

Meal Click: Evaluating Policy and Industry- Based Interventions for Healthier Online Food-Away-From-Home Choices

Vincenzina Caputo
Michigan State University

Authors: Jiayu Sun, Vincenzina Caputo, and Ellen Van Loo

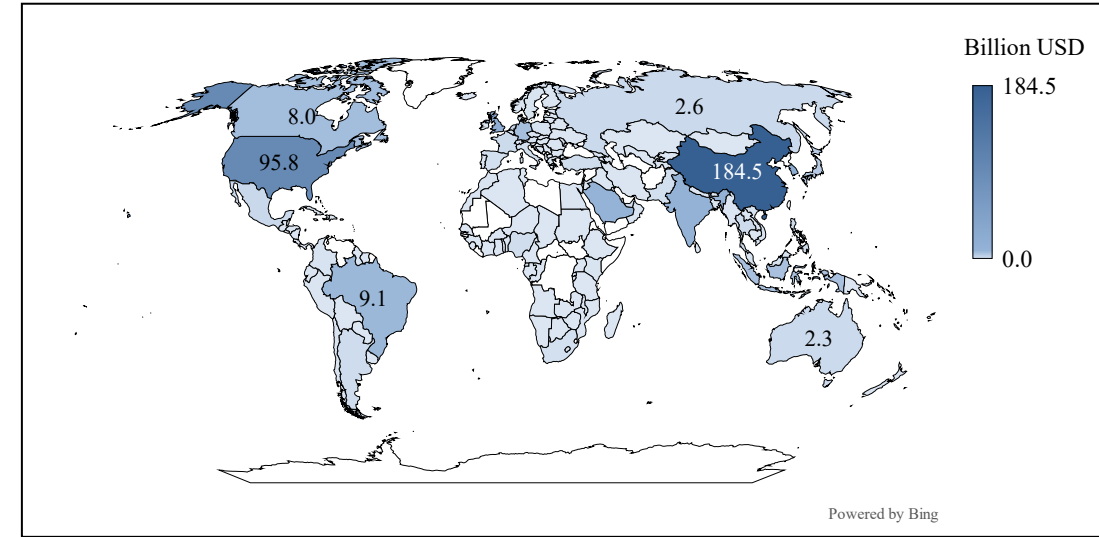
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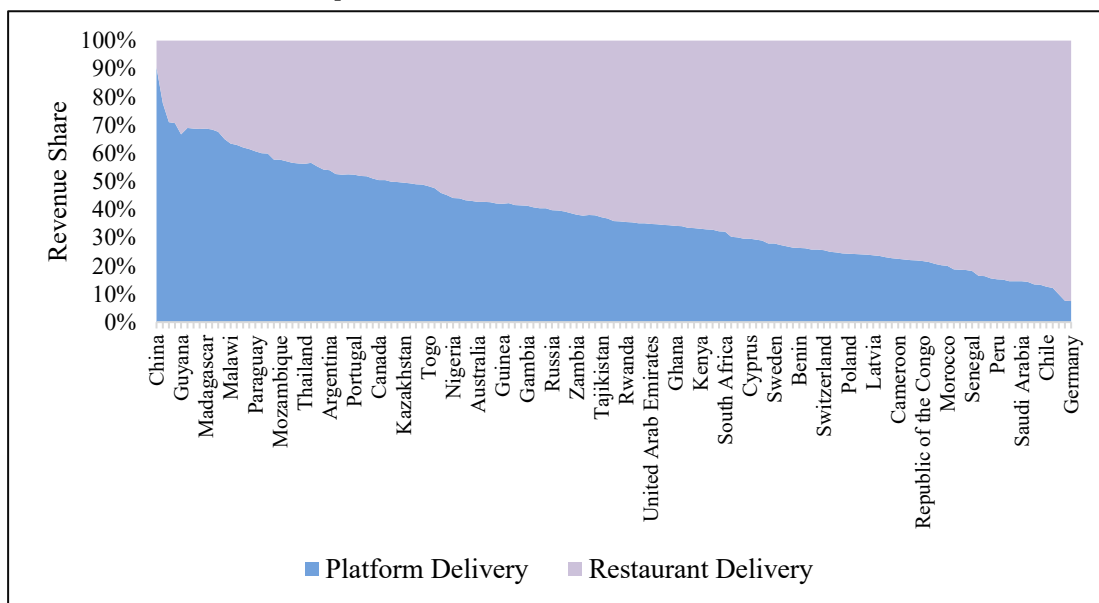
Food Delivery Revolution

- The global food system is undergoing a “food-delivery revolution,” driven by tech innovation, urbanization, and shifting consumer preferences.
- Global online FAFH delivery revenue grew 5 times from 2017 to 2024, with 35 countries each generated over \$1Billion USD in online FAFH delivery revenue.
- Platform delivery leads online FAFH consumption with 65% market share in 2024.

Online FAFH Revenue, 2024



Revenue Share: platform versus restaurant, 2024



Source: Restaurant Delivery. Retrieved March 13, 2025. [Link](#).

Platform Delivery Reshape FAFH Supply Chain

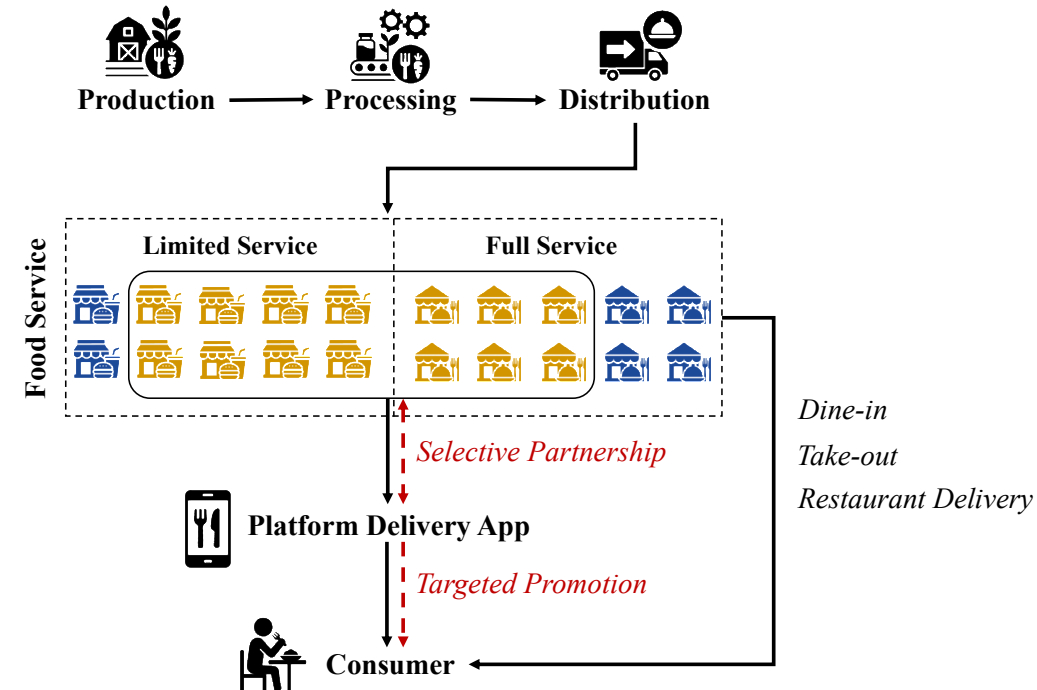
- **Selective partnerships shape availability**

- Fast-food brands dominate platform listings, but full-service restaurants are underrepresented (Fernandez & Raine, 2021).

- **Imbalanced promotional strategies**

- Tactics include free delivery, discounts, loyalty rewards and heavy advertising in media and social media (Jia et al., 2022).
- Promotions favor discretionary foods high in fat, sugar, and salt Implications

- **Implication:** Although these practices fuel rapid platform growth, it raise concerns over dietary quality and population health outcomes.



What We Do

- This paper reviews how these structural changes within digital FAFH environments influence consumer decisions and evaluates the implications for policy designs and industry practices.

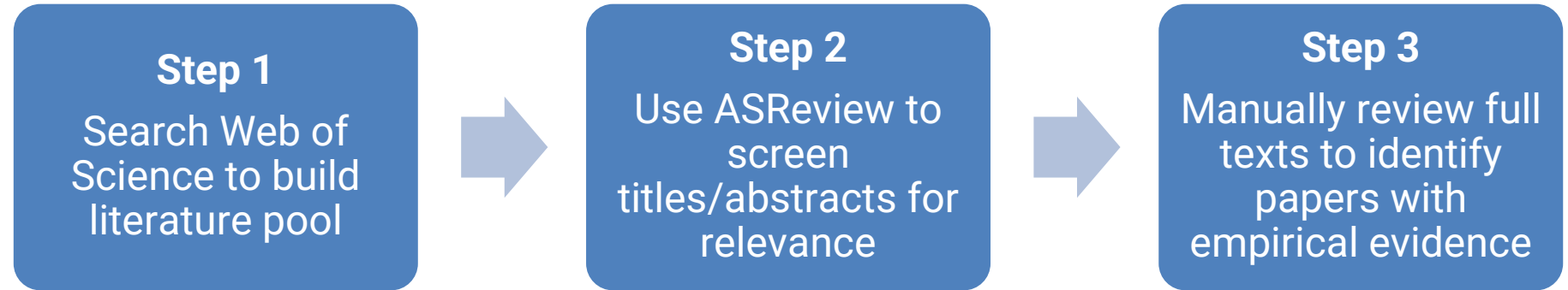
Policy Tools

- Nutritional Labeling Program
- Fiscal Health-Related Policy
- Food Assistance Program

Industry-Driven Tools

- Digital Nudges
- Digital Interactive Decision Support

Systematic Literature Review Procedure

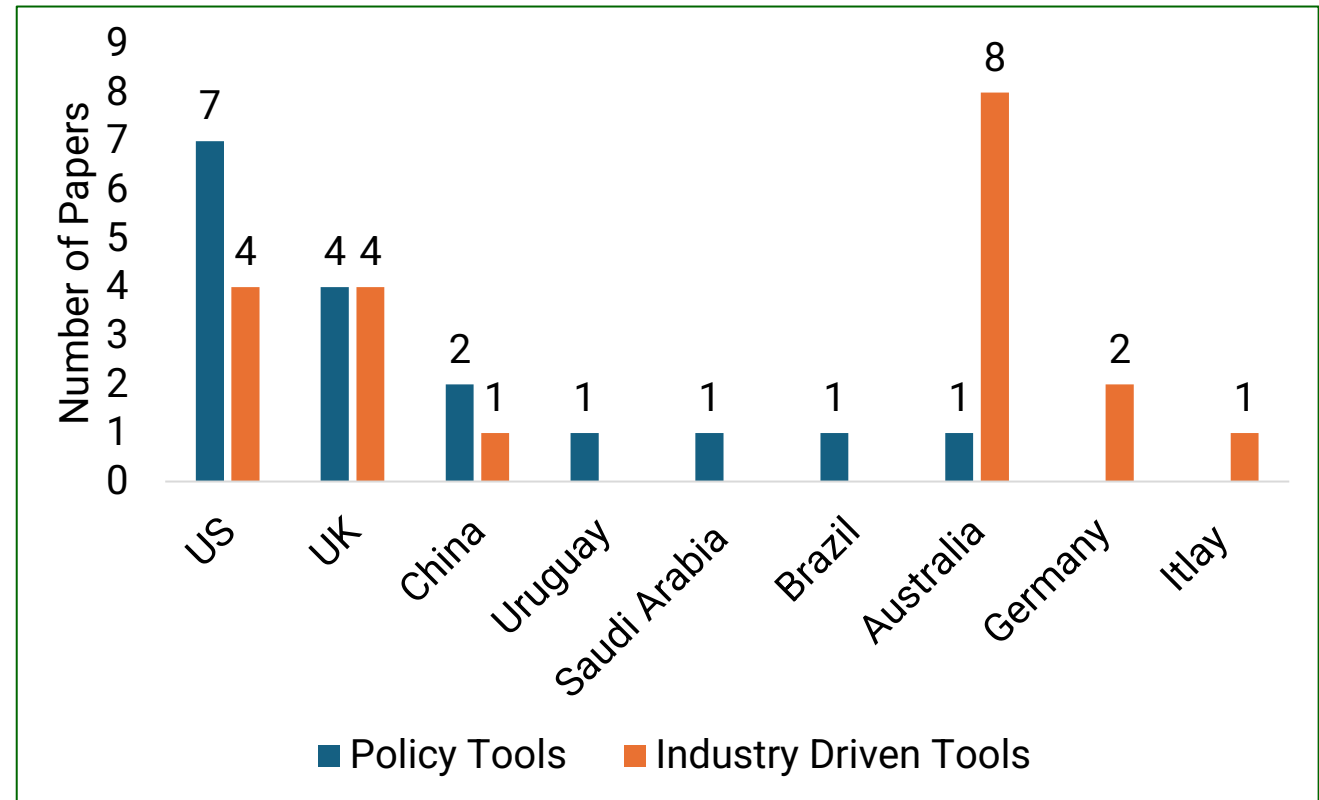


	Unique papers (WoS)	Relevant papers (ASReview)	Final papers (manual review)
Nutritional labeling program	1,121	31	14
Fiscal policy	211	8	2
Food-assistance program	815	30	1
Digital nudge and decision aids	6,641	45	20

Country Distribution of Literature

- Most papers evaluating policy- and industry-driven tools in digital FAFH are concentrated in the U.S. and U.K., followed by Australia and China.
- There is little evidence from developing countries.

Number of papers by country in the final pool



Review on Policy Tools

Policy Tools

- Nutritional Labeling Program
- Fiscal Health-Related Policy
- Food Assistance Program

Nutrition labeling

Label Format Matters

- **Placement:** Effective next to product names; no effect near prices (Luick et al., 2024)
- **Real-Time Feedback:** Labels alone ineffective; impact improves with feedback (Tanasache et al., 2025)
- **Label Type:** Numeric, traffic light, and warning labels vary in effectiveness across countries (Arruda Scheffer, 2024)

Context Shapes Effectiveness

- **Meal Type:** In China, traffic light labels reduced fat, salt, and calories—but not carbs due to dietary norms (Wang et al., 2025)
- **Outlet Type:** In the U.K., More effective in coffee shops and fast-food chains (Finlay et al., 2023)

Menu

Please make your lunch selections from the list of entrees, beverages and snacks below.

Entrees

Turkey Club with Chips	\$5.95	Red
Tuna Salad Ceviche-style Wrap(no mayonnaise) with Fruit Salad	\$5.95	Yellow
Smoked Turkey Sandwich on Whole Wheat Bread with Lettuce, Tomato and Side of Fruit Salad	\$5.95	Green
Cobb Salad with Chicken, Blue Cheese, Bacon, Hard Cooked Egg, Tomato and Italian Dressing	\$6.50	Yellow
Chick		

Outlet logo

McSpicy™
Hot and spicy 100% chicken breast in a crispy coating, served with crunchy lettuce and a creamy sauce, on a sesame seed bun

Medium meal
from £6.19 from 775kcal

Large meal
from £7.05 from 883kcal

Adults need around 2000 kcal a day.

Calorie labelling and proportional pricing

condition

Fiscal Health-Related Policy

Tax Passthrough (Cawley et al. 2021)

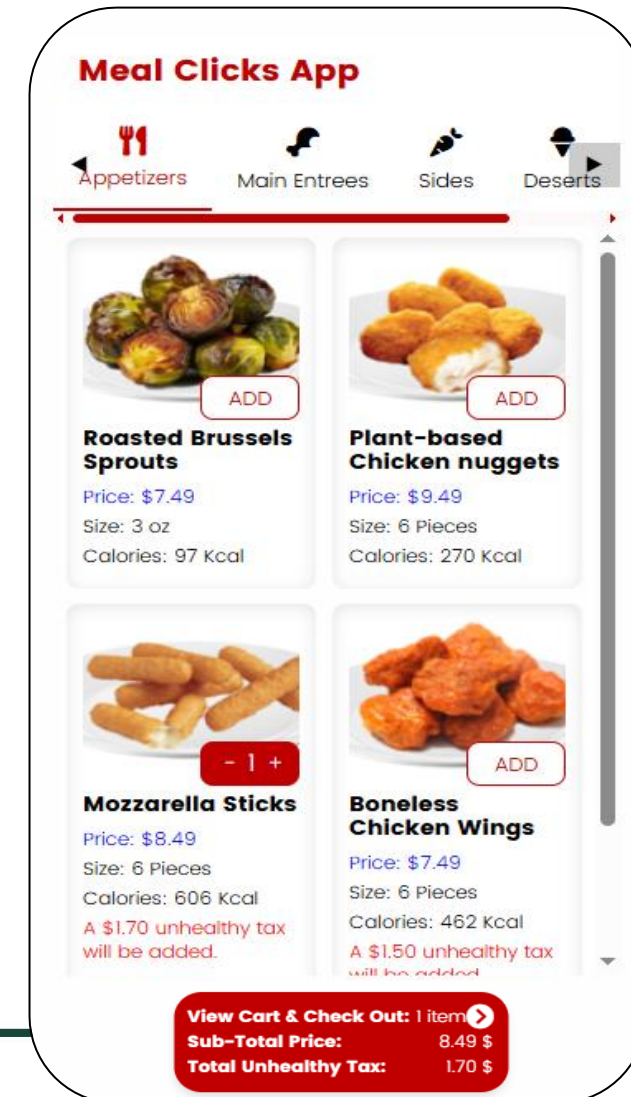
- 74% of sugar-sweetened beverage taxes are passed on to prices in physical outlets, compared to 51–84% in delivery apps
- Tax visibility and platform pricing influence consumer exposure to fiscal interventions and their effectiveness.

Tax Regressiveness (Kilders et al. 2024)

- Red meat tax is regressive in the delivery setting, disproportionately burdening lower-income consumers, but not in dine-in settings.

Gaps and Promising Direction: There is limited evidence on substitution, framing effects, and procurement context in digital FAFH. It is important to explore tax salience with on-screen cues, real-time feedback, or digital price tags linking price to health goals.

Example of our working paper
(Meal Click)



Food Assistance Program

Limited food assistance programs in FAFH, especially in digital settings

- One exception is the U.S. Restaurant Meals Program (RMP), which allows eligible SNAP users to buy meals at authorized restaurants
- Only two studies have evaluated RMP, neither in digital contexts:
 - RMP's reliance on fast-food chains limits healthy options (Robertson 2020)
 - RMP access reduced food insecurity among older adults but had no effect on obesity (Jamal 2025)

Only one study evaluates delivery-based food assistance using a student sample.

- About half of participants improved food security with grocery or delivery gift cards, but nearly 90% preferred grocery benefits (Gamba et al. 2021).

Gaps and Promising Direction: Lack of evidence evaluating benefit structure, eligible items, vendor rules their impact on outcomes in FAFH. Most research is U.S.-focused, with little global evidence.

Review on Industry-Driven Tools

Industry-Driven Tools

- Digital Nudges
- Digital Interactive Decision Support

Digital Nudge

Default positioning

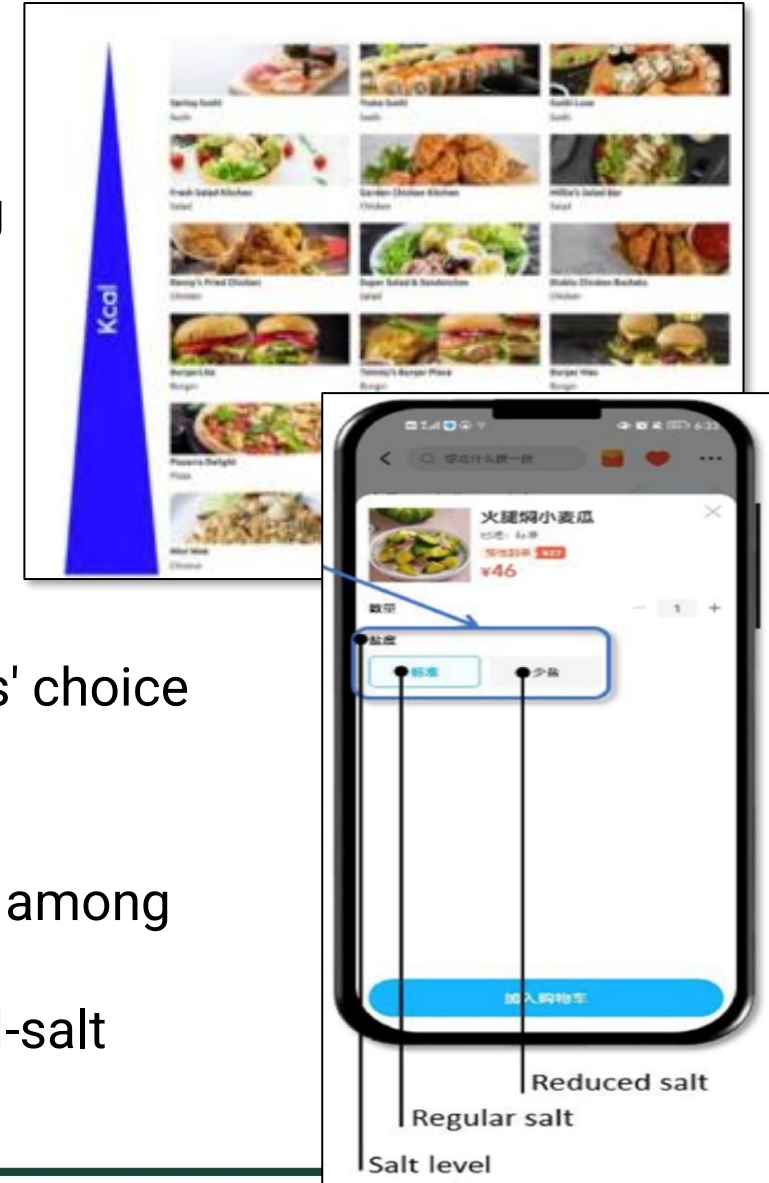
- Energy-based positioning: Listing restaurants or dishes by ascending calorie content lowered total basket calories (Bianchi et al., 2023)
- School/institutional settings: combining positioning with labeling, promotion, and feedback reduced energy, saturated fat, and sodium consumption but effects faded over time (Wyse et al., 2021; Delaney et al., 2023)

Just-in-time basket feedback

- Preselecting a plant-based meal option did not influence participants' choice of that meal (Erhard et al., 2023).

Other menu-design features

- Submenu design: A separate vegetarian submenu reduced selection among frequent vegetarian eaters (Bacon & Krpan, 2018)
- Prompts: Asking consumers to choose between regular and reduced-salt options increased reduced-salt selections (Li et al., 2025)



Digital Interactive Support

Just-in-time basket feedback

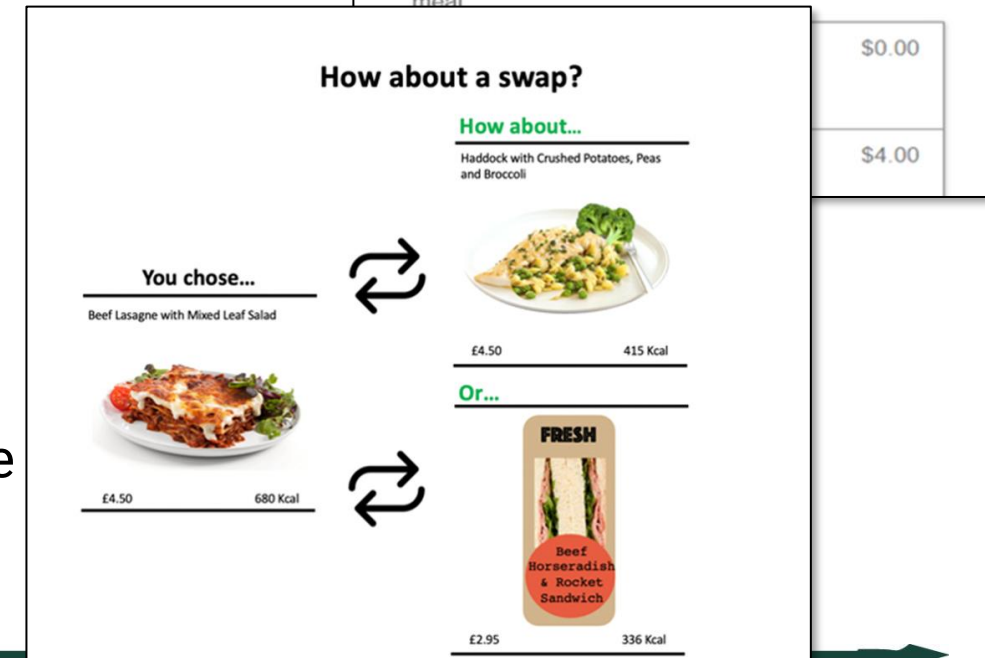
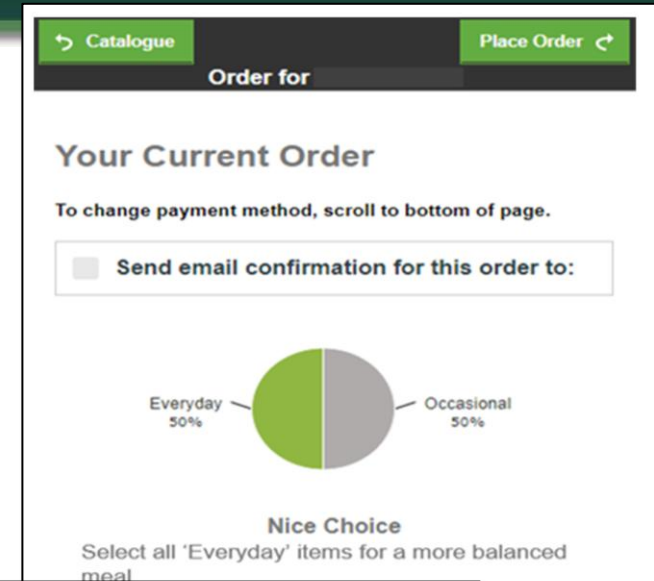
- Calorie Basket Feedback: Color-coded feedback had no effect, but facial-expression cues reduced total calories (Mohr et al., 2019).
- Pie Chart Feedback: No impact on item types or nutritional content of orders (Stacey et al., 2021).

Food Swap

- Low Calorie Swap: Presenting lower-calorie swap options alongside calorie information reduced the total energy content of meal orders (Breathnach et al., 2022).

Sorting and Filtering (no digital FAFH evidence)

- Evidence from digital FAH: Sorting by Nutri-Score in online grocery shopping showed no effect on consumer choices (Godden et al., 2025).



Challenges and Opportunities



Challenges

- **Regulatory Gray Zone**
 - Ambiguity in classifying online FAFH platforms
 - Lack of policies tailored to digital FAFH environments
- **Transparency Gaps**
 - Nutrition details often omitted in digital environment that have already been required in physical restaurants



Opportunities

- **Improve Salience of Policy Tools**
 - Digital platforms can redesign interfaces to highlight nutrition info, boosting visibility and usability.
- **Support New Category of Interventions**
 - Personalized menu designs
 - Algorithmic recommendations
 - Just-in-time tools

Conclusion

- This study reviewed the literature on digital food environments, addressing both opportunities and challenges associated with digital FAFH.
- Integrating policies with industry-led tools (digital nudges, decision-support) shows strong promise.
- **Research Gaps and Future Direction**
 - Limited research on platform impacts on diets and health
 - Policy effectiveness underexplored
 - Gaps in developing countries and vulnerable populations
 - Research dominated by health/nutrition & business; little economic focus
 - Heavy reliance on hypothetical studies

Thank you!

Appendix – Search Term in Web of Science

	Search term	Unique papers (WoS)	Relevant papers (ASReview)	Final papers (manual review)
Nutritional labeling program	TS=((“food away from home” OR “food-away-from-home” OR restaurant* OR meal* OR menu* OR “food service”) AND (digital OR online OR deliver*) AND (label))	1,121	31	14
Fiscal policy	TS=((“food away from home” OR “food-away-from-home” OR restaurant* OR meal* OR menu* OR “food service”) AND (digital OR online OR deliver*) AND (tax OR subsid OR fiscal))	211	8	2
Food- assistance program	TS=((“food away from home” OR “food-away-from-home” OR restaurant* OR meal* OR menu* OR “food service”) AND (digital OR online OR deliver*) AND (assistance))	815	30	1
Digital nudge and decision aids	TS=((“food away from home” OR “food-away-from-home” OR restaurant* OR meal* OR menu* OR “food service”) AND (digital OR online OR deliver*) AND (nudge* OR position* OR order* OR default* OR sort* OR filter* OR “just in time” OR “just-in-time” OR feedback* OR swap*))	6,641	45	20