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Ian Quinn Chief reporter The Grocer

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Sir

I was very interested to read your letter about the incidence of high fat and sugar in free-from gluten foods.

Developing gluten free products does present some technical challenges, especially in bakery products such as biscuits and bread. To understand these it is worth considering what function gluten performs in these food products. Gluten is the protein that forms when wheat flour is exposed to water and is manipulated, either through beating or kneading. This protein then traps air and so creates the texture or "crumb" of breads, cookies, cakes, and pastries. Because gluten plays such a vital role in the structure of baked goods replacing it can dramatically affect the quality of the end product. To overcome the challenge of creating gluten-free products, historically gluten replacements have been used which include hydrocolloids, such as xanthan gum, guar gum, and ground seeds like psyllium, flax, and chia1. More recently, combinations of high protein and high starch flours have been used to mimic the characteristics of gluten thus avoiding the need to use additives - gluten free grain flours include amaranth, teff, white and brown rice, quinoa and oat flour. The quality of gluten free breads tends to be inferior to wheat breads in terms of taste attributes, loaf volume, crumb texture, shelf life and staling.

Fat and sugar do not mimic gluten functionality so they don't replace the role of gluten but there are other potential reasons based on their functionality in specific products. For example, amongst the many important functions of fats in products is the improvement of flavour delivery of products and improvement of texture including reducing stickiness. Sugars are added to products to improve texture, generate colour and flavour, and improve shelf life. The reformulation of products to create gluten free products need to address any compromise to sensory aspects and shelf life.

Science is needed to understand the role of ingredients in foods so that when replacements are needed, such as gluten or indeed to reduce fat salt or sugar, manufacturers can create the correct functional role of the ingredient as well as flavour so that the consumer is happy with the result.

Yours

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Retailers commit to making free-from ranges healthier 13 May 2016 | Ian Quinn

Supermarkets have promised to make their gluten-free products healthier, after research by The Grocer revealed some lines can be up to seven times higher in fat than 'standard' products.

Fat levels - and in some cases sugar levels - of many own-label gluten-free products are considerably higher than in products with gluten, the research found.

The difference is particularly pronounced in bread. An Asda Chosen By You free-from white loaf contains 12.7g of fat per 100g - seven times the 1.9g of fat per 100g of the 'standard' equivalent. A comparable gluten-free loaf at Tesco has three times the amount of fat per 100g compared with a standard loaf, while Sainsbury's is four times higher. Big discrepancies were also found in ready meals. A 400g Sainsbury's free-from beef lasagne, for example, contains 7.2g of fat per 100g - 50% more than the supermarket's standard frozen lasagne; it also has one-and-a-half times as much sugar. Comparable gluten-free products from Asda and Tesco contain 12% and 8%, respectively, more fat than the standard versions.

There are technical reasons for the higher fat and sugar levels in some cases, with experts saying gluten-free recipes sometimes contain more fat or sugar to improve taste or texture. But nutritionists warned consumers often believed free-from options were healthier than standard versions, and supermarkets needed to do more to tackle the disparities in their own-label lines.

"We want them to look at what more can be done to bring down fat and sugar levels in gluten-free products," said Coeliac UK CEO Sarah Sleet. "It's unfair that so many people have to use alternatives loaded with extra fat."

Tesco, Sainsbury's and Asda all stressed they were committed to making their gluten-free products healthier. A Sainsbury's spokeswoman said the retailer had been working hard on bringing free-from products "more in line with their standard equivalents, ensuring we offer a choice of healthier options". A reformulated range would begin hitting shelves "from the end of May".

Tesco said it was working on bringing down fat levels in its gluten-free bread, adding sugar was already lower than in its conventional loaf. "We continually work to improve the nutritional value of our free-from range without compromising on taste or quality," a

spokesman added. "We ensure all products are clearly labelled with nutritional information so that customers can make informed choices about what to buy."

Meanwhile, Asda said it was looking to see what could be done to reduce the fat levels in its gluten-free products without compromising on taste, having recently relaunched its range. "These products have been developed to meet the nutritional value of their 'standard' equivalent as much as possible," said a spokeswoman. "As part of this relaunch, we are currently looking at the nutritionals of existing free-from products."

Dr Glenys Jones, a nutritionist and spokeswoman for the Association for Nutrition, warned consumers without gluten intolerance should steer clear of the calorie-laden products.

"Sometimes there will be a technical barrier involved in gluten-free products," she said. "These products are using fat and sugar to replace gluten both for taste reasons and in some cases, such as bread, where gluten provides elasticity in the products," she said.

"However, the sort of figures The Grocer has found shows it's just a myth that gluten-free diets are healthier. In many cases they are much higher in fat and certainly are going to be far more calorific. They are certainly not suitable for people looking to lose weight."

Ian Quinn

Chief reporter

The Grocer