

Improved everyday food for home living elderly – perception of protein and energy enrichment

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Introduction

Protein-energy malnutrition can be a problem among elderly. A way to increase protein intake may be to enrich home-cooked foods. In this, special attention should be given to that the food is conveniently prepared and well accepted by the target group.



Objective

To investigate the effect of protein and energy enrichment on sensory attributes of home cooked food designed for elderly.

Material and methods

Through triangle testing, the ability of 43 panelists (17 males, 26 females, aged 50+) to discriminate between standard recipes and enriched versions of four Swedish everyday foods, i.e. batter pudding, rye bread, meat loaf and pea soup was evaluated.

Enrichments were focused on practically feasible ways of increasing the level of high quality protein and energy in these food items by means of adding e.g. milk powder, egg, soy flour and high fat dairy alternatives.

Results

The results from the tests show that it is possible to enrich batter pudding and pea soup without significantly influencing the sensory attributes (Table 1). For the meat loaf and rye bread, however, the difference between the standard and enriched versions was noted by the panelists. They mainly commented on color and texture differences between these different versions.

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Table 1. The number of panelists who pick out the correct deviant sample, d' values and an interpretation of the result.

	Correct/ incorrect	(d')	Interpretation
Batter pudding	20/23	1,28	The panelists cannot discriminate between the enriched and standard batter pudding
Rye bread	26/17	2,0	The panelists are able to discriminate between the protein-enriched and standard rye bread
Meatloaf	32/11	2,76	The panelists are able to discriminate between the enriched and standard meat loaf
Pea soup	18/25	1,0	The panelists cannot discriminate between the enriched and standard pea soup



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