

SUGAR SWEETENED BEVERAGE CONSUMPTION IN AUCKLAND PRIMARY SCHOOL CHILDREN

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INTRODUCTION

Sugar sweetened beverage (SSB) consumption has a positive relationship with unhealthy weight gain in children^[1]. Limiting consumption of SSBs is recommended. Whereas, daily consumption of water and plain low fat milk or other dairy products is recommended^[2]. The most recent comprehensive beverage consumption data in the 8 to 12 age group was published in 2007, thus recent beverage consumption data is unknown^[3].

AIM

To investigate beverage consumption in 8 to 12 year old Auckland primary school children.

METHODS

This cross-sectional study evaluated children's beverage consumption using a self-administered questionnaire. Body composition was measured using bioelectrical impedance analysis (BIA).

RESULTS AND DISCUSSION

Children (n=695, 9.87±0.71 years, 44.8% male) were recruited from 6 schools.

Beverage intake

- Plain water was consumed by 11.6% <once/day
- Plain milk was consumed by 54.7% <once/day
- All milk-containing beverages were consumed by 10.1% <once/week

Table 1. Consumption of beverages

	Consumption of Beverages		
	Less than once/week	1 – 4 times/week	5+ times/week
	%	%	%
Plain water	2.5	4.4	93.1
Plain milk	16.4	27.9	55.6
Flavoured milk	79.1	14.9	6.0
Milkshake or milk drink	78.5	16.8	4.7
Flavoured powdered milk drink	54.4	32.2	13.4
Fruit smoothie	79.7	16.3	4.0
Juice	61.0	30.7	8.3
Powdered fruit drink	82.8	11.5	5.7
Fruit drink concentrate/cordial	78.2	16.4	5.5
Soft drink	69.4	25.6	5.0
Soda stream	94.8	4.4	0.7
Diet drinks	90.1	8.0	1.9
Energy drinks	97.9	1.5	0.6
Sports drinks	93.5	5.0	1.5
Flavoured water	91.3	6.1	2.7
Tea	74.1	14.9	11.0
Coffee	96.2	2.5	1.3

REFERENCES:

1. Keller, A., & Della Torre, S. B. (2015). Sugar-Sweetened Beverages and Obesity among Children and Adolescents: A Review of Systematic Literature Reviews. *Childhood Obesity*, 11(4), 338-346. doi:10.1089/chi.2014.0117
2. Ministry of Health. (2012). Food and nutrition guidelines for healthy children and young people (aged 2 - 18 years): A background paper. Wellington: Ministry of Health.
3. National Research Bureau Ltd, *New Zealand children's food and drinks survey*. 2008.

Body fat percentage

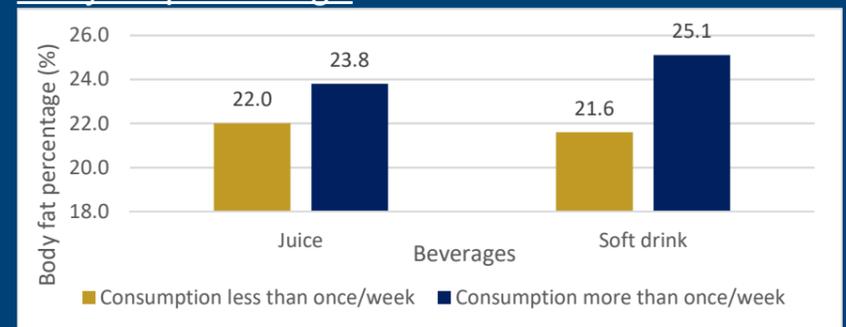


Figure 1. Consumption of beverages and body fat percentage

School

- Children from low decile schools were 3.9 times more likely to consume soft drinks > once/week.

Home

- Home availability of soft drinks and fruit juice had a positive relationship with their consumption.
- Children who received a lot of encouragement to consume healthy beverages had a lower SSB consumption.

SSB consumption outside of school and home

- 28.6% of children consumed a beverage from a fast food or takeaway store > once/week.

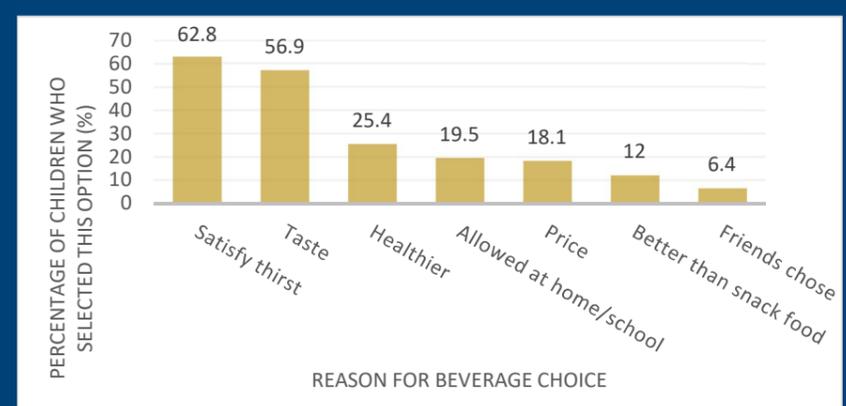


Figure 2. Reason for beverage choice when out

CONCLUSIONS

An unfavourable proportion of children consumed water less than once per day and milk never/less than once per week. If parents limited SSB home availability and encouraged their children to consume healthy beverages it may contribute to a decrease in their children's SSB consumption. Ensuring healthy beverages are available at fast food/takeaway stores may encourage healthy beverage consumption. Limiting soft drink and juice consumption may help children achieve a healthy body fat percentage.

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