Restaurants can influence consumer food choices by offering climate-friendly meals on their menus, a recent study concludes. In a trial at Finnish restaurants, customers and staff were receptive to selecting meals based on the carbon footprints of their ingredients. Appearance, taste and healthiness were priority factors in consumers’ choices. The research highlights the importance of planning communication strategies and the need for a carbon footprint food database.

In the EU25, approximately 20–30% of greenhouse gas (GHG) emissions from overall consumption come from the production and consumption of food and drink. One way to reduce emissions could be to make people aware that their food choices affect the environment.

Researchers investigated if restaurants in Finland could influence consumer behaviour by offering a choice of two ‘Climate Choice’ meals alongside conventional meals. The meals offered either a 15% (meat options included) or 30% (vegetarian only) reduction in GHG emissions compared to an average meal. These values were based on the carbon footprints of 200 different ingredients in 105 common lunchtime meals in the restaurants. Carbon footprint calculations were based on published Life Cycle Assessment (LCA) studies and other scientific evidence, and focused on GHG emissions associated with raw material production and the processing of ingredients used in the meals, including packaging, transport and cooking.

The meals were devised after discussions with stakeholders, including restaurants, government representatives and health and environmental organisations. The concept was trialled at lunchtimes in 25 buffet restaurants, mostly student and office canteens. All but one was located in Helsinki. The meals were labelled with a Climate Choice logo either at the buffet or in the menu.

The researchers assessed how the climate-friendly meals were received using a questionnaire for customers, which received 307 responses, a small number considering the number of total restaurant customers. They also interviewed 33 customers, as well as 19 restaurant staff members. A total of 40% of questionnaire respondents said they would often choose the Climate Choice meal and 54% said they would choose it ‘now and then’.

Although customers were positive about the idea, they typically chose the climate friendly meal because they thought it would be a healthy choice, rather than for environmental reasons. The researchers therefore suggest that communication should link climate change and health impact. Customers also said that the most important factor was how appealing a meal was and how they expected it to taste. Producing attractive Climate Choice meals is therefore important. Most restaurant staff were also interested in the concept, despite it involving extra work for them.

Only around half of the interviewed customers noticed information about the Climate Choice meals in the restaurants. Information on tables was noticed the most and labels at the buffet the least. Having two levels of climate-friendly meals was confusing, so the researchers recommend a future single choice of 25% GHG reduced Climate Choice meal.

Restaurants cannot currently implement this concept because there is no comprehensive carbon footprint database for food ingredients. Therefore, a list of climate-friendly ingredients could be made available, including most plant ingredients and greenhouse vegetables, grown either in-season or using renewable sources of energy.

The researchers say that carbon footprint databases should be created and incorporated with a restaurant’s IT system, which already provides the nutritional value of their recipes. Nevertheless, restaurants would still have to determine the origin and production method of ingredients to design truly climate-friendly meals. In order for customers to take note, climate-friendly food should become a long-term concept in restaurants, rather than the focus of short-term campaigns.