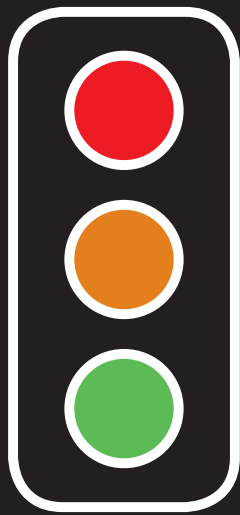


BEVERAGE GUIDELINES

Waitemata DHB





background

Why do we need beverage guidelines?

Let's face facts. We are in the middle of an obesity epidemic. One third of New Zealand children aged 5-14 years are overweight or obese.¹ In 2002, 26% of New Zealand children's total sucrose (sugar) intake came from sugary drinks and in the five years to 2002, our consumption of these drinks increased by 45%.²

Obesity is the result of unhealthy weight gain and is linked with a high risk of disease. Weight gain occurs when energy in (from food and drinks) is more than energy out (from activity).

Sugary drinks are high in energy. They are less filling than solid foods with the same energy content – so we can drink them and still feel hungry. The removal of sugary drinks and large package sizes from school tuckshops has the potential to cut down the 6kg of sugar that New Zealand children drink each year. Furthermore, many sugary drinks and diet soft drinks have high acidity and increase the risk of tooth decay.³ We believe that schools should provide drinks to support students' best possible health.

The Waitemata District Health Board Beverage Guidelines have been developed using a simple traffic light system. They label drinks as 'green', 'amber' or 'red', based on their energy, nutrient and package size. 'Green' drinks (water and plain low fat milk) are the healthiest choices. Milk provides important nutrients,



To reduce overweight and obesity in our children we need to offer them less energy dense foods and beverages AND increase regular physical activity!

whilst water contains no energy. 'Amber' drinks have a higher energy content or, in the case of diet soft drinks, contain acid. These must meet energy and/or package size criteria. 'Red' drinks should not be sold in school canteens or tuck shops.

By using these guidelines your school can be a great role model for your community through raising awareness of healthier drink choices for students, teachers, parents, whanau and policy makers.

- 1 Ministry of Health. 2003. NZ Food NZ Children: Key results of the 2002 National Children's Nutrition Survey. Wellington: Ministry of Health.
- 2 Wham C. All fizz: bad bones. Good teacher. TheSchoolQuarterly.com2002; Term 3. Available online.
- 3 Heller K, Burt BA, Eklund SA. Sugared soda consumption and dental caries in the United States. J. Dent. Res. 2001; 80: 1949-53.



go green

The New Zealand Food and Nutrition Guidelines recommend that children drink 6-8 glasses of fluid every day.

Water makes up around 70 percent of our total body weight and is crucial to maintain our body's functions. Did you know that we lose about 2.5 litres each day? Much of the fluid we need to replace this comes from the food we eat, but we also need to drink around 6-8 glasses of fluid every day - water is the best choice.

Low fat milk is nutritious and an important source of protein and calcium for children. The Food and Nutrition Guidelines recommend that children have 2-3 serves of low fat milk products each day – a glass of low fat (green, light blue, yellow top) milk helps to meet this requirement.

Full fat milks (dark blue top) are higher in saturated fat (which increases the risk of heart disease) and are not recommended for children over two years of age.

The Beverage Guidelines do not support the addition of vitamins and minerals to water and other drinks as there is no established population need for these. The exception is fluoridated water and its well proven benefit on dental health.



In hot weather, or during exercise, children may require more than 6-8 glasses of fluid everyday.

Water is the best fluid

- tap water is free and easy to access
- plain water doesn't contain any sugar or energy
- plain water will quench your thirst better than any other beverage



what's energy?

It takes 52 minutes of brisk walking to burn off the energy (kilojoules) in a 600ml bottle of soft drink

The energy content of a food or drink is measured using **kilojoules** (kJ) - just like kilometres (km) measure distance. (Note: 'calorie' is the older imperial unit for energy – just like 'miles' are the older unit for distance.)

- Sugar is high in energy and 1g of sugar provides 17kJ of energy
- One teaspoon of sugar is 4g – so it provides 68kJ energy
- One 330ml can of soft drink has 40g sugar = 10 teaspoons of sugar = 680kJ of energy
- High energy foods don't give you more "zing" or "get up and go" ... They just give you more kilojoules
- If you are feeling 'flat' or 'tired' it is most likely that you need some fresh air or physical activity not a sugary drink



More energy than your body needs
leads to

WEIGHT GAIN

(Your body stores excess energy as fat)

Beverage Examples (package size)	Energy kJ per 100mls	Sugar (tsp) per glass 250ml	Sugar (tsp) per package
Fruit drink 800ml	174 kJ	6	20
Soft drink 600ml	180 kJ	7	16
Fruit juice 500ml	181 kJ	7	14
Flavoured milk 350ml	392 kJ	8	11
Artificially sweetened (diet) soft drink 600ml	2 kJ	0	0
Sports water 800ml	42 kJ	2	5



things to know about sugar

Sugar is a refined carbohydrate. It is often hidden in foods and beverages which are also high in fat and/or offer very little nutritional value.

Artificial sweeteners, also called sugar substitutes, are substances that are used instead of sugar to make diet/zero drinks. Because artificial sweeteners are many times sweeter than table sugar, smaller amounts are needed to create the same level of sweetness. The consumption of artificial sweeteners is safe.



- We were born with a "sweet tooth" – breast milk is sweeter than cows milk
- The main source of sugar for New Zealand children is from beverages, followed by sweets
- A glass (250ml serving) of soft drink and fruit juice contains the same amount of sugar – 5 teaspoons
- One quarter of New Zealand children get most of their energy (kilojoules) from beverages
- Young kiwi men (aged 15-24) drink an average of 300ml of soft drink each day. Each 330ml of regular soft drink contains up to 10 teaspoons of sugar
- Our soft drink consumption has increased by 45% in the last five years
- Diet (artificially sweetened) soft drink sales are increasing by around 15% a year compared with around 1-2% a year for regular soft drinks
- Artificial sweeteners in soft drinks are safe and are not linked to any health risks in doses typically consumed by humans
- To obtain one tonne of sugar, seven tonnes of sugar cane has to be cut and hauled to a mill and five tonnes of water evaporated
- Half of Brazil's sugar crop is used to make ethanol which is mixed with petrol to run cars
- Before the days of gel and hair sprays, a thick sugar and water mixture was used to stiffen hair
- When soft drinks were first introduced, the standard serving size was 200ml (6tsp of sugar). Now the standard serving size is 600ml (18tsp of sugar)
- A major fast food companys' super size' soft drink is one third larger than its large size



understanding labels

It is important to understand how to read nutrition information panels, and what it means, so that informed food choices that contribute to a healthy diet can be made.

	Average quantity per serve	Average quantity per 100ml
Nutrition Information		
Soft drink- 600ml variety		
Serving per package: 3		
Serving size: 200ml		
Energy	360kJ	180kJ
Protein	0g	0g
Fat		
Total	0g	0g
Saturated	0g	0g
Carbohydrates		
Total	21g	10.6g
Sugars	21g	10.6g
Sodium	20mg	10mg

This is only a guide from the manufacturer showing the number of serves per package. However, typically most people would drink all three servings at one time.

To compare products, look at the 'per 100 ml' column – not per serving. Different brands of beverages have different servings per package size.

This is the amount of energy (kilojoules) a food or drink provides.

Sugar is a form of carbohydrate. Sugary drinks contain only refined carbohydrate which can add to excess energy intake and cause weight gain.

Amount of sugar (grams) in 100mls of the beverage.

Therefore in a 200ml serve there is 21g sugar
 = about 5 ½ tsps of sugar
 BUT in this 600ml bottle of soft drink there are 3 serves and 63g sugar = about 16 tsp sugar = 1071kJ of energy.

Did you know?

A typical 600ml bottle of fizzy drink provides around 1/7th of your daily energy requirements BUT it provides no important nutrients and does not fill you up.



case study school

One school that has made some big changes using the Beverage Guidelines.

This large, low decile school had just signed a two year contract with a major beverage company, giving them three sponsored fridges for drinks and financial help for sports teams. The school was selling 6453 'red' category drinks each month, (mostly 600ml bottles of soft drink). They decided to do something about this and used the Waitemata DHB Beverage Guidelines to make changes in their tuckshop.

Drinks sold before the Beverage Guidelines (May 2005)

- Bottled water
- 250ml Tetra flavoured milk (small amount)
- 600ml Soft drink varieties
- 800ml Flavoured waters
- 800ml Fruit drinks
- 400ml Fruit juices
- 800ml Sports drinks

In less than one week the school had removed all the 'red' beverages. They continued to sell the beverage company's water products which met their contract requirements which allowed them to keep the fridges and get some financial support for their sports teams.

Drinks sold after the Beverage Guidelines (Dec 2005)

- Bottled water
- 250ml Tetra flavoured milk

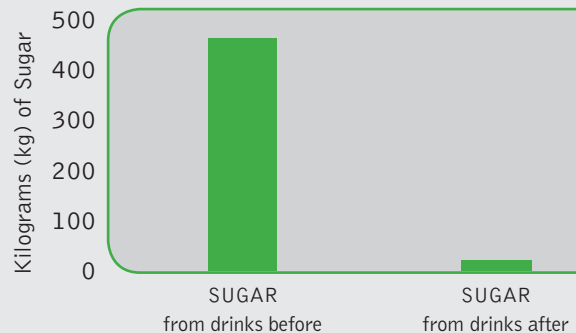
Drinks sold before and after

	Before	After	Difference
Green	89	231	142 more
Amber	32	100	68 more
Red	6453	0	6453 less

Key **Green** – Drinks to encourage and promote
Orange – Drinks to limit
Red – Drinks to remove

The graph below shows the decrease in sugar from drinks available to students following the introduction of the Beverage Guidelines. Except for water (in the 'green' category) and 250ml flavoured milk ('amber' category), all beverages sold before fell into the 'red' category. As a result of removing 'red' beverages, almost half a tonne (437kg) of sugar was removed from the school food supply in one month.

Changes in sugar from drinks after Beverage Guidelines



Although this school decided to remove all 'red' drinks they could have replaced them with 'amber' drinks. The alternative menu below uses the existing menu but replaces 'red' beverages with 'amber' beverages. It offers a range of healthier choices for students with appropriate energy content and package sizes.

Alternative Beverage Menu

- 800ml Bottled water
- 350ml Plain reduced fat milk
- 400ml Diet soft drink
- 450ml Flavoured water
- 350ml Fruit drink
- 250ml Fruit juice
- 250ml Frozen yoghurt
- 250ml Flavoured milk



questions and answers

Whether we like it or not, we have an obesity epidemic and our children are suffering from unhealthy eating habits. The environment, and in particular the school environment, plays a major part in determining the choices that students make. We believe that school is an every day place and the Waitemata District Health Board Beverage Guidelines have been developed to support schools in providing every day drinks so that students can maximise their health and their education.

How do we get started with the Waitemata DHB Beverage Guidelines?

You can follow the steps below on your own, or there is support available from Health Promoting Schools, the National Heart Foundation of New Zealand's 'School Food Programme' coordinators, your local District Health Board or Public Health Service.

- The main stakeholders and decision makers need to be in the loop. Usually this is one or two people but it may be many (e.g. Principal(s), staff, student bodies, parents & whanau, Board of Trustees).
- Successful implementation needs strong commitment.
- Assess what drinks you are currently selling and whether they fit into the 'green', 'amber' or 'red' category of the Beverage Guidelines. Do not forget this also applies to vending machines.
- Decide which 'green' and 'amber' drinks you want to sell and develop an implementation plan and timeline to remove 'red' drinks from your canteen, tuck shop and vending machines.
- We recommend that you monitor your drinks' sales before and after you make these changes.

How long should it take to implement the Beverage Guidelines at our school?

- That depends on your school but it is best to complete the changes in a 3-6 month period.
- It is advisable to explain to students, staff and parents what you are doing and why before you make the changes. You can use parts of this booklet in your newsletters to help with this.
- Some schools have made changes overnight, with a few grumbles initially and then quick acceptance of the new range of drinks available.
- Other schools have run down stocks of 'red' drinks over time – and then not ordered any more.

What have other schools said about using the Beverage Guidelines?

- A number of teachers have reported that students' concentration is better – particularly in the afternoons.
- Many have commented that they have less litter on their school grounds.

How can we make changes to beverages and still keep our canteen profits up?

- Students tend to have a certain amount of money to spend on food & drink and will switch to beverages that are available in the canteen. They may also spend more on food items.
- You can promote 'green' and 'amber' drinks by making them more visible (e.g. at eye-level).
- You could also review pricing, e.g. you might discount 'green' drinks and increase the price of amber drinks to compensate.

Will the beverage companies support these changes?

- Generally speaking, yes! The majority of beverage companies have products that fit into the 'amber' and 'green' categories and you will still sell their brand of drink at school but you may change the products to healthier choices.
- Many companies are using the WDHB Beverage Guidelines as a guide to develop new drinks that fit into the 'green' and 'amber' categories.

Should we have some school policies to support the Beverage Guidelines?

Yes definitely! Policy is very important as it reinforces the messages that you are trying to promote within the school. Ideally it would include some or all of the following:

- Policy regarding drinks brought to school from outside.



- Drinks for sale in the school (tuck shops/canteens/ vending machines).
- Links into the curriculum and classroom lessons.
- Drinks served at school functions.
- Rules for teachers, staff, and visitors.
- The use of drinks as rewards.
- Drinks used for fundraising.
- Commercial influences in the school (e.g. advertising, sponsorship, curriculum material).

For help to develop a school nutrition policy:

- Contact the Heart Foundation about their School Food Programme.
- Liaise with your Health Promoting Schools coordinator to find out what assistance is available in your area.

Why not give students information about healthier drinks and then let them make their own choices?

- Students still have choices – between ‘green’ and ‘amber’ drinks!
- Schools are an every day place and you can encourage students to make the best choices for their health by making them the easy choices!
- Nutrition education in the classroom is a start but is not very effective on its own. Schools will reinforce (or undermine) any nutrition messages based on what they sell on the school grounds.⁴

Will kids buy ‘red’ drinks on the way to school or from the local dairy at lunchtime?

- Evidence shows that students are likely to drink less sugary drinks overall if they are not readily available at school.⁵

- By not selling ‘red’ drinks you are sending an important message to your students that you care about their health and well-being and you are prepared to back it up with action.
- Students will become more aware that sugary drinks and large package sizes are not suitable for everyday consumption.
- It is ideal if your school has a policy that students are not allowed off-site during the school day.
- There is good evidence that changes made in the school can have a ‘ripple’ effect outside the school and in the wider community.

What about teachers and staff drinking ‘red’ drinks at school?

- Teachers and staff drinking ‘red’ drinks gives mixed messages, which will impact on the credibility of the beverage programme and undermine its success.
- It is important for teachers to support the school’s decision to stock healthier products and to support children in making better drink choices.
- Additionally, adopting the guidelines for everyone will assist the health of staff as well. It’s not all about the students.

There are lots of sporty kids at our school. Do they need extra energy from sports drinks?

- Plain water is the best fluid for active children. Encourage them to drink it often (every 15-20 minutes) during exercise.
- Sports drinks are not necessary for most active children. They are high in sugar and only have benefits when exercise is moderately intense and lasts longer than 90 minutes.⁶

4 Hoelscher DM, Evans A, Parcel GS and Kelder SH. Designing effective nutrition interventions for adolescents. J. Am. Diet. Assn. March 2002 Suppl; 102 (3): S52-63.

5 Grimm GC, Harnack L, and Story M. Factors associated with soft drink consumption in school-aged children. J. Am. Diet. Assn. August 2004; 104 (8): 1244-49.

6 Burke L and Deakin V, eds. Clinical Sports Nutrition, 1994. McGraw Hill, NSW Australia. 401-3.



green – drink most

Encourage and promote these beverages in your school.

- Water
- Plain reduced fat milk and calcium enriched soy beverages

amber – drink in moderation

The use of these beverages is limited by pack size. These beverages offer some nutritional value or provide lower levels of energy (kilojoules kJ) than beverages in the RED category

- Fruit juices 250ml package size or smaller
- Reduced-fat flavoured milk, calcium enriched soy beverages and drinking yoghurts 350ml package size or smaller
- Artificially sweetened carbonated beverages 400ml package size or smaller
- Sports beverages, sports waters and flavoured waters with less than 50kJ per 100mls – 450ml package size or smaller
- Fruit drinks with less than 90kJ per 100mls – 350ml package size or smaller

red – drink occasionally

Any beverages not meeting the green or amber category should not be sold in schools including those with bigger pack sizes. These beverages contribute excess energy and offer limited nutritional value.

