

Thirst for Nutrition Teacher Backgrounder

Teenagers need to drink between 8 and 11 cups (1.8 to 2.6 litres) of fluids daily.¹ These recommendations can be met by drinking a variety of beverages, including milk, juice and water.

According to Health Canada, many foods and beverages are sources of water and no one source is essential for normal physiological function and health. Canada's Food Guide promotes water as a calorie-free way to quench your thirst. The Food Guide also advises limiting beverages that are high in calories and low in nutrients. These include fruit flavoured drinks, soft drinks, sports and energy drinks and sweetened hot or cold beverages.²

Thirst for Nutrition looks at the different types of beverages commonly consumed by teens and compares their nutrition value. These beverages are listed alphabetically. Water does not have nutrients but is a calorie-free way to satisfy your thirst. Other beverages such as milk and chocolate milk are good fluid sources that provide additional nutrients. Milk consumption is a marker for an overall healthy diet because of its association with increased nutrient intake.³ Individuals that meet or exceed the dairy recommendations are more likely to meet their calcium recommendations.⁴

Research shows that children and teens who drink more soft drinks and sweetened fruit beverages have lower intakes of many nutrients, such as calcium, folate, and iron.⁵ These sweetened beverages often displace the intake of dairy products.⁶ A Harvard study shows that girls in grade 9 and 10 who drink soft drinks regularly have three times the risk of bone fractures compared with those who do not drink pop.⁷ On the other hand, the consumption of dairy products and sweetened dairy products such as chocolate milk is positively associated with calcium intakes of adolescents.⁸

Sport drinks are very popular beverages among teenagers, especially during sport events. But plain, cool water is the fluid of choice in most situations. Foods and fluids consumed after practice are excellent sources of carbohydrates and electrolytes (such as sodium and potassium) and replenish the body. Sport drinks are needed to replace energy and electrolytes only when workouts last more than 60 to 90 minutes or when several games occur in a short period of time. An easy recipe for making a homemade sport drink is to dilute equal parts of 100% fruit juice and water, and add a pinch of salt. It is as good as commercial sport drinks and much less expensive!

Vitamin water is not featured in the Thirst for Nutrition tool as it hit the beverage market after this tool was developed and printed. Vitamin water may come up in your classroom discussion as it is gaining popularity among teens due to its savvy packaging and attractive labeling. Vitamin water is presented by its manufacturers as a healthier alternative to soft drinks that could satisfy certain nutritional requirements for vitamins while providing adequate hydration. The truth is that vitamin water is just distilled water to which sweeteners, artificial flavours and colours and vitamins are added. It is no better than soft drinks in terms of sugar content and the vitamin levels are not high enough to provide any health benefit. It is also a very expensive source of water.

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Website Resources

- BC Dairy Foundation www.bcdairyfoundation.ca
- Dietitian Services at HealthLink BC www.healthlinkbc.ca/dietitian/
- Dietitians of Canada www.dietitians.ca
- Why is water so important for my body? How do I know when I'm dehydrated?
<http://www.dietitians.ca/getattachment/35dfa8fc-bcd2-4bc4-a6e7-0b9417a0e6fd/FactSheet---Why-is-water-so-important-for-my-body--know-when-dehydrated.pdf.aspx>

Community Resources

- Dietitian Services at HealthLink BC
Call 8-1-1 to speak with a dietitian for nutrition information, counselling and advice, weekdays from 9am – 5pm.
- Local Health Unit (Check the phone book).

References

- 1 Dietary Reference Intakes for Water, Potassium, Sodium, Chloride and Sulfate. National Academy of Sciences, 2004.
- 2 Eating Well with Canada's Food Guide. Health Canada, 2007.
<http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php>
- 3 Weaver C.M. Role of dairy beverages in the diet. *Physiology & Behavior* 2010, doi:10.1016/j.physbeh.2010.01.020
- 4 Nicklas T.A., O'Neil C.E., Fulgoni V.L. The Role of Dairy in Meeting the Recommendations for Shortfall Nutrients in the American Diet. *Journal of the American College of Nutrition*, 28 (1), 2009, p. 73S–81S.
- 5 Frary C.D., Johnson R.K., Wang M.Q. Children and adolescents' choices of foods and beverages high in added sugar are associated with intakes of key nutrients and food groups. *Journal of Adolescent Health*. 34(1), 2004, p. 56-63.
- 6 American Academy of Pediatrics. Soft Drinks in School. Policy Statement. 113(1), 2004, p. 152-154.
- 7 Cromie W.J. Soda pop increases risk of bone breaks. *Harvard University Gazette* 2000. www.news.harvard.edu/gazette/2000/06.15/soda.html
- 8 Murphy M., Douglass J., Latulippe M., Barr S., Johnson R., Frye C. Beverages as a source of energy and nutrients in diets of children and adolescents. *Experimental Biology* 2005, Abstract #275.4.