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ATTITUDES AND HEDONIC RESPONSES TO HIGH PROTEIN MEAT PRODUCTS AMONG YOUNG AND ELDERLY CONSUMERS

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Background and aims
There is currently a growing demand for protein enriched food. Protein intake is important for athletic people, and protein enriched food is a good way to meet their nutritional requirements [1]. Additionally, new evidence show higher protein ingestion is beneficial for maintaining health of elderly people [2]. In order to meet these demands, this study examines hedonic responses and attitudes of protein enriched sausages targeted at active young (18-35) and elderly (65+) consumers.

Method
The target ingredient used for this study is umami tasting protein hydrolysate from pork and beef meat. This type of meat protein is expected to be appropriate for sausages as umami taste is expected to enhance the other flavor properties of the product. Fourteen sausages samples were developed following an experimental design where protein hydrolysate content (0%, 7.5%, 12.5%), type (beef, pork), and recipe (Normal, Merguez, Curry) were systematically varied. A consumer study was conducted where young (N=80) and elderly (N=20) consumers evaluated perceived liking on a 9 point hedonic scale, and completed a Check-All-That Apply (CATA) questionnaire focusing on sensory attributes and appropriateness for relevant usage contexts.

Results and discussion
The results of the research indicate a high degree of similarities in liking between the experimental factors (Figure 1 and Table 1). On average, the merguez recipe was significantly more liked than the other two, and pork protein hydrolysates were preferred to beef. Protein content did not have a significant impact on liking, suggesting that protein enrichment in this product matrix does not affect consumer’s preferences compared to a reference standards. The mean liking for the elderly group was slightly lower than the young. Tentatively, this may be due to higher pickiness in this group [3]. The samples were more clearly discriminated on the basis of the CATA attributes. Correspondence analysis (Figure 2) showed that the main product differences were related to flavor intensity (hot vs mild), primarily due to recipe, and to basic taste (Bitter vs Sweet), primarily due to meat type.

References