

Edinburgh International Science Festival – looks matter!



The Edinburgh International Science Festival is not all about unintelligible chemistry and physics. Some of it has a more direct application!

An experiment into the taste perception of beer conducted at Edinburgh International Science Festival has found that visual stimuli can significantly affect how we perceive flavour.

The Science Festival teamed up with local Edinburgh microbrewery Barney's Beer, along with psychologists from Mountainview Learning and Prof Charles Spence from Oxford University to study how festival-goers tastes were influenced when shown two specially created beer labels – Genius Loki and Liquid Hop Chemistry. However, the tasters were unaware that the contents of the bottles were the same. The experiment was conducted at two events – the Science Festival Lates' evening at the City Arts Centre (3 April), and at scientific farmers market SciMart (6 April).

Overall, drinkers gave Liquid Hop Chemistry, with its vibrant green and yellow coloured label a better overall taste rating. They also found it to be 30% more 'citrusy & fruity' tasting than Genius Loki, which had a warmer coloured label, showing that the label on the bottle exerted a significant influence on people's rating of the beer. In particular, the green and yellow label also led to significantly higher ratings in terms of taste quality and willingness to purchase, though interestingly the label had no impact on price estimate.

While previous studies have looked either at the impact of

label and packaging colour, or at the impact of descriptive label, this is the first study to combine the two. The idea for the experiment and the beer used was brewed specially for the Festival by Barney's owner Andrew Barnett. This gold and malty shape-shifter evolved from Barney's bestselling Volcano IPA, and is a single hop beer featuring the only commercial use of Keyworth hops in Scotland.



Dr Gorkan Ahmetoglu, a lecturer and Director of Consumer Behaviour and Management and Entrepreneurship at Goldsmiths University said: 'We tend to believe that we are fully aware and in control of the machinations behind our senses – but in actual fact, even something as basic as taste can be influenced by hidden psychological persuaders. The subconscious brain plays a much bigger role in our perception of the world than most people tend to believe. When people are given chocolate yoghurt to eat in the dark and told it's strawberry, the majority will say it has a good strawberry taste! The subtlest cues can influence our perceptions of the taste and quality of the products we buy, and have a significant effect on our health by nudging our behaviours in the world of food and drink'.

The fascinating experiment by Barney's Beer at the Edinburgh Science Festival is another great example of how psychology can nudge even our taste buds. Behavioural science offers a fantastic tool for brands to create a premium, quality product without changing any tangible part of it'.

Andrew Barnett, owner of Barney's Beer & brewer of Genius Loki said, 'Science is at the heart of brewing and collaborating with the Edinburgh International Science Festival has allowed me to indulge in some excellent beer-science geekery. The experiment has shown how strong the associations between certain colours & visual cues can be, and

the influence this can have on enjoyment of beer. There are clear implications for brewers to get their packaging, as well as their beer right'.