







Perceptions of Water Quality in the Under 30s

Research among customers

13th February 2023

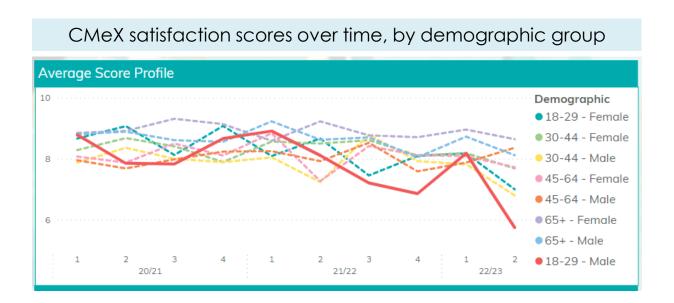




Objectives and Background to Research

Bristol Water wanted to understand in more detail the low levels of satisfaction among customers under 30 years old.

- Bristol Water became aware that there is low satisfaction among the Under 30s age group:
 - Recent CMeX survey results showed that younger people are more likely to be unhappy with the taste and quality of tap water than other age groups.
 - The results showed the lowest satisfaction among any age group for any company since Ofwat started recording CMeX data 3 years ago.
- Bristol Water commissioned this research to
 - Gain a more detailed understanding about the reasons for young people's dissatisfaction with Bristol Water
 - Explore further Under 30s' experience and perception of Bristol Water
 - Investigate why young people seem unhappy with the taste and quality of their tap water





Method / Methodology

We held focus groups among dissatisfied young customers and then conducted a quantitative survey among under 30s.



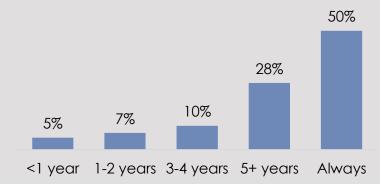
Focus Groups with Dissatisfied Young Customers

- 4 online focus groups lasting 90 minutes with customers under 30 years old in December 2022.
- All reported being dissatisfied with the taste and/or quality of their tap water.
- Sample included a range of time lived in Bristol Water region and geographic location.
- 22 young customers in total
 - 10 men / 12 women
 - 16 living in Bristol city area / 6 living outside Bristol city area
 - 7 students / 15 working full time
 - 5 living in Bristol Water area less than a year / 4 living in area for 1-4 years / 13 for 5+ years.



Quantitative Survey with Under 30s in the Bristol Water Area

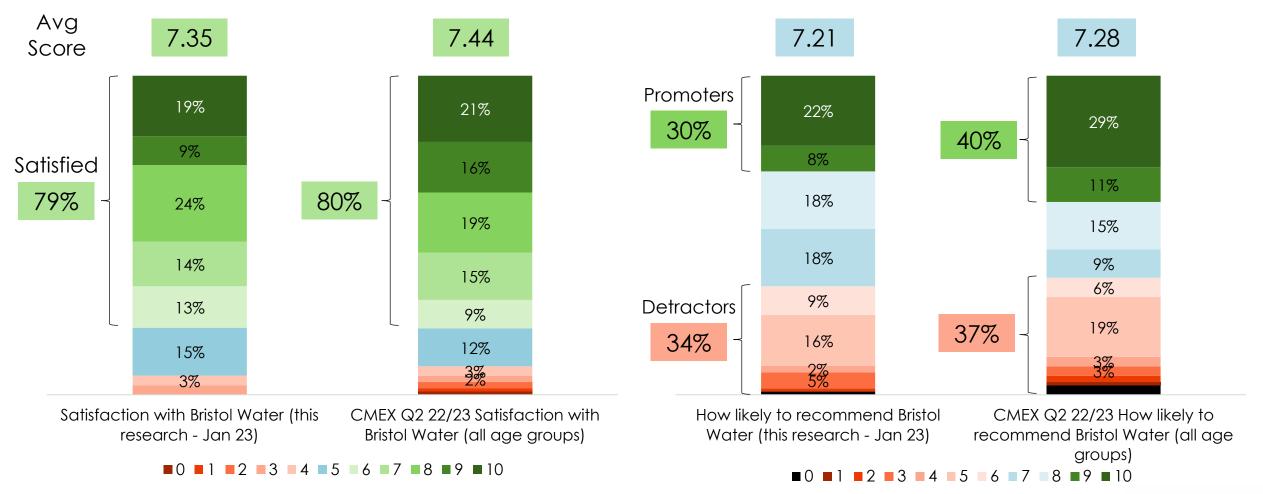
- Survey of **100 young Bristol Water customers** in January 2023. Sample breakdown:
 - Gender:
 - 55% female / 43% male / 2% non-binary
 - Bill paying status:
 - 39% solely responsible / 39% jointly responsible
 - 22% not responsible
 - SEG:
 - AB: 11% / C1C2: 56% / DE: 33%
 - Time lived in Bristol Water area:





Satisfaction with Bristol Water

- Our research found that over two thirds of Under 30s are satisfied with Bristol Water, which is only slightly lower than the Q2 2022-23 CmeX data for all age groups.
- This supports our findings from the focus groups that Under 30s are broadly satisfied with Bristol Water.



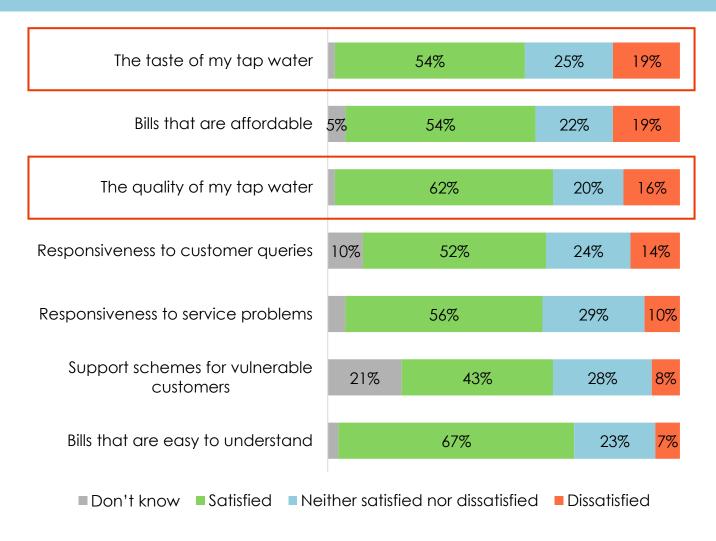
Q6a. Taking everything into account, how satisfied are you with Bristol Water on a scale of 0-10, where 0 is extremely dissatisfied, 5 is neither satisfied nor dissatisfied, and 10 is extremely satisfied. **Base:** All (100)

Q8a. If you could choose your water provider, based on your recent experience, how likely would you be to recommend Bristol Water to friends and family on a scale of 0-10, where 0 is not at all likely and 10 is extremely likely. **Base:** All (100)



Under 30s' satisfaction with different service areas of Bristol Water

- Most under 30s are satisfied with the service they receive from Bristol Water but a significant minority are dissatisfied
 with the taste and quality of their tap water.
- 1 in 5 are also dissatisfied with the affordability of their water bills.

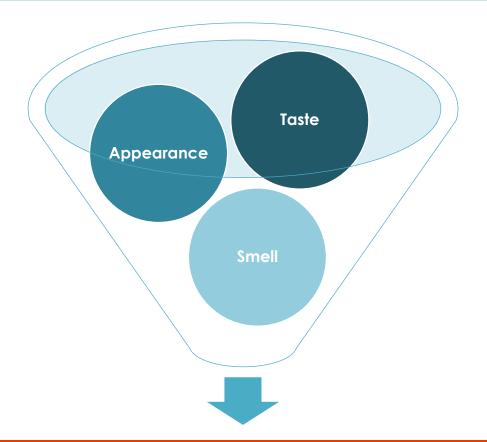


- In focus groups, the story was similar: broadly happy with Bristol Water, but frustrated and dissatisfied with taste and quality of tap water. Issues such as limescale also cause dissatisfaction.
- Other areas of dissatisfaction, such as affordability, were not voiced spontaneously in focus groups.
- Issues with tap water in the past 12 months possibly driving dissatisfaction. Those who had experienced issue with taste, smell, and/or clarity in past 12 months:
 - 25% more likely to be dissatisfied with taste than experienced no issues
 - 15% more likely to be dissatisfied with quality than experienced no issues



Drivers of dissatisfaction with tap water

• Issues with the taste, appearance, and smell driving dissatisfaction with tap water among minority of young people



Perceptions of poor quality water

Distinction between quality and other factors such as taste, smell, or appearance, is not clear in customers' minds – sensory issues with water seen as indicators of overall quality of water.

Dissatisfaction with water driven most prominently by taste, followed by appearance, and lastly smell – both among survey respondents and focus group participants

1) Taste profile of tap water seen as unpleasant:

- 'Metallic' or 'chemical' taste
- 'Chalky' or 'limescaley'
- Others less specific, saying water tastes 'stale', 'not fresh' or 'not pure'.

2) Dissatisfaction also driven by unpleasant appearance:

- A few had experienced 'murky' water.
- Others said their tap water is 'yellow' and 'brown' or a 'strange' colour.
- Some describe the water as 'cloudy' or 'milky'

3) Some also have issues with the smell of their water:

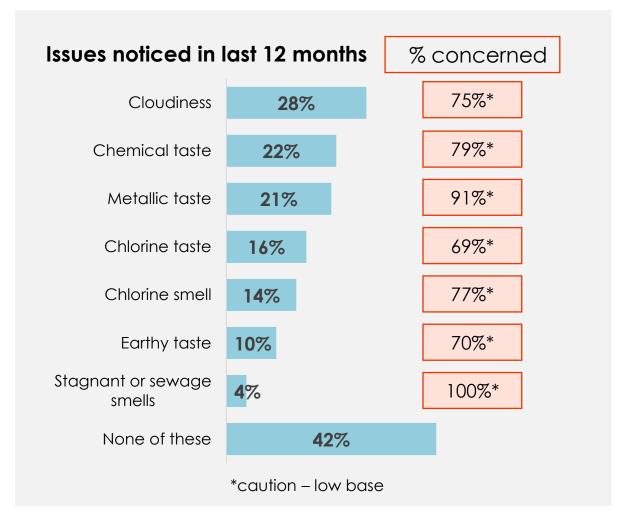
- · 'Chemical' or 'chlorine' smell
- Should smell of 'nothing'





Issues with taste and quality of tap water

- Over half of Under 30s customers have noticed an issue with either the taste, smell, or appearance of their tap water in the past 12 months, with cloudiness, chemical taste, and metallic taste the most common issues.
- All issues cause high level of concern amongst customers (although caution: small base)



- Many focus group respondents found it difficult to describe the taste of their tap water and why or how their tap water does not taste 'good'.
- When pushed on the issue, some alluded to specific tastes, or simply said that it does not taste 'fresh':
 - Some stated that taste of water is particularly noticeable when moving into Bristol Water area from elsewhere – e.g., students and people new to the area.
 - For most, it's not an active problem and they continue to drink the tap water. For others, however, the taste is enough of an issue that they buy bottled water and drink that instead
- Some reported seeing 'debris' in the water (e.g., brown specks) and others experienced cloudiness

 such issues can be very off-putting and generate concerns about safety.



Taste of Bristol Water tap water vs taste of 'good' tap water.

- General overlap between description of taste of Bristol tap water and what 'good' tap water should taste like:
 'refreshing', 'clear/clean', 'fresh', 'crisp' and 'cold'.
- A few used negative words to describe Bristol tap water, such as 'chemical/chemically', 'metallic', and 'chlorine'.

Bristol Water tap water



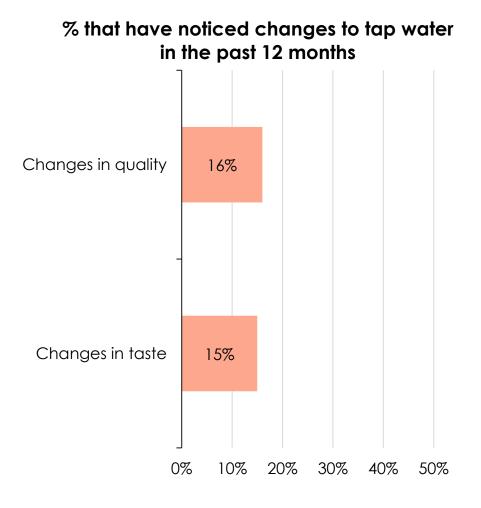
'Good' tap water





Changes in taste and quality of tap water in last 12 months

 Just under three quarters of respondents have not noticed any change in the taste or quality of their tap water in the last 12 months.



- Most respondents that had noticed a change simply stated that the water had got worse in quality and/or taste
 - Some respondents attributed a negative change to the tap water being 'cloudier' in appearance and 'more metallic' tasting.
 - Most failed to provide a specific reason, however.
- Some stated they had noticed a positive change in the taste and or quality of their tap water.
 - These customers said that the water tasted purer and quality had got better in the last 12 months.
- In focus groups, few had noticed any changes recently

 they said that the water in Bristol had always tasted
 the way it does now.
 - Dissatisfaction with the taste and/or quality of the tap water not a new sentiment.

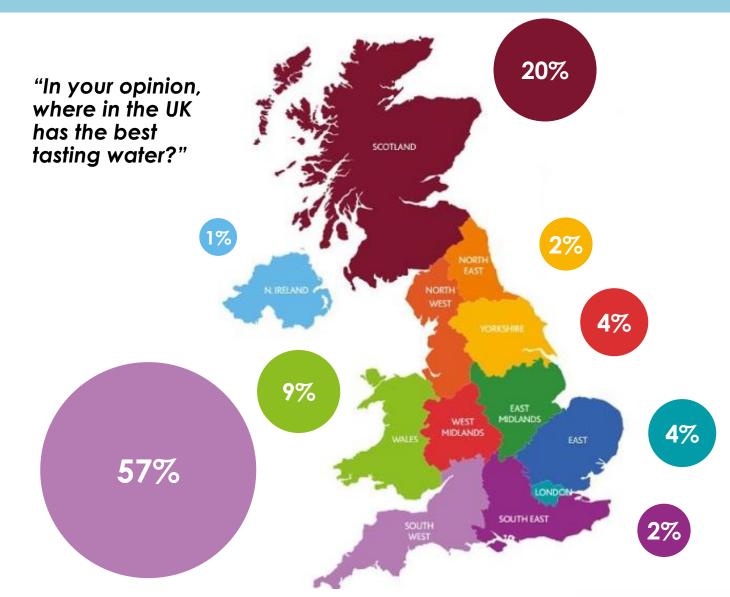


Taste and quality of water across the UK

- Majority of Bristol Water customers Under 30 think that the south west of England has the best tasting water in the UK.
- 1 in 5 think the best tasting water in the UK can be found in Scotland.

- In focus groups, strong connection made between taste/quality and where water comes from.
- Strong perception that tap water in the countryside is of better quality/taste than tap water in urban areas – associated with being closer to nature/the water cycle and further away from pollution.
 - Many mentioned areas such as the Scottish highlands, Welsh valleys, and Cumbria having good tap water.

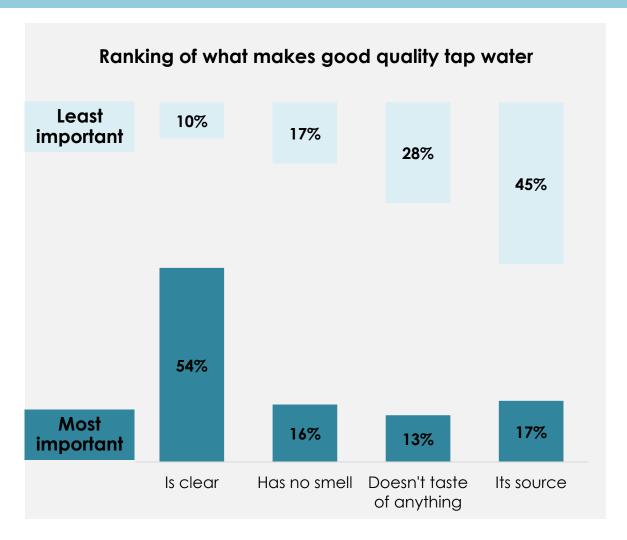
"I think in Bristol there's probably a lot more done to the water than in, say, Cumbria."



Q17. In your opinion, where in the UK has the best tasting water? Please chose one of the regions on the map shown. Base: 100

What makes good 'quality water'?

- When forced to rank what makes good quality tap water, clarity is significantly the most important feature, with over half ranking it first. Smell and taste have similar levels of importance to one another.
- Where tap water comes from least important feature of good quality tap water, with just under half ranking it last



- When not forced on the issue, however, distinction between quality and other factors is not so clear in customers' minds:
 - Among focus group respondents, factors such as taste, smell, and appearance all seen as indicators of whether the water quality is 'good' or 'bad'.
- In focus groups, high levels of confidence that tap water in the UK (and Bristol) is safe to drink – consensus that water quality in the UK is high.
 - Comparison made in focus groups of other countries, such as in southern Europe, where tap water quality is seen as poor and not safe to drink.

"I almost expect it to taste of nothing, but in a good way"



Q15. What, in your opinion, makes good quality tap water. Please rank the following options according to how important they are in making good quality tap water?

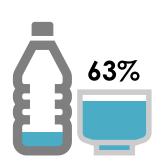
Base: All (100)



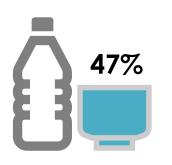
Tap Water vs Bottled Water

Almost 9 in 10 drink tap water at home, but just over half also drink bottled water. A significant minority, 2 in 10, drink
more bottled water than tap water at home, with 1 in 10 only drinking bottled water at home, never tap water.

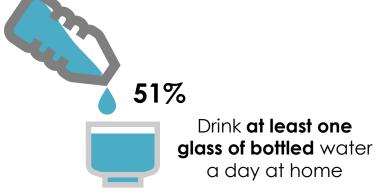


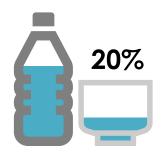


Drink more tap water than bottled water

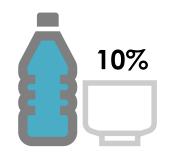


Drink only tap water, never bottled water





Drink more bottled water than tap water



Drink **only bottled** water, never tap water



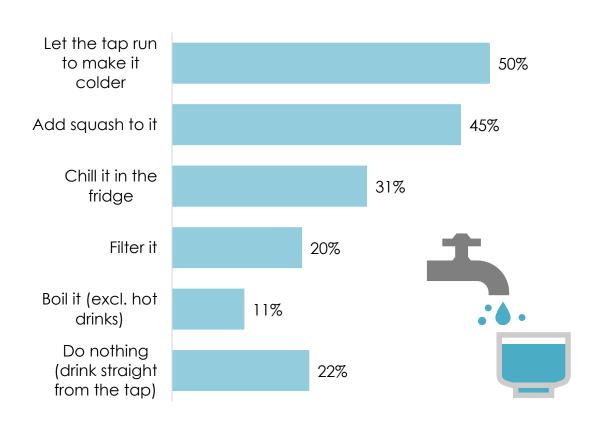
Q12a. How many glasses of tap water do you tend to drink each day at home? Q12b. How many glasses of bottled water do you tend to drink each day at home? Base: All (100)

Tap Water drinking habits

• Of those who drink any tap water, almost 8 in 10 do something to it before drinking it, with most chilling it in some way.

- In focus groups, many said they continue to drink tap water despite being dissatisfied with taste because it is not significant enough an issue in their daily lives to switch to bottled water.
 - Some citied environmental issues of drinking bottled water as a reason why they still drink tap water.
 - A few have perceptions of (micro)plastic in bottled water.
- Many do something to their tap water before drinking it to make it more palatable and taste better:
 - Many chill it in the fridge (not to remove chlorine taste, but because they prefer it cold – cold water seen as better tasting and more refreshing) or let tap run so the water is cold.
 - Some filter it to remove minerals and hardness tastes better after filtration.
 - Some add squash prefer the taste of squash to plain water.

Before drinking tap water Under 30s:

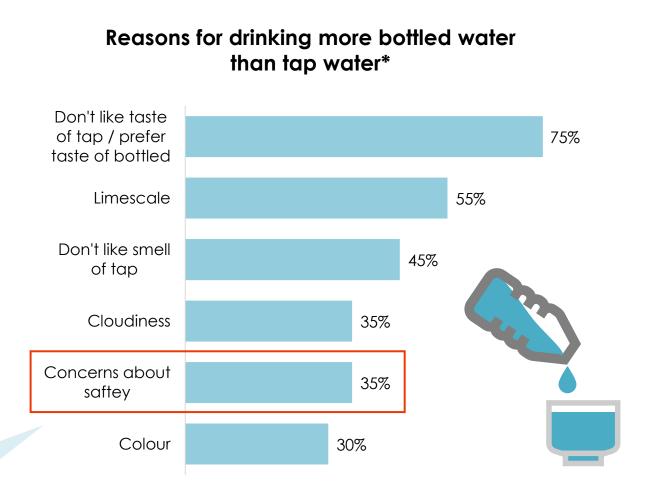




Bottled water drinking habits

- Majority of those who drink more bottled water than tap do so due to reasons of taste.
- Limescale and smell of tap water also driving people to drink more bottled water than tap.
 - A small number of Under 30s we spoke to tend to drink bottled water at home because they don't like the taste of the tap water.
 - Generally buy cheapest brand in the supermarket
 - Bottled water meets criteria of being flavourless
 - A significant number of this group had recently moved to the Bristol Water area and preferred the tap water where they previously lived.
 - This was not reflected in the survey data, however:
 - Those who had lived in the area for <2 years not more likely to drink more bottled water than tap water.
 - In fact, those who drink more bottled water than tap water more likely to have lived in Bristol area for 5+ years.

"You never know what's actually in the water. It feels safer going with bottled water as it's gone through a lot of checks before being distributed, so you'd know more about what's in bottled water than tap water."











Awareness of hard/soft water

- Most under 30s unaware of the hardness classification of their water just over 1 in 4 think their tap water is soft or very soft and 1 in 4 are not sure.
- Just under half of under 30s aware that their tap water is either hard or very hard.
 - In focus groups, we found there is little understanding about hard water and soft water:
 - what hard/soft water is
 - the differences between hard/soft water
 - what it means for taste and use around the house
 - Creates misconceptions about water quality hard water seen as of lesser quality.
 - We found low levels of understanding about where water comes from and the processes it undergoes before coming out of the tap.

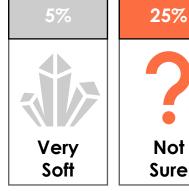
"Seeing limescale in your kettle or your cup is really off putting. It makes me think Bristol water is bad quality, because I'm having to pick bits of stone out of my cup - it's just not nice."

Which of the following is Bristol Water tap water classed as?









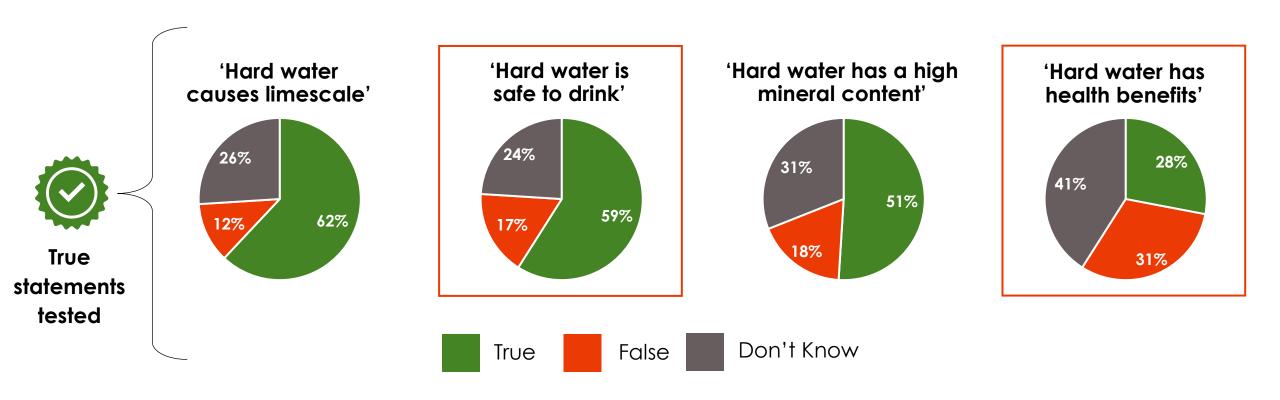
52%

Widespread confusion about hardness classification of tap water in Bristol area



Understanding of hard water (1)

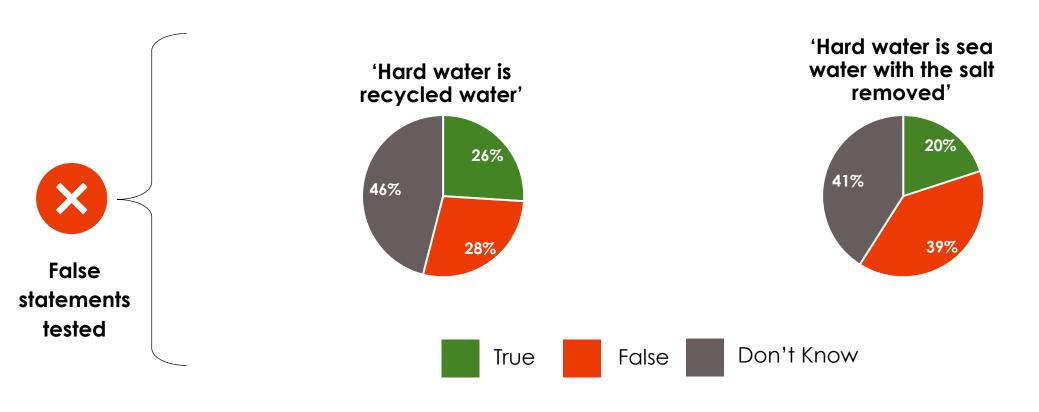
- Around 1 in 6 under 30s think hard water is not safe to drink, with 1 in 4 not sure.
- Majority of under 30s unaware that hard water has certain health benefits.
- Majority aware that hard water causes limescale and has a high mineral content, though significant number not sure.





Understanding of hard water (2)

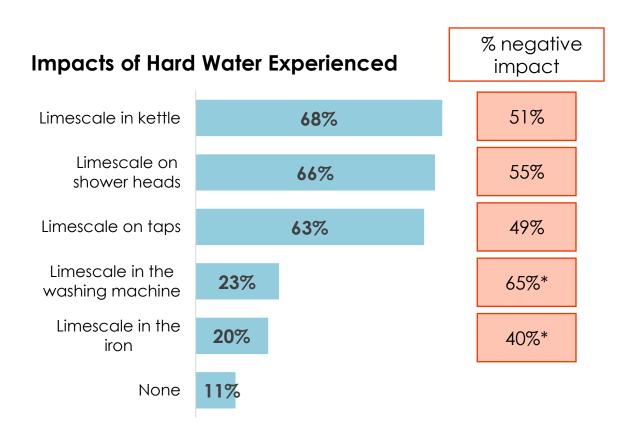
- 1 in 4 believe that hard water is recycled water, with around half unsure whether this is the case.
- 1 in 5 think that hard water is desalinated sea water. Around 40% aware that this is not the case, but the same proportion are unsure.





Impacts of hard water

Around 9 in 10 experience at least one impact of hard water, with limescale in the kettle, on showerheads, and taps
the most common impacts. For most of these people, this creates a negative impact on their day to day lives.



- In focus groups, many made reference to experiencing the impact of limescale in their homes, particularly on showerheads, taps and in the kettle.
 - Removing limescale build up a hassle and an annoying task.
- Many used bottled water in their iron due to issues with limescale build up and difficulties of removing it.
 - 68% of under 30s do not use tap water when ironing.
- Impact of limescale annoying to deal with, but not a major driver of dissatisfaction.

"Round the shower and taps the water creates limescale that takes more elbow grease [to remove] when cleaning."

Q18c. All of the tap water in the Bristol Water area is classed as either hard or very hard, which means that it has a high mineral content. Which of the following impacts of hard water affects you? Base: All (100)



^{*}caution – low base



Comms Testing

We showed customers various pieces of information about wate quality and explored their responses to each.



In the focus groups with dissatisfied young customers we showed five different pieces of information, from a range of sources, in various different formats, and covering different aspects of tap water quality, taste, and hardness. We explored:

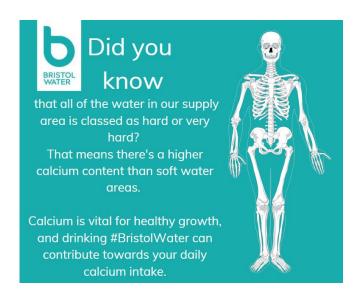
- Their first impressions
- How useful they find the information
- Who they think the information is aimed at
- Where they would expect to see the information
- How reassuring they find the information with regards to taste and/or quality of their tap water.



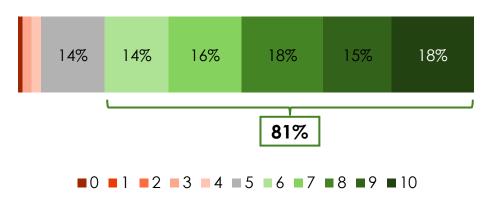
In the quantitative survey with Under 30 customers, we tested two pieces of information and asked them how reassuring they found the information shown.



Stimulus 1 – benefit of high calcium content



How reassuring do you find this information?





Many stated that the negative impact of hard water, principally limescale build up, outweighs any potential health benefits – a few frustrated that Bristol Water suggesting that hard water is beneficial overall.



Others said more context was needed – how much harder is water in Bristol compared to other areas of the country?



Several, however, did say that it was useful to know that hard water is not at all unhealthy – reassuring to know that there are some health benefits to it.



A few said their eyes were drawn to the skeleton before anything else – potentially detracting from the main message.

"For me I just don't really see how that's a positive as such because there's other people across the country that have less calcium in the water, and nobody goes, 'oh you can't go to York because you've got brittle bones', so it's kind of irrelevant."



Stimulus 2 – chlorine taste in water and how to remove it

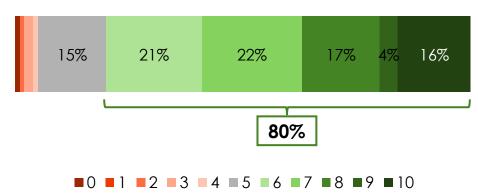
After we've filtered the water to remove particles we then zap it with ultra-violet light to kill bacteria. As a final treatment step we add a small amount of chlorine just before we send it down the pipe to you- this is essential to make sure your water stays protected and quality is maintained as it moves through the network to your tap.

Sometimes the taste of chlorine can become more noticeable, and this is normal, particularly during the winter when water gets colder.

If you prefer your water without the chlorine taste then try filling a jug or bottle and popping it in the fridge for a while- the taste and smell should improve over time as the chlorine naturally leaves the water as a gas.



How reassuring do you find this information?





Some think it's reassuring as it explains the process behind filtering and making the water safe. Also reassuring to people who may have been worried about the chlorine taste/smell and chlorine being added to the water.



However, several mentioned that the several processes it goes through must mean that the original water wasn't of great quality. Raises questions and concerns about original source of water.



Not eye catching – no design and image is boring and mundane.

Too much text – people might lose interest

"I think the main information is good to know, like with the tips about putting it in the fridge and whatever. I just think it's a lot [of text], I'm not sure you'd even get to the good tip at the bottom because there's just too many words."



Water Quality article from *The Drop* magazine

Water Quality article from The Drop magazine:

To shed light on why our water might taste, smell or look different in the winter, we spoke to Rob Luckwell. Rob is our Regulatory and Drinking Water Safety Manager, which means that he's the go-to guy when it comes to Water Quality.

How do you treat the water?

We filter the water to remove particles, we then zap it with ultra-violet light to kill bacteria. As a final step, we add a small amount of chlorine before we send it down the pipe to you.

Why do you add chlorine?

It's essential to make sure your water stays protected, and the quality is maintained as it moves through the pipes, into your home and out of your tap.

Why is the chlorine taste sometimes stronger?

At times, the chlorine taste in your water can be more noticeable. This is normal, particularly during the winter when water gets colder.

What can I do if I don't like the taste?

If you prefer your water without the chlorine taste, try filling a jug or bottle and popping it in the fridge. The taste should improve over time as the chlorine naturally leaves the water as a gas.

Why does my water look cloudy and white?

As we're all turning on our heating for the winter, you might notice your cold water looks cloudy.

The heat running through your pipes as you turn the heating on can warm up the cold-water pipes, as these are often close to each other under floorboards and within the walls. This gradual warming of your cold water leads to air coming out of the water and forming millions of tiny bubbles. It's these bubbles that make your water appear cloudy or milky.

Is it safe to drink?

The cloudy water is completely harmless and the cloudiness will clear if you leave the water to stand. You'll notice the water clearing from the bottom upwards as the air rises out of the water. If you add squash to aerated water, it might look a bit foamy on top.

How can I clear my water?

The cloudiness in the water will reduce as you run your cold tap, as colder water is drawn into your home. If you don't like the look of the cloudy water, rather than running your tap and wasting water, fill up a jug or bottle and pop it in the fridge. The water will clear as the airrises out over time, and you'll have cool, fresh water ready to drink when you need it.



Many said that the information was interesting, useful, and reassuring.

Mixed responses information about cloudy water:

- Some said that despite the explanation on cloudy water and reassurances it's safe to drink, cloudiness in tap water is still very off-putting.
- Others thought the information reassuring and they were now confident about drinking cloudy water.
- ? A few wanted to know why chlorine tastes more strongly on certain days during the winter.
- Others asked why Bristol Water has hard water/high levels of limescale compared to other places.
- For a few, all the talk about chlorine was off-putting don't like the idea of having chemicals in their water.



Stimulus Piece 4 – Bristol Water website water quality postcode checker

Water quality in your area BA6 9EL →

Water quality in your area

BA6 9EL

Not your postcode?

Wells, Glastonbury, Street and Baltonsborough (421)

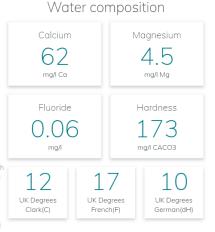
Your drinking water supply is classed as hard

Your water supply comes from surfaces waters (lakes)

collected from randomly selected properties as required by the current Water Supply (Water Quality) Regulations. Due to the restrictions on entering customers' homes during the Coronavirus pandemic, samples have instead been collected from fixed monitoring points within the zone between January and July to ensure they are representative of the water being supplied to customers. This change was permitted by the issuing of a Regulation 7 waiver from the Drinking Water Regulator (DWI), which has now been revoked. During the report period, all tests carried out on samples collected in this Water Supply Zone met all the legal limits specified in the current Water Supply (Water Quality) Regulations, except for two that failed the total coliform standard. Our investigations of both failures confirmed they were specific to the property and not representative of water quality in the zone and all follow up samples were satisfactory. The customers were informed of the results and provided with advice to prevent a

England water supply (water quality) regulations 2016

Download information on your water supply zone



/

For some certain information was helpful and interesting:

- Water source
- Hardness



But many emphasised that for them the numbers about water composition meant very little and were not helpful:

- Suggestions of using comparisons with other areas with different water composition (e.g., soft water or bottled water)
- **~**

Some people appreciated the fact that Bristol Water provides this information for customers.



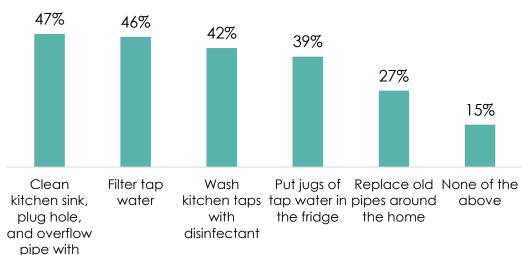
A few said they're more concerned about what their water tastes like, not how much calcium and magnesium is in their water – what does this mean for the taste of their tap water.



Stimulus 5 – Water Safe video



Actions willing to do if improves taste of tap water:



disinfectant



Many stated that they live in rental properties and so cannot do many of the remedies suggested in the video.

Many of the suggestions could be costly and are not quick fixes



Some found the information useful:

- Unaware pipes could influence taste
- Putting water in fridge to remove chlorine



A small number felt like this video was attempting to shift blame for poor tasting water from water companies to the consumer.

"Interesting information, but it's not really relevant to me because I'm in a rental so I'm never going pay to fix the main problems, so it would be better if it had advice for tenants...as a tenant it's not really beneficial to me."





Key findings

Most under 30s satisfied with tap water, but a significant minority are not

- The majority of under 30s are happy with the water that Bristol Water provides, and report no issues.
- There are very few reports of any changes to the taste and quality of Bristol Water in the last 12 months.
- However, there is a dissatisfied minority of under 30s, who have strong opinions about the taste, smell and appearance of their tap water

2 Young customers do not know much about their tap water

- Under 30s often have huge gaps in knowledge regarding what happens to their water before it comes out of the tap – including regarding:
 - Where the water comes from
 - How the water is treated before reaching them
 - The safety tests that their water is subject to
 - What drives common perceived "issues" with tap water and how these can be resolved.

Young customers are misinformed about water hardness

- Significant minorities of young people believe that hard water is not safe to drink, and are unaware of the health benefits.
- A quarter think that hard water is recycled water, and a fifth think that it is desalinated sea water.



Recommendations

Tell a positive, local story to fill the knowledge vacuum on tap water among under 30s

- Continue to provide information regarding the fundamentals of Bristol Water's tap water, making more of:
 - Where the water comes from emphasising the local natural environment and what this means for taste and quality
 - How the water is treated before reaching them including what you do to ensure that water is safe to use

Explain the causes of common issues and show how to resolve them

- Providing the 'why' for frequent bugbears (such as odour or discolouration) will alleviate concerns that such issues are unusual or worrying
- Demonstrate that you understand where customers are coming from and that some issues can be annoying to deal with, even if they are unavoidable
- Promote tips and tricks, which will be well received if more widely known

Specifically, promote information about water hardness, acknowledging the frustration it can cause

- Continue to provide information about water hardness to reduce the risk of misinformation filling the knowledge gap. Explain:
 - What hard water is and why the water in the region is hard/very hard.
 - What the impacts of hardness are acknowledging these can be frustrating but stressing that hard water is safe.

Focus on the most effective channels for communicating with young people

- Young people are relatively unlikely to follow Bristol Water on Twitter or to read your owned publications
- Consider low-cost advertising campaigns on social media (e.g. Instagram), as well as physical advertising on billboards around the region





