**NO EFFECTS OF SWEET TASTE EXPOSURE AT BREAKFAST FOR 3 WEEKS ON PLEASANTNESS, DESIRE FOR, SWEETNESS OR INTAKE OF OTHER SWEET FOODS: A RANDOMIZED CONTROLLED TRIAL**

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**Online Supplementary Materials**

**Supplementary Table 1:** Correlation co-efficients for partial correlations (controlling for participant ID) between the measures for pleasantness, desire to eat and sweetness for the combined foods and all individual sweet foods (n=310).

|  |  |  |  |
| --- | --- | --- | --- |
| Sweet Foods | Combined Ratings for |  |  |
| Ratings for Individual Foods | **Pleasantness** | **Desire To Eat** | **Sweetness** |
| Apple Juice | 0.80\* | 0.81\* | 0.82\* |
| Madeleine Cake | 0.75\* | 0.76\* | 0.76\* |
| Tinned Peaches | 0.75\* | 0.68\* | 0.80\* |

\* All correlations significant at p<0.01.

**Supplementary Table 2:** Correlation co-efficients for partial correlations (controlling for participant ID) between the measures for pleasantness, desire to eat and sweetness for the combined foods and all individual non-sweet foods (n=310).

|  |  |  |  |
| --- | --- | --- | --- |
| Non-sweet Foods | Combined Ratings for |  |  |
| Ratings for Individual Foods | **Pleasantness** | **Desire To Eat** | **Sweetness** |
| Low-Fat Natural Yoghurt | 0.69\* | 0.63\* | 0.80\* |
| Cucumber | 0.65\* | 0.64\* | 0.75\* |
| Medium Cheddar Cheese | 0.68\* | 0.60\* | 0.81\* |

\* All correlations significant at p<0.01.

**Supplementary Results 1:** Analyses using ANOVA for each of the individual sweet foods.

**Pleasantness**

**Breakfast:** In pleasantness ratings at breakfast, in all three sweet foods, there were no exposure x time interactions (largest F(2,100)=1.50, p=0.23, ηp2=0.03).

**Lunch:** At lunch, in all three sweet foods, there were no exposure x time interactions (largest F(2,100)=1.39, p=0.25, ηp2=0.03).

**Desire to eat**

**Breakfast:** In desire to eat ratings at breakfast, in all three sweet foods, there were no exposure x time interactions (largest (F(2,100)=2.27, p=0.11, ηp2=0.04).

**Lunch:** At lunch, there was a trend towards an increase in desire to eat for apple juice and cake (smallest F(2,100)=4.27, p=0.02, ηp2=0.08). In all three sweet foods, there were no exposure x time interactions (largest (F(2,100)=1.23, p=0.30, ηp2=0.02).

**Sweetness**

**Breakfast:** In sweetness ratings at breakfast, in all three sweet foods, there were no exposure x time interactions (largest F(2,100)=2.07, p=0.13, ηp2=0.04).

**Lunch:** At lunch, in all three sweet foods, there were no exposure x time interactions (largest F(2,100)=2.88, p=0.06, ηp2=0.05).

**Supplementary Results 2:** Analyses using ANOVA for each of the individual non-sweet foods.

**Pleasantness**

**Breakfast:** In pleasantness ratings at breakfast, in all three non-sweet foods, there were no exposure x time interactions (largest F(2,100)=1.04, p=0.36, ηp2=0.02).

**Lunch:** At lunch, in all three non-sweet foods, there were no exposure x time interactions (largest F(2,100)=1.44, p=0.28, ηp2=0.06).

**Desire to eat**

**Breakfast:** In desire to eat ratings at breakfast, there was a decrease in desire to eat cucumber (F(2,100)=4.90, p=0.01, ηp2=0.09), specifically between day 0 and 7 (t(53)=3.03, p<0.01). In all three non-sweet foods, there were no exposure x time interactions (largest (F(2,100)=1.83, p=0.17, ηp2=0.04).

**Lunch:** At lunch, in all three non-sweet foods, there were no exposure x time interactions (largest (F(2,100)=2.13, p=0.12, ηp2=0.04).

**Sweetness**

**Breakfast:** In sweetness ratings at breakfast, a trend towards an increase in the sweetness of cheese was found (F(2,100)=3.26, p=0.04, ηp2=0.06). In all three non-sweet foods, there were no exposure x time interactions (largest F(2,100)=1.18, p=0.31, ηp2=0.02).

**Lunch:** At lunch, an increase in the sweetness of cheese was found (F(2,100)=6.09, p<0.01, ηp2=0.11), between day 0 and day 7 (t(53)=2.71, p=0.01), and between day 0 and day 7 (t(53)=2.29, p=0.03). In all three non-sweet foods, there were no exposure x time interactions (largest F(2,100)=2.90, p=0.06, ηp2=0.06).

**Supplementary Results 3:** Analyses using ANOVA where missing data were imputed using last observation carried forward, as pre-specified in our Clinical Trials Registration.

**Pleasantness**

**Breakfast:** In pleasantness ratings at breakfast, higher ratings were given for the sweet compared to the non-sweet foods (F(1,50)=31.16, p<0.01, ηp2=0.38). There were no exposure x time interactions (largest F(2,100)=1.04, p=0.36, ηp2=0.02).

**Lunch:** At lunch, higher pleasantness ratings were again found for the sweet compared to the non-sweet foods (F(1,50)=28.85, p<0.01, ηp2=0.37). There were no exposure x time interactions (largest F(2,100)=1.36, p=0.26, ηp2=0.03).

**Desire to eat**

**Breakfast:** In desire to eat ratings at breakfast, higher ratings were given for the sweet compared to the non-sweet foods (F(1,50)=20.54, p<0.01, ηp2=0.29). There were no exposure x time interactions (largest (F(2,100)=1.48, p=0.23, ηp2=0.03).

**Lunch:** At lunch, higher desire to eat ratings were given for the sweet compared to the non-sweet foods (smallest F(1,50)=14.32, p<0.01, ηp2=0.22). There was a significant increase in desire to eat for all foods over the three weeks in males, but not in females (F(2,100)=3.28, p=0.04, ηp2=0.036. There were no exposure x time interactions (largest (F(2,100)=0.80, p=0.45, ηp2=0.02).

**Sweetness**

**Breakfast:** In sweetness ratings at breakfast, large differences between sweet and non-sweet foods were found (F(1,50)=245.20, p<0.01, ηp2=0.83). There were no exposure x time interactions (largest F(2,100)=1.28, p=0.28, ηp2=0.03).

**Lunch:** At lunch, large differences in sweetness ratings between sweet and non-sweet foods were found (smallest F(1,50)=213.78, p<0.01, ηp2=0.81). There were no exposure x time interactions (largest F(1,50)=1.34, p=0.25, ηp2=0.03).

**Intakes**

**Breakfast:** Percent energy consumed from sweet foods tended to increase over the three weeks (F(2,100)=3.77, p=0.03, ηp2=0.07). Sugars consumed at breakfast tended to increase over the three weeks (F(2,100)=3.23, p=0.04, ηp2=0.06). No exposure x time interactions were found (largest F(2,100)=1.41, p=0.25, ηp2=0.03) .

**Lunch:** There were no changes in intake at lunch over the three weeks (largest F(2,100)=2.27, p=0.11, ηp2=0.04). There were no exposure x time interactions (largest F(2,100)=0.87, p=0.42, ηp2=0.02).

**Hunger**

**Breakfast:** Hunger increased and fullness decreased at breakfast over the three weeks (smallest F(2,100)=3.81, p=0.03, ηp2=0.07). No effects were found in thirst (F(2,104)=1.67, p=0.19, ηp2=0.03). No exposure x time interactions were found (largest F(2,104)=1.38, p=0.26, ηp2=0.03).

**Lunch:** Hunger, fullness and thirst at lunch did not change over the three weeks (largest F(2,104)=2.87, p=0.06, ηp2=0.05). No exposure x time interactions were found (largest F(1,52)=2.13, p=0.15, ηp2=0.04).