



ACKNOWLEDGEMENTS: Natalie Martin/Jo Madden (Simply Squeezed Co), Suzy Newman (Teacher), Ruth Leary (ADM Specialty Ingredients & Sponsorship)

**Issue:**

Increasing concern over the sugar content (both added and natural) of beverages. As a manufacturer Simply Squeezed is aiming for the Smoothie category for 10% sugar.

**Aim/Project Brief:**

To develop a smoothie that contains both fruit and vegetables, and that it reaches the specifications that were set by our Mentor Jo Madden of Simply Squeezed.

**Product development:**

Fifteen concepts were brainstormed and researched. Sensory testing of top 3 concepts was conducted by in house focus group of 10 students (2 girls from Year 9-13). Simply Squeezed Co feedback with focus group feedback concluded that Blueberry with spinach was the final concept. Product development of chosen flavour was further developed to meet specifications.



**Experiments:**

**Pasteurisation:** All smoothies pasteurised to 75°C to ensure food safety and mimic commercial production. Testing to ensure colour was not lost or distorted.

**Vegetable use:** Testing of various vegetables in our smoothie were; ginger, beetroot, spinach, kale, celery and sweet potato. This experiment was concluded with sensory testing to decide on the appropriate vegetable to use in the smoothie.

**Product Specifications:**

- Sugar has to be 10% or less
- Smoothie must contain at least one vegetable component
- Thick texture, as you would expect from a smoothie
- Colour must be vibrant (no yellow or orange colours)
- To be 100% Fruit and vegetable content (coconut water is classed as a fruit juice)
- Brix levels for juices must comply with AIJN/NZJBA/Codex minimum levels

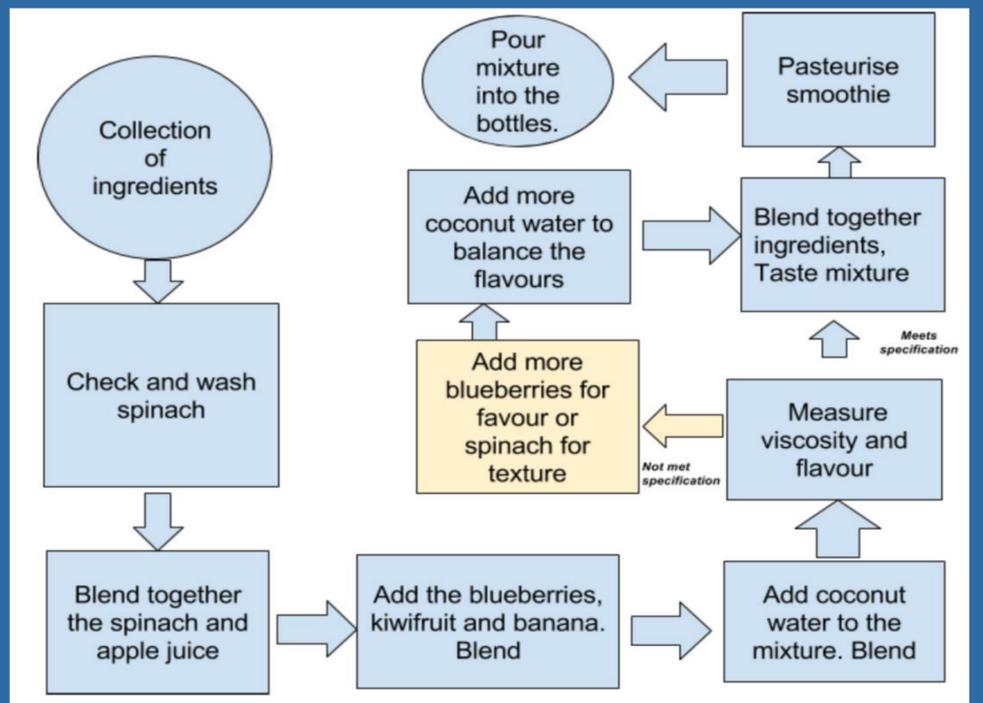
**Constraints:**

**Packaging:** would be using existing packing of *Simply Squeezed Co* this consist of a plastic bottle that is easily recycled and a wide lip to drink out of.

**Sugar Content <10%:** to insure only natural fruit and vegetables in our product with no added sugar.

**Target Market taste preferences:** Adolescent (13-20 years) as our target consumers have limited food experience and preferences.

**Method:**



**Conclusion:**

In consultation with *Simply Squeezed Co* our prototype was viable for potential full scale production. Sensory evaluation has shown positive results with the target consumer trialling group of adolescent (aged 13-20 years), 87% saying they would purchase .

Further consumer trialling and market costing would be required to ensure that the **ProdJuicrs** product was viable for commercial production



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