

Promoting the consumption of tap water: a clinical guide



1. Why promoting tap water is important

In many countries, tap water is unsafe and bottled water is in short supply. In refugee camps, people may also limit their water intake because water is difficult to access and transport and toilet facilities may be limited and unsanitary. For women and children, visiting these facilities may increase the risk of being assaulted, especially at night. Health professionals report the following key issues around water intake in Australia by people with a refugee background:

- Tap water may be avoided due to concern about its safety or dislike of its taste.
- Bottled water may be purchased and consumed instead of tap water. Bottled water does not have added fluoride; this means that people, especially young children whose teeth are developing, miss out on the protective effects of fluoride. This is particularly important for people who consume sugar-sweetened beverages, other high-sugar foods or have poor oral hygiene. The purchase of bottled water is also a cost most people from a refugee background cannot afford.
- Water may be replaced by sugar-sweetened beverages (including fruit juices, fruit drinks and cordials) due to their palatability, marketing and relatively low cost compared to bottled water.
- For some infants and children, milk may replace water as their primary drink. Although milk is part of a healthy diet, too much can reduce the appetite for food from other required food groups or result in excessive weight gain.

The need to promote the consumption of tap water to people with a refugee background has been established through:

- a literature review
- consultation with staff of the Metro South Refugee Health Service
- a recent survey of health professionals, which included dietitians and nutritionists working with culturally and linguistically diverse communities, and members of state and national refugee health networks
- community consultation with people with a refugee background attending TAFE English classes.

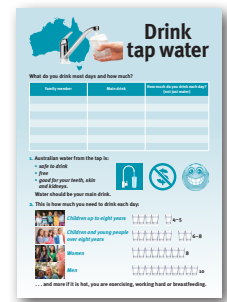
2. When should tap water be promoted?

Health professionals and community members agree that promoting tap water as the primary drink should occur on arrival in Australia, with information on other drinks to be given later in the settlement process.

3. Key messages

- a. Tap water is safe, free, and healthy for your body – especially for your teeth, skin and kidneys.
- b. Tap water is better for your teeth because it contains a special medicine called fluoride that helps children develop strong teeth. It also protects adult teeth against decay. Bottled water does not contain fluoride.
- c. Bottled water is expensive, while tap water is free.
- d. Tap water should be your main drink. Other drinks such as milk are important for your health, but they should not be your main drink.

- e. It is important for all the family to get enough water (see the client resource for age and gender requirements). You need to drink more if the weather is hot, if you are exercising or playing sport, or if you work hard outside.
- f. There are many ways of drinking tap water. These depend on your culture and what you like as an individual.
 - You may like to drink it cold, at room temperature, warm or hot.
 - You may enjoy its taste more if it is boiled or left overnight in the fridge (so that the chlorine evaporates).
 - You might want to flavour it. Tap water can be used to make tea (hot and cold), coffee, herbal teas, and a variety of spiced hot drinks. Tap water may also be flavoured by adding herbs (e.g. mint or ginger), vegetables (e.g. cucumber) or slices of fruit (e.g. strawberries). Only add lemon and lime juice or slices for special occasions, because these can make the water acidic, which damages the teeth.



4. Teaching session outline

- a. Using an interpreter if required, ask the client/s: ‘What is the main thing you drink?’
 - Record answers for all family members in the table provided in the client resource.
- b. Ask the client/s: ‘How many medium-size glasses of *any* fluid do you and other family members drink on a normal day?’
 - Make sure you ask about fluid intake both during and between meals.
 - Record the number of glasses (including all hot and cold drinks) in the table in the client resource.

Tip: Glasses vary greatly in size. You may find it helpful to have a medium glass (around 250ml) on your table to show the client.

- c. Go through the main messages around drinking water, i.e. Australian water from the tap is safe to drink, free, and good for you – especially your teeth, skin and kidneys. Water should be your main drink.

If water is not the main drink, explore why this is the case and go through the different ways to prepare and drink water to make it more palatable (see page 2 of the client resource). Make sure to emphasise the need to limit the amount of sugar added to drinks.

- d. Compare the number of glasses with the NHMRC recommendations in the client resource for age and gender.
- e. Talk to the client about the amount of fluid that should be consumed each day. If the client is not drinking enough, explore why and explain how much is required and its health benefits. If the amount of fluid consumed is very low, suggest increasing intake slowly over a few weeks.
- f. Use the text box on page 2 to write down any changes to water or total fluid intake agreed to by the client. This may be done by an interpreter in the client’s language (if the client is literate in their native language) or by using pictures if required.
- g. Record any issues relating to water or total fluid intake in the client’s notes and recommend reinforcement of key messages by their GP and/or the settlement agency.



Frequently asked questions

Taste



What if a client doesn't like the taste of tap water?

If this is the case, suggest:

- leaving tap water overnight in the refrigerator or boiling it to allow the chlorine, which is used to disinfect water, to evaporate off
- flavouring water with slices of fruit (not fruit juice); because lemon and lime are acidic, suggest that these should be used rarely because of their detrimental effect on teeth
- using tap water to make herbal and spiced teas (but not adding lots of sugar).

Tea and coffee



What about tea and coffee?

When calculating fluid intake, all sources (including all hot and cold drinks) should be included. This includes tea and coffee, which are only mild diuretics and can be good sources of antioxidants (especially green tea).

People who have a poor iron status should avoid drinking tea with meals and up to at least one hour after meals.

The *Australian Dietary Guidelines* recommend a maximum of 300mg of caffeine per day (about three cups of coffee or six cups of tea) for pregnant and breastfeeding women.

The *Infant Feeding Guidelines* state that tea, herbal teas and coffee should not be provided to infants.

Some herbal teas have been associated with health risks during pregnancy, especially during the first and last 12 weeks. Unfortunately, research into these products is limited.

The Royal Women's Hospital, Victoria, has a [factsheet](#) on herbal and traditional medicines in pregnancy.

When



When should people drink water?

It doesn't matter when water is consumed. Drinking water during meals does not dilute digestive juices or interfere with digestion. In fact, drinking water during or after a meal actually aids digestion. Water and other liquids help break down food and soften stools, which helps prevent constipation. [See information from the Mayo Clinic on this topic.](#)

Fluoride



Where can I find more information on the importance of consuming fluoridated water?

The NHMRC's *Information Paper – Water fluoridation: dental and other human health outcomes* (July 2017) can be found [here](#).

Too much water?



Can people drink too much water?

Yes, this is possible. Polydipsia (excessive drinking or a thirst that can't be quenched) can be associated with a number of medical conditions, including poorly controlled diabetes mellitus, diabetes insipidus, some forms of chronic mental illness, and anxiety. If a client reports drinking much more than the recommendations, it is important to alert their GP to this issue because it can be dangerous to their health.

Frequently asked questions

Acidic drinks



Is it okay to add lemon and lime juice to water?

Oral health experts recommend that people avoid adding juices to water, especially if they drink it throughout the day. Doing this acidifies the water and breaks down the hard enamel coating that protects teeth. Even drinking water to which lemon or lime slices have been added should be limited to special occasions for the same reason. Herbal teas that are not acidic include peppermint, camomile and ginger.

Fruit juices



Isn't fruit juice a better choice than tap water?

No. The *Australian Dietary Guidelines* recommend eating whole fruit rather than drinking fruit juice. This is because fruit juice is energy dense and, if consumed in excess, can displace other nutritious foods and may lead to problems such as obesity. For example, one litre of juice has the equivalent kilojoules of eight pieces of fruit (1,460kJ for orange juice), but doesn't produce the same level of satiety. Whole fruit is also higher in fibre, while the acid in fruit juice erodes the protective enamel coating of teeth, especially when it is sipped throughout the day.

Milk



How much milk is too much?

The [Australian Dietary Guidelines](#) provide recommendations on the average daily number of serves for each of the five food groups. This includes the *Milk, yoghurt, cheese and/or alternatives, mostly reduced fat* group. Some people, especially children, drink much more than the recommended amounts of milk. This can result in unwanted weight gain or lack of appetite for other foods that their bodies need. For those consuming milk as their sole source of food from this group, the recommended intake for different ages and genders are:

| Population group | Recommended serves | Amount of milk per day |
|--|--------------------|------------------------|
| Toddlers (1–2 years) | 1–1½ | 1–1½ cups (250–375ml) |
| Girls aged 2–8 years | 1½ | 1½ cups (375ml) |
| Girls aged 9–11 years | 3 | 3 cups (750ml) |
| Girls aged 12–18 years | 3½ | 3½ cups (875ml) |
| Pregnant women – less than 19 years | 3½ | 3½ cups (875ml) |
| Breastfeeding women – less than 19 years | 4 | 4 cups (1 litre) |
| Women aged 19–50 | 2½ | 2½ cups (625ml) |
| Women aged 51+ | 4 | 4 cups (1 litre) |
| Pregnant women – 19 years+ | 2½ | 2½ cups (625ml) |
| Breastfeeding women – 19 years+ | 2½ | 2½ cups (625ml) |
| Boys aged 2–3 years | 1½ | 1½ cups (375ml) |
| Boys aged 4–8 years | 2 | 2 cups (500ml) |
| Boys aged 9–11 years | 2½ | 2½ cups (625ml) |
| Boys aged 12–18 years | 3½ | 3½ cups (875ml) |
| Men aged 19–70 years | 2½ | 2½ cups (625ml) |
| Men aged 70+ | 3½ | 3½ cups (875ml) |

Recommended serves are less if a person is having yoghurt, cheese or other foods within this group. Low or reduced fat milk is recommended for most people two (2) years and over.



Frequently asked questions




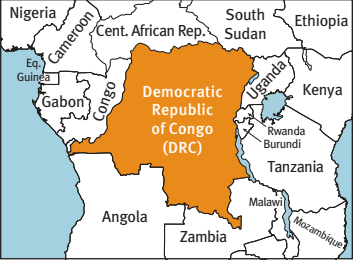

Traditional drinks







What about traditional drinks?

Traditional drinks vary greatly between different cultural groups. (See the following list of traditional drinks for the top ten countries from which Australia takes refugees, using the 2015–2016 national figures.)

| Country | Traditional drinks |
|---|---|
| <p>Iraq</p>  | <ul style="list-style-type: none"> • Coffee is universally consumed. • Tea, also known as <i>chai</i>, is consumed throughout the day and in social settings. It is taken strong and black with lots of sugar. • <i>Sharbat</i>, a chilled, sweet drink prepared from fruit juice or flower petals. • <i>Shinēna</i>, a cold beverage of yoghurt mixed with cold water, sometimes with a pinch of salt or dried mint added. • Little alcohol is available because Iraq is primarily a Muslim country. The main alcoholic drinks are: <ul style="list-style-type: none"> – <i>arak</i>, a clear, colourless, unsweetened, aniseed-flavoured, distilled alcoholic drink. It is generally mixed with water and served with ice. – beer. • Milk. <p>(Please note: It is important to be discrete when discussing alcohol consumption, especially with Muslim clients.)</p> |
| <p>Syria</p>  | <ul style="list-style-type: none"> • Cups of tea and coffee are often drunk throughout the day and are served with lots of sugar. • Herbal teas include rose hip and camomile, and spiced teas with walnuts. • <i>Mate</i>, made from the yerba mate plant, is widely consumed and may be drunk in large quantities. Sugar and cardamom may or may not be added. • Cold drinks include: <ul style="list-style-type: none"> – <i>ayran</i>, a cold, salted yoghurt beverage mainly drunk in summer and during Ramadan – <i>jallab</i>, a fruit syrup made from carob, dates, grape molasses and rose water; it is usually sold with crushed ice and floating pine nuts and raisins – Syrian mint lemonade (sometimes called <i>bolo/polo</i>), made from fresh lemon juice, mint leaves, sugar and water – tamarind drink, made from dried and soaked tamarind and sugar – <i>erek el-sous</i>, distilled from the roots of liquorice plants and generally unsweetened. • Alcoholic drinks include <i>arak</i> (a clear, aniseed-flavoured liquor made from grapes, which is generally diluted with water and ice), wine, and Syrian and imported beer. <p>(Please note: It is important to be discrete when discussing alcohol consumption, especially with Muslim clients.)</p> |

| Country | Traditional drinks |
|--|--|
| <p>Iran</p>  | <ul style="list-style-type: none"> • Tea is universally drunk and is provided to guests on arrival. Iranians traditionally put a sugar cube or rock candy in the mouth before drinking tea. • Green and herbal teas are drunk for health reasons. • Iran's traditional coffee is served strong and sweet. Turkish coffee is also popular. • <i>Doogh</i>, a salty, cold yoghurt drink. • Pomegranate juice and carrot juice. • Sherbet, a fruit syrup. • <i>Aragh</i>, flower essence beverages. • <i>Khakshir</i>, a cold, sweet drink with small seeds added. • <i>Sekanjebin</i>, a cold drink made from honey and vinegar. • Alcohol is prohibited, so all drinks and beverages are non-alcoholic, although some non-Muslim minorities are allowed to produce alcoholic beverages for their own use. |
| <p>Afghanistan</p>  | <ul style="list-style-type: none"> • Tea, with added sugar. • Fruit juice and soft drink, especially among younger people. • <i>Doogh</i>, a salty yoghurt drink containing cucumber, is mostly consumed in summer. <p>(Please note: Some young Afghan people may drink alcohol, even though this is against Islam. Be discrete when asking about alcohol, and explain why the question is important.)</p> |
| <p>Myanmar</p>  | <ul style="list-style-type: none"> • Water. • Burmese tea (green), usually drunk without milk and unsweetened. • Coffee, often with condensed milk but no sugar. • Fermented milk drink. • Alcoholic drinks include: <ul style="list-style-type: none"> – locally produced rice wine (reported by the Karenni people in Brisbane) – beer and a range of spirits. |
| <p>Democratic Republic of Congo (DRC)</p>  | <ul style="list-style-type: none"> • Water is consumed with all meals. • Alcoholic drinks may be consumed by those who do not follow the Muslim faith. Drinks include: <ul style="list-style-type: none"> – <i>lotoko</i> or <i>pétrole</i>, made from banana or sorghum; this drink has important social value for the Congolese, who believe that it unites people and fosters friendship – palm wine, made from palm tree sap – <i>linguila</i>, a wine made from fermented sugar cane – white elephant, a popular alcoholic drink made from rum, coconut and milk. |
| <p>Bhutan</p>  | <ul style="list-style-type: none"> • <i>Suja/sura</i>, Tibetan-style tea, made from butter and salt with or without milk powder. • <i>Ngaja</i>, a sweet milk tea. • (Imported) instant coffee is a newly adopted drink. • Alcoholic drinks include: <ul style="list-style-type: none"> – <i>ara/arag</i>, a distilled or fermented drink made from rice, maize, millet or wheat – <i>chang</i>, a home-brewed local beer – wine and a range of locally produced spirits. |

| Country | Traditional drinks |
|---|--|
| <p>Somalia</p>  | <ul style="list-style-type: none"> • Black tea or coffee with sugar. • Somali tea is a traditional spiced drink made from black tea, cardamom, cloves, ground ginger, cinnamon and large amounts of sugar. • Camel, sheep, goat or cow's milk. • Water. |
| <p>Ethiopia</p>  | <ul style="list-style-type: none"> • <i>Jebena buna</i>, strong espresso coffee consumed black with lots of sugar and milk coffee. • Tea. • Thick fruit juices with water and sugar. • <i>Atmet</i>, a barley and oat-flour based drink that is cooked with water, sugar and <i>kibe</i> (Ethiopian clarified butter). This drink is often given to women who are breastfeeding. • Traditional alcoholic beverages include: <ul style="list-style-type: none"> – <i>talla/tella</i>, home-brewed beer based on barley – <i>tej</i>, made from fermenting honey – <i>kaitaka</i>, pure grain alcohol. |
| <p>Eritrea</p>  | <p>Most cultural groups have their own traditional beverages, with Christians drinking alcoholic beverages and Eritrean Muslims generally abstaining from these.</p> <ul style="list-style-type: none"> • <i>Bun</i>, black coffee with lots of sugar added. The coffee ceremony is an important symbol of hospitality. • <i>Shahi</i>, black tea with lots of sugar. • Traditional alcoholic beverages include: <ul style="list-style-type: none"> – <i>Siwa</i>, <i>Daga</i> beers – <i>mess</i>, a fermented drink made from honey – <i>sewa/suwa</i>, a fermented drink made from various grains – <i>caticala</i>, a strong spirit made in the lowlands. • Fruit juices (banana, mango and papaya). • <i>Abake</i>, a non-alcoholic alternative produced by the Eritrean Muslims. |
| <p>Sudan and South Sudan</p>  | <ul style="list-style-type: none"> • Black or white tea, usually with added sugar. • Strong black coffee, served with sugar that may be spiced. • <i>Karkaday</i>, a herbal tea made from hibiscus flowers. • <i>Hilo murr</i>, a dark-brown drink made from dried maize, herbs and spices, with sugar added to taste. • Fruit juices, including guava, mango, orange and grapefruit. • Alcoholic drinks are officially banned under strict Islamic law. |

* Using 2015–2016 national figures. Countries ordered by geographical region.



**Queensland
Government**

 *Healthy New Communities*
Metro South Health

Created in partnership with the Culturally & Linguistically Diverse NEMO Group

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