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Innovations in catering industry: first results of a quasi-experiment at a university canteen

NOVANIMAL
Innovations for a future-oriented consumption and animal production

Worldwide consumption of meat and milk products is increasing.[1] These nutritional transitions affect the environment as well as public health.[2]

Eating habits in Switzerland center around dairy and meat. At the same time a rising share of all main meals are not eaten at home[3], and large numbers of people eat daily in the public or institutional food sector.[4]

▶ **How can the catering industry contribute to a moderate consumption of animal-based food?**

▶ **How can consumers be prompt to eat more frequently resource-light meals with less animal products?**

Method

Transdisciplinary approach: a quasi-experiment[5] in two ZHAW canteens was developed and conducted with practice partners (SV Schweiz, ZHAW Facility Management).
Intervention: Increased share of plant-based vegetarian and vegan meals.
Length: 2 canteen cycles à 6 weeks.
Meal offer: over 90 different meals via three menu lines (Favorite, Kitchen, World). An important part of the experiment was not to label the meals as vegetarian or vegan.

Preliminary results

- Patrons (with CampusCard): 1601; F/M: 46/54; mean age: 31 years (SD = 10).
- Sold meals (with CampusCard): 23'900 meals on 60 days; meals/patron: 15
- No differences between total meal sales 2015, 2016 and 2017.
- No differences between total meal sales in «meat» weeks and «vegetarian» weeks.
- Meal choice depends on meal offer: In «vegetarian» weeks more vegetarian and vegan meals are sold.
- Women chose less frequently meals with meat than men.

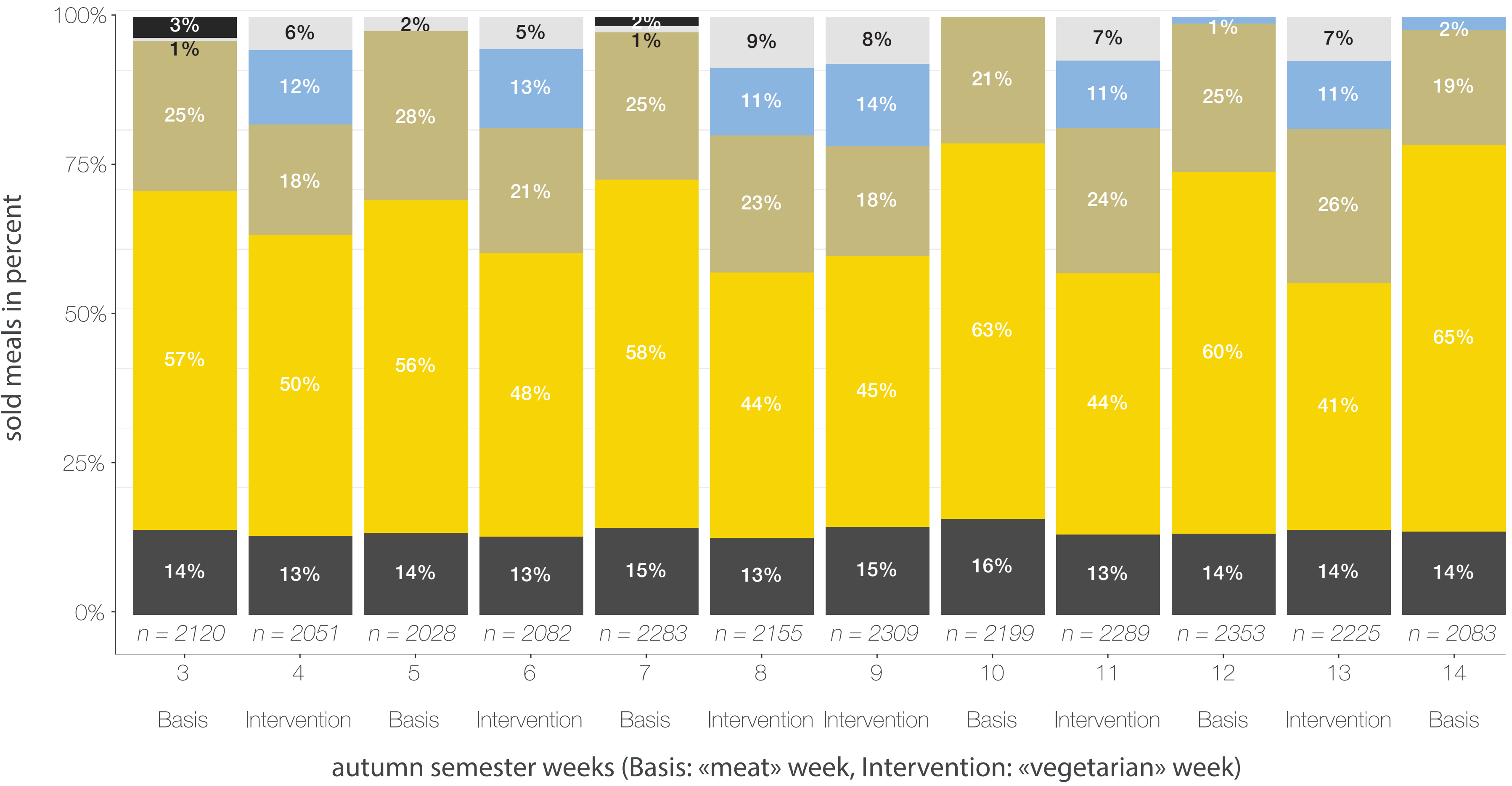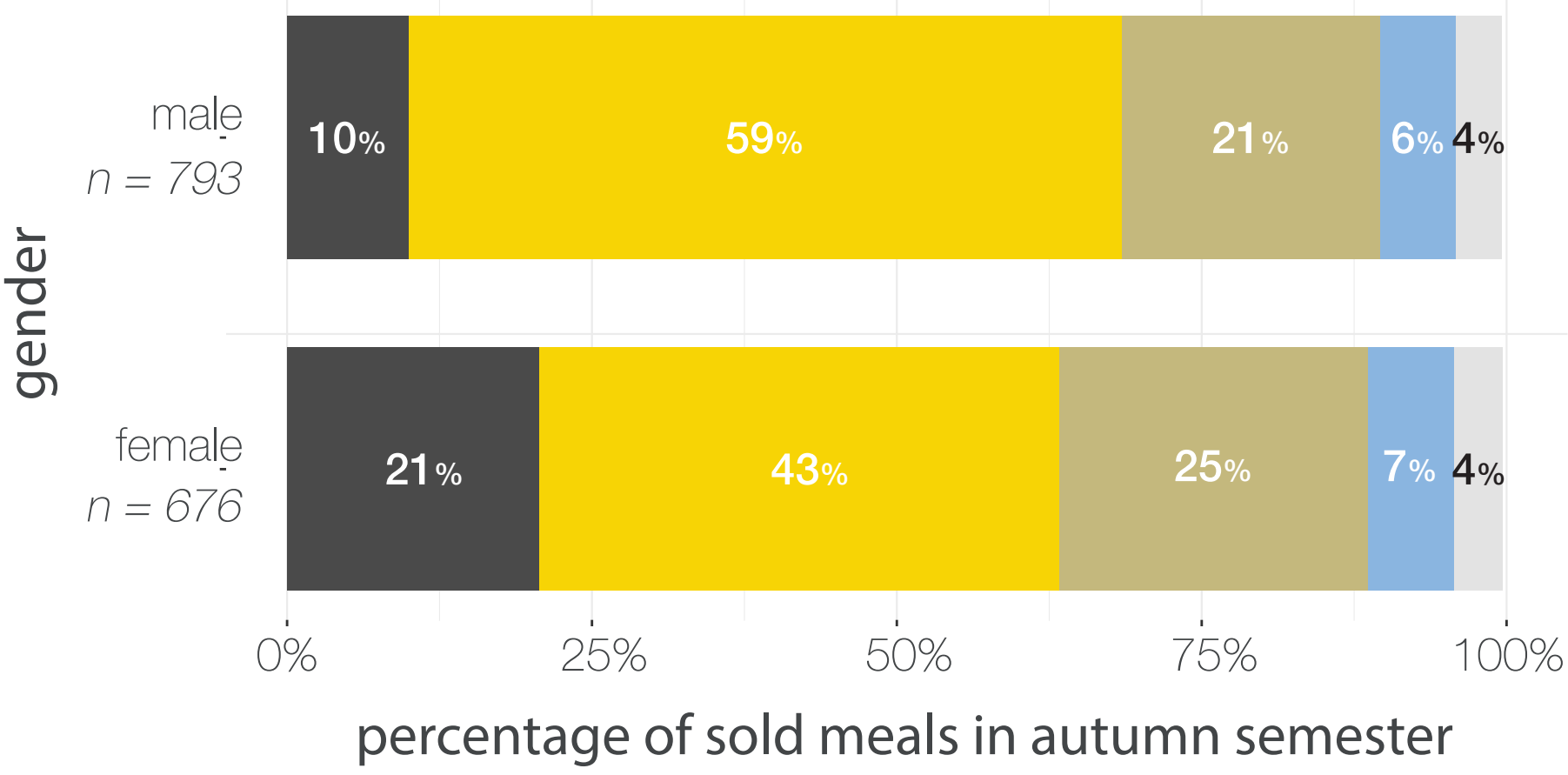meal content (for all figures): hot and cold — vegan* — meat — vegan — vegetarian — NA

Figure 2: Differences in meal choice between men and women, $X^2(4, 22'483) = 746.64$, $p < 0.001$.

Outlook

▶ Further statistical analyses of individual and panel data: explaining meal sales; finding nutrition patterns; LCA of «meat» and «vegetarian» weeks; etc.
▶ Discussing results with practice partners.
▶ Conclusions and recommendations to develop innovative resource-light meal offerings.

Figure 1: Differences in meal choice between «meat» weeks and «vegetarian» weeks, $X^2(4, 26'177) = 2'367.6$, $p < 0.001$.

autumn semester weeks (Basis: «meat» week, Intervention: «vegetarian» week)

Table 1: Repeated ABABAB reversal design[5] with the three menu lines.

meat — vegetarian — vegan (with meat substitute) — vegan* (authentic)
favorite — kitchen — world

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