

## **Connecting consumers with local produce: Insights for a local food provisioning app.**

Food supply chain resilience has been challenged in recent times due to climatic, political and health (pandemic) factors. Food transportation contributes 26% of carbon emissions globally.<sup>1</sup> Within Europe food is transported an average of 171km from farm to fork<sup>2</sup>. EU citizens waste over 58 million tonnes of food annually<sup>3</sup> at an estimated cost of €132bn<sup>4</sup>. To address such issues, greater resilience must be built into future supply systems to reduce food waste, support the next generation of food producers with a fair income, and ensure food security for all European citizens.

Utilising short food supply chains (SFSC) where 'local' food is sold through a limited number of intermediaries, with independent price setting for producers, and full production information available for consumers, may address these challenges. Given perceived proximity can increase the positive perception of mobile apps<sup>5</sup>, such a development could enable a SFSC that allows for dynamic food supply in local areas. This study seeks to understand consumers' drivers and barriers in local food provisioning, and more specifically the potential for digital provisioning solutions (e.g. apps).

Five focus groups were conducted across five countries (Austria, Belgium, France, Spain, UK) with a total of 35 participants. Provisioning of local and/or non-local food, and the use/non-use of digital tools were explored. A semi-inductive, thematical approach was taken for the analysis, inspired by grounded theory.<sup>6</sup>

Findings covered three key areas: 1) definitions of local food, 2) drivers and barriers to local food provisioning, and 3) drivers and barriers in food provisioning with digital tools. Firstly, exploring consumers depictions of local food led to a heterogeneous and multifactorial definition of 'local food'. Key criteria discussed were origin, distance, type of products, number of intermediaries, packaging, type of transport, seasonality, and the context of purchase. Secondly, drivers of local food provisioning were found to be better quality (taste, freshness, healthiness), less waste/food waste, seasonality, and a reduction in the associated carbon footprint (although this was mentioned less than other drivers). Barriers to local food provisioning came in the form of expense as local food was considered more highly priced than alternatives, (although some saw this as a sacrifice to be made), lack of information (at times causing distrust) in the origin and length of the supply chain meaning consumers could not be certain it was 'local', and a lack of diversity. Thirdly, drivers of utilising digital tools for food provisioning were established as convenience (gaining of time, a simplified daily/weekly schedule, physical ease), along with a reduction on one's mental load (through easily finding recipes, etc.), and finally financial drivers with consumers stating they had more control over expenses with a digital tool. Barriers to food provisioning using digital tools, were stated as a lack of variety in both products and recipes, waste associated with packaging, the proximity of other offers (such as those found in stores), and a loss of

benefits such as interaction and physical presence (touch/smell, sociability) found with in-person food provisioning.

This research establishes that whilst consumers may perceive some barriers to using digital tools in food provisioning, there is still potential for their use in SFSC. Future research will look to explore these results further through a larger quantitative consumer study.

## References

<sup>1</sup>Poore, J. and Nemecek, T. 2018. Reducing food's environmental impacts through producers and consumers. *Science* 360 (5392) 987-992. DOI:10.1126/science.aag0216.

<sup>2</sup>Wojciechowski, J. 2020. *Farm to Fork 2020 Conference*. 15 - 16 October 2020. Online.

<sup>3</sup>Eurostat. 2023. *Food waste and food waste prevention – estimates*. Available at: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Food\\_waste\\_and\\_food\\_waste\\_prevention\\_-\\_estimates](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Food_waste_and_food_waste_prevention_-_estimates)

<sup>4</sup>European Commission. 2023. *SWD (2023)421 final*. Available at: [https://eur-lex.europa.eu/resource.html?uri=cellar:1fefebb0-1b4e-11ee-806b-01aa75ed71a1.0001.02/DOC\\_5&format=PDF](https://eur-lex.europa.eu/resource.html?uri=cellar:1fefebb0-1b4e-11ee-806b-01aa75ed71a1.0001.02/DOC_5&format=PDF)

<sup>5</sup>Casteran, G. and Plotkina, D. 2023. The Importance of Perceived Proximity in Local Food Mobile Apps. *Journal of Food Products Marketing*, 29(1). DOI:10.1080/10454446.2023.2222067.

<sup>6</sup>Charmaz, K. 2014. *Constructing Grounded Theory, 2<sup>nd</sup> Edition*. Sage Publications.