

# Message strategies to increase fruit and vegetable intake in adults with cardiovascular risk factors: Application of Taylor's six segment message strategy wheel



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## INTRODUCTION

Cardiovascular disease is the primary cause of death globally, and its mortality rate is steadily increasing<sup>1</sup>. The adoption of a healthy dietary pattern has the potential to lower all-cause mortality rates and safeguard cardiovascular health<sup>2</sup>. Although the World Health Organization recommends a daily intake of 400g of fruits and vegetables, a considerable portion of the population does not adhere to this guideline<sup>3</sup>. Therefore, this study aims to develop a message strategy that encourages the consumption of fruits and vegetables.

## METHODS

This study utilized Taylor's Six-Segment Message Strategy Wheel based on the Elaboration Likelihood Model (ELM)<sup>4</sup>. In order to develop a message strategy, the following steps were taken: (1) an examination of campaigns that were previously run with a theme of healthy eating habits based on the six-segment message strategy wheel, (2) preparation of a draft based on the findings, and (3) an evaluation with input and corrections from peers.

## RESULTS

- As a result of reviewing the fruit and vegetable eating campaign conducted by the central government using the six-segment message strategy wheel, most of the messages for the purpose of information delivery were concentrated on the ration segment among the six segments.
- The message strategy was developed based on the specific characteristics of each segment.

### (1) EGO

This addresses messaging strategies that aim at influencing an individual's self-concept or self-identity. It is recommended to employ the Diffusion of Innovations theory and select suitable opinion leaders to deliver positive messages about consuming fruits and vegetables.

### (2) SOCIAL

This aims to promote, cultivate, and safeguard social connections. Messages were crafted based on the Theory of Planned Behavior and subjective norms to convey sentiments such as 'Your family desires your well-being by increasing your fruit and vegetable consumption.'

### (3) SENSORY

This aims to engage individuals' five senses. Utilizing the Humor Appeal theory, the messages were crafted to convey the refreshing imagery and light sensations linked with vegetables and fruits.

### (4) ROUTINE

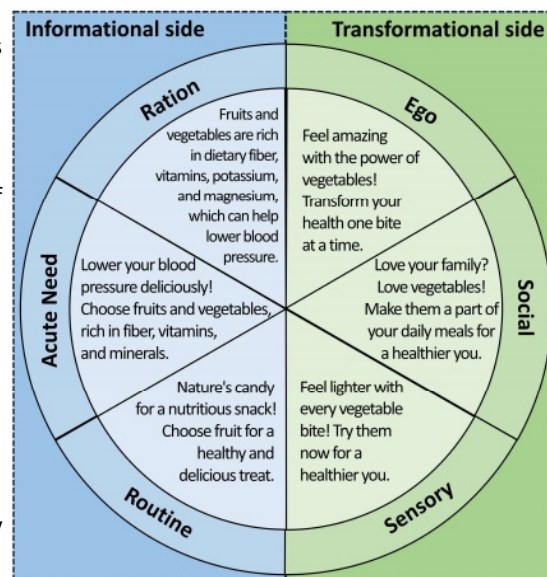
This segment emphasizes the habitual use of specific products or services, or engagement in particular activities during routine and scheduled intervals. Based on the Health Literacy theory, the researchers made efforts to deliver simple and concise messages that could be universally understood. Moreover, messages were formulated to promote the habit of consuming fruits and vegetables as snacks, instead of other alternatives, thereby increasing daily intake.

### (5) ACUTE NEED

Acute Need fulfill individuals' requirements to participate in a specific activity. Following the Social Marketing theory, messages were customized to alter perceptions related to consuming fruits and vegetables in the target audience.

### (6) RATION

This aims to access individuals' logical reasoning and ability to process information. Based on the Health Belief Model, messages were created to offer concrete information, thereby supporting rational decision-making.



## CONCLUSIONS

Although Taylor's six-segment message strategy wheel has been applied in various domains, its usage in the field of public health has been restricted. This study implemented the strategy wheel systematically to devise messages targeting adults with cardiovascular disease, encouraging the consumption of fruits and vegetables.

In addition, the messages created in this study are expected to strongly connect with the recipients and enable them to adopt fruit and vegetable consumption more efficiently. These messages aim to stimulate empathy and encourage greater commitment to incorporating fruits and vegetables into people's diets. The framework developed in this study will serve as a basis for future research aimed at creating health behavior promotion messages.

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