

What is the contribution of snacks to the energy and macronutrient intake of military recruits from the Canadian Armed Forces during Basic Military Qualification?

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Introduction

- During Basic Military Qualification (BMQ), military recruits often struggle to meet their daily energy requirements, increasing their injury risk. ^{1,2,3}
- Snacks are classified as any foods consumed between typical breakfast, lunch, or dinner times and provide on average 22.7% of Canadian adults' daily energy intake. ^{4,5}
- Snack intake could be particularly beneficial for populations with high energy expenditure and restricted mealtime such as military recruits. ⁶

Objective

- To evaluate the macronutrient composition of snacks as well as their contribution to daily energy intake amongst military recruits during BMQ.

Methods

- Food photography was used to capture meal consumption over two days and a questionnaire for daily snack consumption was distributed to recruits.
- Daily food intake was analysed with ESHA Food Processor using recipes provided by StratJ4 Food Services and the Canadian Nutrient File to determine energy and macronutrient intake.

Results

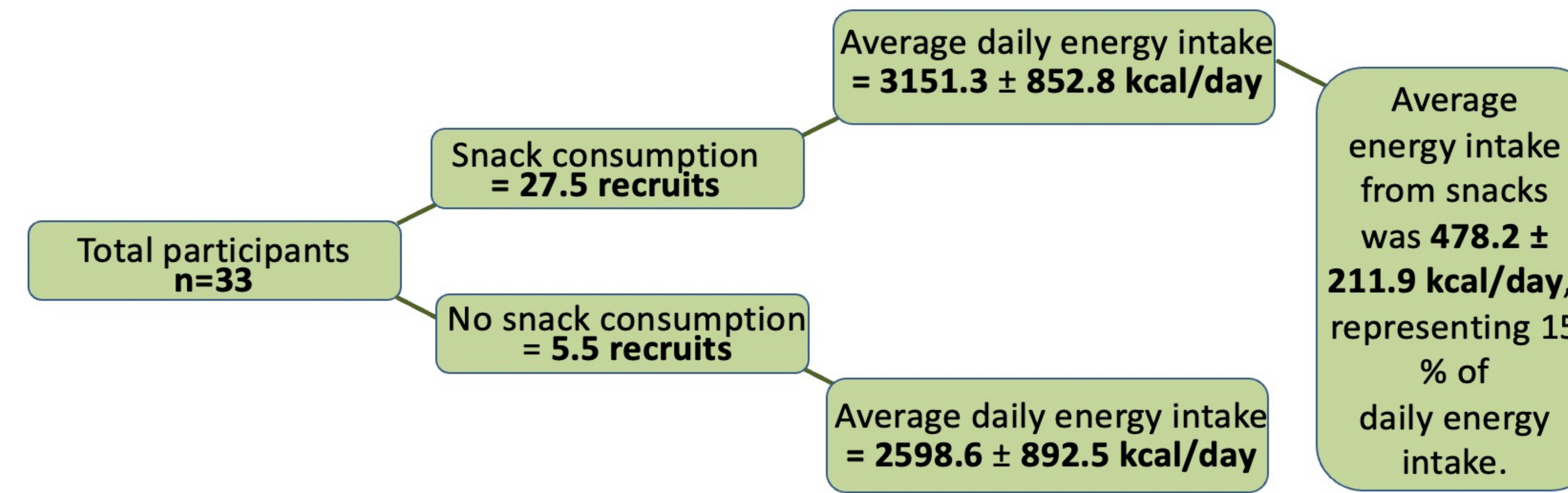


Figure 1. Distribution of participants based on snack consumption over two days with average daily energy intake of each group (n=33)

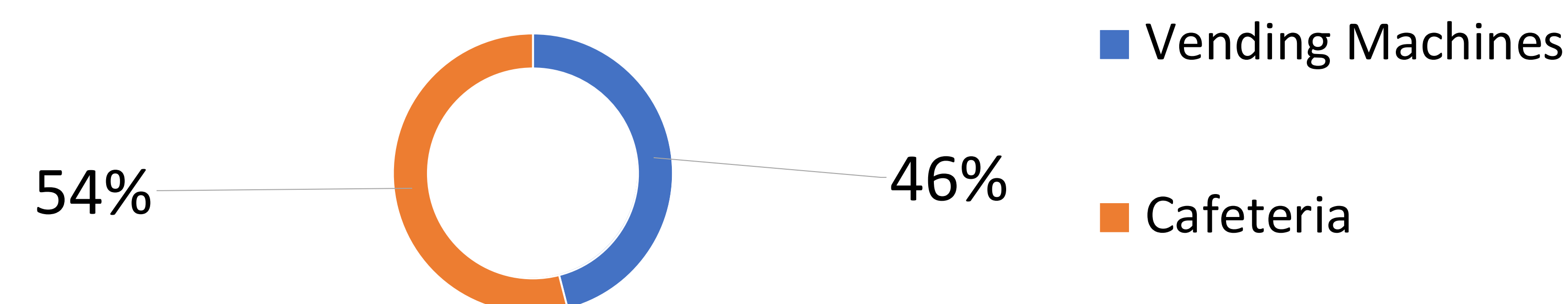


Figure 2. Percentage of daily energy intake from snacks sourced from vending machines versus evening snacks provided by the cafeteria (n=33)

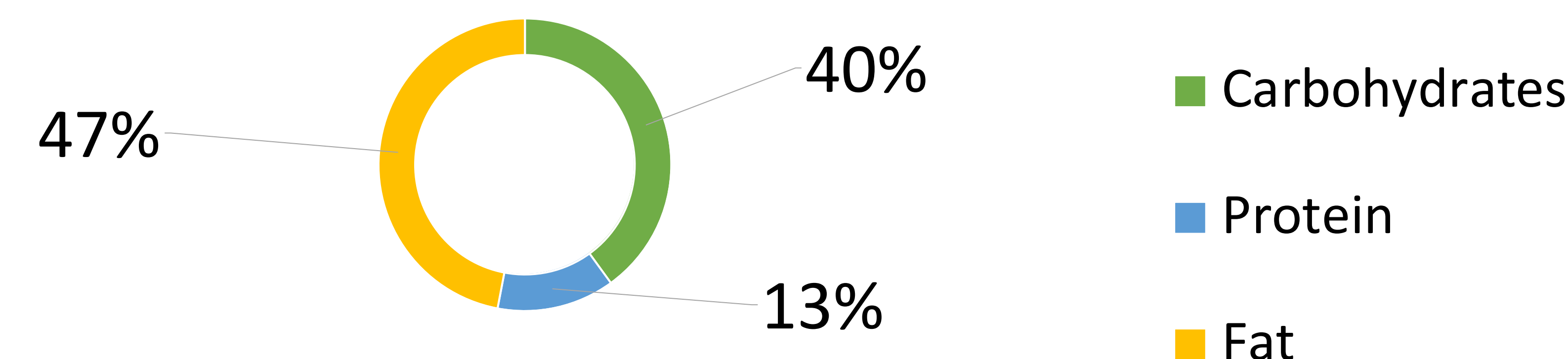


Figure 3. Average percentage of the energy from snacks coming from each macronutrient

Conclusion

- Snacks represented an important proportion of daily energy and macronutrient intake amongst recruits.
- These findings confirm that snacks could be beneficial to support military recruits in meeting their daily energy requirements, particularly during times of high energy expenditure such as BMQ.

Significance

- Dietitians should promote the consumption of snacks in military recruits to help minimize energy deficits, which may in turn help to optimize performance and limit injury in this population.

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