

Nutrition care to prevent and manage dental caries: Understanding the practices and perspectives of dietitians and oral health professionals from Saskatchewan

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INTRODUCTION

- Dental caries are the most prevalent chronic disease worldwide and represents a public health challenge^{1,2,3}.
- There is a strong relationship between dental caries and nutrition. Food choices and eating behaviours influence the risk of developing dental caries, and likewise, dental caries can affect nutritional status and dietary patterns^{4,5}.
- Dietitians (RD) and oral health professionals (OHP) have a role to help reduce the burden of dental caries.^{3,6,7} Collaboration between dietitians and oral health professionals in practice, education, and research is important and recommended to prevent and manage dental caries.^{8,9}
- Existing data on the nutrition care practices of dietitians and OHP regarding dental caries in Saskatchewan is limited.

OBJECTIVES

- To describe knowledge, attitudes and practices of RDs and OHPs regarding nutrition to prevent and manage dental caries in Saskatchewan.

METHODS

- Two similar survey instruments (one for RDs; one for OHP) were developed that included a variety of question types to obtain information to address the research objective objective.
- An interdisciplinary advisory committee guided the study. The advisory committee was composed of one dentist/dental researcher, one dietitian, one dental therapist, three patient partners (two mothers whose children have recently experienced dental caries, and an adult who has recently experience dental caries), the principal investigator (research dietitian), and the student researcher.
- Participant Recruitment: Survey was distributed in Summer 2021 through regulatory bodies in Saskatchewan, email lists and social media pages.

Figure 1: Survey Development and Project Design



RESULTS

Table 1. Participant Demographic Information

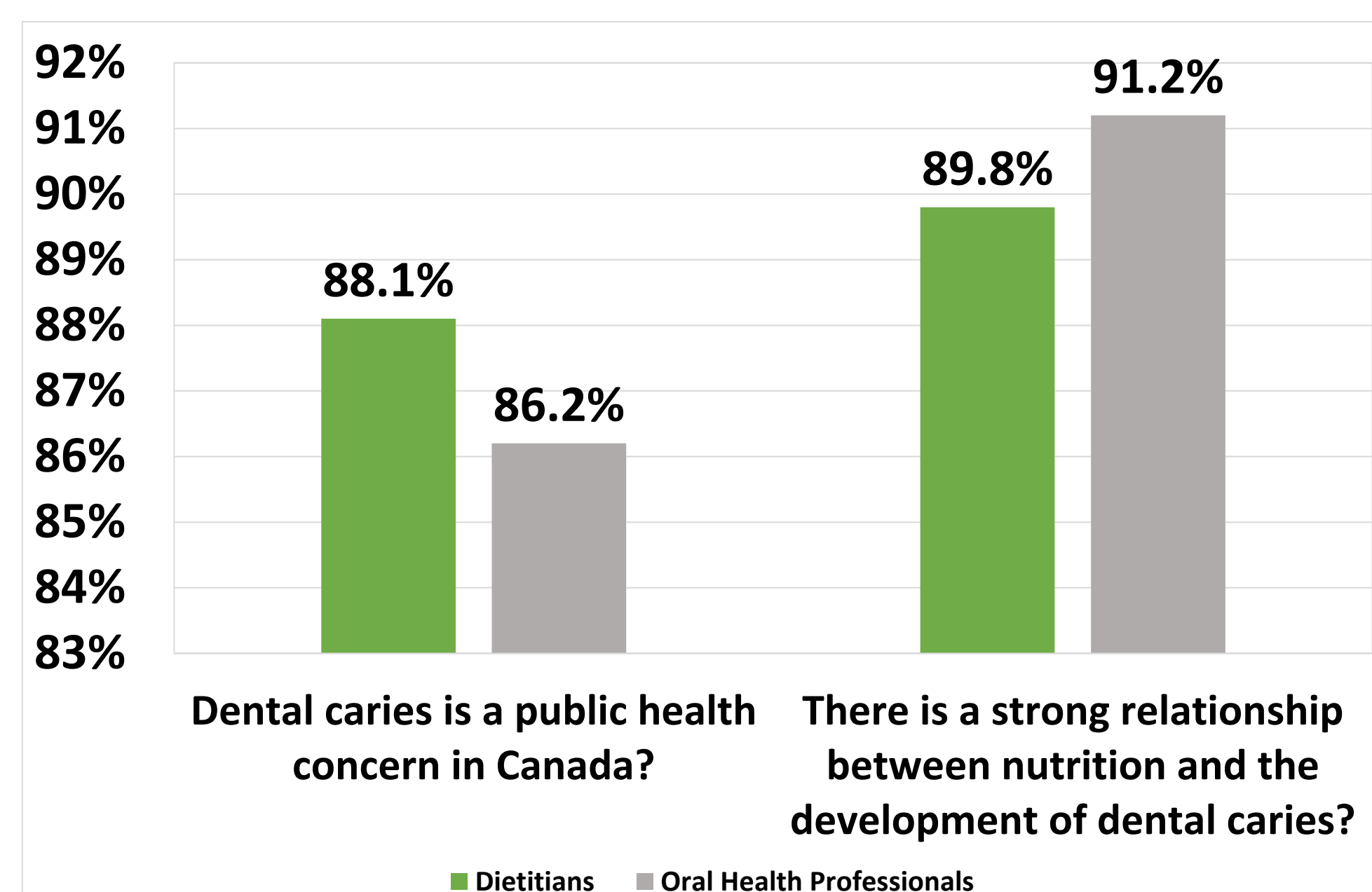
	Dietitians n (%)	Oral Health Professionals n (%)
Age		
18-40 years	42 (71.2%)	49 (52.1%)
≥41 years	17 (28.8%)	45 (47.8%)
Gender		
Male	2 (3.4%)	6 (6.4%)
Female	56 (94.9%)	88 (93.6%)
Prefer not to answer	1 (1.7%)	0 (0%)
Years of work		
0-10 years	32 (54.2%)	27 (28.7%)
11 - 20 years	19 (32.2%)	29 (30.9%)
≥21 years	8 (13.6%)	38 (40.5%)
Hours of work		
Less than 10 - 20 hours	5 (8.5%)	14 (15.4%)
21 - 40 hours	53 (89.9%)	72 (79.1%)
41 hours or more	1 (1.7%)	5 (5.5%)
Location of practice since 2015		
Large population centre	27 (46.6%)	45 (48.4%)
Medium population centre	13 (22.4%)	20 (21.5%)
Small population centre	25 (43.1%)	30 (32.3%)
Rural areas	21 (36.2%)	15 (16.1%)
Work in remote or isolated communities since 2015		
Yes	18 (31%)	22 (23.7%)
No	40 (69%)	71 (76.3%)

- Dental hygienists were the most common professional category within OHP.

Most Common Practice Areas:

- Dietitians: Nutrition Care for Outpatients that is publicly funded, Nutrition Care for Hospital Inpatients, Nutrition Care for Long Term Care Home Residents, and Health Promotion
- Oral Health Professionals: Private Practice

Figure 2. Percentage of participants who agree or strongly agree with different statements on dental caries and/or nutrition.



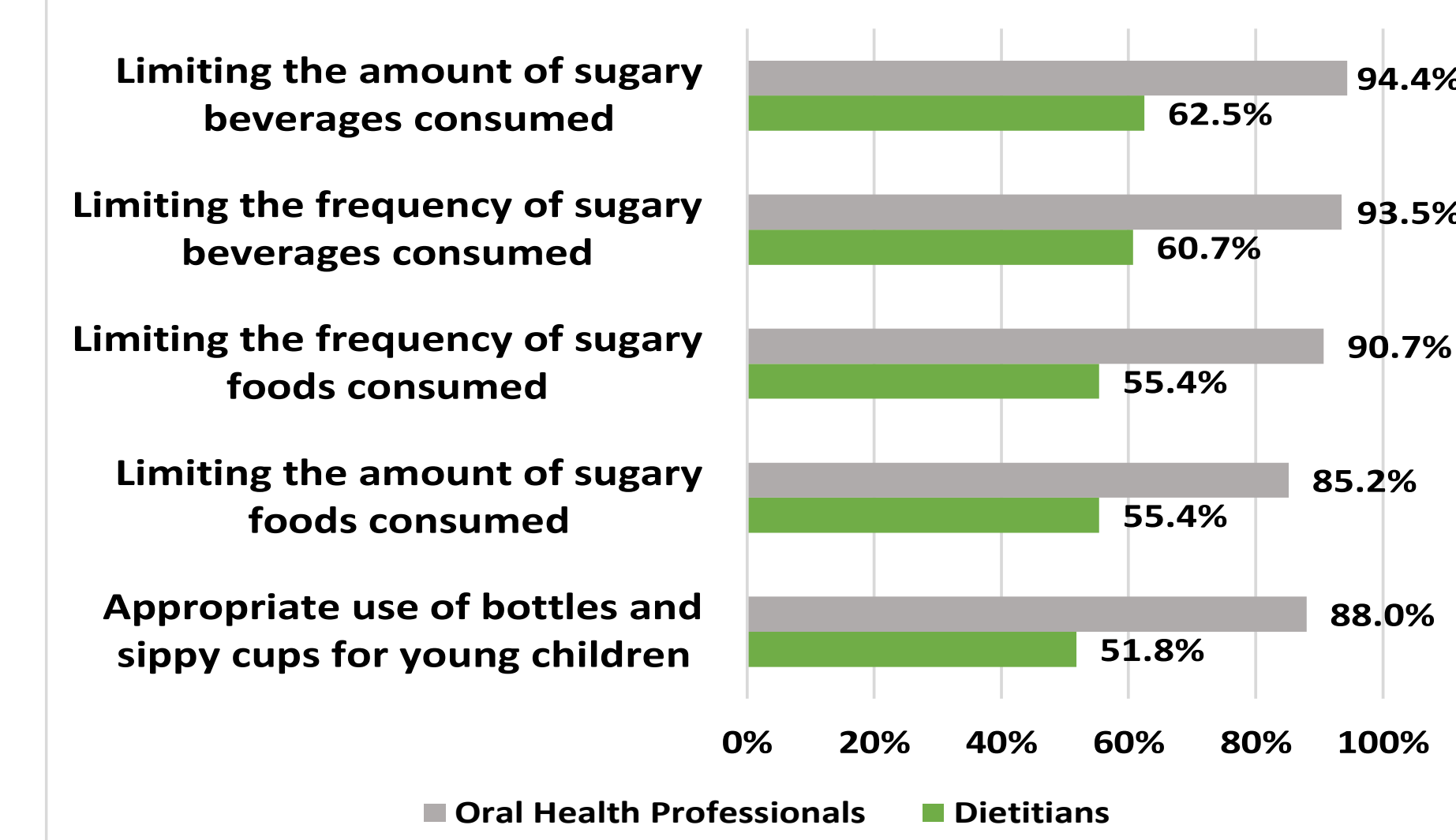
RESULTS

- More participants reported having good, very good or excellent knowledge of cariogenic foods, compared to foods that prevent against dental caries.

Good, Very Good or Excellent knowledge of cariogenic foods: RD: n=43 (74.1%) – OHP: n=90 (95.7%)

Good, Very Good or Excellent knowledge of protective foods: RD: n=23 (39.7%) – OHP: n=77 (82.0%)

Figure 3. Most common types of messages provided by participants regarding nutrition and dental caries.



Types of messages provided least often by participants:

- RD: use of Fluoride and limiting the intake of acidic foods
- OHP: use of vitamins/minerals supplements and increasing the intake of whole grains
- RD and OHP: not sharing utensils or blowing on someone else's food

Figure 4. Most common practices related to nutrition and dental caries performed by each professional category.

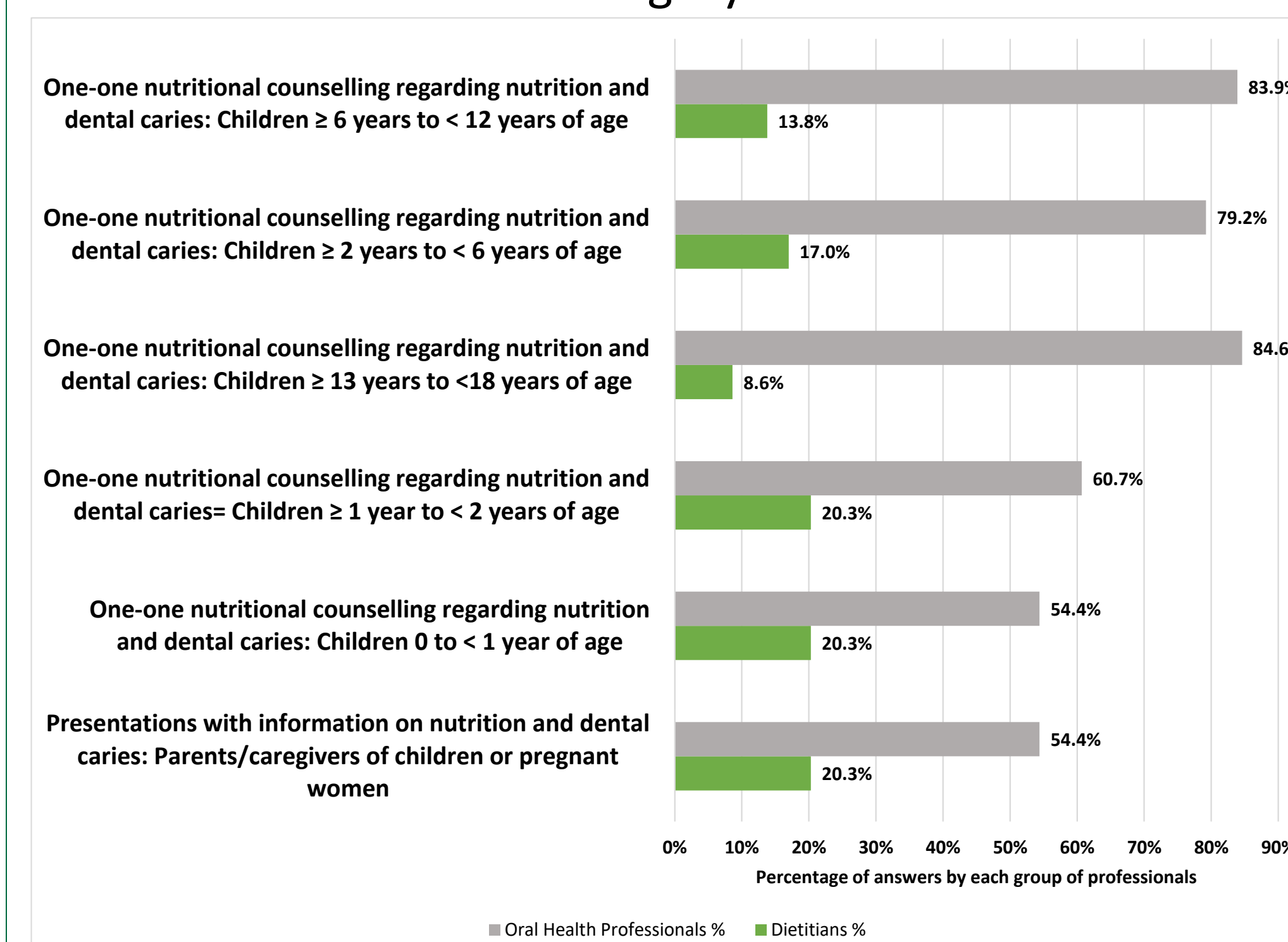


Table 2. Participants responses regarding barriers in the area of nutrition and dental caries.

Type of Barrier	Dietitians	Oral Health Professionals
I do not have enough training on this topic	58.1%	60.8%
My patients are unable to make changes	44.2%	74.7%
I have never been asked about this topic	37.2%	73.4%
I do not have sufficient knowledge on this topic	72.1%	25.3%
I do not know where to get information	20.9%	17.7%
My patients are not motivated or interested	30.2%	6.3%
I do not have enough time	23.3%	8.9%
I am not interested in this topic	4.7%	7.6%
I do not consider this issue to be important	0%	1.3%
It is hard to receive financial compensation	0%	1.3%
Other	16.3%	8.9%

CONCLUSIONS

- Professionals demonstrated lots of enthusiasm about the importance of the topic.
- The most common advice provided by professionals focused on limiting consumption of sugary beverages and foods. Messaging around protective foods/behaviours was less common and something professionals could consider giving in the future.
- Results demonstrated existing barriers working in the area of nutrition and dental caries which is relevant for managers and researchers.
- The results of this study provide insights to what is needed to improve nutrition care regarding dental caries in Saskatchewan.

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