

DEVELOPMENT OF EATING SMART: A MOBILE APP TO FACILITATE DIETARY CHANGE IN PATIENTS WITH COLORECTAL CANCER



Introduction

1. Red and processed meat consumption is known to be associated an increased risk of cancer mortality, including colorectal cancer.
2. Need effective and accessible dietary change strategies.

Aim

To develop a mobile app, specifically designed to promote reducing the consumption of red and processed meat, as well as refined grains, in colorectal cancer patients

Methods

1. Conducted a comprehensive literature review to identify the essential components of existing mobile apps that focused on dietary change in cancer patients.
2. Referenced to our face-to-face dietary intervention that has been shown to be effective in reducing the consumption of red and processed meat and refined grains in colorectal cancer patients.

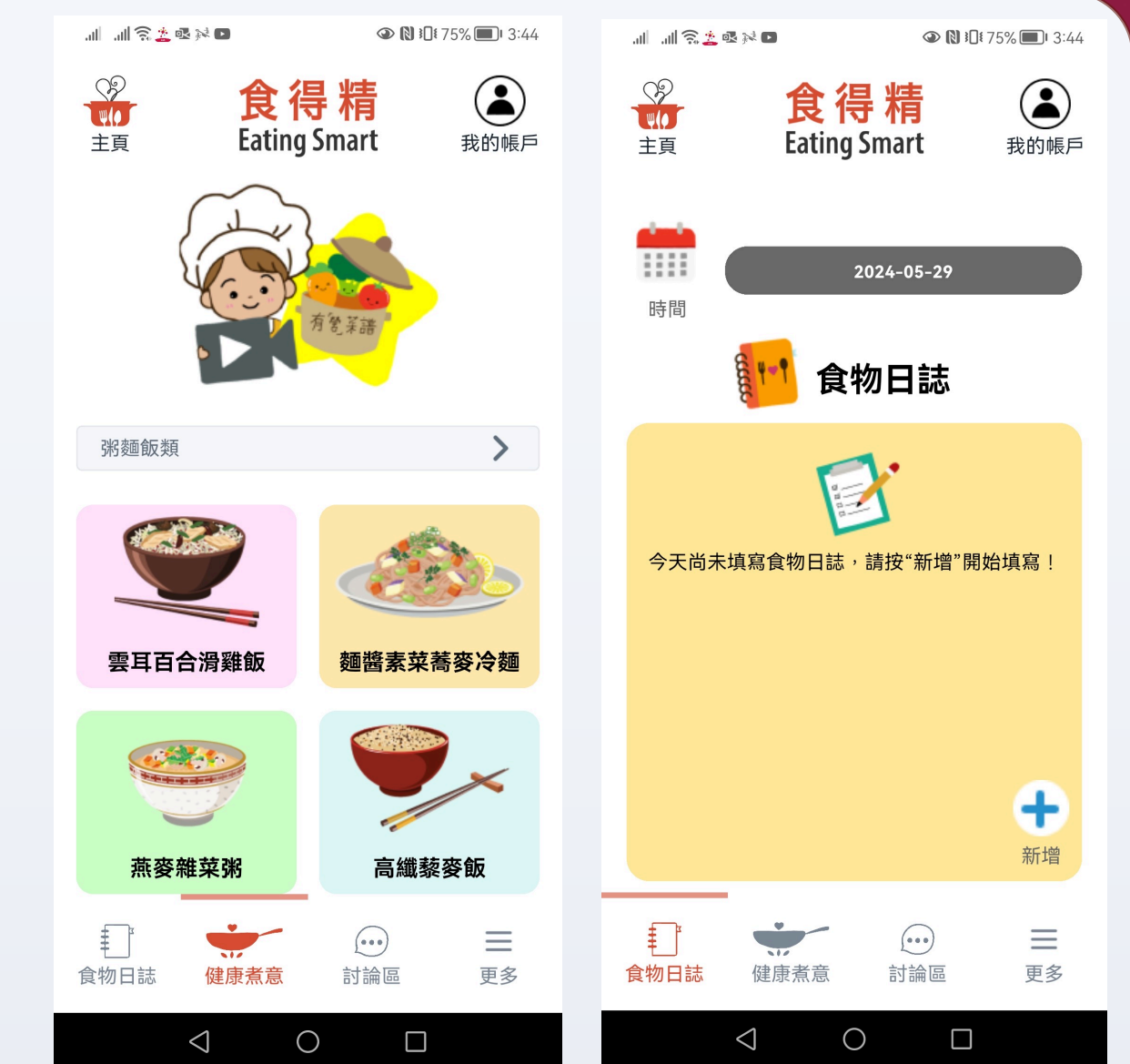
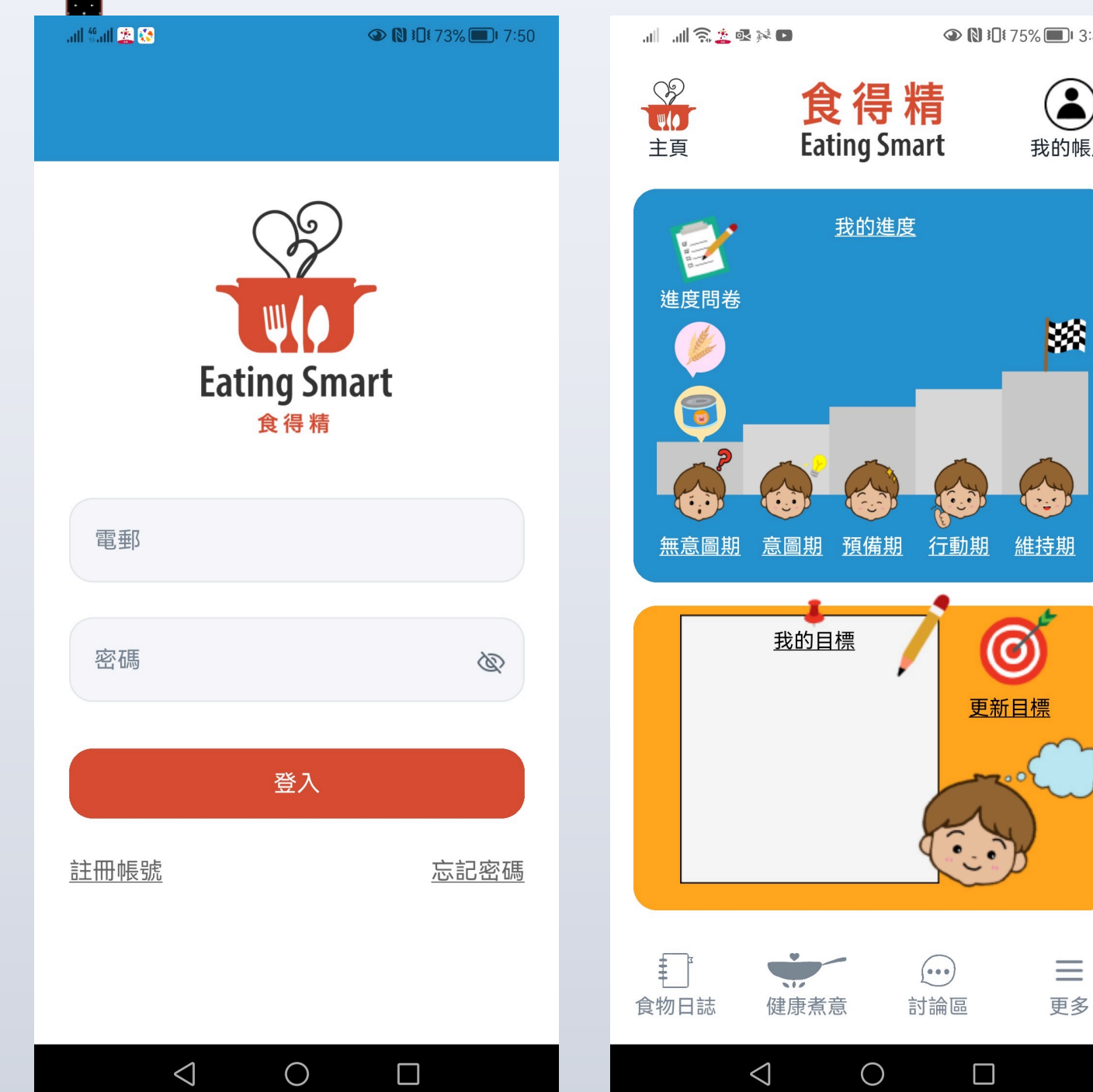
Results – Literature Review

1. Identified 22 relevant cancer studies from 4 electronic databases
2. Geographical location:
 - i. Korea (36%)
 - ii. US (32%)
 - iii. China (14%)
 - iv. Australia (4.5%),
 - v. Germany (4.5%),
 - vi. Iran (4.5%),
 - vii. Spain (4.5%)
3. Identified 20 dietary apps
4. Cancer types:
 - i. Breast (45%)
 - ii. Breast and Endometrial (5%)
 - iii. Gastric (36%)
 - iv. Leukemia/Lymphoma (9%)
 - v. Lung (5%)
5. Main app components:
 - i. Self diet monitoring (86%)
 - ii. Dietary goal setting (59%)
 - iii. Feedback messages (55%)
 - iv. Self body weight monitoring (40%)
 - v. Personalized dietary management planning (22%)
 - vi. Social platform (19%)

Results – Eating Smart

Essential components:

1. Goal setting
2. Progress monitoring
3. Cooking/food suggestions
4. Social support
5. Continual incentives
6. Evidence-based recommendations



Discussion

1. Lack of theory-based dietary intervention for colorectal cancer patients.
2. “Eating Smart” has the potential to enhance dietary adherence and improve the overall well-being of individuals navigating colorectal cancer treatment and survivorship.
3. Future studies will assess the effectiveness and long-term impact of the app on dietary behavior changes and health outcomes.