

The Development Of

nước Sốt cà phê

Dark Roast Coffee Sauce

Button Brown & Honey Brown



Initial Brief

Sophie Shaw from GROENZ condiment company has provided us with a brief for our participation of the NZIFST product development challenge 2016. The company wanted us to develop a sauce, condiment or dressing for the Southeast Asian market. The product has to be suitable to use in the quick service restaurants (QSR) and foodservice markets because of their intention to export their products to Asia. The product must also meet the GROENZ business requirements:

- Meet target market food legislation requirements
- Be suitable for halal accreditation
- Contain natural colours and flavourings
- Where possible have a "clean label" declaration, no 'E' numbers
- Be shelf stable
- Have a pH of <4.2

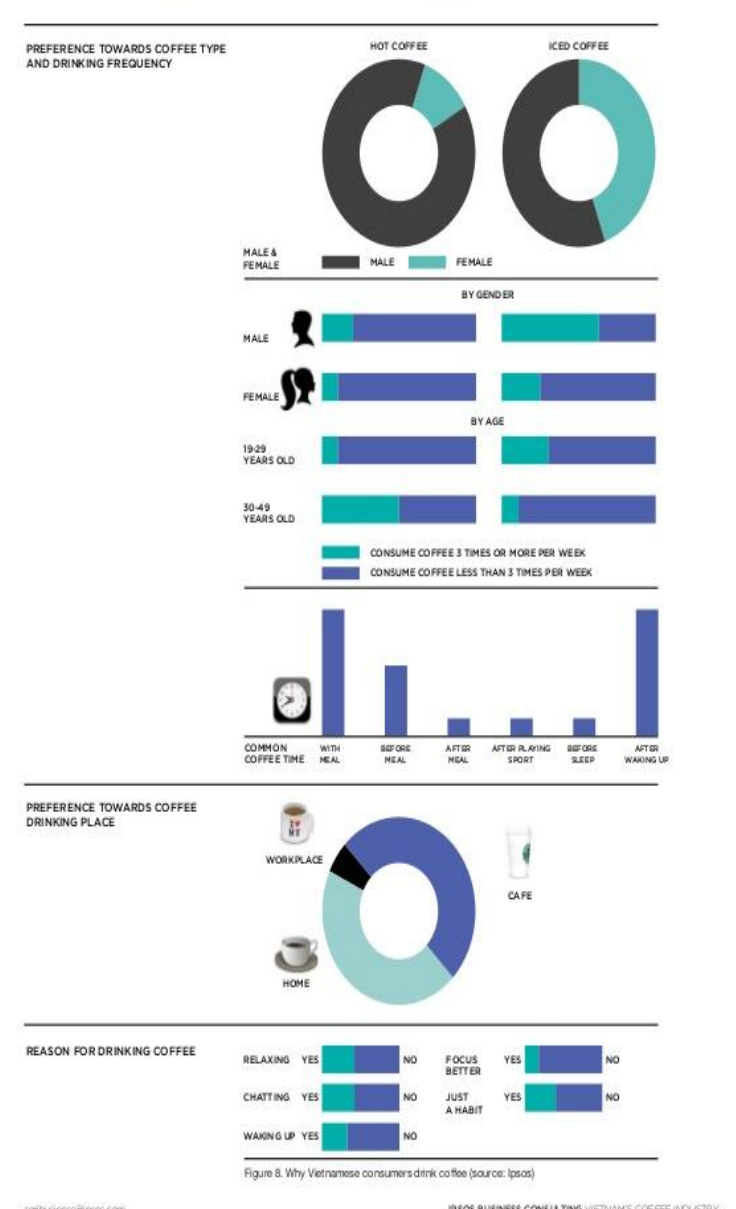
Hypothesis

To develop a sauce product for Vietnam that is pleasing to the Vietnamese palate and also be suitable for their QSR market.

Research

- In 2014 Vietnam was New Zealand's 19th largest trading partner, and now export of goods to Vietnam stands at \$548 million (predominantly dairy)
- A multi-lateral free trade agreement between New Zealand, Australia and the Association of South East Asian Nations (ASEAN), including Vietnam, came into force
- Even though Vietnam's food and beverage sector is less developed than other countries in Southeast Asia, it is growing quickly
- A youthful population, changes in lifestyle and rising incomes are driving growth of high quality imported food and beverage products. The government is also giving high priority to the development of food processing. This offers opportunities for New Zealand businesses in areas such as fruits, seafood and dairy farming
- On the right is a graph showing the popularity of coffee in Vietnam as well as the main consumers of coffee in Vietnam

Vietnamese coffee drinking habits



Quality Control

Shelf life

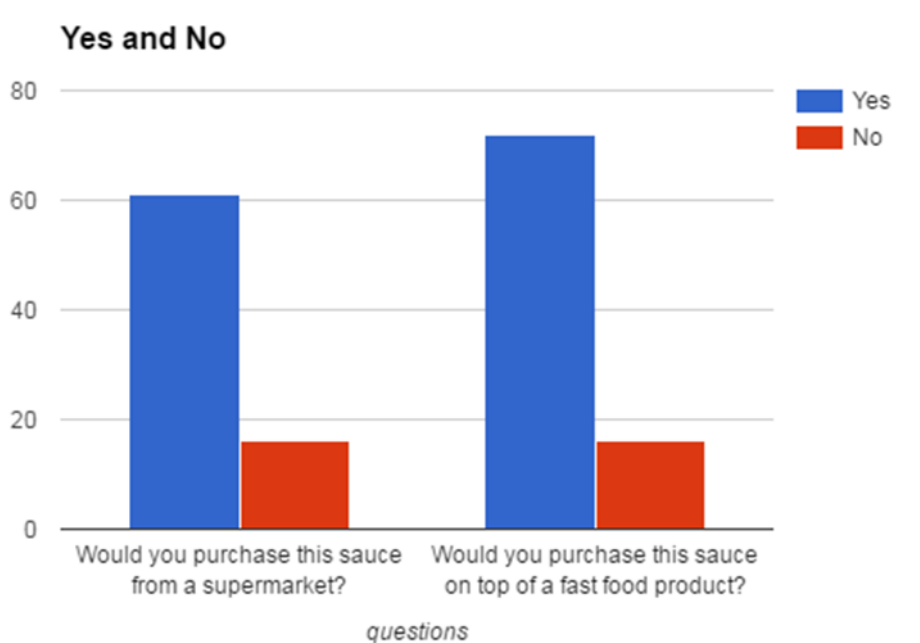


Sugar Temperatures	
Stage	Temp
Thread	110 - 112°C
Soft ball	112 - 116°C
Firm ball	118 - 120°C
Hard ball	121 - 130°C
Soft crack	132 - 143°C
Hard crack	146 - 154°C
Clear liquid	160°C
Brown liquid	170°C
Burnt sugar	177°C

- A brix test was done at GROENZ to test the water activity of the sauce. With a brix of > 30 it meant that the water activity was relatively low and indicated that the sauce would be shelf stable
- The light box tested how the sauce would keep in a hotter climate and exposure to light, Vietnam is very humid and hot so this test was essential
- The caramel was boiled to 104 °C because at this temperature the caramel had the best colour and consistency

Sensory evaluation

Sensory evaluation to test the acceptability of the sauce showed 77% in favour of requesting the flavour at QSR. (the sensory test was done at our school open evening where 90 people participated).



Packaging

The packaging for the sauce had to be easy to use because in QSR the sauce packaging is only there to hold the sauce whilst it is in transport. For the purpose of the competition the team decided to develop a label for a squeeze bottle to use when it has to be drizzled over top of a dish. The pour bottle label was designed to meet the legal requirements of labelling.



COFFEE DESERT SAUCE (2016)
BATCH SAMPLE
PRODUCT: CDS/QSR
BRUX :-> 30
BATCH: 20161
DATE: 17-08-16

Final evaluation

The brief provided by Sophie Shaw from GROENZ, we were able to create a product that met all the specifications of the brief. The sauce was also able to fit a niche market that would suit the Vietnamese coffee culture and palette. nước Sốt cà phê meets all the regulations specified by GROENZ. The label is "Clean" with an excellent shelf life. Ultimately technically viable and fit for the intended social environment.

Acknowledgement:

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Concept Development



Instant Coffee

The first trial was made using instant coffee. The colour as well as the flavour were light.



Espresso Coffee

Espresso coffee had a coffee flavour that tasted real and added body to the sauce. The mass extraction of coffee for the production of the sauce posed a problem and it was obvious that for feasible reasons another solution had to be sourced.



Cold brew Coffee

It was then decided to experiment cold brewing Havana coffee because the method is easier to produce in bulk. Although the flavour is lighter than the espresso it provided a smooth rich coffee flavour.

Thank You To:



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