

Exploring the Drivers of Food Choice: Understanding What, How, and Why People Eat the Way They Do

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BILL & MELINDA
GATES *foundation*





What is Food Choice?

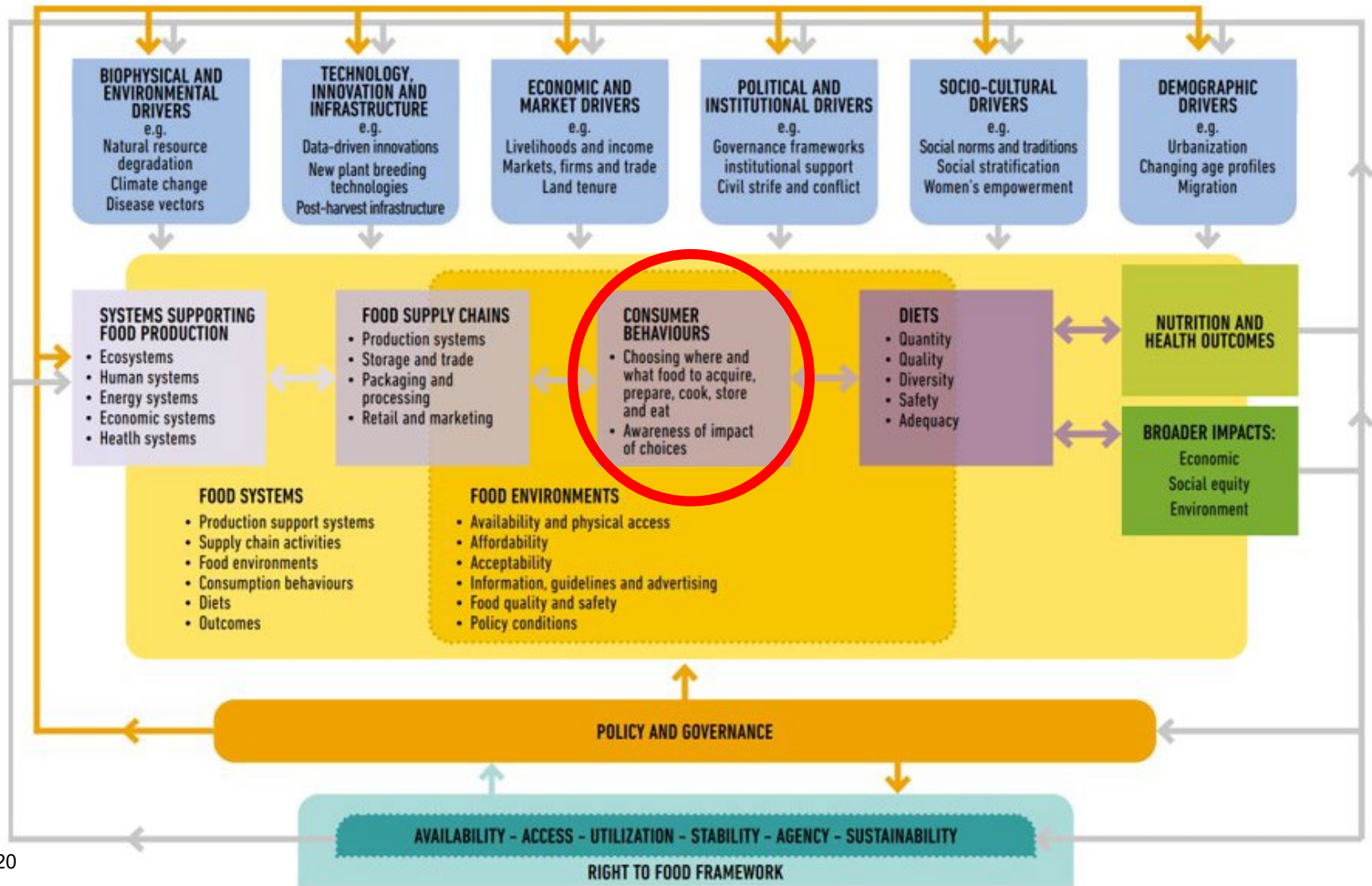
Food choice encompasses the processes by which individuals and households decide

- What, how, and why to acquire, prepare, allocate, store, and consume

Why Care About Food Choice?

- Global commitment to improving nutrition
- Attempts to achieve ambitious goals hindered by **limited knowledge of drivers of food choice behavior** among the poor in low- and middle-income countries (LMIC)





What kinds of choices do people have?

- Nearly all people have some choice of **what, when, where, with whom, or how to acquire, prepare, allocate, store, and consume food**
- Latitude for food choice varies



Changing Food Environments

- Macro Forces
 - Climate change
 - Globalized food systems
 - Urbanization
- Transformation is broad
- Expansion and alteration of markets with more foods
 - Purchased
 - Perishable
 - Processed
 - Prepared



<https://www.voanews.com/a/as-african-supermarkets-spread-study-finds-traditional-markets-just-as-safe/2614979.html>

<https://driversoffoodchoice.org/food-environment-2/>

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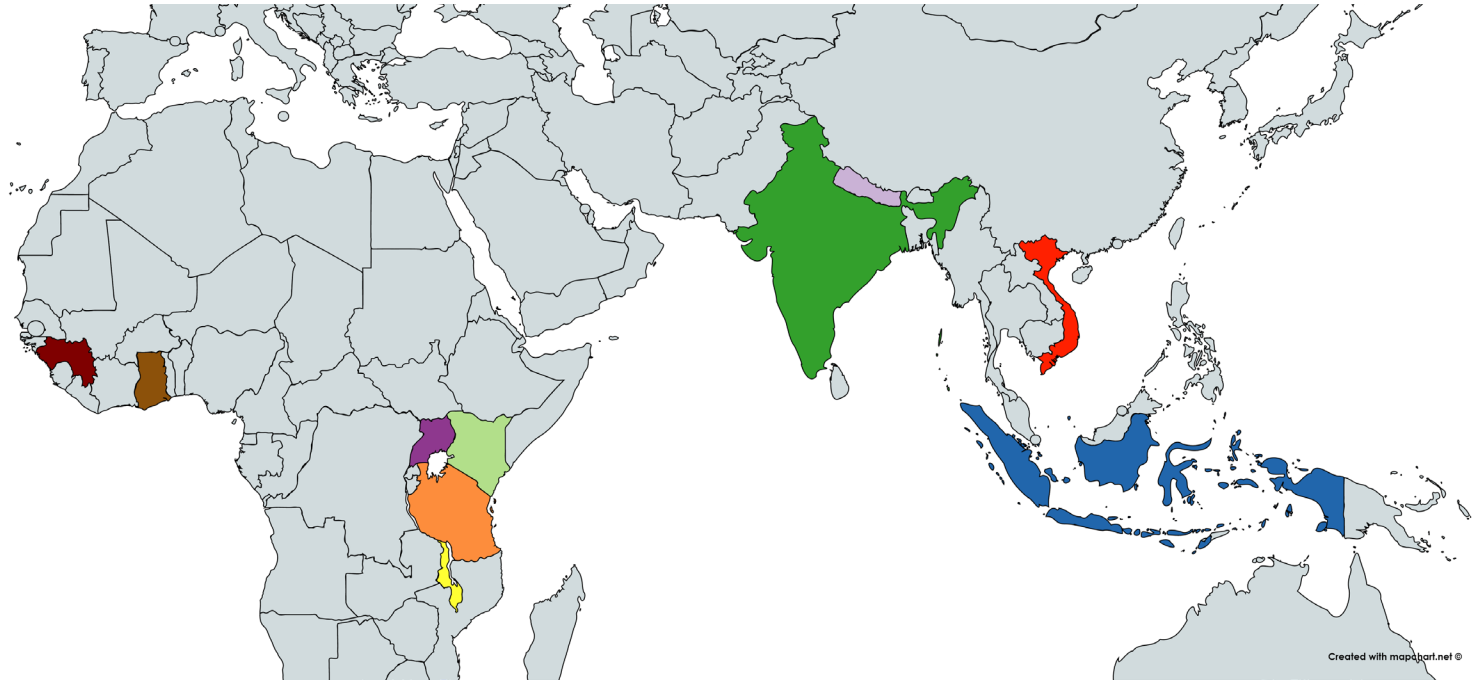


Drivers of Food Choice (DFC) Competitive Grants Program

Facilitate, synthesize and disseminate research to provide a deep understanding of the drivers of food choice among the poor in developing countries



15 Projects in 10 countries



<http://www.driversoffoodchoice.org/>

Physical and Economic
context of the
Food Environment

WHAT?
Dietary intake

Political and Socio-cultural
context of the
Food Environment

HOW?
Food Choice Behavior
Acquire, Prepare, Allocate, Store, and Consume

WHY?
Drivers of Food Choice

Availability and Accessibility, Prices and Affordability, Vendor and product properties, Marketing regulation, Convenience and Time, Preferences and Desirability, Nutrition and Health, Food Safety and Trust,
Social and cultural influence, Tradition, Gender Dynamics, Livelihoods
Decision-making: Unconscious, Routine, Habit, Value negotiations and Trade-offs



Overview of two examples

Study designs and corresponding
methods for understanding
drivers of food choice

Example 1: Guinean Miners

Objective: “Depict how artisanal mining livelihoods impact food choices, with a particular focus on the choices women make for themselves and their young children.”

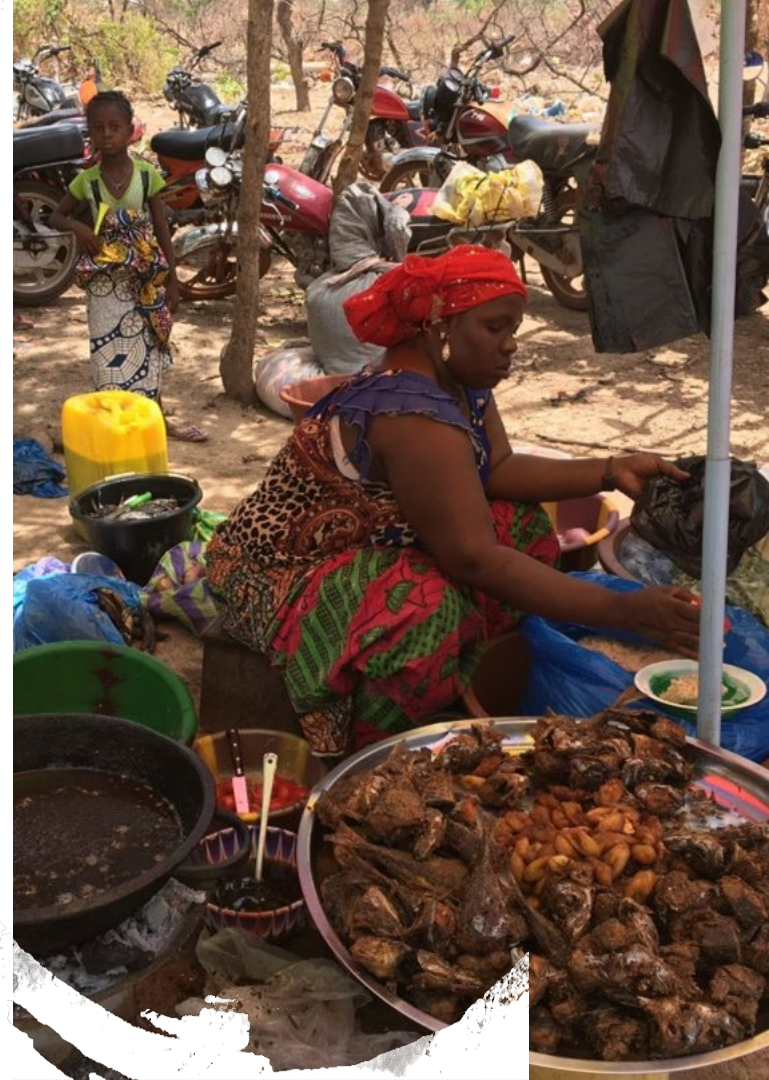
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Sadio Diallo, Université Julius Nyerere de Kankan

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Example 1: DFC among Guinean Miners

Cross-Sectional Mixed Method Design

Study Population:

- 18 mining sites in two districts in Kankan Region, North Eastern Guinea
- Women miners or wives/partners of miners who are caretakers of children < 5 years
- Young single miners (male or female)
- Food vendors

Quantitative:

- Market surveys (n=4)
 - 4 rounds covering 4-7 markets
- Cross-sectional household survey (n=613)

Qualitative:

- Mining site observations (n=10)
- Food preparation observations (n=25)
- In-depth structured interviews
- 24-hour recall (non-quantitative)

WHAT?

- Dietary intake of women and children
- Food availability, price, vendor and product properties

HOW?

- Production: Crops and livestock raised
- Food acquisition and shopping practices

WHY?

- Accessibility and Affordability
- Convenience
- Desirability
- Decision-making for food purchases and spending (with regards to gender dynamics)



Example 1: DFC among Guinean Miners

What?

- Diets for women and children were poor
 - 23% of women and 21% of children meeting minimum dietary diversity
- 28% of households were severely food insecure
- Nutrient-dense non-staple foods scarce and pricey
 - Low availability of fresh food and appropriate complementary foods, higher availability of highly processed foods



Example 1: DFC among Guinean Miners

How?

- Mining households engaged in limited food production
- Acquisition
 - Markets that sell mostly processed and packaged foods
- Preparation and Distribution
 - Women do majority of household plus substantial mining work
- Consumption:
 - Fast during work hours
 - Reliance on energy drinks
 - Children eat with non-parent caregivers



Example 1: DFC among Guinean Miners

Why?

- . Acquisition:
 - . A key driver of poor diets is income instability
 - . Challenge for healthy diet, exacerbated by gender inequities
- . Food safety concerns drive food acquisition
- . Societal expectations around gendered roles place heavy burdens on women's time

Example 2: Retail Diversity for Dietary Diversity: Vietnam

Objectives:

1. Understand how, why, in what way and to what extent transformations in the local food system impact the dietary intake of the urban poor
2. Provide policy recommendations and solutions to improve the inclusiveness of urban food retail systems

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Example 2: DFC among Vietnamese Urban Poor

Sequential mixed-methods design

Women of reproductive age and their hh's

n=563 food outlet mapping

n=400 food practices survey

*n=14 interviews w/ shopping trips

n=357 nutrition surveys

* n=60 sub-sample repeat

Methods:

- **Census of food retail outlets (GPS)**
- **Household nutrition survey**
 - 24-hour dietary recall
- **Multi-generation household study**
 - Household visits
 - Multi-generation hh interviews
 - Shopping trips
- **Film Essay**

(<https://www.youtube.com/watch?v=3ZiZ2xSvffY&t=139s>)

- **Multistakeholder validation workshop**

WHAT?

- Food retail outlet - classification, healthfulness assessment, distance from home and work
- Food prices
- Dietary intake (micro and macronutrients, food groups, dietary diversity, ultra-processed food)

HOW?

- Household food shopping practices
- Food preparation and meals
- Household food responsibilities
- Intro-household food allocation

WHY?

- Availability and affordability
- Convenience and cost
- Knowledge, attitudes, preferences
- Culture, tradition, and habit
- Family and gender roles
- Food insecurity
- Risk perception and trust in food safety
- Perceptions of food diversity and freshness



Example 2: DFC among Vietnamese Urban Poor

What?

- Minimum Dietary Diversity reached by 75% of mothers
- Minimum Nutrition Adequacy Ratio = .54
 - Diets high in starchy staples and low in fruits and vegetables
 - Distribution of food groups varied widely across dishes, eating occasions, and location
- Uneven geographical distribution of retail outlets
- Wet-markets geographically more evenly distributed
- No difference in diet quality across strata of geographic proximities



Example 2: DFC among Vietnamese Urban Poor

How?

- Continued shopping in traditional informal markets and wet markets, bypassing most supermarkets
 - 70% of food from traditional retail: 16% of total UPF
 - 19% of food from modern/convenience retail: 84% of total UPF
- Traditional household food acquisition and preparation practices accommodating modern lifestyle



Example 2: DFC among Vietnamese Urban Poor

Why?

- Most demonstrated knowledge and understanding of nutrition concepts
- Food environment changes did not immediately lead to changes in practices
- Preferred shopping practices emphasized
 - Diversity and perceived freshness of products offered,
 - Convenient location
 - Enjoyment of open-air market shopping
 - Availability of healthy foods
 - Lower food-price
 - Trust for food-safety
- Social considerations including
 - Habit
 - Maintaining culture and tradition associated with market shopping
- Food Preferences, especially children drive food choice behaviors

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Cross-Cutting Themes from Synthesis of Evidence on the DFC in LMIC

1. Food choice at the nexus
of the Food Environments

2. Perspectives on
Food Safety

3. Changing Values and
Prioritization

4. Changing Livelihoods

Food Choice at the Nexus of the Food Environments

External Food Environment

- Availability
- Prices
- Vendor and Product properties
- Marketing and Regulation



Personal Food Environment

- Accessibility
- Affordability
- Convenience and Time
- Preferences and Desirability
 - Including Nutrition and Health concerns
- Perspectives on Food Safety and Trust



Social and Cultural Context

- Security (e.g., expectations about income, prices, supply)
- Social Relationships including Gender Dynamics
- Values, including tradition
- Livelihood changes



Perspectives on Food Safety

- Concerns
 - Food hygiene—influences decisions about where to eat
 - Food adulteration and contamination
 - Environmental sanitation
- Assurances
 - Trust built with food vendors
 - Meals prepared at home
 - Policies and regulations
- Food safety valued over cost

Isanovic, Constantinides, Frongillo, Bhandari, Samin, Kenney, Wertheim-Heck, Nordhagen, Holdsworth, Dominguez-Salas, Ambikapathi, Laar, Patil, Kulkarni, Bukachi, Ngutu, & Blake. How perspectives on food safety of vendors and consumers translate into food choice behaviors in six African and Asian countries, 2022.

Wertheim-Heck et. al, 2019; Raneri and Wertheim-Heck, 2019; Zhang et. al., 2020; Patil et. al, 2020; Dominguez-Salas et. al., 2019; Isanovic et. al., 2022



Changing Value Prioritization Driving Food Choice

- In the past, emphasis on considerations
 - Cost, Taste, Convenience, Health
- Basic values shape how considerations defined and negotiated
 - Acceptable Cost (price, value)
 - Desired Taste (flavor, texture, social status)
 - Degree of convenient (time, access, packaging)
 - Aspect of Health (individual, environment)
- Social and cultural changes alter basic values
 - Livelihood change is a major driver in LMIC





Basic Human Values Drive Food Choice

Conservation

*Security-personal,
Conformity-rules,
Tradition*

Self- Enhancement

*Achievement,
Face, Power*

Openness to Change

*Self-Direction,
Stimulation,
Indulgence*

Self- Transcendence

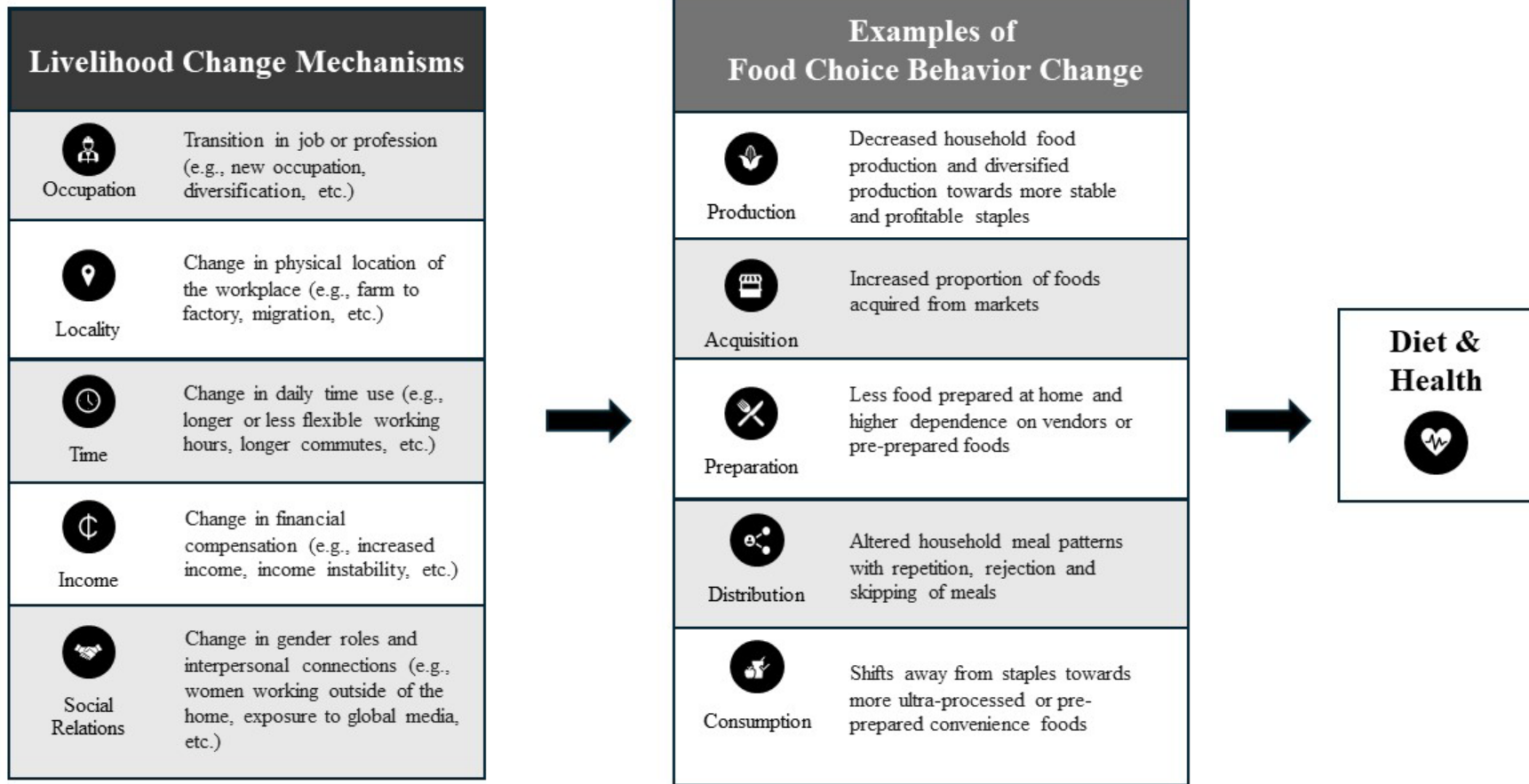
*Benevolence-
caring-
dependability*

“Most youths nowadays claim that they use globalization, they tend to be modern, when you tell them about such fruits and that they are edible, they ignore, they tend to be arrogant...they have different understanding compared to our young ages in former days.” (Tanzania male) Value: Conformity-rules

Changing Livelihoods

- Livelihoods secure necessities of life
 - Means → acquisition of material resources
 - Means → achieve non-material goals
- Time use and patterning of daily life
 - Including dietary behavior
- Change has challenges and opportunities
 - Can lead to less healthful behaviors
- Understanding mechanisms of livelihood change useful for anticipating trajectories





Kenney, et. al., 2024. How livelihood change affects food choice behaviors in low- and middle-income countries: A scoping review. In review.

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Conclusions

- Challenge of our time is achieving sustainable healthy diets on a global scale in the context of food system transformation
- Need quality data on what, how and why people eat the way they do to guide action
- Need consistent but flexible designs
 - Requires advances in methodology
- Understanding of trajectories of change
- Identification of levers for action and innovations in what works to shape demand



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