

Aim

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Our aim for our CREST Challenge was to develop a new flavoured sauce, dressing or condiment, for the Quick Casual Restaurant (QSR) and Foodservices market. It will be sold in New Zealand, Australia or Pacific Islands.

Our product can be either sweet or savoury, however it must have a unique selling point. Our product specifications provided by GROENZ

Issue

Throughout our research and working through the process of developing ideas, it came to our attention as a group surrounding the rising trend of veganism and the lack of product toward their dietary requirements. From current market research it was proven to us that there was a huge gap in the market in terms of sauce that is suitable for vegans to consume. Vegans are very restricted when it comes to food. They are experiencing a serious shortage in sauces, dressings and condiments due to a very strict diet. Having a larger variety of sauces they can eat can result in them trying new types of food and looking to find more protein in their diets. As a group we saw this as an opportunity to fulfil that gap and create a product that satisfies our target market.



include the follows;

- Meet target market food legislation requirements
- Must be suitable for Halal accreditation
- Where possible have a 'clean label' declaration, no 'E' numbers.
- Be shelf stable.
- Must have a pH <4.2.

Process Development

Initially we creating a variety of different sauces. This included a pasta sauce that used the hot processing method. The second was a nut aioli to trial a cold process, this also helped us to understand the steps involved with converting Mayonnaise to aioli. This led to the development of three different flavoured mayonnaise before adapting it to aioli. We relied on stakeholder feedback to help guide our development throughout.

After the initial trials above we made the decision to not proceed with developing nut aioli, to ensure our product was accessible to more consumers and to reduce the overall cost of the product. After sensory testing with our contributing stakeholders and consultation with Carmen Boyd our mentor from GROENZ we were left with two preferred mayonnaise bases which was the first step of our aioli development.

Methods

Our initial research into potential sauce types that we could further develop for GROENZ we found a distinct lack of products which catered for consumers who identify as vegan. This decision was reinforced by current food trends for 2019. We trailed, developed and prototyped our ideas for potential sauce flavours to find the best suited and most desirable outcome. We also consulted with our identified stakeholders who represented our target market, as well as consultation with Carmen Boyd our GROENZ mentor.

Testing was required throughout our trailing, the brief requirements stated we needed to follow current food standard relegations. We undertook pH testing and incubated our final sauce to monitor mycobacterial growth. We learnt that pH was also important for maintaining the shelf life and safety of our final product for human consumption.

Specifications

- Creamy Viscosity
- Meet the needs of our target market and suitable

for GROENZ

- Suitable for Halal Accreditation
- No preservatives, artificial colours or additives
- Shelf Stable
- pH below 4.2





Using the base mayonnaise developments we then trialled a variety of different aioli ingredients. This was strictly monitored to ensure the reproduction of any one product. Mayonnaise consistency was unpredictable so we had to be careful when adding in the oil or altering the ingredients for flavour. We continued to monitor pH levels in our test samples to ensure that we maintained a pH of below 4 to enable a stable shelf life.

 Once our final product was fully developed, we tested our product against a store bought vegan aioli. Final stakeholder feedback provided us with beneficial feedback regarding consistency, mouthfeel and flavour. Finally we developed appropriate packaging for our product as well as a potential name and logo.



Conclusions

We based our final product on the NZ Food Quality specification and Australia New Zealand Food Standards Code.

Concluding and examining our product based on various of NZ food safety/quality specifications, we made sure that the final recipe, manufacturing process, packaging and the final product is safe, meets the specific requirements and specifications and is eligible to be sold on the New Zealand market.

Looking back and concluding our product as a team, we successfully meet all requirements and specifications provided to us by GROENZ and followed the brief throughout. If we were to further develop our product we would trial the use of pea protein more as a thickener and further explore the use of alternative vegan products.



Figure 1. Product Development. **Figure 2.** Final Packaged Product

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