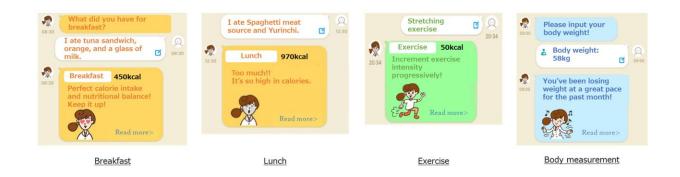


## Smartphone health care app helps users lose weight

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Screenshots of CALO mama Plus. Credit: *Nutrients* (2022). DOI: 10.3390/nu14214608

Behavior therapy is a well-known and effective treatment for obesity. But now, researchers from Japan have found that behavior therapy can be successfully implemented using a smartphone health care app.

In a study recently published in *Nutrients*, researchers from the University of Tsukuba have revealed that CALO mama Plus, a newly developed health care app, led to significant reductions in body weight in a group of office workers classified as being overweight.

Health care apps are an innovative way to provide support to individuals undergoing behavior modification, such as changes in diet or exercise habits. However, at present, few comprehensive studies have examined



the efficacy of such apps, which the researchers at the University of Tsukuba aimed to address.

"In conventional health programs, nutritionists manually calculate the nutritional value of meals, and offer customized advice," says lead author of the study Professor Yoshio Nakata. "Because this specialized support is costly and time consuming, we wanted to test the efficacy of a much more efficient behavior modification app."

To do this, the researchers developed the app and then tested it using a rigorous randomized controlled trial. The participants were divided into two groups: an intervention group, who were instructed to use the app, and a control group, who received no intervention. Those in the intervention group entered information about their diet, sleep quality, exercise and mood, and were instructed to try to follow the advice given by the app.

"The results confirmed the efficacy of CALO mama Plus," explains Professor Nakata. "We found that users of the app lost significantly more weight than the individuals in the control group."

Although the study only examined changes after a three-month intervention period, the effects of the app were similar to other established interventions.

"The change in <u>body weight</u> in the <u>intervention group</u> corresponded with a feasible weight loss target for the participant population," says Professor Nakata.

Health care apps such as CALO mama Plus have the potential to dramatically increase the accessibility of <u>behavior modification</u> therapy because they are much cheaper for participants and more resource-efficient for health care practitioners. Comprehensive assessments of



CALO mama Plus and similar systems will enable researchers and developers to improve the app design and efficacy in the future, leading to greater health benefits for users.

**More information:** Yoshio Nakata et al, A Smartphone Healthcare Application, CALO mama Plus, to Promote Weight Loss: A Randomized Controlled Trial, *Nutrients* (2022). DOI: 10.3390/nu14214608

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