'Coffee Culture'; cross-sectional survey exploring UK female university students coffee consumption habits, factors influencing choice and awareness of nutritional content

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Background

Global research has demonstrated how the coffee industry has grown significantly over recent years, with the British Coffee Association (2015) estimating 55 million cups of coffee are consumed each day in the UK. Interestingly, Demura et al. (2013) found females to be more interested in the nutritional content of coffee than males.

The majority of existing research on coffee consumption is US based, with very limited UK research exploring if the nutritional content of coffee is a factor that influences consumption trends. This is an important consideration when exploring links between dietary habits and the rise in conditions such as obesity and type II diabetes (Santos and Lima 2016).

The aim of this study is to explore coffee consumption amongst UK female university students, through a questionnaire designed to analyse coffee consumption frequency, factors influencing choice and nutritional knowledge.

Methods

A cross sectional survey of UK based female university students age 18 to 51 years were recruited using snowball sampling from a network known to the researcher. An online questionnaire was distributed to suitable participants as per inclusion criteria, using various question formats to capture information on beverage preference, consumption frequency and nutritional knowledge.

Results

A total of 44 participants were recruited to complete the questionnaire, the largest portion of whom were aged 18-24 years (n=31, 70.45%).

The main findings of this study show semi skimmed is the preferred milk type (n=21, 47.73%) and 'tea and flavoured teas' were the most popular beverage (n=14, 31.82%) although this preference was not statistically significant between age groups (p=0.853).

The most influential factor when choosing a beverage is taste, with 72.73% (n=32) of participants selecting this option. Cost, time of day and level of tiredness were each chosen as the second most influential factor by 26 participants (59.09%). The nutritional content of coffee beverages, including calorie, sugar and fat content were amongst the least influential factors, as seen in Figure 1.
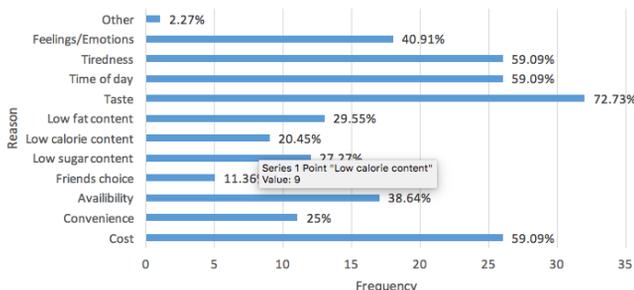

Figure 1 – Graph showing factors influencing beverage choice

Participants accuracy when matching calorie and sugar content to six popular coffee based beverages was varied, as only 36 out of 44 participants (81.82%) completed this section. However, all participants (n=44) demonstrated a better awareness of beverage sugar content over calorie content can be drawn, with an average accuracy of 47.73% accuracy when matching sugar content to beverage (Figure 2) and only 40.91% accuracy when matching calorie content (Figure 3).
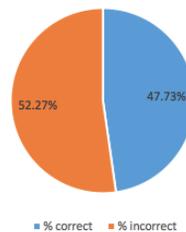
Figure 2 – Chart demonstrating participating accuracy when matching calorie content to popular beverage
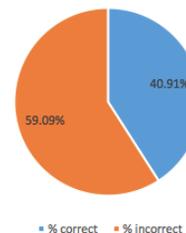

Figure 3 – Chart demonstrating participant accuracy when matching calorie content to popular beverage

Discussion and Conclusion

This study shows that 70.45% (n=31) of participants consumed at least one hot beverage per day, a contrasting result to Saad (2012) who found only 40% of 18-24 years olds consume coffee daily. Taste, tiredness, time of day and cost were the top factors influencing beverage choice, where as nutritional factors were amongst the least common influences, contrasting Roberto et al. (2010) finding that 50% of consumer's dietary choices are influenced by nutrition. Lower calorie milks being popular choice amongst participants (70.45%) is therefore unlikely nutritionally influenced.

With participants having higher accuracy when matching sugar content to popular coffee beverages than calorie content, similarities can be drawn with research conducted by Kim and House (2012), who found university students to be more interested in sugar content of beverages (51%) than calorie content (47%).

In conclusion, the research demonstrates environmental and personal factors appear more influential than nutritional factors for beverage choice. Analysis of nutritional knowledge suggests female UK university students have better awareness of coffee beverages sugar content compared to calorie content, however this could be further improved. Future research exploring how perceptions of nutritional content of beverages between genders translates into dietary choice would strengthen the results of this study.

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