

DESIGNING A HEALTHIER AUSTRALIA:

THE ROLE OF BUBBLERS IN MAKING WATER A TOP CHOICE



INTRODUCTION

Water is one of the most important substances on earth as it is essential for life.¹ Water should be the number one choice for hydration, especially for children as opting for sugary alternatives can impact on their development and lead to lifestyle diseases such as obesity and diabetes. Convenient access to water in public spaces is absolutely essential to ensure Australia's population can make healthy choices. Architects, designers, specifiers and all professionals behind creating Australia's buildings have a responsibility to help the country shift towards a healthier lifestyle by providing spaces which feature convenient and accessible drinking water solutions such as bubblers.

WATER AS THE NUMBER ONE CHOICE

Water is an essential nutrient and is the largest single component of the human body.² Drinking plenty of water helps keep our body in peak condition, it is key to creating energy³ and can improve mental wellbeing.⁴ Children need to be encouraged to make the right drink choice as it can have an impact on their overall health and development. Children who are dehydrated can easily lose concentration in the classroom and be tired in the playground. The Australian Dietary Guidelines recommends tap water as an ideal drink as it is inexpensive, tastes good and is safe in most areas of the country. For children, the guidelines state that “a child's fluid needs are best met by water and milk” and that consumption of drinks with added sugars, such as soft drinks and cordials, fruit drinks, vitamin waters, energy and sports drinks can increase risk of excessive weight gain in both children and adults. Unlike sugary alternatives, water has no kilojoules and a low acidity.⁵



FIGHTING DISEASE

Accessible drinking water has an important role to play in fighting lifestyle diseases. Regular consumption of drinks with added sugar beverages is associated with developing diabetes, obesity, chronic kidney disease and kidney stone formation.⁶

In Germany, researchers conducted an experiment to test whether environmental and educational intervention promoting water consumption could prevent overweight in elementary school children.⁷ The study saw bubblers installed in and teachers present four lessons to promote water consumption. After the intervention, the risk of overweight was reduced by 31 per cent in the intervention group, compared with the control group and water consumption was 1.1 glasses per day greater in the intervention group. The study concluded the installation of bubblers and education on water was effective in the prevention of overweight among children in elementary school.

Obesity in children is a serious public health concern. Overweight and obesity affect more than one in five NSW school children and young people. The NSW Schools Physical Activity and Nutrition Survey 2010 found NSW students ate energy-dense, nutrient-poor foods too often and many drank too much

soft drink.⁸ Overweight and obesity are major priorities for public health action. The NSW Government has pledged to take action and to reduce overweight and obesity rates of children by 5 per cent within 10 years – that would mean an additional 62,000 children would be a healthy weight in NSW.⁹ It plans to do this through key programs such as Make Healthy Normal, an element of which involves encouraging drinking water instead of sugary drinks.¹⁰

In Western Australia, Diabetes WA, the Public Health Advocacy Institute WA (PHAIWA) and Nirrumbuk Aboriginal Corporation banded together to fight disease in Indigenous communities by working to reduce soft drink consumption. The water bubbler project focussed on two remote Aboriginal communities to encourage people to drink water instead of soft drink. People in remote communities may drink soft drink over water as there is no drinking water and soft drinks are easy to buy, cheap and heavily advertised. The initiative installed water bubblers close to the community store, provided the community with drink bottles that can be filled up instead of buying a bottle of soft drink and worked with the store to help them promote water more. The water bubbler is well used, especially by children.¹¹

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ENCOURAGING WATER CONSUMPTION

If children can access water easily, whenever they want to, they are more likely to drink enough.

A University of Southampton study established a link between children’s access to drinking water in the classroom and fluid intake. The study compared schools which have water prohibited in the classroom, water allowed in the classroom but not on the desk and free access to water i.e. water encouraged on the desk. Researchers found most children have an inadequate fluid intake in school. It established children with free access to drinking water in class had an improved total fluid intake and recommended primary schools promote drinking water in class.¹²



BUBBLERS OR BOTTLES?

A study in the US provided cold, filtered drinking water in a middle-school cafeteria to assess how schools could improve drinking water among adolescents and compared it with a school where it did not. It distributed reusable water bottles to students and staff and provided education and promotional activities on the offering. The research found children at the school where the water was provided had significantly higher odds of drinking water from school drinking fountains and from reusable water bottles. However, it found the amount of water dispensed decreased over the length of the program as use of the reusable water bottles declined. Research staff observed when paper cups were placed next to the water dispensers, the amount of water consumed increased.¹³ This suggests that water is more likely to be consumed when the user does not have to carry around a bottle.

Bubblers not only eliminate the need to carry a bottle but they can be a more sanitary alternative. If a reusable bottle is not regularly cleaned, it can be harbouring nasty bacteria. A study

conducted by EmLab P&K tested 12 water bottles used by athletes for a week without being washed. It found reusable drinking containers may be harbouring more than 300,000 colony-forming units per square centimetre, that's many times worse than an average pet's toy or pet bowl. Over 60 per cent of the germs found had the potential to cause illness.¹⁴

Furthermore, plastic water bottles raise environmental concerns. In 2008 Manly Council installed free filtered-water bubblers on The Corso to reduce the number of plastic water bottles being purchased and disposed of and encourage reuse of water bottles. In 2010, the bubblers used almost enough water per year to fill two million 600mL bottles. This potentially avoided up to 80 tonne of plastic bottles being used, saved 153m² of landfill space, conserved natural resources and reduced greenhouse gas emissions. There were significant savings for the community from avoided water bottle purchases and a reduced cost to council for waste and litter management.¹⁵

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WATER ACCESS AND PUBLIC SPACE

The way public spaces are designed affects whether it is easy for people to be active and take part in activities such as walking, cycling, playing sport or active recreation and to interact with other community members – all activities which contribute to lifelong health and wellbeing.¹⁶ If key principles in designing the built environment are integrated and applied correctly they can create an environment that supports greater levels of physical activity, reduces the incidence of obesity and improves mental health outcomes. Healthy Spaces and Places identifies supporting infrastructure as a key design principal. It specifies drinking water access is important in many public areas and that consideration should be given to providing a water bubbler. The supporting infrastructure is most effective in creating a usable space when incorporated with other infrastructure and development, such as cycleways, seating, lighting and shade.¹⁷



CONCLUSION

Architects can make a difference to the overall health of the Australian population by designing spaces which present opportunities for communities to achieve better health. Put simply, if a community has easy access to well-designed, beautiful areas which suits their needs, they are more likely to use them. Architects play an integral role in ensuring these public areas are a blend of beautiful and functional. A key element of this is providing access to water, particularly in spaces designed for children's use, such as schools and playgrounds. By following design principals and incorporating bubblers into their design, architects can create a beautiful and functional space that supports active living and positively impacts on the well-being of a community.



ENWARE AUSTRALIA

Enware Australia bubblers are designed to be easy to use, vandal resistant and ensure the highest quality of water supply.

Enware Australia has a range of solutions to fit the needs of any public space or building. They have recently released a new range of Australian-made bubblers that bring a fresh and clean new look to the playground. The new Blueline Bubbler range has handles which are the lightest and easiest to use, and five different models are available. The range has an updated design incorporating a bright blue, soft rubber guard to protect teeth and is designed with UV protection so it will last and last. All models have the same heavy duty mechanisms used on all Enware spring action products.

Enware Australia's spring-action tapware and bubblers have been designed and manufactured at Enware since 1937. They are made to last and are designed to save water and reduce ongoing maintenance in challenging environments such as schools and local public areas, with barrier free models also available for wheel chair users.

Visit www.enware.com.au for the full range.



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