2016. Accessed May 4, 2020.
  21. Weinreb L, Wehler C, Perloff J, et al. Hunger: its impact on children's health and mental health. *Pediatrics*. 2002;110(4):e41.
  22. Gucciardi E, Vahabi M, Norris N, Del Monte J, Farnum C. The intersection between food insecurity and diabetes: a review. *Curr Nutr Rep*. 2014;3(4):324-332.
  23. USDA nutrition assistance programs. United States Department of Agriculture, National Agricultural Library website. <https://www.nal.usda.gov/fnic/usda-nutrition-assistance-programs>. Accessed May 4, 2020.
  24. A sustainable diet by 2030 is key to solving the climate emergency. C40 Cities website. [https://www.c40.org/press\\_releases/a-sustainable-diet-by-2030-is-key-to-solving-the-climate-emergency](https://www.c40.org/press_releases/a-sustainable-diet-by-2030-is-key-to-solving-the-climate-emergency). Published June 12, 2019. Accessed May 4, 2020.
  25. United States Department of Agriculture, The Farm to School Census website. <https://farmtoschoolcensus.fns.usda.gov/>. Accessed May 4, 2020.
  26. National Farm to School Network. The benefits of farm to school. <http://www.farmtoschool.org/Resources/BenefitsFactSheet.pdf>. Updated April 2017. Accessed May 4, 2020.
  27. Tufts University. Decoding food labels. <https://sustainability.tufts.edu/wp-content/uploads/Decoding-Food-Labels.pdf>. Published 2016. Accessed May 4, 2020.
  28. Fair Food Network. The 20% shift – infographic summary. [https://fairfoodnetwork.org/wp-content/uploads/2016/10/FFN\\_MI-20PercentShift-Infographic.pdf](https://fairfoodnetwork.org/wp-content/uploads/2016/10/FFN_MI-20PercentShift-Infographic.pdf). Published 2013. Accessed May 4, 2020.
  29. The Edible Schoolyard Project website. <https://edibleschoolyard.org/>. Accessed May 4, 2020.
  30. Crop biodiversity: use it or lose it. Food and Agriculture Organization of the United Nations website. <http://www.fao.org/news/story/en/item/46803/icode/>. Published October 26, 2010. Accessed May 4, 2020.
  31. Food Sovereignty. U.S. Food Sovereignty Alliance website. <http://usfoodsovereigntyalliance.org/what-is-food-sovereignty/>. Accessed May 4, 2020.
  32. Gordillo G, Jerónimo OM; Food and Agriculture Organization of the United Nations. Food security and sovereignty. <http://www.fao.org/3/a-ax736e.pdf>. Published 2013. Accessed May 4, 2020.
  33. What is food sovereignty. Food Secure Canada website. <https://foodsecurecanada.org/who-we-are/what-food-sovereignty>. Accessed May 4, 2020.
  34. Traditional diets. Oldways website. <https://oldwayspt.org/traditional-diets>. Accessed May 4, 2020.
  35. US Department of Health and Human Services. 2015–2020 Dietary Guidelines for Americans: Eighth Edition. <https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines/guidelines/>. Published January 7, 2016. Accessed May 4, 2020.

#### **Part 4: Next Generation Health Professional Frameworks**

1. Mintel announces three global food and drink trends for 2019. Mintel website. <https://www.mintel.com/press-centre/food-and-drink/mintel-announces-three-global-food-and-drink-trends-for-2019>. Published November 14, 2018. Accessed April 20, 2020.

2. Top 10 trend predictions for 2019. SPINS website. <https://www.spins.com/2019-trend-predictions/>. Published January 10, 2019. Accessed April 20, 2020.
3. International Food Information Council Foundation. Survey of consumers' attitudes and perceptions of environmentally sustainable and healthy diets. <https://foodinsight.org/wp-content/uploads/2019/09/EnvSus-Healthy-Research.pdf>. Published July 2019. Accessed April 20, 2020.
4. Institute of Medicine; National Research Council. A framework for assessing effects of the food system. <https://www.nap.edu/read/18846/chapter/1>. Published 2015.
5. The Culinary Institute of America; Harvard T.H. Chan School of Public Health. Menus of change: the business of healthy, sustainable, delicious food choices: 2019 annual report. [https://www.menusofchange.org/images/uploads/pdf/2019MOC\\_AnnualReport.pdf](https://www.menusofchange.org/images/uploads/pdf/2019MOC_AnnualReport.pdf). Published 2019. Accessed April 1, 2020.
6. British Dietetic Association; One Blue Dot. Eating patterns for health and environmental sustainability: a reference guide for dietitians. <https://forwardeating.org/wp-content/uploads/2019/05/One-Blue-Dot-BDA.pdf>. Published November 2018. Accessed April 22, 2020.
7. 2018 state of the world fisheries and aquaculture. Food and Agriculture Organization of the United Nations. <http://www.fao.org/state-of-fisheries-aquaculture>. Accessed May 2, 2020.
8. World Health Organization; Food and Agriculture Organization of the United Nations. Sustainable healthy diets: guiding principles. <http://www.fao.org/3/ca6640en/ca6640en.pdf>. Published 2019.
9. Garcia D, Galaz V, Daume S. EATLancet vs yes2meat: the digital backlash to the planetary health diet. *Lancet*. 2019;394(10215):2153-2154.
10. Global warming of 1.5 °C. The Intergovernmental Panel on Climate Change website. <https://www.ipcc.ch/sr15/>. Accessed April 1, 2020.
11. Nutrient pollution: sources and solutions. United States Environmental Protection Agency website. <https://www.epa.gov/nutrientpollution/sources-and-solutions>. Accessed April 25, 2020.
12. Nelson ME, Hamm MW, Hu FB, Abrams SA, Griffin TS. Alignment of healthy dietary patterns and environmental sustainability: a systematic review. *Adv Nutr*. 2019;7(6):1005-1025.
13. NOAA forecasts very large 'dead zone' for Gulf of Mexico. National Oceanic and Atmospheric Administration website. <https://www.noaa.gov/media-release/noaa-forecasts-very-large-dead-zone-for-gulf-of-mexico>. Updated June 12, 2019. Accessed April 25, 2020.
14. Nutrient pollution: infographic: what is nutrient pollution? United States Environmental Protection Agency website. <https://www.epa.gov/nutrientpollution/infographic-what-nutrient-pollution>. Accessed May 1, 2020.
15. Ranganathan J, Vennard D, Waite R, et al. Shifting diets for a sustainable food future. [https://wriorg.s3.amazonaws.com/s3fs-public/Shifting\\_Diets\\_for\\_a\\_Sustainable\\_Food\\_Future\\_1.pdf](https://wriorg.s3.amazonaws.com/s3fs-public/Shifting_Diets_for_a_Sustainable_Food_Future_1.pdf). Published April 2016. Accessed May 5, 2020.
16. Raworth K. A doughnut for the Anthropocene: humanity's compass in the 21st century. *Lancet Planet Health*. 2017;1(2):e48-e49.
17. Richie H, Roser M. Environmental impacts of food production. Our World in Data website. <https://ourworldindata.org/environmental-impacts-of-food>. Published January 2020. Accessed April 29, 2020.
18. Rockström J, Steffen W, Noone K, et al. Planetary boundaries: exploring the safe operating space for humanity. *Ecol Soc*. 2009;14(2):32.

19. Health Care Without Harm. Redefining protein: adjusting diets to protect public health and conserve resources. [https://noharm-uscanada.org/sites/default/files/documents-files/4679/Redefining%20Protein%20Report\\_4-13-17.pdf](https://noharm-uscanada.org/sites/default/files/documents-files/4679/Redefining%20Protein%20Report_4-13-17.pdf). Published April 2017.
20. Scavia D, Bertain I, Obenour DR, Turner RE, Forrest DR, Katin A. Ensemble modeling informs hypoxia management in the northern Gulf of Mexico. *Proc Natl Acad Sci U S A*. 2017;114(33):8823-8828.
21. Sushi. Monterey Bay Aquarium Seafood Watch website. <https://www.seafoodwatch.org/seafood-recommendations/sushi>. Accessed May 1, 2020.
22. Tagtow A, Robien K, Bergquist E, et al. Academy of Nutrition and Dietetics: standards of professional performance for registered dietitian nutritionists (competent, proficient, and expert) in sustainable, resilient and healthy food and water systems. *J Acad Nutr Diet*. 2014;114(3):475-488.e24.
23. National Restaurant Association. What's hot: 2020 culinary forecast. [https://restaurant.org/Downloads/PDFs/Research/Whats\\_Hot\\_2020.pdf](https://restaurant.org/Downloads/PDFs/Research/Whats_Hot_2020.pdf). Accessed April 20, 2020.
24. Whitmee S, Haines A, Beyrer C, et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation-Lancet Commission on planetary health. *Lancet*. 2015;386(10007):1973-2028.
25. Willett W, Rockström J, Loken B, et al. Food in the Anthropocene: the Eat-Lancet Commission on healthy diets from sustainable food systems. *Lancet*. 2019;393(10170):447-492.
26. World Wildlife Fund. Eating for 2 degrees: new and updated Livewell plates, revised edition. [https://www.wwf.org.uk/sites/default/files/2017-09/WWF\\_Livewell\\_Plates\\_Full\\_Report\\_Sept2017\\_Web.pdf](https://www.wwf.org.uk/sites/default/files/2017-09/WWF_Livewell_Plates_Full_Report_Sept2017_Web.pdf). Published August 2017. Accessed April 10, 2020.
27. World Resources Institute. Creating a sustainable food future: a menu of solutions to feed nearly 10 billion people by 2050. [https://wrr-food.wri.org/sites/default/files/2019-07/WRR\\_Food\\_Full\\_Report\\_0.pdf](https://wrr-food.wri.org/sites/default/files/2019-07/WRR_Food_Full_Report_0.pdf). Published July 2019. Accessed April 1, 2020.

#### **Part 5: The Future of Food: Ancient Wisdom Meets Innovation**

1. Schipanski ME, MacDonald GK, Rosenzweig S, et al. Realizing resilient food systems. *BioScience*. 2016;66(7):600-610.
2. Lal R. Soil carbon sequestration impacts on global climate change and food security. *Science*. 2004;304(5677):1623-1627.
3. Rodale Institute. The Farming Systems Trial: celebrating 30 years. <https://rodaleinstitute.org/wp-content/uploads/fst-30-year-report.pdf>. Published 2011.
4. Forman J, Silverstein J; Committee on Nutrition and Council on Environmental Health. Organic foods: health and environmental advantages and disadvantages. *Pediatrics*. 2012;130(5):e1406-e1415.
5. Hertz-Picciotto I, Sass JB, Engel S, et al. Organophosphate exposures during pregnancy and child neurodevelopment: recommendations for essential policy reforms. *PLoS Med*. 2018;15(10):e1002671.
6. HEN organic food talking points. Hunger and Environmental Nutrition Dietetic Practice Group website. <https://hendpg.org/resources/organic-food-talking-points>. Accessed April 28, 2020.
7. Lori M, Symnack S, Mäder P, De Deyn G, Gattinger A. Organic farming enhances soil microbial abundance and activity-a meta-analysis and meta-regression. *PLoS One*. 2017;12(7):e0180442.
8. Mie A, Andersen HR, Gunnarsson S, et al. Human health implications of organic food and organic agriculture: a comprehensive review. *Environ Health*. 2017;16(1):111

9. Kummeling I, Thijs C, Huber M, et al. Consumption of organic foods and risk of atopic disease during the first 2 years of life in the Netherlands. *Br J Nutr*. 2008;99(3):598-605.
10. Curl CL, Beresford SA, Fenske RA, et al. Estimating pesticide exposure from dietary intake and organic food choices: the Multi-Ethnic Study of Atherosclerosis (MESA). *Environ Health Perspect*. 2015;123(5):475-483.
11. Reiss R, Johnston J, Tucker K, DeSesso JM, Keen CL. Estimation of cancer risks and benefits associated with a potential increased consumption of fruits and vegetables. *Food Chem Toxicol*. 2012;50(12):4421-4427.
12. Surveys: organic agriculture. United States Department of Agriculture, National Agricultural Statistics Service website. [https://www.nass.usda.gov/Surveys/Guide\\_to\\_NASS\\_Surveys/Organic\\_Production/](https://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Organic_Production/). Updated May 11, 2020.
13. United States Department of Agriculture, Agricultural Marketing Service. Introduction to organic practices. <https://www.ams.usda.gov/sites/default/files/media/Organic%20Practices%20Factsheet.pdf>. Published September 2015.
14. Delate K, Cambardella C, Chase C, Turnbull R. A review of long-term organic comparison trials in the U.S. *Sustain Agric Res*. 2015;4(3):5-14.
15. Viel JF, Warembourg C, Le Maner-Idrissi G, et al. Pyrethroid insecticide exposure and cognitive developmental disabilities in children: The PELAGIE mother–child cohort. *Environ Int*. 2015;82:69-75.
16. Greene C, Ferreira G, Carlson A, Cooke B, Hitaj C. Growing organic demand provides high-value opportunities for many types of producers. United States Department of Agriculture, Economic Research Service website. <https://www.ers.usda.gov/amber-waves/2017/januaryfebruary/growing-organic-demand-provides-high-value-opportunities-for-many-types-of-producers/>. Published February 6, 2017. Accessed April 28, 2020.
17. United States Department of Agriculture, Economic Research Service. Agricultural resources and environmental indicators, 2019. <https://www.ers.usda.gov/webdocs/publications/93026/eib-208.pdf?v=2348.3>. Published May 2019. Accessed April 28, 2020.
18. Rethinking soil, reinvesting in our foundations. The Nature Conservancy website. <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/rethinking-soil-reinvesting-in-our-foundations/>
19. LaCanne CE, Lundgren JG. Regenerative agriculture: merging farming and natural resource conservation profitably. *PeerJ*. 2018;6:e4428.
20. Motta EVS, Raymann K, Moran NA. Glyphosate perturbs the gut microbiota of honey bees. *Proc Natl Acad Sci U S A*. 2018;115(41):10305-10310.
21. Stein MM, Hrusch CL, Gozdz J, et al. Innate immunity and asthma risk in Amish and Hutterite farm children. *N Engl J Med*. 2016;375:411-421.
22. Hanski I, von Hertzen L, Fyhrquist N, et al. Environmental biodiversity, human microbiota, and allergy are interrelated. *Proc Natl Acad Sci U S A*. 2012;109(21):8334-8339.
23. Lundell AC, Johansen S, Adlerberth I, Wold AE, Hesselmar B, Rudin A. High proportion of CD5 B cells in infants predicts development of allergic disease. *J Immunol*. 2014;193(2):510-518.
24. Rillig MC, Lehmann A, Lehmann J, Camenzind T, Rauh C. Soil biodiversity effects from field to fork. *Trends Plant Sci*. 2018;23(1):17-24
25. Global food and drink trends 2030. Mintel website. <https://www.mintel.com/global-food-and-drink-trends>. Accessed January 10, 2020.
26. Stull V, Finer E, Bergmans RS, et al. Impact of edible cricket consumption on gut microbiota in healthy adults, a double-blind, randomized crossover trial. *Sci Rep*. 2018;8(1):10762.



27. Food and Agriculture Organization of the United Nations; Wageningen UR. Edible insects: future prospects for food and feed security. <http://www.fao.org/3/i3253e/i3253e.pdf>. Published 2013.
28. Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC. Legislation.gov.uk website. <https://www.legislation.gov.uk/eudr/2001/18/contents#>. Published 2001.
29. Court of Justice of the European Union. Organisms obtained by mutagenesis are GMOs and are, in principle, subject to the obligations laid down by the GMO Directive. <https://curia.europa.eu/jcms/upload/docs/application/pdf/2018-07/cp180111en.pdf>. Published July 25, 2018. Accessed April 24, 2020.
30. Alvarez JB, Preble MG. Disrupting the meat industry: tissue culture beef. Harvard Business School website. <https://www.hbs.edu/faculty/pages/item.aspx?num=48239>. Updated March 2015.
31. Friends of the Earth. From lab to fork: critical questions on laboratory-created animal product alternatives. <https://1bps6437gg8c169i0y1drtgz-wpengine.netdna-ssl.com/wp-content/uploads/2018/06/From-Lab-to-Fork-1.pdf>. Published 2018.
32. Meat industry applauds USDA, FDA joint regulatory framework for cell-based meat products. <https://www.meatinstitute.org/index.php?ht=display/ReleaseDetails/i/154030/pid/287>. Published March 7, 2019. Accessed April 25, 2020.
33. Global Economy and Development at Brookings. The unprecedented expansion of the global middle class: an update. [https://www.brookings.edu/wp-content/uploads/2017/02/global\\_20170228\\_global-middle-class.pdf](https://www.brookings.edu/wp-content/uploads/2017/02/global_20170228_global-middle-class.pdf). Published February 2017.
34. Food and Agriculture Organization of the United Nations. World agriculture towards 2030/2050: the 2012 revision. <http://www.fao.org/3/a-ap106e.pdf>. Published June 2012.
35. Li XZ, Yan CG, Zan LS. Current situation and future prospects for beef production in China — a review. *Asian-Australas J Anim Sci*. 2018;31(7):984-991.
36. The Culinary Institute of America; Harvard T.H. Chan School of Public Health. Menus of change: the business of healthy, sustainable, delicious food choices: 2019 annual report. [https://www.menusofchange.org/images/uploads/pdf/2019MOC\\_AnnualReport.pdf](https://www.menusofchange.org/images/uploads/pdf/2019MOC_AnnualReport.pdf). Published 2019. Accessed April 25, 2020.
37. Health Care Without Harm. Redefining protein: adjusting diets to protect public health and conserve resources. [https://noharm-uscanada.org/sites/default/files/documents-files/4679/Redefining%20Protein%20Report\\_4-13-17.pdf](https://noharm-uscanada.org/sites/default/files/documents-files/4679/Redefining%20Protein%20Report_4-13-17.pdf). Published April 2017.
38. Reganold JP, Wachter JM. Organic agriculture in the twenty-first century. *Nature Plants*. 2016;2:15221.
39. Shew AM, Nalley LL, Snell HA, Nayga RM Jr, Dixon BL. CRISPR versus GMOs: public acceptance and valuation. *Glob Food Sec*. 2018;19:71-80.

## Part 6: Vision 2025

- 1.