

New Challenges in Food and Nutrition to Inform Policy

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FDA Congratulates and Thanks the Food and Nutrition Board!

- FDA uses the best available science to develop food and nutrition policies to protect and promote public health.
- FDA relies on numerous NASEM/IOM reports to guide its work
- Some notable ones guiding recent activity:
 - DRIs, most recently DRI for Sodium and Potassium
 - Strategies to reduce sodium intake in the U.S.
 - Fiber, inclusion of "beneficial physiological effects in humans"

Proceedings of a Workshop

IN BRIEF

December 2019

Innovations in the Food System: Exploring the Future of Food Proceedings of a Workshop—in Brief

On August 7–8, 2019, the Food Forum of the National Academies of Sciences, Engineering, and Medicine hosted a public workshop in Washington, DC, to review the status of current and emerging knowledge about innovations for modern food systems and the extent to which they are or could be designed to optimize environmental, health, social, and economic outcomes. The 1.5-day workshop included an opening session that provided a broad look at food systems, case studies in food system evolution from the federal government and private sector, and a closing discussion. The rest of the workshop was organized into six additional sessions, which focused on "game-changing innovations" and their implications for food systems, including those in 1) food production and processing; 2) alternative food production; 3) food distribution; 4) food marketing and food value chains; 5) food data and analytics; and 6) food access and affordability. This Proceedings of a Workshop—in Brief summarizes the key points made by workshop participants during the presentations and discussions and is not intended to provide a comprehensive summary of information shared during the workshop.¹ The views summarized here reflect the knowledge and opinions of individual workshop participants and should not be construed as consensus among workshop participants or the members of the Food Forum or the National Academies.



Innovation: For Nutrition/Better Health





Innovation: Novel Foods and Ingredients

- Plant proteins
- Cell-cultured meats
- Synthetic biology
- Biofermentation of microorgansims







Innovation: Biotechnology



- Genetic engineering/genome editing
- Implications for both safety and labeling
- Consumer confidence



Innovation: Analytical Science



As ability to detect trace levels of chemical contaminants in foods improves, how do we be sure consumers do not let concerns about low/trace levels of chemical contaminants deter consumption of otherwise healthy foods?

Innovation: Outbreak Investigation



FD)



Conclusion

- There is unprecedented innovation happening in the U.S. food supply
- FDA needs to continually evolve and innovate; FNB is a trusted partner that FDA relies on
- Whole genome sequencing has been game-changing for food safety; FDA will soon release a blueprint for a New Era of Smarter Food Safety that will take advantage of other innovative technologies such as blockchain, artificial intelligence, and machine learning to advance our mission

https://www.fda.gov/food/food-industry/new-era-smarter-food-safety

