



need/opportunity

There is a clear lack of meat pies, especially from NZ and Australia, in Asia. There are some small, specialty shops in Asia, but not many can be found in mainland China or Korea. It appears that knowledge of pies there are almost exclusively fruit pies. We see this as an **opportunity**, a gap to fill in their markets. Therefore, we focused on making the pie attractive for the Asian market, mostly in flavour. We believe that this is a viable market to try and enter as Asians are very welcoming of Western food.

brief/stakeholders

We were tasked by our mentor to develop a pie which would enable them to expand in the overseas market. **Dad's Pies**, our mentor, offered us guidance and resources to help us develop a pie, such as helping with making it suitable for a commercial market, as well as their equipment to bake our pies. With both our team members being Asian, we have an interest in bringing New Zealand's specialty closer to our homelands. Therefore, we decided to develop a Chicken Teriyaki Pie. Our focus will be on the profitability of the pie, which means matching the flavour so the target market will like our pie, as well as having an acceptable cost of production. We will also make sure the pie is healthy and safe to eat.

market research

We have focused a lot on the market research for our pie, starting with a survey of how good people think the idea of a teriyaki pie was - **97%** of people surveyed said they like the idea of a teriyaki pie. This shows that there is interest in our pie and that it is an idea worth trying. Our samples have also received an overwhelmingly positive response when surveyed with Chinese and Korean people, with **80%** saying that they would buy it.

profitability

ingredient costs	profitability per pie
chicken thigh	\$0.383
teriyaki sauce	\$0.147
pastry	\$0.103
edamame beans	\$0.058
oregano	\$0.042
carrots	\$0.014
onions	\$0.013
cinnamon	\$0.013
oil	\$0.003
corn flour	\$0.003
	(RRP) selling price: \$3.10
	cost: <u>-\$0.78</u>
	gross profit: \$2.32

(However, this is without taking into account other costs such as manufacturing costs for machinery. Price decided by survey.)

packaging

Packaging has gone through numerous stages of prototyping. For convenience, we have decided on a holdable cardboard box with a tearaway lid. Our final design was influenced by a model from Dad's Pies which gave us the idea for the shape.



trialling

Initial Trials: We worked mainly on having a base recipe to work from - we referenced teriyaki recipes on the internet, and had several trials making sure everything was suitable for a pie. **Latter Trials:** For the latter trials, we had experimented a lot and fine-tuned the flavour for our target market.

scientific research

Scientifically, we wanted to make the pie suitable for the commercial market by having the right amount of moisture content so it won't dry out, but without making the pastry soggy. At first, our pies were too dry for a commercial pie. This is because commercial pies, especially for exporting, needs more moisture content due to the freezing and reheating of the pies where moisture may be lost. Our team rectified this problem by excluding the rice, which would decrease moisture content. However, we had a new problem. Now that there was no rice to absorb the water, the sauce in our pies was too runny which caused the pastry of the pies to go soft and soggy. Therefore our team had to research for an ingredient that could help thicken the sauce in our pies. Fortunately, our mentor from Dad's Pies, Eddie Grooten, helped us with an ingredient called 'MAPS 281', which is a binding agent that helped the consistency of the pies.

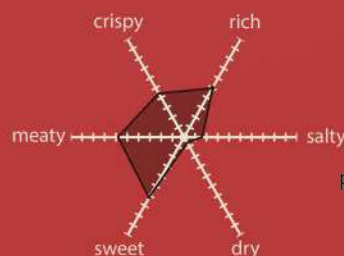


disassembly

On the market, there aren't any distinctively Eastern flavours that we could find. We heard about Bulgogi Pies being exported to Korea, but there was a limited amount of flavours in the Asian market. On the other hand, we also looked at the pies in the NZ market - a lot of them had a lot of salt, something we decided we could cut down on due to the general tastes of the Asian market. There is also a growing popularity of Asian food in the NZ market, a possibility to capitalize on.



results



The final product that we decided to go with was a slight variation on the classic teriyaki flavour, to better suit the pie. It had good moisture content, and during testing, we had received a positive response from both our target market, as well as New Zealanders, which was a nice surprise. **80%** of surveyed people said that they would buy it in their place of origin, and **87%** said their family members would eat it too.

In terms of pricing, we had surveyed them after they ate a pie. The average price for a pie at a bakery was \$3.13, which we rounded down to \$3.10 for the pricing chart. For a frozen pie at the supermarket, the results show an average price of \$2.26, so a pack of 6 pies would be \$13.56, which comfortably covers the cost of production, and it shows that they are willing to pay a higher price than the prices of competitors on the market.

