



# WHAT AM I DRINKING?



Our body needs liquids to stay healthy. It's called staying "hydrated". Drinks provide a range of nutrients. How can we make good choices?

We can check labels to see how much sugar or energy is in each serve. Lots of sugary drinks could rot our teeth or make us put on weight. They might also fill us up and stop us eating some healthy foods we need to grow. Even with low or no sugar versions, most soft, sports and energy drinks still contain enough acids to damage the enamel layer on our teeth. Milk and water are not acidic.

Colas and energy drinks contain caffeine – but only energy drinks must say how much. Caffeine can make us feel energetic and excited, but too much can make us jittery or sick. Large servings of energy drinks may contain more caffeine (over 100 milligrams) than is healthy for a child.

## What are we drinking?

Recent NZ surveys found 25% of 10 to 14 year olds were drinking flavoured milks, 23.5% regular fizzy drinks, 7% diet drinks, and 4% energy drinks more than three times a week. NZ kids get 26% of the added sugar they consume from non-alcoholic drinks. In 2012, fewer than 20% of drinks sold in NZ supermarkets were low-energy or unsweetened. Small amounts of most of these drinks are fine, but large amounts can cause us problems.



## What's the story with caffeinated drinks?

Energy drinks contain a lot of caffeine from substances like coffee beans and guarana and may also contain other stimulants (something that makes us feel more active). Cola-type drinks contain about a third as much caffeine. NZ laws regulate (manage) how much caffeine each type of drink can contain.



Lots of caffeine can cause jitters, irritability, headaches, and trouble sleeping. Very high levels could even affect someone's heart rate. If you add the 80 mg caffeine in a typical 250 mL energy drink to a child's average baseline caffeine level (about 20 mg from things like chocolate and the odd cola), that puts them over the recommended 100 mg/day level. A 500 mL can of energy drink will contain 160 mg caffeine on its own, which is why its label says that no one should drink more than 500 mL each day. Caffeine, being a drug, also acts on the reward centres in developing brains, so it may affect future drink choices. Energy drinks carry warnings that young children and pregnant women shouldn't drink them for these reasons.



## In a typical 250 mL (one cup) serve of some common cold drinks you'll get:



Fluid	Sugars (g)	Caffeine (mg)	And also ...
Water	0	0	Zero energy, mineral ions like calcium, sodium, potassium, magnesium, fluoride, depending on source.
Blue top milk (3.3% fat) Yellow top Calci trim type milk (0.2% fat)	11.9 12	0 0	658 kJ energy, fat (8.5 g), protein (8.3 g) 480 kJ Energy, fat ( 0.5 g) protein (to 14.8), Both also contain calcium, vitamins A, B, D.
Calcium-enriched chocolate flavoured milk drink	23.0	0	750 kJ Energy, fat (3.5 g), protein (12.3 g), calcium, vitamins A,B,D.
Orange juice from carton Reduced sugar orange juice from carton	18-24 9.6	0 0	364 kJ Energy, vit C. 235 kJ Energy, vit C, sweeteners like stevia, aspartame etc.
Fruit cordial or syrup made up with water in 1:6 ratio -lite version (40% less sugar) of this cordial	19.5 10.0	0 0	343 kJ Energy, maybe some vit C. 182.5 kJ Energy, maybe some vit C, sweeteners like stevia, aspartame .
Powdered orange drink made up with water to instructions	19	0	330 kJ Energy, maybe some vit C.
Typical sugary fizzy drink - non cola (like Sprite, Fanta etc.)	24.5	0	431 kJ Energy.
Typical sugary fizzy drink -cola type	20.0	25	340 kJ Energy.
Typical no sugar/diet cola fizzy drink	0	25	Zero energy, sweeteners like stevia, aspartame, saccharin.
Fizzy energy drink (like V, Pure, Mother)	26.5	79-80	488 kJ Energy, often stimulants like guarana (contains caffeine), claimed performance enhancers (taurine, glucoronolactone, ginseng), B vitamins and related compounds (inositol).
Power drink (like Powerade, Gatorade)	14-22	0	262 kJ Energy, electrolytes like sodium and potassium, maltodextrin.

Source: The Concise New Zealand Food Tables, 12th edition, 2016 (2017), and product label information.  
Purple cells show neutral or nearly neutral liquids; Red cells show acidic liquids. Acids can damage tooth enamel.

## What's the problem with sugary drinks?

It's easy to get loads of sugar from drinking a lot of sugar-sweetened cordials, powdered, soft, fizzy, energy or sports drinks because they don't fill us up like solid food. Each 250 mL serve can contain 4 to 7 teaspoons of sugar (see table), and an average 600 mL bottle of fizzy, sports or energy drink has over 16 teaspoons. If it's not all used up, the energy from this sugar can cause weight gain, as well as heart problems and type 2 diabetes over time. Sugar also creates great conditions for the mouth bacteria which cause tooth decay. Fruit juices and flavoured milks can contain as much sugar, but at least they have other valuable nutrients including vitamins, minerals and proteins. Most soft drinks, being mainly sugar and water, offer only "empty" calories with no other useful nutrients.

## What about acidic, artificially sweetened or no sugar drinks?

Reduced, diet, or sugar-free drinks can go some way to dealing with problems of extra calories and tooth decay. But they keep us wanting sweet flavours and still risk filling us up with zero or empty calories. Most fruit juices, soft, fizzy, energy and sports drinks are also acidic (whether they're sugar-free or not). The food acids they contain (like citric, tartaric and phosphoric acid) can wear down the enamel on our teeth, particularly if we don't dilute or neutralise them with water or saliva. Milk and water will not cause erosion.

## What are some healthy drinking things we can do?

- Aim for water or milk rather than acidic or sugary liquids for regular drinks.
- Avoid high-caffeine energy drinks or drinking lots of colas a day.
- Eat fruit rather than drinking it: it takes 5-6 oranges to make a glass of orange juice.
- Try not to fill up between meals on sugary or diet drinks with empty zero calories.
- Read ingredient lists and Nutrition Information Panels (NIPs) to know exactly what we're getting in every serve.



## USEFUL LINKS

Fizz. Website at: <http://www.fizz.org.nz/>  
Caffeine and its Effects and Sugary sweet alternatives factsheets from Life Education.

## REFERENCES

- Cochrane, N.J. et al. 24 August 2009. "Erosive Potential of Beverages Sold in Australian Schools". *Australian Dental Journal* 54(3): 238-244. doi: 10.1111/j.1834-7819.2009.01126.x. Retrieved from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1834-7819.2009.01126.x/full> 17 September 2017.
- Independent, 9 June 2015. "The Drinks Which Erode Your Teeth": authors Stuart Dashper and Eric Reynolds. Retrieved from: <http://www.independent.co.uk/life-style/health-and-families/features/the-drinks-which-erode-your-teeth-10308496.html> 17 September 2017.
- Ministry of Health, July 2012. "Food and Nutrition Guidelines for Healthy Children and Young People (Aged 2-18 years): a Background Paper. Partial Revision February 2015." Retrieved from: <http://www.health.govt.nz/system/files/documents/publications/food-nutrition-guidelines-healthy-children-young-people-background-paper-feb15-v2.pdf> 5 September 2017.
- Mhurchu, CN, Eyles H, March 2014. "Sweetened and Unsweetened Non-Alcoholic Beverages in New Zealand: Assessment of Relative Availability, Price, Serve Size and Sugar Content". *Pacific Health Dialog* 20(1): 81-86. Retrieved from: <http://www.fizz.org.nz/sites/fizz.org.nz/files/9%20Sweetened%20and%20Unsweetened%20Non%20alcoholic%20Beverages%20in%20New%20Zealand.pdf> 13 September 2017.
- Seifert et al. 2011. "Health Effects of Energy Drinks on Children, Adolescents, and Young Adults". *Paediatrics* 127(3): 511-528. Retrieved from: <http://pediatrics.aappublications.org/content/127/3/511> 17 September 2017.
- Stuff.co.nz, 4 May 2013. "Caffeine: How Young is too Young?": author Beck Eleven. Retrieved from <http://www.stuff.co.nz/life-style/well-good/8632765/Caffeine-How-young-is-too-young> 17 September 2017.
- University of Auckland Clinical Trials Research Unit/Synovate, June 2010. "A National Survey of Children and Young People's Physical Activity and Dietary Behaviours in New Zealand: 2008/09. Key Findings". Retrieved from: <http://www.health.govt.nz/system/files/documents/publications/cyp-physical-activity-dietary-behaviours-08-09-keyfindgs.pdf> 13 September 2017.