

# Fast food lamb curries have carbon footprint of 140 million car miles

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(PhysOrg.com) -- Supermarket lamb curry ready-made meals eaten in the UK amount to an annual carbon footprint equivalent to 5,500 car trips around the world or 140 million car miles.

The figures were calculated using a new carbon footprinting tool known as CCaLC developed by researchers at The University of Manchester.

The estimates - calculated to illustrate the tool- are based on the figure of 30% of adults in the UK who eat ready-made meals at least once a week. Curry is one of the nation's favourites, accounting for up to 10% of ready-made sales.

The academics in the School of Chemical Engineering and Analytical Science found that the [fast food](#) meal generates the equivalent of 4.3 kg of [carbon dioxide emissions](#) per person.

The meal's ingredients are responsible for 65% of the [carbon footprint](#), with lamb contributing half of the total. Meal manufacture contributes on average 14% and packaging 4% of the total carbon footprint.

The contribution of transport is small at 2%. However, storage at the retailer contributes 16%.

The research was carried out as part of the Carbon Calculations over the Life Cycle of Industrial Activities (CCaLC) project at The University of Manchester.

The £1 million project is led by Adisa Azapagic, Professor of Sustainable Chemical Engineering at The University of Manchester and funded by organisations including the Engineering and Physical Research Council, and the Natural Environment Research Council.

Previous work by the same research group showed that, surprisingly, the Christmas turkey meal prepared at home is a greener offering, coming in at only 2.5kg carbon dioxide emissions per person.

One of the reasons for this, they say, is that preparing food at home can in some cases reduce the carbon footprint.

“The same lamb curry prepared at home has a 20% lower carbon footprint, mainly because of the elimination of the [refrigeration](#) stage at retailer needed for the ready-made meals,” said Professor Azapagic.

In addition to food products, the CCaLC carbon footprinting tool can be used for estimation of carbon footprints of other products, including packaging, biofuels and various chemicals.

A chemical sector version of the tool for estimating the carbon footprints of PVC products is available for free at [www.ccalc.org.uk/](http://www.ccalc.org.uk/).

The PVC CCaLC tool will be launched tomorrow (18 May) in London, where the team demonstrate it on a number of case studies to show its uses and benefits.

Professor Azapagic said: “Measuring carbon footprints of industrial and other human activities is a first step towards a better understanding of our impacts on climate change. Because, what can be measured, can be managed.

“But, the devil is in the detail - measuring carbon footprints is not a

trivial task. Industrial and human activities are notoriously complex, so capturing that complexity is a challenge.

“It is particularly so if we expect businesses - and consumers - to make everyday decisions based on the estimations of carbon footprints of their activities.

“And yet, this should be the ultimate aim as only then can we hope to make a real contribution towards mitigating the effects of climate change.

“We have considered all [life cycle](#) stages in estimating the carbon emissions - including long-distance transportation for imported food and short distances related to food shopping.

“Food production and processing are responsible for up to three quarters of the total carbon footprint for most food products - so this sector is an important part of our work.”

Provided by University of Manchester

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