



Contract Testing Inc.



# INTRODUCTION

Lemonade is one of the most iconic symbols of the dog days of summer. It's the quintessential summer refresher - from the days of the 'two cent lemonade stand' to our modern day grocery stores which offer a vast array of new lemonade flavour combinations.

But despite the simplicity and authentic image of lemonade, it is not a 'one-size-fits-all' type of product. In fact, flavour preferences are so varied that appealing to a mainstream palette may not be quite as easy as it seems.

This research aims to explore the differences in taste among these products to determine which attributes drive overall liking and purchase interest and to find out if any achieved the 'perfect' lemonade flavour profile.

#### **MATERIALS AND METHODS**

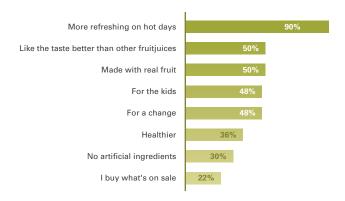
The research recruited 50 women from the Greater Toronto Area who regularly consume lemonade to participate in a blind taste test of six national brands. All six brands were sold in cartons or plastic containers in the cooler section of the grocery store.

Each participant evaluated 100ml of each sample, served in clear plastic cups labelled with a 3 digit code number and presented in varied order. Respondents answered a series of questions relating to the aroma, appearance, taste, and texture and evaluated them on a 9-point hedonic scale.

## **RESULTS**

When asked about why they purchase lemonade over other fruit juices, an overwhelming 90% claimed the main reason is because it is 'more refreshing on hot days'. (See Figure 1)

Figure 1 - Reasons for Choosing Lemonade over Other Fruit Juices



However, our research indicates that many products on the market are not delivering the refreshment consumers are looking for.

The results of our blind taste test resulted in an even split - three of our samples performed similarly on most performance measures and were the better performing brands overall, while the other three scored significantly lower on most measures. However, even among the better half of our brand array, scores on Overall Flavour were not strong. The top mean flavour score was 6.6 (out of 9), falling below our expected norms in a sweet beverage category.

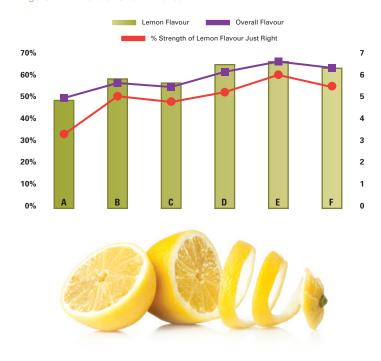
There are three attributes which comprise the flavour profile of lemonade for the everyday consumer — tartness/sourness, sweetness, and the strength of the lemon flavour. By taking a closer look at some of these specific flavour attributes, we hope to learn more about these lack-lustre flavour scores.



#### **LEMON FLAVOUR**

Not surprisingly, liking of the Lemon Flavour was strongly linked to respondents' liking of the overall flavour of the products. (See Figure 2) In addition, products with higher scores for overall flavour had a higher number of participants rating the strength of the lemon flavour "just right." But only one product achieved our action standard of 60% Just Right for Lemon Flavour, further supporting the conclusion that none of these products are hitting the consumer ideal.

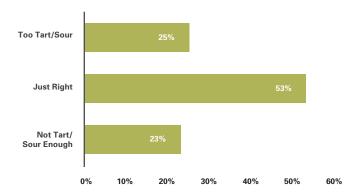
Figure 2 - Drivers of Overall Flavour



#### **SOURNESS**

Sour taste notes are present in all citrus fruits and for some people the grimacing effect of sucking on a lemon is one of pleasure while to others it is a source of pain. Both the tolerance and likeability of sour flavours is wide ranging and our testers were no exception to this. When averaging the sourness ratings across all six products, about half of our testers rated Sourness as 'Just Right', but the remaining fifty percent were equally divided - with a quarter wanting more sourness and another quarter wanting less. (See Figure 3) For product developers looking to find the right degree of sourness, this presents an obvious quandary.

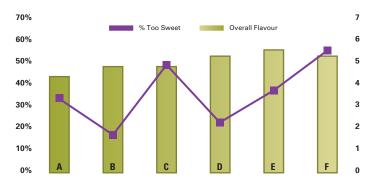
Figure 3 - Average Rating of Sourness/Tartness Across All Products



#### **SWEETNESS**

Although sweetness is not technically the direct opposite of sourness, typically consumer ratings for these two attributes are inversely correlated - so a desire for less sweetness typically goes along with a desire for greater tartness. This relationship generally held true in our results, however there was a greater overall dissatisfaction with sweetness and a more decisive leaning to the 'too sweet' side of the scale. In fact, for two of the top performing products, over 30% of respondents rate them much too sweet. (See Figure 4)

Figure 4 – Sweetness vs. Overall Flavour







#### **CONCLUSIONS AND IMPLICATIONS**

The objective of this research was to investigate the taste profile of lemonade and to determine which attributes drive overall liking. Within this framework we see that many products currently on the market are not fully satisfying consumers.

This may be because everyone has their own unique expectation of what exactly 'freshly-squeezed lemonade' should taste like. What may be the perfect balance of sweetness, tartness, and lemon flavour for one person, may be far from another person's ideal.

Although three brands emerged as the best products in our test, we identified some very obvious failings in their flavour profiles. However, they may have reached the ceiling in product performance scores simply because they cannot please everyone. Perhaps this is a category where the only way to truly appeal to wide ranging taste expectations is with multiple variants such as "Super Sour", "Extra Sweet", or "Ultra Lemony" - similar to what you may find in many Spicy food categories. However, product segmentation strategies ultimately add marketing costs... and as we all know, money doesn't grow on lemon trees.

For questions about this research, or how you can leverage consumer taste buds in your business, contact Dan Scholes at info@contracttesting.com or (905)-456-0783.



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