

# Exploring Registered Dietitians' Perceptions of a New Dietary Self-Monitoring App Resembling the 2019 Canada's Food Guide: A Qualitative Study

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## INTRODUCTION

- Dietary self-monitoring is critical to making and maintaining dietary changes.<sup>1</sup>
- Current dietary self-monitoring tools can be complex and time-consuming,<sup>2</sup> leading to decreased adherence to the tools over time.<sup>3</sup>
- Traditional portion-based dietary self-monitoring tools are not easily adapted to reflect the new format of the 2019 Canada's Food Guide (CFG) based on proportions (i.e.: "the plate").

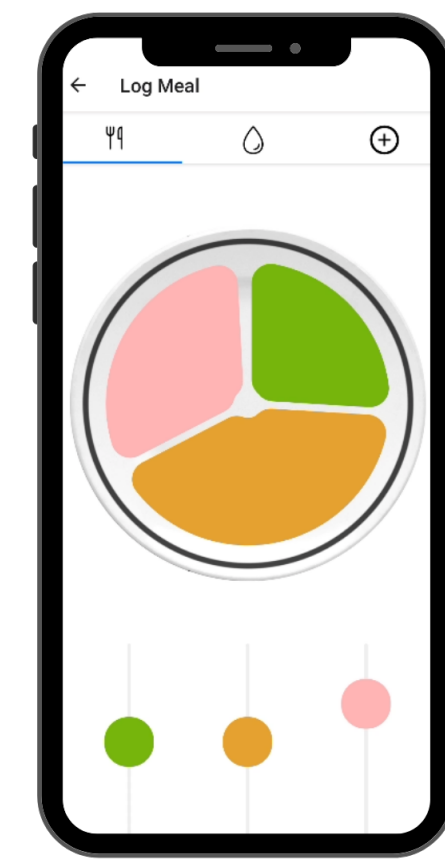


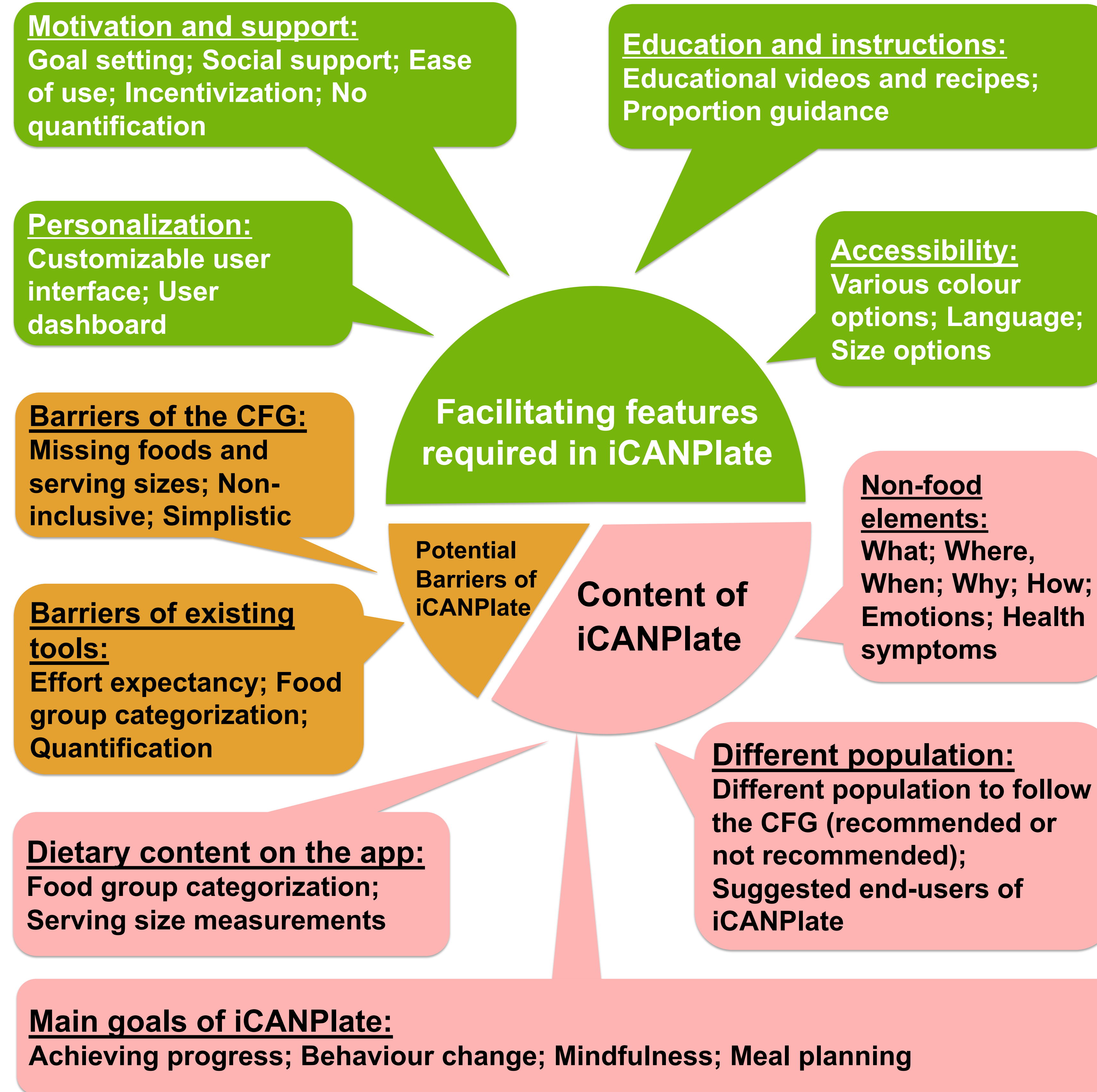
Figure 2- Screenshot of iCANPlate

## Thematic Analysis

- Independent coding by two trained researchers (MK and RM), resolving discrepancies through consensus between the two researchers<sup>4,5</sup>
- Achieving data saturation after **seven** focus group sessions
- NVivo12 Pro Software (QSR International, US) used for thematic analysis

## RESULTS

### Identified Categories (3) and Themes (10)



Characteristics	
Number of focus groups	7
Number of participants	44
Cultural background	
• White	70%
Province of dietetics practice	
• Ontario	44%
Primary practice area	
• Private practice and outpatient care	59%
Client group	
• Diabetes and weight loss	75%
Duration of practice	
• 0-5 years	64%
• Having experience of using self-monitoring tools with clients	82%

Table 1- Demographic characteristics of participants

## OBJECTIVES

To explore registered dietitians' (RD) perceptions and incorporate them in the development of a dietary self-monitoring smartphone app (iCANPlate), resembling the 2019 CFG.

## METHODS

- **Study design:** Qualitative study via focus groups from July to August 2021
- **Study participants:** English speaking RDs licensed to practice in Canada
- **Recruitment methods:** Throughout Canada using Facebook and Twitter
- **Procedure:** virtual focus groups over Zoom (~90 minutes) moderated by a trained researcher and dietitian (CB) using a focus group guide.
- **Focus group guide sections:**
  - Perceptions of the 2019 CFG (2 questions)
  - Perceptions of currently available dietary self-monitoring tools (3 questions)
  - Suggestions for the content and features of the iCANPlate application (11 questions)

## CONCLUSION

- RDs are key health professionals who use the CFG to help educate the public about nutrition.
- Input from RDs for iCANPlate's development will enable the research team to optimize the development of a dietary self-monitoring app that helps users follow the 2019 CFG.
- iCANPlate could improve adherence to dietary self-monitoring and improve efficacy of dietary self-monitoring in adults.

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## References

1. Burke LE, et. al. Journal of the American Dietetic Association. 2011
2. Michie, et. al. Journal of Health psychology. 2009
3. Kirkpatrick SI, et. al. Nutrients Journal. 2018
4. Boeije, H. Sage publications. 2009.
5. Srivastava and Hopwood. International Journal of Qualitative Methods. 2009

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