Concurrent Session 6: Food and Nutrients

**Calcium glutamate enhances acceptability of reduced-salt sausages**

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**Background** - One strategy for reducing Na intakes is to develop reduced-salt equivalents of foods that conventionally have a high salt content. But can we make them taste as good?

**Objective** - To assess the impact of different levels of calcium diglutamate (CDG) on various taste characteristics of reduced-salt sausages.

**Design** - Healthy university students and staff (n=65) tasted nine bratwurst sausages, representing all combinations of three levels of added salt (0.12, 0.28 and 0.69 g added Na per 100 g) and three levels of added CDG (0.00, 0.10 and 0.40g per 100g), in random order. They used nine-point scales to rate each sausage for 11 characteristics, including their liking for it.

**Outcomes** - For liking ratings, ANOVA showed significant (P<0.05) main effects for Na and glutamate, but not a significant interaction term. Post hoc comparisons (Tukey test) indicated that the 0.12% Na + 0.00% CDG sausage was less well liked than the 0.69% Na + 0.00% CDG sausage (3.8 vs 4.7, P<0.05). Addition of CDG to the 0.12% Na sausage raised its mean liking to 4.2 (0.10% CDG) and 4.9 (0.40% CDG) – neither being significantly different from the 0.69% Na + 0.00% CDG sausage.

**Conclusions** - CDG makes reduced-salt sausages equivalent in palatability to sausages with a conventional Na content. This is similar to previous findings with soup, and suggests CDG has potential to improve palatability of a range of reduced-salt foods.