# Designing Technology to Encourage Healthy Eating at Work

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## CCS CONCEPTS

• Human-centered computing ~ User centered design

## KEYWORDS

Office worker; healthy eating; digital technology; questionnaire

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## 1. INTRODUCTION

Office vitality becomes increasingly crucial to improve individuals' quality of life [5]. Eating healthier at work can substantially promote health and vitality among office workers. Office environments and work routines offer good settings to apply healthy eating interventions [1]. In the meantime, many newly developed digital technologies, such as wearable sensors [3] and mobile apps [2] present opportunities to support healthy diet interventions. However, little is known about how to design health-promoting technologies and interventions to optimize office diet. This poster presents an experience sampling study to understand office workers' eating experiences within the workaday context and identify design opportunities to promote office diet optimization.

## 2. METHODS

We designed the survey following the experience sampling method in a format of sentence completion [4], in order to acquire rich qualitative information about the target user and research context. The questionnaire consisted of 29 sentence completion tasks, involving 1) understand office workers' eating experiences in their daily work routine, and 2) acquire user requirements of the diet technology designed to promote occupational health. We posted the questionnaire on the SurveyMonkey platform and received a total of 86 responses.


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## 3. FINDINGS

The received data were analyzed qualitatively. Our results showed that, work productivity concern and health concern were the two main factors influencing the decision of eating behaviors in the work routine. Non-working behaviors such as snack breaks in the work routine were considered to be important to promote health and improve 'work energy' by our respondents. Regarding the interventions to healthy eating, contextual factors such as workload, socialize and environment etc. should be involved in diet tracking as well. The diet-optimizing technology was expected by the respondents with following features: improve adoption and user engagement, decrease time burdens, integrate with work routine properly. Based on these results, we suggest that workplace diet-optimizing technology could be further investigated in the following three design directions.

- Leverage contextual factors as inputs to office diet technology.
- Develop routine-based interventions to promote 'work-eat' dynamics.
- Support the optimization of office diet as secondary tasks at work.

## 4. FUTURE WORK

We plan to design and evaluate several prototypes of workplace diet-optimizing technology based on design opportunities derived from this survey study. We then plan to conduct interventional studies to validate our research insights for improved office vitality.

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