



Students involved: Aimee Hollis & Harrison Yang
Teacher: Susanna Pattison
Mentor: Neala Ye



Issue:

Many beverages currently being marketed are high in both sugar and acidity; a combination that is corrosive to teeth. Whilst consumption of sugar-sweetened beverages has been declining for more than ten years (NZ Beverage Council), the industry as a whole sees the need for beverages that are lower in sugar. Currently there is a gap in the market for a beverage that is better for your teeth. There is an opportunity to create a beverage which is low in sugar and acidity and targeted at young adults.

Aim:

To produce a healthy beverage that is beneficial for your teeth without any taste compromise. Our beverage has to compete with other products with high sugar content, which is a desired attribute for young adults, so there needs to be a substitute in terms of sweetness. The beverage needs to be an appropriate serving size (250ml), affordable, convenient and healthy. The beverage needs to have a shelf life of six months while still retaining all the nutrients, colour and flavour it had when first produced.

Attributes:

- Simple eye-catching packaging targeted to market
- Innovative and 'on trend'
- Aroma needs to match the flavour description
- Visually appealing
- Health claims for being beneficial for teeth: low sugar & acidity
- Has minimum 6-month shelf life
- Effective production and raw ingredient costs in order to be produced commercially
- Unique and clean flavour



Product development:

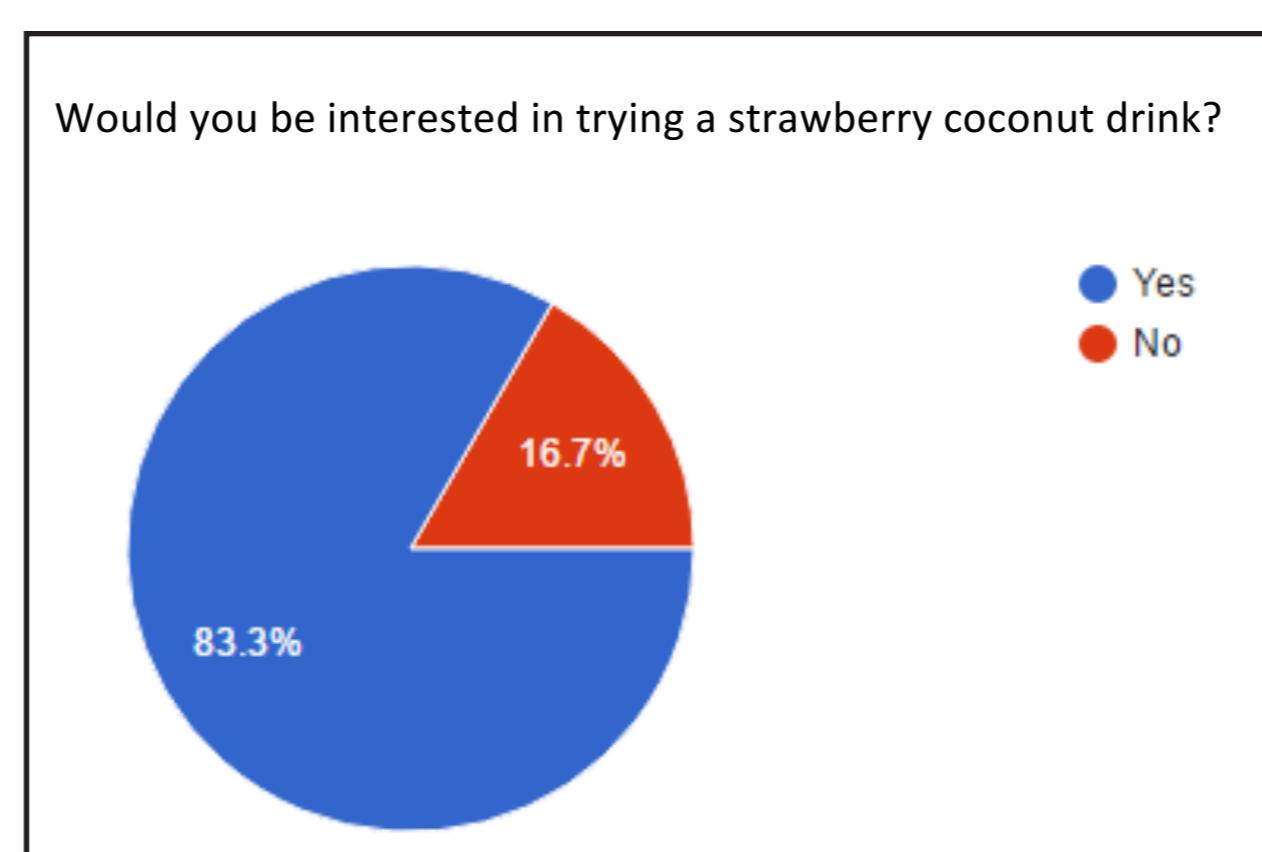
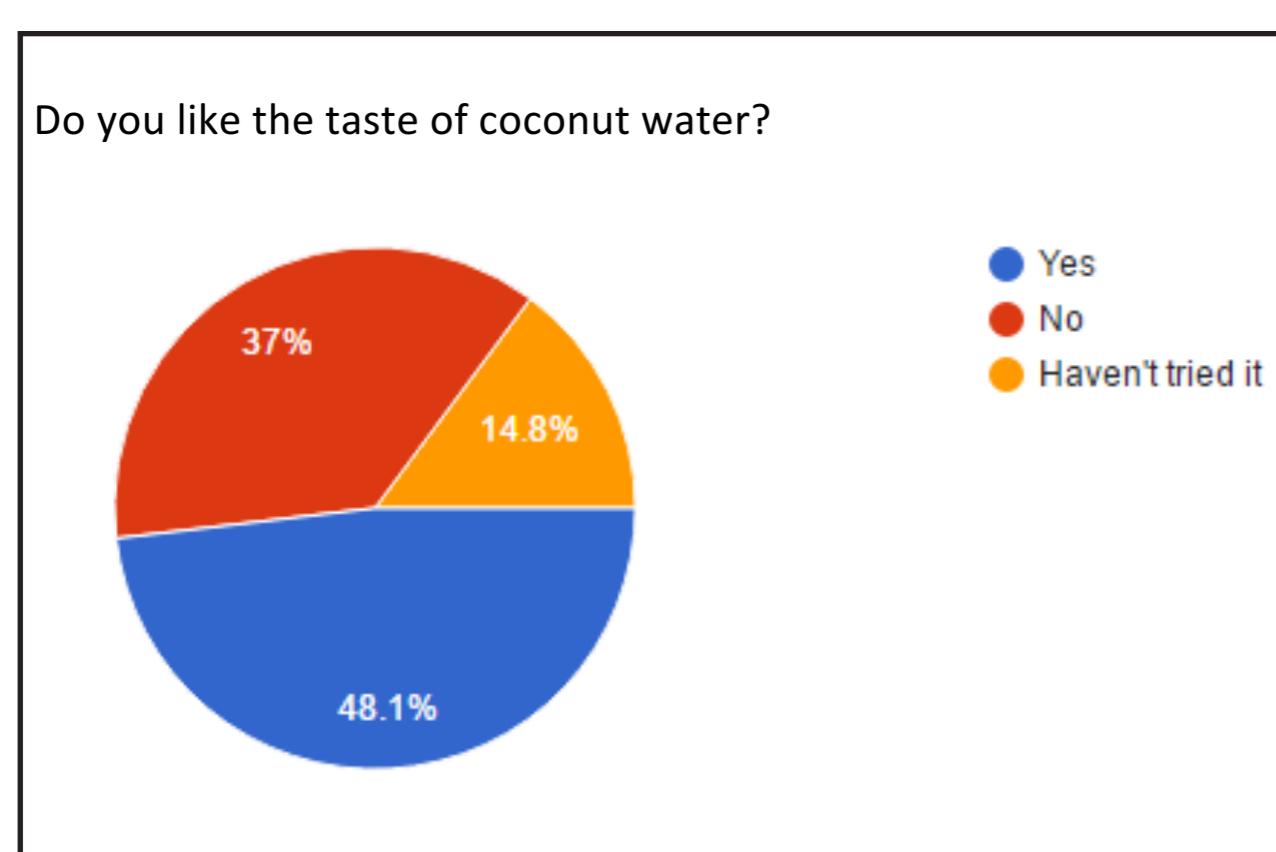
- After conducting extensive research into beverages currently on the market and speaking to dental health professionals we found that there are few beverages other than water that are beneficial for your teeth.
- Focus group and stakeholder feedback along with testing data encouraged us to pursue a coconut based beverage.
- We chose strawberry for our flavouring as strawberry are a good source of vitamin C and K which provides health benefits for your teeth.
- We identified and followed HACCP and health and safety procedures.
 - We are still working on our final product formulation with the assistance of our mentor and sponsor Hawkins Watts.

Final product:

Our final product is a strawberry flavored coconut water beverage sweetened with stevia. Through testing and development, we are modifying our beverage to have the correct acidity, sweetness and balance of flavours. At our most recent taste testing we asked participants their opinion for the sweetness, aroma, colour appeal, acidity, taste and overall appeal. Overall, results showed the sweetness appealed to the palate. Acidity remains a problem and we will continue to work on this with the guidance of our industry mentor. Current testing involves using strawberry flavourings sourced from Hawkins Watts and Frucor instead of the natural product. Market testing with these has been unfavourable to date. Overall we felt that the concept of a strawberry coconut beverage meets the initial brief. With further planned development and testing the beverage will meet the shelf life requirement of 6 months and will be easily manufactured in the commercial factory environment of our mentor.

Sponsors: Hawkins and Watts

Thanks to: Frucor, NZIFST, CREST, Saint Kentigern College, Futureintech



Cocoberry

Special diets: Vegan, Dairy Free, Gluten Free, Halal, Kosher, Low Carbohydrate

Ingredients by volume -- 250ml per portion

Coconut water (61.6%), Strawberries (37.9%), Natvia

Nutritional Information

	Per serving	Per 100g
Energy	361.7kJ	98.4kJ
Total fat	1.1g	0.3g
Saturated fat	0.3g	0.1g
Carbs	6.5g	1.8g
Total sugars	17g	4.6g
Protein	2.6g	0.7g
Iron	1.9mg	0.5mg
Sodium	41.5mg	11.3mg
Fibre	3.4g	0.9g