

Knowledge and attitudes towards sugar sweetened beverages among parents and guardians of school age Hispanic children.

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INTRODUCTION

Hispanics and Latinos are the second largest racial or ethnic population in the United States. According to the National Center for Health Statistics, among youth aged 2–19 years, the prevalence of total dental caries was highest for Hispanics (57.1%) compared with non-Hispanic Blacks (48.1%), non-Hispanic Asians (44.6%), and non-Hispanic Whites(40.4%).

Sugary drinks contribute to the development of dental caries. However, many parents provide sugary drinks to their children and may mistakenly believe some are healthy, highlighting the need for parental education.

PURPOSE

To assess the **knowledge and attitudes towards sugar sweetened beverages of the parents and/or guardians of Latino children 4-12 years** of age who seek care at Nicklaus Children's Hospital.

METHODS

A 24 item paper-based questionnaire was the primary tool for data collection.

Caries risk was determined based on AAPD's Caries Risk Assessment Form. The moderate caries risk group was excluded due its distinct characteristics and small sample size.

Data was tabulated. Descriptive and inferential analyses were performed. A p-value of <0.05 was considered significant. Data was analyzed in IBM SPSS Statistics 29.0.2.0.

RESULTS

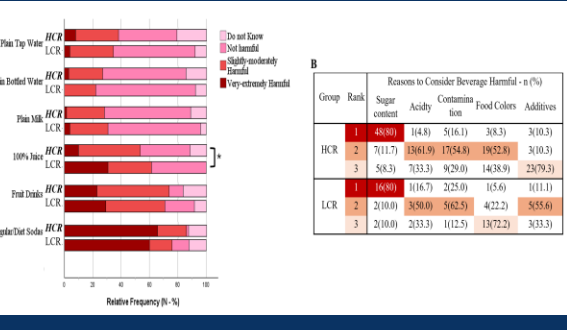
Consumption pattern of beverages							
Beverage	HCR (N=76)	LCR (N=31)	P-Value	Beverage	HCR (N=76)	LCR (N=31)	P-Value
Plain tap drinking n(%)							
None	26 (42.6)	10 (47.6)	0.531	None	14 (25.5)	9 (33.3)	0.911
1-2 cps	6 (9.8)	0 (0.0)		1-2 cups	29 (52.7)	13 (48.1)	
3-4 cps	13 (21.3)	4 (19.0)		3-4 cups	9 (16.4)	4 (14.8)	
≥5	15 (24.6)	7 (33.3)		≥5	1 (1.8)	0 (0.0)	
Plain bottle drinking water n(%)							
None	5 (7.4)	5 (17.2)	0.529	None	20 (38.5)	17 (73.9)	0.037
1-2 cps	13 (19.1)	4 (13.8)		1-2 cups	26 (50.0)	6 (26.1)	
3-4 cups	25 (36.8)	11 (37.9)		3-4 cups	4 (7.7)	0 (0.0)	
≥5	23 (33.8)	9 (31.0)		≥5	0 (0.0)	0 (0.0)	
Plain milk n(%)							
None	16 (25.0)	6 (22.2)	0.579	None	24 (43.6)	18 (75.0)	0.127
1-2 cups	40 (62.5)	19 (70.4)		1-2 cups	23 (41.8)	5 (20.8)	
3-4 cups	4 (6.3)	2 (7.4)		3-4 cups	4 (7.3)	1 (4.2)	
≥5	4 (6.3)	0 (0.0)		≥5	1 (1.8)	0 (0.0)	

Frequency of beverage consumption at home and school						
Beverage	HCR		P-Value	LCR		P-Value
	Home	School		Home	School	
Plain milk n(%)						
Never/rarely	25 (43.9)	23 (74.2)	<0.001	12 (52.1)	6 (60.0)	0.111
Sometimes/often	20 (35.1)	5 (16.1)		9 (39.1)	3 (30.0)	
Always	11 (19.3)	2 (6.5)		2 (8.7)	1 (10.0)	
100% Juice n(%)						
Never/rarely	17 (27.4)	15 (50.0)	0.027	9 (47.4)	7 (77.8)	0.665
Sometimes/often	39 (62.4)	13 (43.3)		10 (52.6)	1 (11.1)	
Always	5 (8.1)	1 (3.3)		0 (0.0)	1 (11.1)	
Regular/ diet sodas n (%)						
Never/rarely	36 (59)	27 (79.8)	0.005	15 (71.4)	8 (80.0)	0.334
Sometimes/often	22 (36.1)	6 (20.0)		5 (23.8)	1 (10.0)	
Always	1 (1.6)	0 (0.0)		1 (4.8)	1 (10.0)	

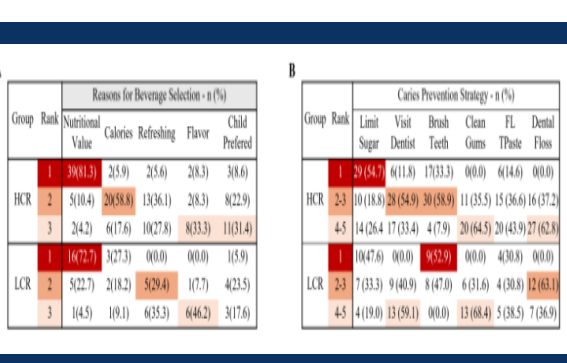
A total 130 parents and guardians completed the survey. Most respondents were mothers (83.3%), with a mean age 39.4 years (range 21-60 years), married (66.7%), primarily Hispanic-white (79.5%) and working full time (53%), had an education level above a high School Diploma or GED (60.3%). Children had a mean age of 8.5 years (range 4-14 years), 53.8% were females and 76.5% insured.

There were not any significant differences in demographic characteristics between high caries risk (HCR) or low risk caries (LCR) groups.

RESULTS



A. Respondent perception of how harmful beverage are. B. Reasons why respondent consider beverages harmful.



A. Reason for beverage selection. B. Caries prevention strategies used by respondent.

DISCUSSION

HCR children consumed more sugar-sweetened beverages, particularly fruit drinks, iced teas, and sodas at home. Caregivers often misperceived the risks of fruit-based drinks, calories, additives, and tap water and fluoride exposure. Although most caregivers recognized sugar as harmful, this knowledge did not consistently translate into healthier choices and may reflect competing influence. A trend toward lower caregiver education in the HCR group may influence health literacy and beverage choices.

Both groups identified limiting sugar as a key preventive strategy, while low-risk caregivers also emphasized toothbrushing. Despite no significant differences in hygiene behaviors, the low-risk group showed a trend toward more frequent brushing and dental visits. Caregivers reported variability in the perceived difficulty of limiting sugar intake, indicating practical barriers to behavior change.

These findings highlight the need for targeted caregiver education focused on reducing sugar-sweetened beverages, promoting tap water, and reinforcing oral hygiene. This studies generalizability is limited by the sample size, in certain survey response accuracy due to length, administration method and respondent literacy, potential inconsistencies in familiarity of the respondent with the child's diet.

Differences in caries risk were driven more by beverage behaviors and caregiver perceptions than by demographics. These findings emphasize the need for ongoing education to optimize beverage choices and reinforcing of dietary and oral hygiene practices, especially at home.

CONCLUSION