

Session 1: Equity Challenges

PCAST Advancing Nutrition
Workshop

Jaapna Dhillon

Assistant Professor
Nutrition and Exercise Physiology
School of Medicine
College of Agriculture, Food and Natural Resources
University of Missouri-Columbia





Equity Challenges in Nutrition Science

- Equity in nutrition isn't just food access but tailored nutritional information for all.
- **Why equity matters in nutrition science:**
 - A lack of equity in nutrition science can lead to broad generalizations, which could exclude or misinform certain populations. Achieving equity ensures all populations benefit from advancements in nutrition research and can lead to better public health outcomes.
- Addressing disparities can enhance public health and shape the future of equitable nutrition science.

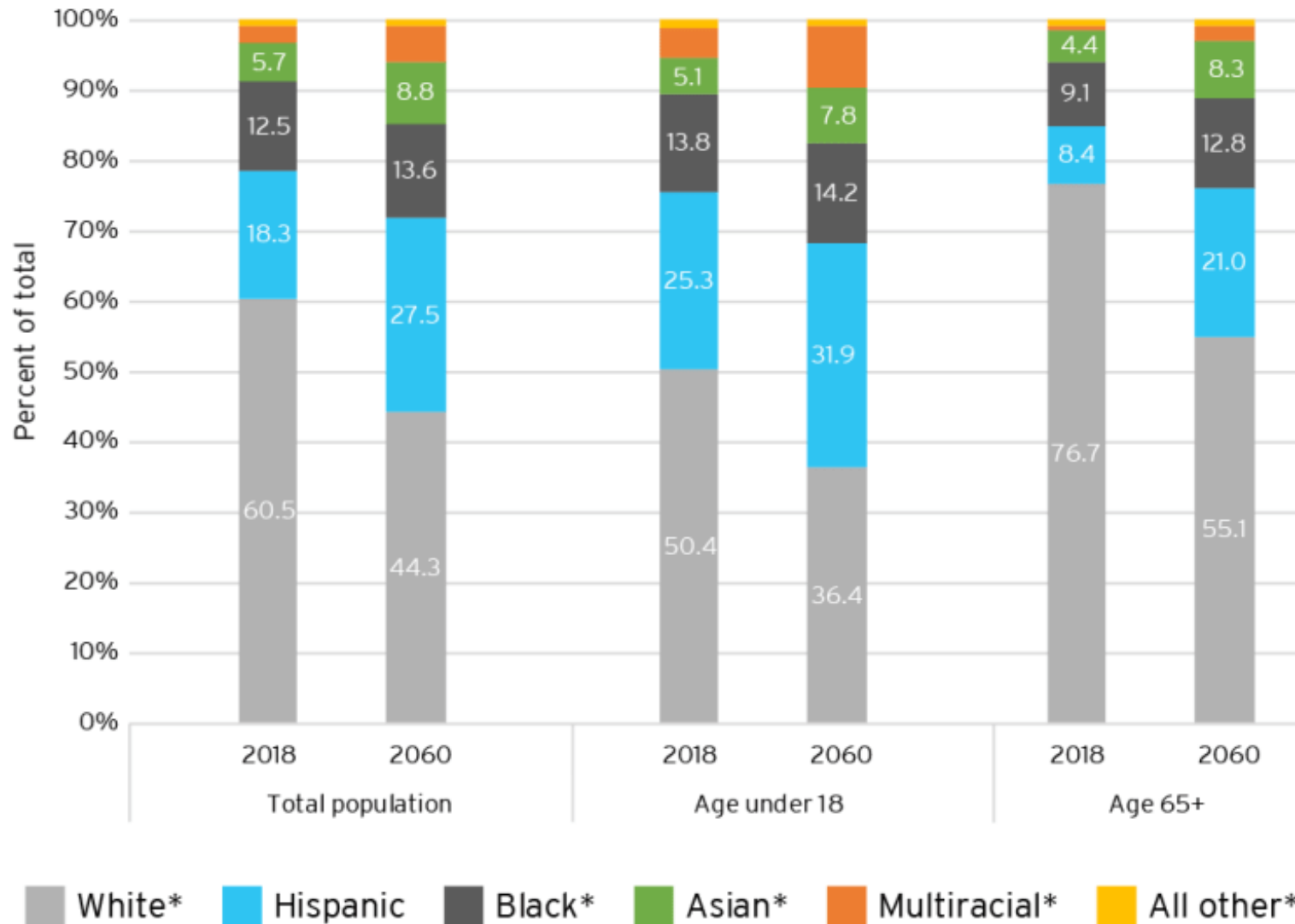
Disparities and Gaps in Nutrition Science

Many ethnicities and races are underrepresented in nutrition research studies despite having a higher burden of diet-related diseases.

GROUPS	DISEASE/CONDITION	COMPARATIVE LIKELIHOOD VS. NON-HISPANIC WHITES
Non-Hispanic Black	Hypertension	1.3 times more likely
	Diabetes	1.6 times more likely
	Obesity	1.3 times more likely
Hispanic	Diabetes	1.7 times more likely
	Obesity	1.2 times more likely
Asian Americans	Diabetes (despite lower body mass)	1.4 times more likely

❑ Moreover, there are differences within racial and ethnic subgroups as well

Projected Increase in US Ethnic/Racial Diversity



[2017 National Population Projections Tables: Main Series \(census.gov\)](https://www.census.gov/projections/2017-national-population-projections-tables-main-series.html)

Figure: <https://www.brookings.edu/articles/the-us-will-become-minority-white-in-2045-census-projects/>

*Non-Hispanic members

Future Direction Framework for Addressing Key Gaps in Nutrition Research Examining Ethnic or Racial Disparities in Health Outcomes

- 1) Conduct exploratory studies (cohort, case-control, cross-sectional) to expand the understanding of the dietary patterns of ethnic and racial minorities and their association with health outcomes, with emphasis on subgroup differences.
- 2) Design dietary interventions that reflect the eating patterns of ethnic and racial minorities and test their feasibility and acceptability among those groups and subgroups.
- 3) Test the efficacy of culturally sensitive dietary interventions at improving relevant health outcomes in robust clinical studies, paying strong consideration to contextual variables known to mediate eating behavior in the groups of interest.
- 4) Compare and contrast the adoption, maintenance, and effectiveness of dietary interventions on health outcomes between different ethnic and racial minorities to build evidence on approaches to mitigate diet-related health disparities.

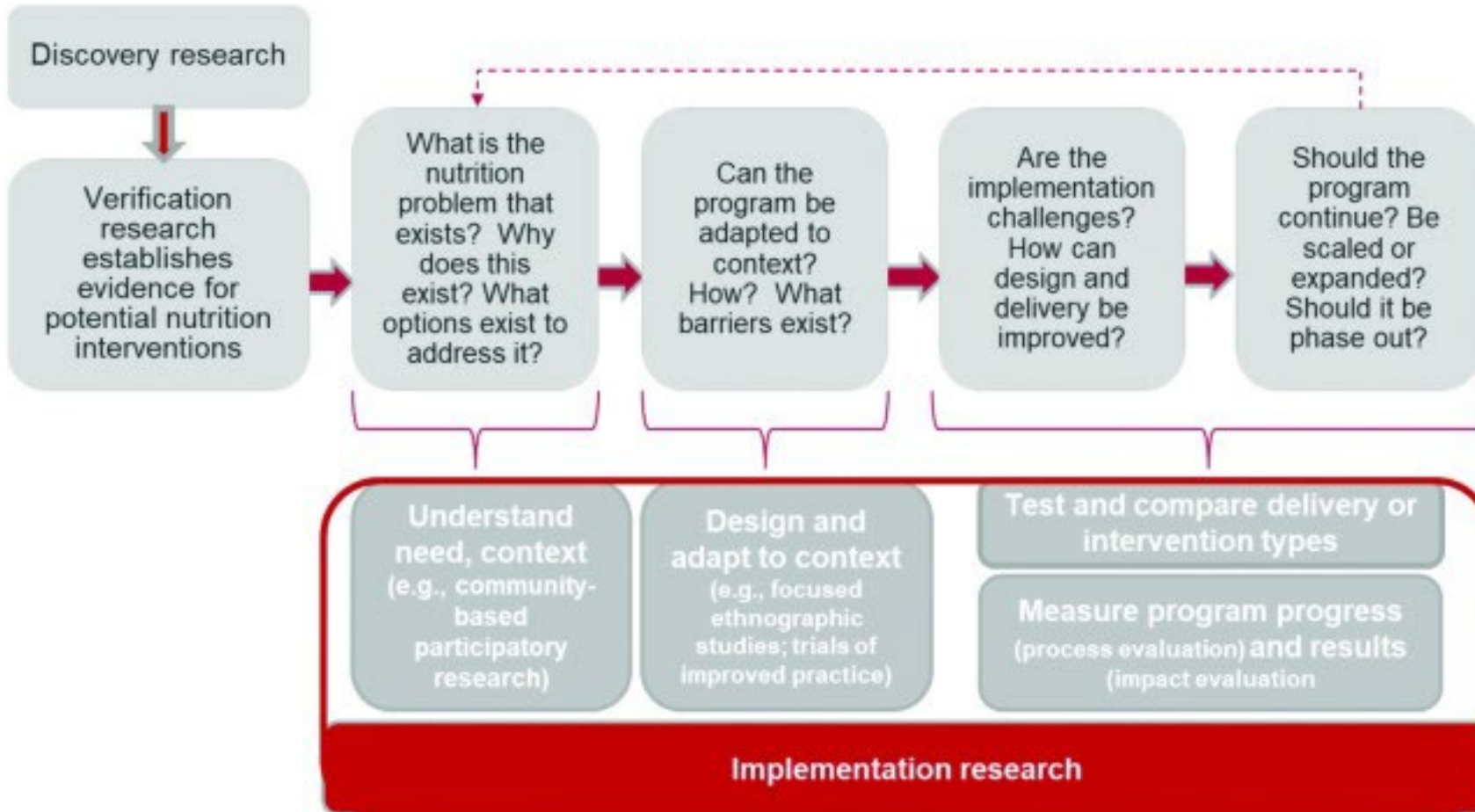
The Importance of Context in Nutrition Interventions

Global perspective: Many nutrition interventions are population-based. However, individual contexts play a huge role in their success.

Implementation research: This type of research has a direct purpose – to inform decisions for public health nutrition programs.

Addressing disparities: Utilizing implementation research becomes essential for equity in health outcomes, both in the U.S. and globally.

Mapping the Nutrition Intervention Lifecycle



From Community Involvement to Program Impact



Community-Based Participatory Research (CBPR)

Strengths: CBPR addresses power dynamics, promotes culturally tailored interventions, and focuses on community assets.

Community-centric: By focusing on strengths rather than deficits, CBPR can empower marginalized communities.

Challenges: Requires long-term commitments, unique skills, and risks of tokenistic engagement if not done right.

From Community Involvement to Program Impact



The Role of Focused Ethnographic Studies (FES)

In-depth understanding:
Nutrition interventions demand deep knowledge about targeted populations.

Merging perspectives:
FESs combine quantifiable information with insights from within the communities.

True representation:
Capturing an authentic, insider's viewpoint on the unique challenges and potential solutions in a given community.

From Community Involvement to Program Impact



Impact Pathway Analysis in Nutrition

Evaluation: Essential for accountability, particularly to donors and governments.

Beyond primary outcomes: Evaluations should also provide insights on why a program works, its context, and its equity implications.

Informative feedback: Evaluations must guide course corrections, ensuring program effectiveness in varied contexts.

Achieving Equity through Informed Interventions

- **Context is key:** For effective and equitable interventions in nutrition, understanding the context and community is crucial.
- **Interdisciplinary collaboration:** Combining multiple research methods, like CBPR, FES, and impact pathway analysis, offers a comprehensive approach.
- **Next steps:** Continued engagement with communities, investing in implementation research, and ensuring equity is at the forefront of every nutrition initiative.
- **Future research opportunities:** Explore not only the 'what' but the 'why'. Why might certain populations respond differently to nutritional interventions, and how can we tailor approaches to serve them best?



Steering Towards an Equitable Future – What Can be Done?

Inclusive research protocols: Develop studies designed with diversity in mind, ensuring participants from various backgrounds are included.

Training and education: Equip researchers with the tools and knowledge to conduct culturally sensitive and inclusive research.

Outreach: Engage with communities, learn their unique nutritional challenges, and use this feedback to inform research directions.

Implementation of precision research findings: Investigate the incorporation of precision research findings into implementation science to ensure practical applications and address real-world nutritional challenges.

A call for collective action: This isn't a task for only researchers but needs a collective effort, including policymakers, educators, and the community.