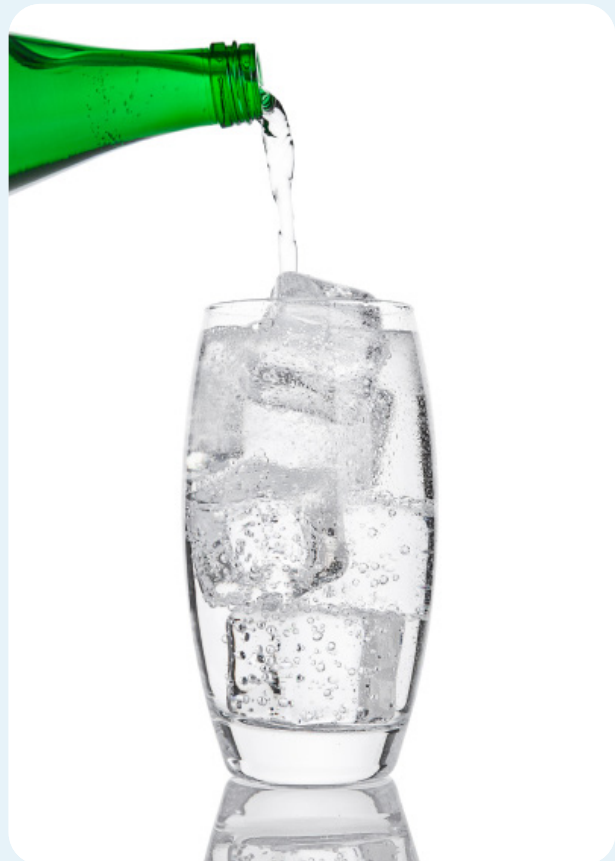


SPARKLING WATER

Sparkling water is one of the healthiest ways to hydrate with no sugar or calories. Sparkling water has been gaining popularity in the UK and US¹ and yet there is still some confusion about sparkling water, how it is produced and its health benefits. This fact sheet explains how sparkling water is made, what it does and does not contain, how much we are consuming and the role it plays in supporting healthy hydration.

- Sparkling water can be naturally sparkling or carbonated to have added fizz.
- Sparkling water tends to be drunk occasionally rather than as a habitual beverage.
- Sparkling water does *not* contain any calories or sugar.
- Sparkling water in amounts typically consumed is unlikely to have any adverse effects on bone or dental health.



ITS MAKING

Water can be naturally carbonated or have carbonation added. Water that is naturally carbonated is usually from regions that have had volcanic activity in their past. Cooled magma releases carbonic acid deep within the earth which then permeates some natural mineral waters. Historically, sparkling water from springs was well regarded for its mineral content and refreshing taste. So it was only a matter of time before this natural process was emulated by infusing water with carbon dioxide.²



ITS CONTENT

Research in Canada has shown that some spring and mineral waters can provide a valuable source of magnesium and calcium, helping to achieve dietary targets for these nutrients³

Sodium is a naturally occurring mineral that is found in water. Sodium can be present in sparkling water and the amount will vary from brand to brand depending on the geology of the land they come from, as the minerals are naturally occurring. To calculate the approximate amount of salt in a bottle of water, multiply the amount of sodium found on the label by 2.5. The UK and EU set a maximum limit for sodium in bottled water, which

is 200mg/L and all natural sourced waters are below this limit.

Whether it's still or sparkling, plain water does not contain any calories or sugar. There is some confusion with consumers on this fact; in a survey conducted for NSW, almost 10% of those questioned mistakenly thought that plain sparkling water contained sugar or calories.⁴



OUR HEALTH

The average person in the UK drinks 7.5 litres⁵ of sparkling water per year.

In context, this equates to just 140ml a week, or just 20ml per day. This demonstrates that on average, sparkling water is drunk occasionally rather than as a habitual beverage. However, as one of the healthiest ways to hydrate, it does provide people with another drink choice with a fizz, but without sugar or calories.

CLEARING UP CONFUSION

There are a number of myths surrounding plain sparkling water.

Dental Health

With regard to dental health, plain water (tap, still or sparkling) is an excellent drink of choice. Some sparkling waters have a lower pH than still water. Drinks with low pH values⁶ can have higher erosive potential than those with a neutral or alkaline pH. However, you would have to drink sparkling water on a regular basis for a long period for this to be a cause for concern.



Obesity

It has been suggested that sparkling water can be linked to an increase in the hunger hormone, Ghrelin. This is due to a study conducted by Birzeit University in Palestine. However the author of the study notes that in the human tests, sparkling water and other carbonated beverages induced more ghrelin release in the subjects, however they did not measure obesity or any other aspect pertaining to humans. The study was mainly focused on soft drinks and the intertwined roles of carbon dioxide and sugar content in the obesity of rats. It is difficult to draw firm conclusions from this new area of work because the studies involved are small and only suggest a slight difference in the effect on ghrelin levels between still water and carbonated water.

Bone Density

Claims have been made about the impact of carbonation on bone density. There is little scientific evidence to support this for carbonated water, although there have been studies^{7,8}

Please note

This information sheet has been based on scientific evidence available. The information contained in this fact sheet is not a substitute for medical advice or treatment, and we recommend consultation with your doctor or health care professional if you have any concerns for your health.

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References

1. Zenith UK Water Drinks Report 2017
2. <http://www.historyofsoftdrinks.com/soft-drink-history/history-of-carbonated-water/>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1495189/>
4. OnePoll survey 2015
5. Zenith UK Water Drinks Report 2017
6. Anything with a pH below 5.5 may cause erosion. See British Oral Health Foundation for a list of foods and drinks with very low pH values. <https://www.dentalhealth.org/tell-me-about/topic/caring-for-teeth/diet>
7. <https://www.ncbi.nlm.nih.gov/pubmed/17023723>
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FURTHER INFORMATION

Natural Source Waters Association
www.naturalsourcewaters.org.uk