



makes a better frankfurter

Tests confirm the benefits of Nordic Sugar's sugar beet fibre



Frankfurters get a textural lift with Fibrex® from Nordic Sugar. Recent tests prove that the addition of the sugar beet fibre to a frankfurter formulation results in a firmer, less watery final product where the fat remains in suspension.

In a series of tests a frankfurter made with Fibrex® was compared to a standard frankfurter with soy protein and a control with neither Fibrex® nor soy protein. Only the meat, Fibrex® and soy protein content varied in the three samples, enabling a meaningful comparison of the test results. The water content was also adjusted for texture and cost optimisation purposes.

Benefits

- Fibrex® has high thermostable water holding capacity
- Fibrex® improves texture
- The use of Fibrex® in frankfurters enables the meat or fat content to be reduced
- 1.25% Fibrex® can replace 1.50% soy protein
- Fibrex® reduces production costs
- Fibrex® is GMO-free and ISO 9001 approved



The frankfurters were analysed by a texture analyser and sensory analysis. In figure 1, the results of the sensory analysis show that Fibrex® significantly improves the water holding capacity of the frankfurter, making it firmer and less watery. No significant differences were observed in chewing time between the frankfurters made with Fibrex® and soy protein, while the Fibrex® frankfurters were

slightly less red and had a slightly more intense smoky flavour and salty taste.

The texture analyser results in figure 2 confirm that the addition of Fibrex® improves the texture, and that there is no difference in compression whether the frankfurters contain Fibrex® or soy protein.

Ingredients	Standard	+ Soya	+ Fibrex®
Meat & fat	74.14%	72.64%	72.89%
Nitrite salt	1.60%	1.60%	1.60%
Dextrose	0.20%	0.20%	0.20%
STTP	0.30%	0.30%	0.30%
Potato starch	2.00%	2.00%	2.00%
Seasonings	0.50%	0.50%	0.50%
Soy protein	–	1.50%	–
Fibrex® 595	–	–	1.25%
Water	21.26%	21.26%	21.26%
Total	100.00%	100.00%	100.00%

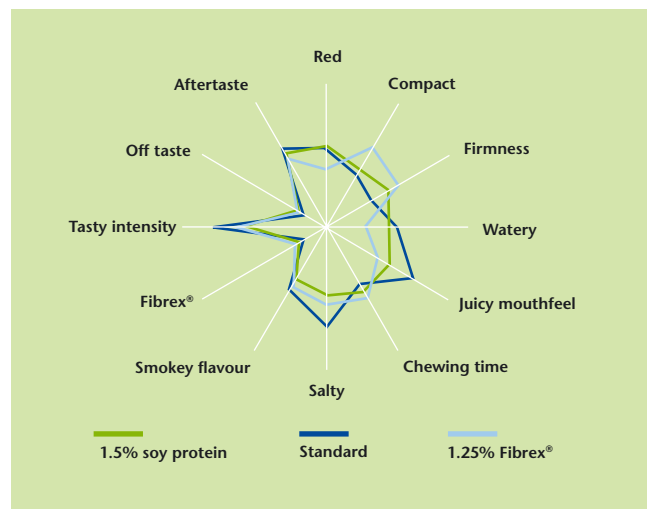


Table 1. Frankfurter recipes: standard, with 1.5% soy protein and with 1.25% Fibrex®.

Figure 1. Comparison of sensory parameters of frankfurter with 1.5% soy protein, 1.25% Fibrex® and standard.

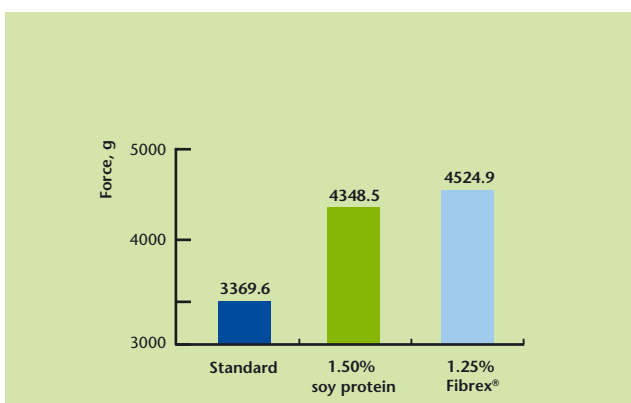


Figure 2. Comparison of compression in frankfurters measured by a texture analyser.