

# PICTON HIGH SCHOOL

Creating Opportunities Achieving Success



## STAGE 6 YEAR 12 FOOD TECHNOLOGY

### FOOD PRODUCT DEVELOPMENT

<b>Due Date:</b> Term 3 Week 6 28 <sup>th</sup> Aug 2020	<b>Assessment Name:</b> Food Product Development Design Project
<b>Mark:</b> /112	<b>Weighting:</b> 30 %

#### SYLLABUS OUTCOMES TO BE ASSESSED:

- H1.3** Justifies processes of food product development and manufacture in terms of market, technological and environmental considerations
- H2.1** Evaluates the relationship between food, its production, consumption, promotion and health
- H4.1** Develops, prepares and presents food using product development processes
- H5.1** Develops, realises and evaluates solutions to a range of food situations

#### DIRECTIVES TO BE ASSESSED:

- Develop** - to come gradually into existence or operation
- Prepare** – make (something) ready for use or consideration
- Present** – show or offer (something) for others to scrutinize or consider
- Evaluate** – make a judgement based on criteria; determine the value of

#### COMPONENTS:

- 10% Skills in researching, analysing and communicating food issues
- 20% Skills in experimenting with and preparing food by applying theoretical concepts

Check your assessment booklet for the PHS Assessment Policy

## TASK DESCRIPTION:

Prepare a report (using the scaffold provided: digital copy available on Google Classroom):

### Design Brief

Create a specialty pie for Australian families to enjoy as a dinner or snack food item. The pie must be affordable, appealing, and should include some healthy ingredients. The pie produced should compete with other commercially bought pies.

*At home find 3 recipes for pies, make them and choose the best recipe to use as your prototype. Take pictures of the production steps and the final pie. Have family members taste test the pie and complete screening assessment sheet. Construct a package for this pie. Design and make the chosen pie prototype in the class practical lesson. Create the package at home. Bring to class on the practical day.*

### PART A: Food Product Development of a pie report

Your written work must appropriately communicate your food product's story of conception to the shelves by following the headings and activities listed below.

1. Conduct a personal **SWOT analysis** that will define the personal aspects and constraints of your situation. /3
2. Write a **project aim**. Identify the need for a new product. /2
3. Communicate your **idea generation** brainstorm and submit recipe ideas. /8
4. Complete **idea screening** for 3 pie ideas. /3
5. Conduct relevant **market research** and describe the market segment. /2
6. Conduct **primary research** on the 3 pie ideas. /6
7. Make the **3 pie ideas at home and submit photographs of your student card** with each of the pies as documentation. /6
8. Submit **hedonic scales** of all 3 pies- submit 6 survey's in total as two members must try each pie. /3
9. Justify an informed **optimum selection**. Ensure you discuss its suitability to the brief and project aim. /4
10. Outline **product specifications**. Include recipe and method. (2 marks for each specification) /12
11. Conduct **feasibility study based on cost**. /4
12. Conduct **feasibility study based on technical equipment**. /2
13. Outline the development of the **production process** – product flowchart showing standard symbols, raw material specifications, tasks, written steps processing, equipment used and quality assurance measures to be undertaken (HACCP, packaging). /20
14. **Prototype development**- recipe formulation. /6
15. Consider and list **appropriate packaging** for your pie. Sketch or insert pictures of choice of packaging. (Back, sides, front) /4
16. Consider **packaging tests**. /6
17. **Product planning** for marketing /2
18. **Price structure and target market** for marketing pie /3
19. **Type and distribution** for your pie /2
20. **Means of distribution** for your pie /2
21. **Combination of advertising** for your pie /3

**PART A:** **Total:** /102

**PART B: Practical pie making in class**

Correct use of utensils	/2	
Hygienic procedures	/2	
Presentation- cooked evenly, no burnt or undercooked spots	/6	
<b>Total:</b>		<b>/10</b>

**PART C:**

Construct **package** and accurate label complete with legal requirements on label.

<b>Total:</b>	<b>/12</b>
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<b>Final Total</b>	<b>/ 112</b>
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<b>Total 30%</b>	<b>/30</b>
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<b>Rank</b>	<b>/11</b>
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### **ASSESSMENT CRITERIA – STUDENT CHECKLIST:**

You will be assessed on your ability to:

- Have you completed a detailed SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis for your company?
- Idea Generation and Screening – have you come up with a minimum of 3 ideas?
- Idea Generation and Screening – have you identified advantages and disadvantages of each idea?
- Idea Generation and Screening – Have you chosen the best possible solution to the design brief?
- Market Research – Have you identified your target market and distributed a market research survey to at least 5 people in this target?
- Market Research – Have you evaluated your product in terms of the responses and listed any modifications that may be made to your product?
- Product Specifications – have you produced a product specification table for your product?
- Feasibility study – have you completed both a financial and technical feasibility for your product?
- Production Process Development – have you completed a Flow Process Chart indicating all steps required in production of your product?
- Production Process Development – is your Flow Process Chart in the correct format, using the correct symbols and does it clearly identify all quality control points?
- Develop and prepare prototype – have you made your product at home and included photographs?
- Testing and evaluation of prototype – have you completed a sensory evaluation of your product, describing appearance, odour and taste?
- Testing and evaluation of prototype – have you listed any modifications that may be made to your final product from this evaluation?
- Prepare and Present meal to panel – have you included your final recipe in your folio?
- Prepare and present meal to panel – have you got all your ingredients ready for your practical (Period 1)
- Prepare and present meal to panel – have you got answers prepared for any questions the panel may ask?

**Check your assessment booklet for the PHS Assessment Policy**

### MARKING GUIDELINES

<b>Outstanding</b>	<ul style="list-style-type: none"> <li>• Presents a highly detailed SWOT analysis and project aim.</li> <li>• Clearly and professionally shows idea generation, evaluation and fully justifies decisions.</li> <li>• Conducts in depth and appropriate research for chosen product including correct product specifications and an in depth feasibility study.</li> <li>• Conducts extensive testing and experimentation of products and communicates process and findings in depth.</li> <li>• Constructs a highly presentable, appropriate product that clearly satisfies the brief.</li> <li>• Presents an excellent marketing strategy for the new product launch.</li> </ul>
<b>High</b>	<ul style="list-style-type: none"> <li>• Presents a detailed SWOT analysis and project aim.</li> <li>• Clearly shows idea generation, evaluation and fully justifies decisions.</li> <li>• Conducts good appropriate research for chosen product including correct product specifications and a high quality feasibility study.</li> <li>• Conducts thorough testing and experimentation of products and communicates process and findings in depth.</li> <li>• Constructs a well presentable, appropriate product that clearly satisfies the brief.</li> <li>• Presents a thorough marketing strategy for the new product launch.</li> </ul>
<b>Sound</b>	<ul style="list-style-type: none"> <li>• Presents an adequate SWOT analysis and project aim.</li> <li>• Shows idea generation, evaluation and justifies decisions.</li> <li>• Conducts good research for chosen product including some product specifications and a feasibility study.</li> <li>• Conducts sound testing and experimentation of products and communicates process and findings.</li> <li>• Constructs an appropriate product that satisfies the brief.</li> <li>• Presents a sound marketing strategy for the new product launch.</li> </ul>
<b>Basic</b>	<ul style="list-style-type: none"> <li>• Presents a brief SWOT analysis and project aim.</li> <li>• Shows some idea generation and evaluation.</li> <li>• Conducts basic research for chosen product including some product specifications and/or a brief feasibility study.</li> <li>• Attempts to conduct testing and experimentation of products and communicates briefly process and findings.</li> <li>• Constructs a new food product.</li> <li>• Presents a basic marketing strategy for the new product launch.</li> </ul>
<b>Limited</b>	<ul style="list-style-type: none"> <li>• Presents an incomplete SWOT analysis and project aim.</li> <li>• Shows poor idea generation with little or no evaluation. Makes new food product, however no packaging.</li> <li>• Conducts some research for chosen product but with brief product specifications and little evidence of feasibility study. Attempts some testing and experimentation of products however does not communicate process.</li> </ul>