

CASE STUDY

Tower Bakery

Reformulation of morning rolls to create higher fibre white rolls

Tower Bakery in Abernethy has been owned by Angela and Sandy McKinnon for over 40 years, and they now run the business alongside their three children.

The bakery has 5 own brand retail shops, and third party outlets including a large retailer and local authority contracts. With bakery in the blood, Tower Bakery boast a number of Industry awards for a range of their produce.

With the New Nutritional Requirements for Schools Regulations now in force in Scotland, many Local Authorities are seeking options from suppliers containing enhanced nutrition. Stirling Council contacted Tower Bakery, an existing supplier, seeking an enriched white morning roll containing higher fibre.

The reformulation process is not new to the business, who have been reformulating for years in order to meet retailers' specification requirements.

Despite the challenges presented by covid, Tower Bakery were keen to explore this project. Pandemic circumstances led to many of the team working from home, and with the other working restrictions in place, the process no doubt took longer than it would have pre-pandemic. It would have been easy for Tower Bakery to shelf the idea, but Angela and Sandy were aware of the health benefits they would be able to introduce to their local community, and the business opportunity to supply local schools and nurseries, by developing the product.



Tower Bakery produce a range of bakery goods

The Reformul8 program, hosted by FDF Scotland, was pleased to award financial support to Tower Bakery to assist with their reformulation project, through the **Reformul8 Challenge Fund**. While many reformulation processes require just small amendments, many do attract additional costs including trial ingredients, laboratory analysis, and consultancy advice. The funding enabled Tower Bakery to offset the above overheads, and dedicate a member of staff to the project.

There was a great deal of research involved, to identify and source higher fibre flours and powdered fibres which would present enough fibre, while maintaining a light coloured appearance in the product.

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The NPD team sampled many flour alternatives, in multiple recipe formulations. The functionality of the alternative ingredients was very similar to wheat flour, so no processing adjustments were required. The repeated trials were required to fine tune fibre content, with the appearance of the roll, as it was important to Tower Bakery that the roll carried a similar appearance to their white morning roll, as such making it an easy transition for procurement and customers alike. It wasn't until they enlisted the help of a consultant who was able to point them in the direction of a powdered fibre, that they settled on the final formulation.

"The fibre is something that is used by large bakeries, and available, but doesn't seem to be promoted by ingredients companies. We wouldn't have been able to use it if we hadn't been told exactly where to source it from by our consultant". Angela McKinnon

The finished product

The original recipe morning roll made with wheat flour contains 2.1g fibre per 100g product. Tower Bakery's new reformulated higher fibre white morning roll contains 4.3g per 100g, which is more than double the original fibre content.

The initial consumer base for the higher fibre white rolls will be local schools and nurseries, supplied through Perthshire council procurement. This is just the beginning for the product, as Scotland Excel has listed Tower Bakery as part of their framework and able to supply a white high fibre roll to meet government requirements.

Beyond engaging with new supply opportunities brought by the enriched morning roll, Tower Bakery are interested in rolling out the formulation to sell in their own shops and other outlet avenues. There is scope to increase the use of the high fibre ingredients in other products in the future, to increase the fibre content across the Tower Bakery range.

Angela would encourage other manufacturers to reformulate, be it on their own terms or to meet nutritional requirements set out by government.

www.towerbakery.co.uk

FDF Scotland's Reformulation for Health programme offers free to access support to SME manufacturers in Scotland. Support is also available to suppliers of the Scottish food and drink industry, to ensure reformulation friendly ingredients are accessible to active reformulation projects.

For more details, contact reformulation@fdfscotland.org.uk or visit www.fdfscotland.org.uk