

Reducing fat in traditional breakfast favourite

"One of the biggest wins from our reformulation project was finding a use for a by-product from within our own production chain."

Katherine Wernsen-Towler, Technical Director Perthshire butcher and manufacturer of premium meat products Simon Howie is passionate about quality meat. From award-winning bacon to Scotland's best-selling black pudding and the UK's best-selling haggis, Simon Howie's quality ingredients are trusted and relied upon by their customers to create mouthwatering everyday meals.

Why reduce the fat in black pudding?

We have the number one black pudding brand in Scotland, selling approximately 2million packs a year.

Although this is a breakfast favourite made to a time-honoured recipe, we wanted to explore whether we could reduce the fat content in the product, reducing the calories and making it a healthier choice for our customers.

An added driver was the price of beef fat - previously a relatively inexpensive by-product - which has increased sharply recently.

We received £3,000 in support from the third round of the Reformul8 Challenge Fund.

This covered raw materials used in the development phase, production time and the nutritional and microbiological testing of the finished product.

What we did

Initially, we wanted to reduce the fat content of our black pudding by between 20 and 30%.

We had intended to source and trial several fat alternatives, but a flash of inspiration transformed two challenges into one solution.

- By-product: Simon Howie has seen a surge in production of packs of bacon. We arrived at the idea of using the ends generated from our bacon production as a fat substitute. We generate so many kilogrammes of bacon ends every day and there is no home for them so this appeared to be a great potential solution.
- Timeline: The project took around 10 weeks, kicking off in February 2023, and brought together production, technical and commercial who formed the core team for discussion and decision-making.
- Substitution: We used different percentages of bacon ends to produce the fat, aiming not to affect the taste or flavour. Through experimentation, the combination of 40% bacon and 60% beef fat seemed to give the best results. We tried 60% bacon ends but felt this gave the slightest hint of bacon in the taste.



We haven't yet carried out any blind sensory testing or general market testing.

Our next step would probably be to feature it as a special limited product in one or both of our butchery shops to test with the general public.





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The findings

The results of the reformulation project found:

- we had suspected that using bacon would increase the protein content of our black pudding, as our bacon is very lean, and it did. In fact, it cut the fat content almost in half.
- we also expected an increase in the salt content, as we were introducing a cured product. However it actually reduced the salt content of the final product.
- there is a massive potential impact for customers and we're not keen on tampering with our particular existing products. A reduced fat label might put loyal customers off with a negative effect on sales
- there is the issue of adding pork to a product, which would require ingredient declaration as eating pork is forbidden in certain religions



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CASE STUDY

The benefits and learning points

We were surprised at how straightforward it was. We carried out two trials, and it all seemed to fall into place so we were obviously very lucky, focused — or both. We had discussed the percentages beforehand and there is an element as a butcher of knowing your product.

By-product benefits: the biggest win was finding a use for a by-product – the bacon ends - in our own production chain

Internal engagement: the reformulation project made the team feel involved and informed, so for example the production supervisor was genuinely interested and engaged in how the reformulated black pudding had performed

Challenge presumptions: it's important to start with a lack of preconceptions, for example the reduced salt was an unexpected result from our testing, so it's worth testing out everything

Grab opportunities: we're keen to look at different options, such as Cardowan's reduced fat cake margarine as well as ingredients from clean label supplier Ulrick & Short. But one of the biggest challenges is getting factory production time because we're replacing commercial activity when we're running trials.

Commercial balance: there is understandable nervousness about changing an existing product that is so popular. We don't get offered extra space on supermarket shelves, so it's important



the consumer market is ready and there is the demand to support introducing a reformulated black pudding.

Consequently, we're more likely to introduce a reduced fat line, increasing the range and choice of our products.

