



Reducing carbon and cost whilst maintaining consumer experience – via blended beef mince and burgers

Intended audience

This case study is intended for anyone interested in reducing the carbon and/or cost impact of their menus – specifically in the burger and beef mince category.

The challenge we're trying to address

Suppliers to foodservice and hospitality organisations are under pressure to support their customers in reducing the carbon impact of their menus, especially in the contract catering and Education sectors. The main focus area for carbon reduction is beef, for many reasons:

- Overall reduction of corporate carbon footprint – for ESG reporting
- The need to be proactive and responsible in the climate crisis
- Beef is a well-known carbon hotspot in many menus
- Demonstrating culinary innovation
- Rising cost of beef – it's challenging to meet cost/profit targets

However, beef, and specifically burgers, remain a core menu item and an established purchasing category. The burger is a staple menu item across the foodservice offering; it's not going away anytime soon. This provides a strong platform for initiatives such as our beef blended burgers and mince, where meaningful carbon reduction benefits can be achieved without moving away from a product that customers and consumers continue to purchase regularly. Market research confirms our experience; burgers are not just surviving; they're one of the main formats through which operators deliver menu innovation, an example being pub and bar operators 'doubling down' on Korean, Japanese, Indian and Mexican-inspired menus in this area (Source: Lumina).

So, the only solution is to address the ingredients. Campbell Brothers already use UK sourced minced beef, so there's no deforestation adding to the climate footprint. One way forward is to reduce the proportion of beef in the mince, by producing what's known in the trade as a blended burger. Some blended burgers aren't as good when it comes to flavour, texture and moisture – so the challenge for Campbells was to reformulate the conventional burger in a way that would still pass the taste test, but would be more appealing to consumers in terms of its environmental impact and use of plant-based ingredients (pea and faba bean protein).

Finding a suitable supplier for the beef-alternative ingredient

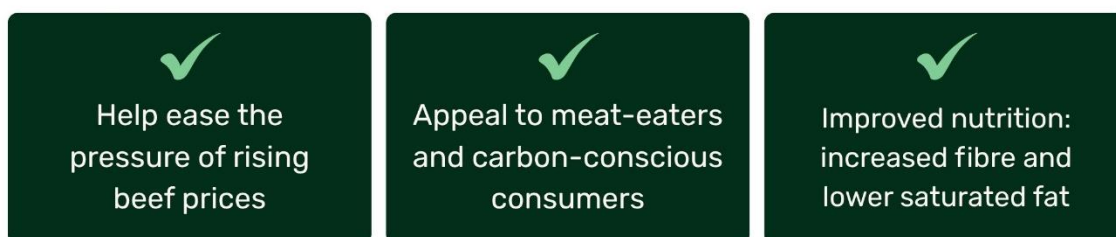
We saw the market changes and customer requirement needs, and wanted to partner with a more sustainable protein alternative. So, Campbell Brothers set about trying to find a solution for reformulating the standard burger so that they could offer a lower carbon alternative. They were looking for a product that ideally reduced cost (to create a commercial incentive), boosted the

nutritional qualities of the standard burger, and crucially, performed very well on taste tests, while also not requiring additional time, complexity or skill to cook. These are all the areas where Eat Curious® really does tick the box.

Eat Curious dehydrated mince and pieces are made from just three ingredients: pea and faba bean protein concentrates, and salt. They're ideal for integrating into blended dishes, where meat reduction is required, helping to reduce saturated fat and boost fibre without compromising on taste or texture.

Eat Curious is neutral in flavour and can be hydrated with stock, allowing it to take on the flavour profile of the dish.

A Smarter Approach to Meat Products



In terms of carbon reduction, the minced beef that's used for the standard burger has a carbon footprint of 32.5 Kg CO₂e per Kg, versus approximately 1 Kg CO₂e per Kg of hydrated Eat Curious¹. This made it a compelling ingredient to use.

We were already aware that some customers were choosing to buy Eat Curious™ and blend it with mince to create their own blended burgers in their own kitchens. Due to the hydration steps required prior to blending, this demonstrated a clear opportunity to make the process more convenient and consistent, by taking this additional preparation step out of the kitchen and bringing the blended burger experience to customers in a ready-to-use format. Campbell Brothers were asked by customers to investigate if this process could be brought into their factories, making it easier for their customers by producing a ready-made blended burger.

Action taken, outcomes and results

Campbell Brothers and Bidfood then visited the *Eat Curious* offices, to understand more about the product in terms of its backstory, its ingredients, nutritional information and guidance on the best way to rehydrate. The visit incorporated a cookery demonstration and tasting session, to see the product being used in many different recipes.

¹ Note on methodology: Eat Curious calculations were developed using an indicative Life Cycle Assessment (LCA) methodology, modelled in SimaPro, based on supplier and product data available at the time. The work was informed by an academic student research collaboration, but it should be treated as directional rather than a current third-party certified assessment.

Bidfood carbon footprint calculations are produced in partnership with CarbonCloud. CarbonCloud uses scientifically validated models aligned with the GHG Protocol and ISO 14067, ensuring full compliance and consistency. We have access to the methodology, detailed parameter data, and a complete change log, so every result is traceable and verifiable. Full information on the CarbonCloud methodology is available at <https://carboncloud.com/extended-methodology/>.

We learned that Eat Curious was developed around a simple principle: everyone should have access to affordable, high-quality protein and better nutrition, without increasing the cost of everyday meals – it wasn't just about carbon footprint.

We were seriously impressed by the ease with which the product could be cooked, and the all-important taste test. We were unanimous that the end results were impressive, even for the sceptics!

We discussed blend proportions and Campbell Brothers then took the learnings back to their own factories and experimented with different percentage formulations. They discovered that a blend of beef:Eat Curious that gave the optimum taste profile typically reduced the carbon footprint of their standard burger by 38%, based on the methodology provided in the footnote, whilst also enabling them to produce a burger at a reduced price point – the all-important factor for all customers.

Compared to regular 100% minced beef, the new blended mince contained 23% less fat, 45% less saturated fat and is 18% lower in calories.

The outcome was that Campbell Brothers then created both Eat Curious blended beef mince and burgers in their own factory; they're now part of the Bidfood core range and adopted by an increasing number of customers. The blended mince is already purchased by three major national accounts covering sectors from Travel and Leisure, to Healthcare and Education, all keen to act on their scope 3 emissions. Both categories have shown steady and strong growth since their creation.



Figure 1: Campbell Brothers' blended burger

Challenges encountered

The main learning for the blended mince is that it reduces the shelf life of minced beef from seven to five days. However, as we only use fresh product it can be frozen on site in line with customers' HACCP process should they need to.

Lessons learnt

Sustainability is easier to sell, when a solution sits in the Venn diagram 'sweet spot' between people, planet and profit. In this case, it's a solidly commercial proposition due to reduced cost, it's socially acceptable because there's no compromise to taste or diner experience and easy to use in commercial kitchens, plus it directly supports the environmental objective of carbon reduction. Working with Eat Curious has helped us innovate, improve to drive greater customer satisfaction, and identify further opportunities for the range. We look forward to our next steps (below).

Next steps

We're already looking to add blended lamb mince and blended lamb kofta mince to our range. Both of these are already generating serious customer interest.