# "What I Eat to Lose Weight" A Food Buffet Experiment 

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## 1 Motivation \& Method

In an obesogenic environment and due to the prevalent sedentary lifestyle, preventing overnutrition is a challenge. However, people often choose inappropriate weight loss strategies, such as very strong calory limitation, meal skipping, or ban of certain food products.
We examined whether people can successfully construct a menu for an entire day that is suitable for weight loss.

Our food buffet consisted of 152 food items (real and replicas). Participants selected foods for an entire day two-times

1) for a Normal Day
2) for a Weight Loss Day


Figure 1. Food selection on a normal day with 2781 kcal (top) and on a weight loss day with 1526 kcal (bottom) of a female participant.

## 2 Results

- Compared to a normal day, a weight loss day had fewer calories, less salt, a higher proportion of sugar, SFA, fiber and protein, and a lower proportion of fat.
- Compared to a normal day, a weight loss day had less sweets \& salty snacks, oils \& fats, protein sources, starchy foods and more vegetables and unsweetened beverages.

Table 1. Comparing energy, macronutrients, sugar and fiber content between a normal day and a weight loss day.

|  | Normal Day |  |  | Weigh Loss Day |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
|  | $M$ | $S D$ |  | $M$ | $S D$ |  |  |
| Total Energy (kcal) | 2342.21 | 916.93 |  | 1380.45 | 524.45 | $* * *$ |  |
| Carbohydrates (\% of TE) | 39.42 | 7.57 |  | 39.97 | 11.74 |  |  |
| Sugar (\% of TE) | 20.88 | 7.62 |  | 24.55 | 10.09 | $* * *$ |  |
| Fat (\% of TE) | 40.70 | 7.53 |  | 34.84 | 10.67 | $* * *$ |  |
| SFA (\% of TE) | 6.89 | 2.06 |  | 12.57 | 5.70 | $* * *$ |  |
| Fiber (\% of TE) | 2.44 | 0.84 |  | 3.60 | 1.30 | $* * *$ |  |
| Protein (\% of TE) | 17.64 | 6.00 |  | 21.91 | 7.79 | $* * *$ |  |
| Salt (g) | 7.59 | 3.35 |  | 5.02 | 2.64 | $* * *$ |  |

Note. TE = total energy served; SFA = saturated fatty acids. ${ }^{* * *} \mathrm{p} \leq .001$

## 3 Conclusion

People seem to know how to compose a weight loss menu, which is healthy. The biggest hurdle is probably the self-discipline to stick to the menu plan over a longer period of time, as the caloric reduction is very high and unrealistic.

## 4 Contribution to Sustainable Food Systems

This study contributes to a comprehensive understanding of how well individuals can put together an adequate menu. This is crucial for developing effective interventions aimed at changing unhealthy eating habits and promoting successful long-term weight control in our obesogenic environment.


