

Sensory characteristics and acceptability of sausages with 10% fat and added rye or wheat bran

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BACKGROUND AND OBJECTIVES

Improving the nutritional profile of sausages by addition of dietary fibres might influence appetite, sensory characteristics and liking differently depending on the fibre source.

The objective of this study was to investigate:

- 1) Sensory characteristics
- 2) Consumer liking assessed among two Danish target groups



Table 1. Nutritional content of the test sausages given per 100 g.

	WBS	RBS	WFS	20%S	10%S
Fiber source	Wheat bran	Rye bran	-	-	Potato
Energy (kJ)	771	723	714	1050	620
Protein (g)	13.9	13.4	13.4	12	10
Carbohydrate (g)	5.6	4.3	4.5	5	8
Dietary fiber (g)	3.2	2.4	0.4	-	2
Fat (g)	11.2	10.9	11.0	21	9

METHODS

Sensory profile with nine trained panelists evaluating texture, odor, appearance, taste, flavor.

Consumer test among 49 children (6-9 years old) and 24 parents



RESULTS

- 1) Of all the sausages, RBS and WBS were most brown, had the greatest extent of dots and the coarsest inner structure. WBS differed from all other samples being less juicy and having a higher intensity of cereal flavor whereas RBS was similar to the commercial 10%S according to juiciness, fatty mouth feel and firmness.
- 2) The consumer tests showed that liking was lower for WBS than for RBS whereas the latter was not different from the commercial 10%S.

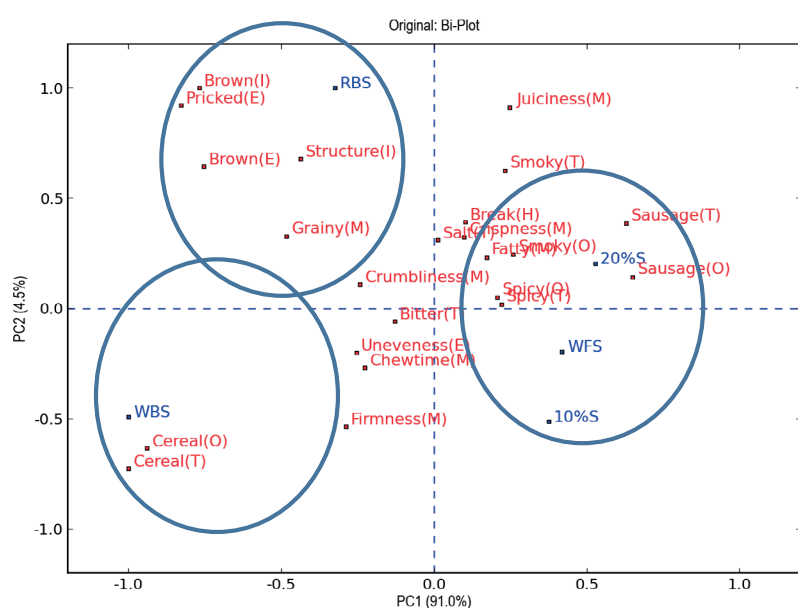


Figure 1: PCA plot of objective data from the sensory profiling. Letters in parentheses indicate the attribute category: consistency in hand (H), odor from the interior surface (O), appearance of the exterior surface (E), appearance of the interior surface (I), taste (T), flavor (F) and consistency in the mouth (M).

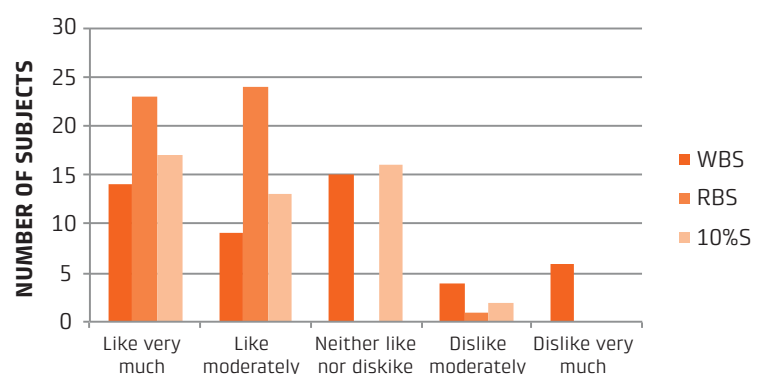


Figure 2: Liking evaluated by children in central location test (n=49). Liking was evaluated on a 5-point smiley scale.

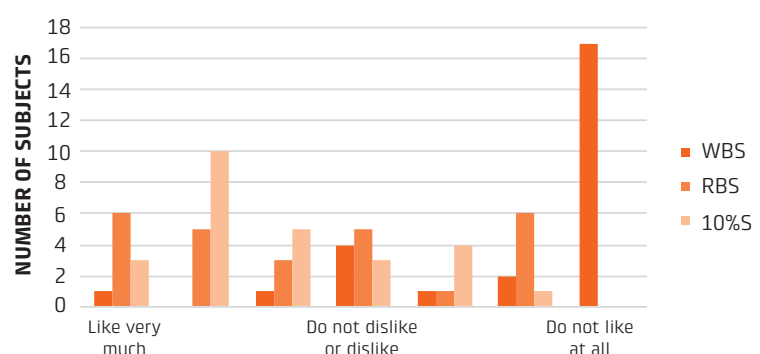


Figure 3: Liking evaluated by parents in home use test (n=24). Liking was evaluated on a 7-point categorical scale.

CONCLUSION

Addition of dietary fibre from rye bran to sausages represents a promising approach to improve the healthiness of conventional sausages while maintaining consumer liking.

See also: "Appetite and food intake after consumption of sausages with 10% fat and added rye or wheat bran" by Vuholm et al. (PO28888)



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