



# 2021 AIFST STUDENT PRODUCT DEVELOPMENT COMPETITION (SPDC)

Entrant Handbook – Rules and Procedures

*Rethinking Protein: Creating Products using Alternative Proteins*





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## AIFST Student Product Development Competition

Welcome to the 2021 Australian Institute of Food Science and Technology's (AIFST) Student Product Development Competition (SPDC). AIFST provides numerous opportunities each year for students to better prepare themselves for their professional lives post study. The SPDC is one such opportunity and is the chance for student members to experience a new product development project in "real life" - providing exposure to industry experts, peers, and potential future employers within the food industry.

The SPDC was established over 9 years ago and has attracted team entries from leading educational institutions across Australia, with previous entrants and winning team members going on to find fulfilling careers within both the Australian and global food industry.

For a full competition brief please see **Appendix 1**.

The competition is open to undergraduate and graduate students. A maximum of three finalist teams will be selected to present their projects at the AIFST Convention in Sydney on July 26, 2021.

This Handbook, encompassing the rules and procedures for the 2021 AIFST SPDC, has been provided to enable all entrants to gain the information required to ensure the entry process is as easy as possible. It also provides hints and tips to help with every step along the way to ensure that you gain the most out of your involvement in the 2021 SPDC.

If you have any questions or need any clarification about any of the information provided, please contact the AIFST team on 0447 066 324 or via email [aifst@aifst.com.au](mailto:aifst@aifst.com.au).



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Best of luck!  
Fiona Fleming  
AIFST Chief Executive Officer

## 2021 Competition Overview

The 2021 SPDC is for young food professionals to create, develop and showcase a brand-new food product based upon a specified project brief provided by AIFST. The theme for this year is ***Rethinking Protein: Creating Products using Alternative Proteins*** - a full brief can be found in **Appendix 1**. The competition is open to AIFST Student or Graduate Members, whose team meets all the entry criteria.

In recent years, this competition has been based on a theme, and for 2021 the theme is ***Alternative Proteins***. With the rise of the global population, there is an increasing concern about the expected increased demand for food, with projections that an additional 2 billion more people will need to be fed by 2050<sup>1</sup>. Urbanisation and rising incomes are expected to also contribute to a 70% increase in protein consumption<sup>2</sup>. With climate change also affecting meat production many have identified alternatives to meat products as a potential solution to mitigate these problems<sup>3</sup>.

The biggest challenges associated with production innovation related to alternative proteins are ensuring that these products are economically, socially, and environmentally viable. Formulation of alternative protein products need to be safe and desirable amongst consumers<sup>4</sup>.

Keeping this in mind, the objective of this years' competition is to deliver an innovative food product using meat protein substitutes. This market area opportunity of identifying new alternative protein products could potentially be adopted by food producers as it actively promotes the core values of future foods: ethicalness, health and sustainability.

After all teams have submitted their proposals and these have been reviewed by the judging panel, a maximum of three (3) finalist teams will be selected. Finalist teams will be required to fully develop their proposed products and present them at the 2021 AIFST Convention in Sydney on July 26. Presentations will include both an oral presentation and product sampling and defence. A full written report will also be required to be submitted to AIFST as a component of the judging process - this is to be submitted to AIFST prior to the Convention (see key dates below). Winners of the competition will receive a cash prize determined and approved by AIFST.

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<sup>1</sup> Elferink, M. Schierhorn, F. (2016). Global Demand for Food is Rising. Can we meet it? <https://hbr.org/2016/04/global-demand-for-food-is-rising-can-we-meet-it>

<sup>2</sup> Ibid.

<sup>3</sup> Gibbens, S. (2019). Eating meat has 'dire' consequences for the planet, says report. <https://www.nationalgeographic.com/environment/2019/01/commission-report-great-food-transformation-plant-diet-climate-change/>

<sup>4</sup> Elferink, M. Schierhorn, F. (2016). Global Demand for Food is Rising. Can we meet it? <https://hbr.org/2016/04/global-demand-for-food-is-rising-can-we-meet-it>

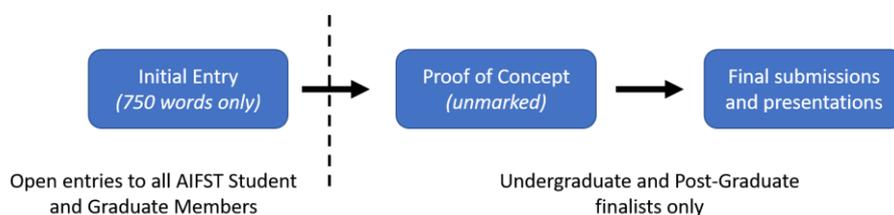
## Objectives

The purpose of the competition is to:

- Encourage student and graduate involvement in AIFST
- Provide a platform for students to demonstrate their talents in innovative thinking and design, food product development, written and oral communications and application of theory and teamwork
- Provide students/graduates an opportunity to gain greater exposure to the food industry and food industry professionals
- Encourage students/graduates to research into the 'who, what, where, when, how and why' of alternative proteins
- Provide an opportunity to experience implementing against a real industry product development brief
- Promote and foster innovation and entrepreneurship amongst students/graduates.
- Allow food industry representatives the opportunity to identify talented students/graduates for potential future employment, and
- Allow an avenue to explore the concept for continuous improvement by the provision of feedback about team entries.

## Competition Key Dates

- Stage 1: Initial Entry Proposals Submission Due: 5.00pm Monday, 19 April 2021
- Finalist Team Selections Notified: Thursday, 29 April 2021
- Stage 2: Proof of Concept Submission Due: 5.00pm Monday, 7 June 2021
- Stage 3:
  - i. Finalist Written Proposals Submission Due 5.00pm Monday, 5 July 2021
  - ii. Oral Presentation and Product Sampling Monday, 26 July 2021
  - iii. Winners Announced Monday, 26 July 2021



## Competition Prizes

The winning team will be awarded prize money as set by AIFST on an annual basis. However, all finalist teams and overall winning educational institution/s will be presented with a Certificate of Recognition. Finalists and winners will also be featured in the AIFST journal *food australia*. Other prizes may also be offered in this competition and will be advised via the AIFST website.

## Entrant Criteria – 2021

The entrant criteria for the 2021 SPDC include:

- Undergraduate level, which includes all tertiary studies up to and including Honours degree courses.
- This includes students who graduated from these courses in the year prior to the year in which the competition is being held.

## Team Composition

For a team to be eligible to enter the 2021 SPDC they are required to meet the following criteria:

- All team members must be an AIFST Student or Graduate Member.
- A team must consist of two or more people - there is no maximum number of team members. however only three (3) team members will be permitted to present at the 2021 AIFST Convention.
- Team members must be enrolled at the same educational institution in the same year or previous year that the competition is held in.
- Team members are able to be from non-food science and technology related disciplines, such as business or marketing, however they **MUST** be an AIFST student or graduate member.
- Team members are permitted to enter in subsequent years.
- No team members may serve on more than one team in the same year of the competition.
- Teams may only submit one entry per team.
- There may be a maximum of two teams representing the same education institution.

## Competition Rules

- Entries must consist of a proposal for a new or significantly improved/adapted food product meeting the project brief provided (Appendix 1).
- Product proposals submitted into this competition must be for a food or beverage product for consumption by humans only.
- The product may be for any retail product category and target market, but these must be clearly defined within the report.
- The product must have a significant point of difference from all current products within the defined category and for the defined target market selected.
- Manufacture of the proposed product must be feasible within the Australian food industry.
- The product must be a packaged product.
- If proposals are selected to progress into the finalist section of the competition, all components for judging must be submitted in full and on time – extensions may be requested in writing and will be assessed on a case-by-case basis.
- All Initial Proposals will be judged according to the scoring criteria in this Handbook.
- The three (3) highest scoring teams will be invited to proceed to the finalist section of the competition. Finalist teams are required to prepare a full written report for submission prior to the convention (see key dates below) and at the convention provide an oral presentation and produce the proposed product with packaging for sampling by the judging panel and interested parties as part of the overall assessment process.
- Finalist teams will be judged at the convention solely based on their overall scores received during the oral presentation, food scoring and written paper. Therefore, all scores received prior to the finalist section will not be factored into the overall winning score and are to be treated separately to the Initial Entry Proposal score.
- Teams are not allowed to provide samples to the general public at the convention.
- Teams may enter their products in competitions outside the AIFST and provided team member eligibility remains current, may enter into the competition more than once during their studies.
- All finalist teams will have submitted into each component of the competition and be judged according to the criteria provided.
- Entries must be students/graduates' work. Academic Staff may be consulted and referenced but must not be a major contributor to the actual work.
- A letter from the Department head will be required to verify the eligibility of the project and is to be provided with all finalist entries.
- Industry support such as donation of ingredients or use of equipment is allowed and encouraged; however, recognition must be negotiated with AIFST.

## Costs and Expenses

There will be three (3) teams (maximum) selected to present final product projects at the 2021 AIFST Convention. All finalist teams will be provided with a full complimentary registration for each of the two (2) or three (3) presenting team members.

All travel to and from the convention; accommodation and incidental expenses including product development costs are the full responsibility of the team members. Team members may seek funding support either via industry and/or their educational institute to provide for this. All teams must demonstrate in the first stage that they have the ability to cover all expenses, a letter providing evidence of support from industry and/or education institutes or declaration of personal support must be included.

## Hints and Tips for Getting Started

- Read all rules before proceeding.
- Check eligibility criteria to ensure you and your team are eligible to compete – if unsure call AIFST to discuss.
- Use all checklists provided - they can help ensure that you remain on track and focussed.
- Proofread all work and do not rely on spellcheck only – find an external person to read through all work for errors. Correct all errors before submission.
- Use of abbreviations or acronyms - if using an abbreviation or acronym for a term in your written report or oral presentation for the first time you refer to this term it needs to be in full then followed by the acronym or abbreviation in brackets. You may then refer to this term by the abbreviation or acronym anywhere else it appears in the same piece of writing. E.g. Australian Institute of Food Science and Technology (AIFST).
- If using an acronym in your oral presentation, ensure that you explain its meaning and do not assume that everyone already knows what it means. Different acronyms mean different things to different people.
- Look over all scoring criteria and scoring matrix to gain an understanding of how to get the best score possible (See Appendices 2 - 4).

# Competition Procedures and Criteria

## Stage 1: Initial Entry Proposals Criteria

**Details:** 750-words max, 5.00pm Monday, 19 April 2021

The Initial Entry Proposal is the first stage of the SPDC. It is a chance for you to come up with concepts for your product in line with the product brief, develop your ideas and the rationale as to why you have chosen that specific product. Once your Proposal has been reviewed by the judging panel, it will then be marked. The teams with the highest scores, who best fulfil the brief and have the most innovative products, will then be selected to go through as finalists.

The format of the Initial Entry Proposal is a project proposal, with the aim of convincing the judges to take your product through to development. When writing your Product Proposal, you will need to touch on all aspects of the brief in Appendix 1:

### 1. Alternative proteins

a) You must undertake research and understand:

- What alternative protein ingredient you have selected?
- Why you have selected it/the benefits the ingredient displays
- How the alternative protein ingredient was/can be processed
- Strategies to make the ingredient more acceptable to society

b) Design a product that utilises the alternative protein ingredient you have identified

c) The product must have market potential and viability

### 2. New Product Development

Your proposed product that addresses the selected food issue must have:

- A full product description
- Proposed ingredients
- Source of ingredients
- Market Category
- Target Market
- Brand (name, design)
- Proposed packaging

An Initial Entry Proposal must be submitted to AIFST by close of business on 5.00pm Monday, 19 April 2021

- The Initial Proposal must be submitted in Word, with at least 1.5 line spacing, in 11pt font.
- The Initial Proposal is to be no more than **750 words** and 2 pages in length. (excluding references, which are to be done on a separate page)

To be eligible to compete in the 2021 SPDC, each team's Initial Entry Proposal must be accompanied by a letter of endorsement from their respective educational institution outlining the level of support for travel, accommodation and incidental expenses as well as support for all aspects of the project.

To be eligible to proceed to Stage 2 of the competition all entries must align to SPDC criteria, address the criteria requirements of the Initial Entry Proposals and be accompanied by the supporting letter.

Initial Entry Proposals will be scored according to the criteria as set out in Appendix 3. The three (3) finalist teams will be invited to provide a Proof of Concept and a finalist entry into the competition.

Team leaders will be responsible for ensuring all documents are sent on time and providing all communication requirements to the team members, such as further information or requirements communicated from AIFST.

### **Submission of Initial Entry Proposal**

Submissions are to be emailed to AIFST via [aifst@aifst.com.au](mailto:aifst@aifst.com.au) by close of business on 5:00pm Monday, 19 April 2021.

## **Stage 2: Proof of Concept Submission**

After your Initial Entry Proposal if you are selected as a finalist in the competition, you will be required to submit a Proof of Concept to form a part of the finalist stages of this competition - stages 2 & 3. The Proof of Concept must be 1000 words minimum to 1500 maximum and up to 4 pages in length excluding Appendices. References are to be done on a separate page. Text must have 1.5 spacing in fonts no smaller than 11pts.

Stage 2 is an **unmarked** portion of the competition and is included for teams to check in with the judges and receive constructive feedback. It is also a chance for you to work through any problems ahead of the final stage of the competition.

In this section you will be required to develop your product from concept to reality. This is the NPD section of the competition and the time to make your product, test the concept and ideas, try the product, review and adjust. You will need to provide the results of your proposed product during the development process and a brief description of the success of the concept. If you have had to make any changes from the Initial Proposal, then the rationale for any changes must be made, along with a full description of those changes.

If your changes affect the fundamentals of the concept, not just minor ingredient changes or adjustments, then you must contact AIFST as your new product may no longer fulfil the brief. Any major adjustments will be reviewed by AIFST and a decision regarding the approval of those changes to the original product will be provided.

### **Proof of Concept: Written Report Suggested Structure**

The format of the Proof of Concept will be a written report and should follow the structure as set out here and adhering to requirements as set out in the scoring criteria in the Appendix section:

- Introduction
- Aims/objectives
- Method
- Results
- Discussion
- Conclusion

**Introduction:** this will provide some background information covering points about your product. This can be drawn from your Initial Entry Proposal:

- Background on why you decided on your product from your Initial Entry Proposal
- Briefly detail how it meets the criteria set in Appendix 1

**Aim:** should be clearly stated i.e. what do you want to achieve from this NPD? What are you trying to uncover?

**Method:** Product description and evaluation - describe the process used to develop the product, describe ingredients used, and how the product is processed/manufactured. You may also want to include your method for selecting packaging materials. Describe your methodologies used to gain any results. Testing you may have done could be sensory analysis, microbiological testing or shelf-life determination.

**Results:** Product evaluation. Your results collected should be both qualitative and quantitative. What results did you gain from your development of the concept? For example, describe the newly created product. Describe all results from shelf-life testing, sensory testing or consumer tests. Use clearly labelled graphs or tables to collate all results. When using scales on graphs ensure that they are consistent and easy to understand. Update product and costing details. All graphs, figures, tables and images are to go in an Appendix at the end of the report and WILL be included in word/page count. Label all graphs figures and images consecutively and all tables as a separate set of numbering but also consecutively. I.e. Table 1, Figure 1, Table 2, Figure 2.

**Discussion:** Provide information about the project and its limitations. Suggested topics include the following questions: what went well, what didn't? For example, were you able to conduct sensory testing or shelf-life testing? If not, explain why. Is your project economically viable? Does your food product meet your goal? Suggest further work. Also, if you have made any changes to the concept list them here and your reasoning behind the changes.

You will also need to provide details of proposed manufacturing process flow charts and HACCP (Hazard Analysis Critical Control Point) analysis charts. Cost analysis may also go in this section as well as your Nutrition Information Panel – all of which also need to have descriptions of development or any explanations provided. In this section also provide the descriptions and rationale for all ingredients and packaging materials used for your project and product manufacture.

**Conclusion:** Briefly detail what worked in the creation and testing of the product from its concept and also what you have found difficult/challenging. You will also need to mention what further steps you will still need to take (if any) to perfect your product for the final stage of the competition.

Ensure that you reference appropriately and provide a list at the end of the report on a separate page.

### **Proof of Concept Submission**

Submissions are to be emailed to the AIFST via [aifst@aifst.com.au](mailto:aifst@aifst.com.au) by close of business on Monday, 7 June 2021.

## Stage 3: Finalist Entry Criteria and Proposals

This stage requires you to prepare a full written report, an oral presentation and produce the product for sampling at the 2021 AIFST Convention. The written report will be submitted **two weeks before** the Convention, with your oral presentation and product sampling occurring on day one of the Convention (Monday July 26).

To ensure you are fully prepared as a finalist team, the following provides further information around what is expected to be delivered as part of your final stage of the Competition.

### Written Proposal

The Written Proposal is a summation of both the Initial Entry Proposal and your Proof of Concept NPD. It is the final written summary of your project as a whole and meant to persuade the judges that you have created the best new product. The report must be 3000 words maximum and up to 6 pages in length excluding your Appendices. References are to be done on a separate page. Text must have 1.5 spacing in fonts no smaller than 11pts. The written report should cover the following points which may be answered in any order:

- A description and explanation of your product and how this directly ties into the three key points of the brief as outlined in Appendix 1
- Include any research that you have looked at or undertaken to help develop your product
- Product description
- Definition of who the target market is for the product and an estimate of the size of that market
- Analysis of product category including price points and selling points of the nearest competitor(s), if any, and whether the price points and selling points fulfil the brief as required
- Manufacturing product formulation
- Rationale for chosen ingredients and how the key chosen ingredient(s)
- Full product cost analysis including packaging
- Description of product packaging and rationale for chosen materials
- A full manufacturing production process flow chart and rationale for selection
- A full HACCP analysis
- Methodology used, and results of research utilised
- List product attributes influencing shelf-life
- Preservation method
- Storage and shelf-life determination including rationale and methodology utilised
- Regulation compliant ingredient list and fully developed Nutrition Information Panel
- A full reference list following the Harvard referencing system

#### **Additionally:**

A letter from your educational institute's Department Head verifying originality of work and compliance to rules must be included with the written report. The letter must include the signature of the Department Head or Course Coordinator and their contact details. This is to be submitted in pdf format only.

## Submission of Written Report

Submissions are to be emailed to AIFST via [aifst@aifst.com.au](mailto:aifst@aifst.com.au) by close of business on 5.00pm Monday, 22 June 2021.

### Oral Presentation

- The three Finalist teams will present a fifteen (15) minute oral presentation accompanied by visuals in Power Point, followed by a five (5) minute question/answer session.
- Presentation will occur at the 2021 AIFST Convention in Sydney on 26 July.
- A maximum of three team members from each of the three finalist teams are eligible to present and participate in the question/answer session.

## Preparing Your Oral Presentation

Consider what part of your project is the most important to present to an audience (you will not be able to adequately cover everything in the time allocated). Remember that your oral presentation is where you get to **sell your concept** (product) to the audience and demonstrate to them the unique selling points and the superior processes, for example shelf-life, of your product. You are in it to win it, so do not be shy in promoting your product (but keep it honest at all times as you will be required to defend what you promote). The best way to think about this is as a sales pitch, much like Shark Tank or Dragons Den.

### Some key questions you may ask when formulating how you will present your product to your audience:

- What is my product? (the food, the brand, the message to consumers)
- What is it about your product that is unique over existing products in the marketplace?
- Why did you choose to make this product and use your ingredients? Detail the importance of adopting alternative protein ingredients and target market/need/consumer push you are seeking to address.
- How effect alternative protein ingredients addresses the increased demand of alternative protein food products?
- Power Point program presentations:
  - Look at which areas will gain the most points from the scoring criteria and ensure you cover these areas. There is no need to discuss every part of the methods used in your project – decide what are the most relevant results or outcomes and focus on these.
  - Less is more - people will not be able to concentrate on what you are saying if they are also trying to read a lot of text. Aim for three lines of three words each - this should be the maximum amount of text that you aim to use on any slides you will display during your talk
  - Images are better to convey your message, talk about the image to the audience and try not to read the text from the slides.
  - Proofread all text and get someone not involved with your work to proofread it also, this will assist in reducing errors on your slides.
- Practice your presentation as a team to ensure you can correctly pronounce all terms used, that you stick to time allocated and all team members contribute equally. Practice in front of an audience and gain their feedback about content, slides used (presentation), speed and volume of delivery, your pitch and tone of voice as well to assist you to reduce the use of filler words such as 'umms' and 'aahs'.

## Product Sampling

- Product sampling will be held in conjunction with the oral presentation at the 2021 AIFST Convention.
- Product sampling will occur before oral presentations usually on the same day however this is subject to change without notice.
- Each team will showcase their product and project concepts to the judging panel and allow for taste testing of your product as well as being interviewed about these by the judging panel.
- Finalist teams are to ensure enough product quantity for a minimum of 12 people is provided for all judges and/or observers to sample. AIFST will advise the final number of attendees in advance to assist with quantity required.
- All packaging labelling is to be fully compliant with the Australia New Zealand Food Standards Code and Australian Consumer Law.
- Your product needs to be either transported in a safe manner to the Convention or able to be partly or fully assembled once you arrive at the Convention, however you will need to provide any utensils or equipment in order to do this as there may or may not be cooking facilities available.
- Practice your set up and presentation for this section. AIFST will provide you with as much information as possible regarding the set-up of the room in advance to help you in organising this session to your best advantage.
- Your product sampling will be evaluated by the judges on your product promise versus your actual delivery. The "Promise" is the product that the team orally communicates to the judges through the written report, oral report and images. The "Delivery" is the product that is actually produced and presented to the judges for tasting.

For more information on the Final Entry Stage scoring criteria see Appendix 4.

## Competition Checklist

### Preliminary Requirements

- Find a team! Make sure you find at least two team members to work with on the 2021 SPDC.
- All team members are required to be a current financial student or graduate member of AIFST. If your team members are not current AIFST members they must join AIFST prior to the submission of your Initial Entry Proposal.
- All team members must ensure they are eligible to enter.
- Ensure your team has the financial and educational institution support to attend the SPDC at the 2021 AIFST Convention if successful. You must include a letter outlining your support to AIFST with the submission of your Initial Entry Proposal.
- Submit your Initial Entry Proposal by close of business on **Monday, 19 April 2021** to AIFST via email [aifst@aifst.com.au](mailto:aifst@aifst.com.au).

### Finalist requirements

- Make sure you meet all deadlines or apply for extensions before deadlines expire.
- Organise flights and accommodation to attend the 2021 AIFST Convention in Sydney from Monday 26 July – Tuesday 27 July 2021.
- Confirm team member attendance for 2021 AIFST Convention via email to AIFST at [aifst@aifst.com.au](mailto:aifst@aifst.com.au) no later than Monday 5 July for completion of Convention registration.
- Develop Power Point presentation for oral presentation at the 2021 AIFST Convention.
- Produce enough finished product to supply all judges and/or observers involved with the product sampling enough product to taste.

## Further Information

For further information or for any enquiries regarding the 2021 SPDC, please email AIFST on [aifst@aifst.com.au](mailto:aifst@aifst.com.au).

## Background - Alternative Proteins



Alternative protein ingredients are sourced from plants, insects, fungi, or through meat culture to replace conventional animal-based sources.

By 2050, global food systems need to meet the dietary demands of more than 10 billion people<sup>5</sup>. Such growth requires sustainably sourced ingredients that effectively address environmental challenges and encourage healthy diets. It is widely recognised that with the supply chains of current global food systems, we will not reach future food goals<sup>6</sup>.

In 2018, it was estimated that Australia consumed \$2.2 billion worth of alternative proteins<sup>7</sup>. This resulted in an estimated \$4.6 billion savings. This consumption value, predicted by CSIRO, is expected to increase to \$4.1 billion in domestic consumption by 2030<sup>8</sup>.

In 2018, the use of alternative protein as a food ingredient in consumer products continued to rapidly increase. This is evident with plant-based foods increasing in sales by 17% over the past year<sup>9</sup>.

Research and development, advocacy, and consulting services in Australia are recognising this societal shift for protein alternatives and have thus invested into plant-based meat and cell-based meat research<sup>10</sup>.

Fast food chain restaurant, Hungry Jacks, and supermarkets are also recognising this trend across Australia<sup>11</sup>. CSIRO have launched a plant-based meat venture with products developed using Australian ingredients such as legumes, fibre from plants, and oils from sunflower and coconut<sup>12</sup>. The venture has made Hungry Jacks the first major fast food chain to stock meat-free burger patties around Australia<sup>13</sup>.

<sup>5</sup> Moynihan, R. Goya, C. (2019). These 5 solutions could help us feed 10 billion people by 2050 without depleting the planet. <https://www.businessinsider.com/these-5-solutions-may-help-us-feed-10-billion-people-by-2050-2018-12/?r=AU&IR=T>

<sup>6</sup> FAO. (2017) The future of food and agriculture – Trends and challenges. <http://www.fao.org/3/a-i6583e.pdf>

<sup>7</sup> Duke, J. (2019). The \$3 billion opportunity that will change the Aussie BBQ forever. <https://www.smh.com.au/business/companies/the-3-billion-opportunity-that-will-change-the-aussie-bbq-forever-20190908-p52p2s.html>

<sup>8</sup> Cole, M. (2019). The future of food. <https://blog.csiro.au/the-future-of-food/>

<sup>9</sup> Bashi, Z. McCullough, R. Ong, L. Ramirez, M. (2019). Alternative proteins: The race for market share is on. <https://www.mckinsey.com/industries/agriculture/our-insights/alternative-proteins-the-race-for-market-share-is-on>

<sup>10</sup> Cole, M. (2019). The future of food. <https://blog.csiro.au/the-future-of-food/>

<sup>11</sup> Wells, L. (2019). CSIRO and Hungry Jacks bite into plant-based burger market. <https://www.beefcentral.com/news/csiro-and-hungry-jacks-bite-into-plant-based-burger-market/>

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

The four alternative-protein profiles with promising opportunities for this growing market include:

- **Plant protein**  
This protein is derived from protein-rich seeds via dry or wet fractionation. The most popular types for consumers are soy, pea, chickpea, rapeseed, and lupins<sup>14</sup>.
- **Insect**  
The most commonly used edible insects, as a source of protein, are crickets. Producers in the market are already milling crickets for flour, however, isolating protein from the flour is currently cost prohibitive due to the costs of crickets being high, making this process difficult to scale<sup>15</sup>.
- **Mycoprotein**  
This protein source is composed of whole, unprocessed, filamentous fungal biomass, known as mould. Fungi contains approximately 40% protein. It also is high in fibre, low in carbohydrates, and contains no cholesterol<sup>16</sup>.
- **Cultured meat**  
This protein is meat derived by in vitro cultivation of animal cells, creating muscle tissue that mimics animal muscles<sup>17</sup>.

Evidently, consumer awareness and interest in alternative proteins is leading to the growth in the market. A complete transition to a meat-free diet seems unlikely, however, it seems necessary to action development of food products that contain alternative proteins. Once alternative protein products are made readily available in the market, the question then arises, *what can we do as a society to promote the cultural acceptability of these products?*

This competition offers students the opportunity to think outside the box by innovatively producing a new food product using alternative protein ingredients. The product needs to be safe, edible and delicious whilst also being attractive and marketable to consumers.

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<sup>14</sup> Liu, W. (2018). Fact Sheet: Alternative Protein. <https://www.nottingham.ac.uk/biosciences/documents/business/food-innovation-centre/food-waste-alternative-protein-event-2018/fact-sheet-alternative-protein-dr-wentao-liu.pdf>

<sup>15</sup> Ibid.

<sup>16</sup> Ibid.

<sup>17</sup> Ibid.

## Appendix 1: Competition Brief

**Theme:** *Rethinking Protein: Creating Products using Alternative Proteins*

**SPDC 2021 Objective:**

To deliver an innovative new food product that can promote sustainability and well-being through the use of alternative protein ingredients.

In the creation of your product you need to address the following key points.

### 1. Alternative proteins

a) You must undertake research and understand:

- What alternative protein you have selected
- Why you have selected it/the benefits the ingredient displays
- How the alternative protein ingredient was/can be processed
- Strategies to make the ingredient more culturally acceptable by society

b) Design a product that utilises the alternative protein ingredient you have identified

c) The product must have market potential and viability

### 2. New Product Development

Your proposed product that addresses your selected food issue must have:

- A full product description
- Proposed ingredients
- Source of ingredients
- Market Category
- Target Market
- Brand (name, design)
- Proposed packaging

## Appendix 2: Stage 1: Initial Entry Proposal Team Information

Complete the following form and submit with your initial proposal via email to AIFST via [aifst@aifst.com.au](mailto:aifst@aifst.com.au) no later than 5.00pm on Monday, 19 April 2021.

<b>Name/s of applicant/s:</b>	<b>1.</b>  <b>Team Leader</b>	<b>2.</b>	<b>3.</b>	<b>4.</b>
<b>Contact details: Mobile number and email address</b>				
<b>AIFST membership - Yes/No (all entrants must be current AIFST members)</b>				
<b>Course of study in which applicants are currently enrolled</b>				
<b>Tertiary Institution:</b>				
<b>Department:</b>				
<b>Financial support:</b> Evidence of financial support for all travel and accommodation expenses to attend the 2021 AIFST Convention to be provided – via a letter of support (to be attached to Initial Entry Submission)				
<b>Educational Institute Department Head:</b>			<b>Contact phone</b>	
<b>Team leader details:</b>	<b>Phone/Mobile</b>		<b>Email address</b>	
<b>Street address:</b>				
<b>Suburb:</b>		<b>State</b>		<b>Postcode</b>



## Appendix 3: Stage 1: Initial Entry Proposals: Distribution of scores

Scoring is as follows, as determined by all judges on the judging panel. Each entry will be scored on a basis of **100 points** distributed as following:

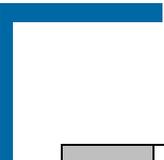
- Define key alternative protein ingredient(s) (5 points)
- Detail why addressing this particular alternative protein ingredient is important (5 points)
- Outline the extent this need is currently unmet (10 points)
- Outline the research undertaken and present key findings (15 points)
- Outline and describes proposed product, including a product description, proposed ingredients, market category, target market, proposed branding and packaging (35 points)
- Detail how each of the specific features and functions of the new product will benefit the target market and address the need for alternative protein food products (15 points)
- Reference list using Harvard referencing format (5 points)
- Submission is 750 words or less and 2 pages max. (5 points)
- Submission is logical, well thought out with no spelling or grammatical mistakes (5 points)

### Appendix 3: Stage 1: Initial Entry Proposal Scoring Matrix & Distribution (100 points)

Criteria						
	<b>Detail the importance of adopting alternative proteins</b>  <b>(5 points)</b>	Clear detailing of the importance of chosen alternative protein ingredient	Sound detailing of the importance of chosen alternative protein ingredient	Simple detailing of the importance of chosen alternative protein ingredient	Poor detailing of the importance of chosen alternative protein ingredient	No detailing of the importance of chosen alternative protein ingredient
		5	4	3	2	1
	<b>Explain the reasoning for your chosen alternative protein ingredient</b>  <b>(5 points)</b>	Chosen alternative protein ingredient well defined and clearly explained	Chosen alternative protein ingredient defined and explained	Chosen alternative protein ingredient simply defined and/or explained	Chosen alternative protein ingredient poorly defined and/or explained	Chosen alternative protein ingredient not defined.
		5	4	3	2	1
	<b>Outline the extent the need for your alternative protein is currently unmet</b>  <b>(10 points)</b>	Clear explanation of the extent this need is currently unmet	Sound explanation of the extent this need is currently unmet	Simple explanation of the extent this need is currently unmet	Poor explanation of how the extent this need is currently unmet	No explanation of the extent this need is currently unmet
		5	4	3	2	1

<p><b>Outline the research undertaken and present key findings to uncover insights. Including:</b></p> <ul style="list-style-type: none"> <li>• Research objectives</li> <li>• Research approach</li> <li>• Research methodology</li> <li>• Results</li> <li>• analysis</li> </ul> <p><b>(15 points)</b></p>	<p>Excellent research undertaken, all key points very well covered and findings were clearly shown to form key insight(s)</p> <p>15 - 13</p>	<p>Clear and evident research undertaken, all key points covered, and findings were shown to form key insight(s)</p> <p>12 - 10</p>	<p>Some research undertaken, all key points covered, and findings were somewhat shown to form key insight(s)</p> <p>9 - 7</p>	<p>Minimal research undertaken, some key points covered, and findings were not clearly shown to form key insight(s)</p> <p>6 - 4</p>	<p>No research undertaken, no key points covered, and findings were not shown to form key insight(s)</p> <p>3 - 0</p>
<p><b>Outline and describe proposed product, including:</b></p> <ul style="list-style-type: none"> <li>• product description</li> <li>• proposed ingredients</li> <li>• market category</li> <li>• target market</li> <li>• proposed branding</li> <li>• packaging</li> </ul> <p><b>(35 points)</b></p>	<p>Excellent outline and description of proposed product. All the key NPD points covered and with a high level of detail</p> <p>35 - 31</p>	<p>Good outline and description of proposed product. All the key NPD points covered and in good detail</p> <p>30 - 26</p>	<p>Sound outline and description of proposed product. All key NPD points covered however lacking in some detail</p> <p>25 - 21</p>	<p>Simple outline and description of proposed product. Most NPD points covered and lacking in detail</p> <p>20 - 11</p>	<p>Poor outline and description of proposed product. Some NPD points covered and only with minimal detail</p> <p>10 - 0</p>

<p><b>Detail how each of the specific features and functions of the new product will benefit the target market and address the need for alternative proteins</b></p> <p><b>(15 points)</b></p>	<p>Each specific feature and function clearly stated and identified. Each feature and function clearly demonstrated to benefit the target market and address the need for alternative proteins</p> <p>15 - 13</p>	<p>Specific features and functions mostly stated and identified. Each Feature and function stated is demonstrated to benefit the target market and address the need for alternative proteins</p> <p>12 - 10</p>	<p>Some features and functions stated and identified. Each Feature and function stated is mostly demonstrated to benefit the target market and address the need for alternative proteins</p> <p>9 - 7</p>	<p>Only one or two features and functions stated and identified. Each Feature and function stated is somewhat demonstrated to benefit the target market and address the need for alternative proteins</p> <p>6 - 4</p>	<p>No features and functions stated and identified. No needs and benefits addressed.</p> <p>3 - 0</p>
<p><b>Reference list using Harvard referencing format</b></p> <p><b>(5 points)</b></p>	<p>Correct Harvard Referencing with no errors</p> <p>5</p>	<p>Correct Harvard referencing with minimal errors, more references needed</p> <p>4</p>	<p>Correct Harvard referencing, however, with frequent errors and limited references</p> <p>3</p>	<p>Reference list provided, however is not in Harvard format.</p> <p>2 - 1</p>	<p>No reference list</p> <p>0</p>
<p><b>Submission is 750 words or less and 2 pages max.</b></p> <p><b>(5 points)</b></p>	<p>Submission is within 10% of 750 words and 2 pages max.</p> <p>5</p>		<p>Submission is within 10% of 750 words but exceeds 2 pages in length.</p> <p>3</p>		<p>Submission exceeds 10% of 750 words</p> <p>0</p>



	<b>Submission is logical, well thought out with no spelling or grammatical mistakes</b> <b>(5 points)</b>	Submission is logical, well thought out with no spelling or grammatical mistakes  5		Submission is mostly logical and thought out, with occasional spelling or grammatical mistakes.  3		Submission is not logical or thought out well, with multiple grammatical errors.  0
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## Stage 2

The Proof of Concept submission is an unmarked portion of the competition and is included for teams to check in with the judges and receive constructive feedback. It is also a chance for you to work through any problems ahead of the final stage of the competition.

The Proof of Concept must be 1000 words minimum to 1500 maximum and up to 4 pages in length excluding your appendix. References are to be done on a separate page. Text must have 1.5 spacing in fonts no smaller than 11pts.

### Proof of Concept: Written Report Suggested Structure

The format of the Proof of Concept will be a written report and should follow the structure as set out here and adhering to requirements as set out in the scoring criteria.

- Introduction
- Aims/objectives
- Methodology
- Results
- Discussion
- Conclusion

## Stage 3:

### Appendix 4: Stage 3: Finalist Entries: Distribution of Scores

Finalist entries will be scored on a basis of **300 points** distributed as follows:

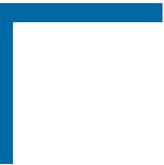
- Written proposal (70 points)
- Oral presentation (120 points)
- Product sample and defence (110 points)

#### **Written Proposal (70 points)**

- Report provides all key elements to support the proposal, as detailed in the matrix below (35 points)
- Structure and presentation (5 points)
- Grammar and spelling (5 points)
- Internal references and reference list (5 points)
- Report is well written i.e. Has a logical and rational flow (5 points)
- Report length is correct (5 points)
- Report was submitted on time (5 points)
- All Data provided is legible and clearly defined (5 points)

#### **Oral Presentation (120 points)**

- Description of product and process is well explained including how it meets the criteria for the project (10 points)
- Product attributes “sold to audience” (10 points)
- All results and data provided is clearly presented and explained (10 points)
- Presentation slides are well structured with correct spelling and grammar (10 points)
- Each team member presents for approximately same amount of time (5 points)
- Presentation takes correct amount of time (5 points)
- Presentation covers all key points from the project (10 points)
- Each team member demonstrates full knowledge and understanding of the project being presented (10 points)
- Any limitations to product process or project are discussed and solutions or suggested future work required discussed (10 points)
- Delivery demonstrates well developed presentation skills using the following criteria (40 points)

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- Speed of delivery- too fast/slow (5 points)
  - Volume - too soft/loud (5 points)
  - Pronunciation of key terms – accuracy (5 points)
  - Pitch, tone and emphasis (10 points)
  - Speaking not reading from notes (10 points)
  - Use of filler words (5 points)

**Product Sampling (110 points)**

- Promise versus delivery is demonstrated – i.e. Product description and report is equitable to actual product (30 points)
- Presentation of product provides consumer appeal i.e. Packaging (15 points)
- Sensory appeal of products (20 points)
- Team members are able to answer questions during defence of product (Sampling/taste testing session) (25 points)
- Team members adequately sell product concept (20 points)

## Appendix 4: Stage 3: Final Written Proposal Scoring Matrix & Distribution

		Criteria					
Written report	Final	<p><b>Report provides all key elements to support the proposal as listed here:</b></p> <ul style="list-style-type: none"> <li>• A description and explanation of your product and how this directly ties into the key points of the brief as outlined in Appendix 1.</li> <li>• Include any research that you have looked at or undertaken to help create your product.</li> <li>• Detail how the product specifically meets the need for alternative protein food products</li> <li>• Product description</li> <li>• Definition of who the target market is for the product and an estimate of the size of that market.</li> <li>• Analysis of product category including price points and selling points of the nearest competitor(s), if any, and whether the price points and selling points fulfil the brief as required.</li> </ul>	<p>Report provides all key elements as required. Excellent quality of supporting evidence for the proposal.</p> <p style="text-align: center;">35 - 31</p>	<p>Report provides most key elements as required. Good quality of supporting evidence for the proposal.</p> <p style="text-align: center;">30 - 26</p>	<p>A number of key elements missing from report.</p> <p>Some supporting evidence for the proposal.</p> <p style="text-align: center;">25 - 21</p>	<p>Many key elements missing from report</p> <p style="text-align: center;">20 - 11</p>	<p>Most or all of the key elements missing from report</p> <p style="text-align: center;">10 - 0</p>

- Manufacturing Product recipe
- Rationale for chosen ingredients
- Full product cost analysis including packaging
- Description of product packaging and rationale for chosen materials
- A full manufacturing production process flow chart and rationale for selection
- A full HACCP analysis
- Methodology used and results of any consumer market research including any sensory analysis
- List product attributes influencing shelf-life
- Preservation method
- Storage and shelf-life determination including rationale and methodology utilised
- Regulation compliant ingredient list and fully developed Nutrition Information Panel
- A full reference list following the Harvard referencing system

**(35 points)**

	<b>Structure and presentation</b>  (5 points)	Final report is very well structured, perfectly presented with all graphs and tables in an appendix. References are on a separate page.  5	Final report is well structured, presented to a high standard with all tables and graphs in an appendix. References are on a separate page  4	Final report is mostly structured, presented well with most tables and graphs in the appendix and some missing. References are on a separate page.  3	Final report is poorly structured and poorly presented with some tables and graphs in the appendix and some missing. References are on a separate page.  2	Report is not structured, has no presentation at all most or all of the graphs and tables and missing or in the wrong place. References are missing or in the wrong place.  1
	<b>Grammar and spelling</b>  (5 points)	No spelling or grammatical errors  5	Few errors made  4	A number of errors made  3	Many errors made  2	Errors very frequent – report ineligible  1
	<b>Internal references and reference list</b>  (5 points)	Several (minimum of 3) reputable background sources were used to enhance the basis of the project and cited correctly  All references accurately provided and listed in correct order following Harvard style.  5	A couple (minimum of 2) of reputable background sources were used to enhance the basis of the project and cited correctly.  Most references accurately provided and listed in correct order following Harvard style.  4	Background sources were cited but may not correctly but were used in a manner to enhance the basis of the project correctly.  Some references accurately provided and listed in correct order following Harvard style.  3	Background sources were cited but not used in a manner to enhance the basis of the project correctly.  References provided but do not follow Harvard style accurately.  2	No back ground sources were cited  Not all references listed and those that are do not follow correct style  1

	<b>Report is well written i.e. Has a logical and rational flow</b>  <b>(5 points)</b>	Report is well written i.e. Has a logical and rational flow- report is easy to follow and read as it includes .All paragraphs make logical sense leading to the conclusions made and described.	Report suffers from a few errors in regards to logical flow as headings may be missing in some instances or paragraphs do not follow a logical flow in their structure and information provided	Report suffers from an some errors in regards to logical flow as headings may be missing in many instances or paragraphs do not follow a logical flow in their structure and information provided	Report contains many errors in regards to logical flow, not many headings for sections, subsections have not been provided and paragraphs do not follow a logical flow in their structure.	Report does not have a logical flow and no headings for sections and paragraphs do not follow a logical flow in their structure and information provided
		5	4	3	2	1
	<b>Report length is correct</b>  <b>(5 points)</b>	Correct within 10% of word limit		Correct within 15% of word limit		
	5		3			1 - 0
<b>Report was submitted on time (or extension granted) (loss of .5 per day for non-conformance)</b>  <b>(5 points)</b>	On time with /without a previous extension granted		Submitted 1 day late  With /without a previous extension granted			Submitted 2 days late with /without a previous extension granted (not accepted after this date without a previous extension granted)
	5		3			1

	<p><b>All Data provided is legible and clearly defined</b></p> <p><b>(5 points)</b></p>	<p>Professional looking and accurate presentation of the data labelled correctly and titled appropriately. Data is analysed and interpreted accurately. Results are explained clearly and in a logical manner.</p> <p>5</p>	<p>Professional looking and mostly accurate presentation of the data labelled and titled appropriately. Data is analysed and interpreted accurately in most cases but not all. Results are explained clearly and in a logical manner.</p> <p>4</p>	<p>Data is presented and is labelled and titled. Data is analysed and interpreted but not very detailed or accurately interpretations are provided or key information is not referred to in the analysis of the data.</p> <p>3</p>	<p>Data is presented however not all is labelled or titled. Data is not analysed and interpreted.</p> <p>2</p>	<p>Data is not provided but is referred to in the report or data is provided but no explanation is provided.</p> <p>1</p>
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## Appendix 4: Stage 3: Oral Presentation Scoring Matrix (120 points)

Criteria						
Oral presentation content	<b>Content - Description of product and process is well explained</b>  <b>(10 points)</b>	A clear and accurate description of the product was provided. All components of the production of the product are well explained and presented in a clear and logical manner  10 - 9	A clear and accurate description of the product was provided. All components of the production of the product are explained but are still presented in a logical manner  8 - 7	The description of the product was not very clearly defined. Not all components of the production of the product are explained but are still presented in a logical manner  6 - 5	The description of the product was not clear and / or not accurate. Not all components of the production of the product are explained , or presented in a logical manner  4 - 3	Product not described. Many/all components of the product are not discussed in any manner  2 - 0
	<b>Content - Product attributes “sold to audience”</b>  <b>(10 points)</b>	Attributes and marketability of the product was clearly detailed and articulated and based upon research conducted with evidence provided during the presentation	Attributes and marketability of the product was provided however further information could have been provided. Research was conducted with evidence of this provided during the presentation  8 - 7	Attributes and marketability of the product was provided however it was not clearly discussed and no evidence that it was based upon research was provided.	Attributes and marketability of the product were outlined however no detail was provided	No clear attributes or marketability was provided

		10 - 9		6 - 5	4 - 3	2 - 0
<b>Content - All results and data provided is clearly presented and explained</b>  <b>(10 points)</b>	Professional looking and accurate presentation of the data labelled and titled appropriately and easily read by audience. Data is analysed and interpreted accurately. Results are explained clearly and in a logical manner.	Professional looking and mostly accurate presentation of the data labelled and titled appropriately and most but not all data can be easily read by audience. Data is analysed and interpreted accurately in most cases but not all. Results are explained clearly and in a logical manner.	8 - 7	Data is presented but not completely labelled and titled appropriately. Data is analysed and interpreted accurately in most cases but not all. Results are explained but not very clearly.	Data is presented but is not labelled and titled appropriately. Data is difficult to interpret in most cases and is not accurate or key elements have been missed in the analysis.	No data provided but is explained or data provided but not explained at all.
	10 - 9				4 - 3	2 - 0

				6 - 5		
<p><b>Content - Presentation slides are well structured with correct spelling and grammar</b></p> <p><b>(10 points)</b></p>	<p>Slides “look” appealing and are not overloaded with text. (Slide colours and font choices made slides appealing and easy to read). All images are appropriate to enhance the content. There are no grammatical or spelling errors present.</p> <p>10 - 9</p>	<p>Slides are mostly appealing and easy to read. Some images chosen detract from the information being provided rather than enhance the slide show/ and or the slides presented have too much text on them.</p> <p>There are a couple of grammatical or spelling errors present.</p> <p>8 - 7</p>	<p>A few of the slides presented are difficult to read, poor colour choices, excessive text on slides, or font size too small. Some irrelevant images that may detract from the information being provided rather than enhance the presentation.</p> <p>There are a few of grammatical or spelling errors present.</p> <p>6 - 5</p>	<p>Many of the slides presented are difficult to read, poor colour choices, excessive text on slides, or font size too small. Multiple irrelevant images that detract from the information being provided rather than enhance the presentation. There are a lot of grammatical or spelling errors present.</p> <p>4 - 3</p>	<p>All slides were unappealing and difficult to read for various reasons such as colours used, font size selected, and too much text on slides.</p> <p>A large number of spelling or grammatical errors made on slides/</p> <p>2 - 0</p>	

<p><b>Content - Each team member presents for approximately same amount of time</b></p> <p><b>(5 points)</b></p>	<p>All team members participated and provided to the presentation for about the same time period.</p> <p>5</p>	<p>All team members participated and provided to the presentation however one or two team members presented longer than the others.</p> <p>4</p>	<p>All team members participated and provided to the presentation however one team member presented much longer than all the others</p> <p>3</p>	<p>Not all team members participated or provided to the presentation. Those who presented did so for roughly the same time period</p> <p>2</p>	<p>Not all team members presented and those that did so did not present for the same time period or only one team member presented</p> <p>1 - 0</p>
<p><b>Presentation takes correct amount of time</b></p> <p><b>(5 points)</b></p>	<p>Presentation does not exceed allocated time</p> <p>5</p>		<p>Presentation is 10% over or under allocated time</p> <p>3</p>		<p>Presentation exceeds 10% of allocated time</p> <p>1</p>
<p><b>Presentation covers all key points from the project</b></p> <p><b>(10 points)</b></p>	<p>Presentation covers all key points with appropriate detail</p> <p>5</p>		<p>Presentation covers some key points from the presentation</p> <p>3</p>		<p>Presentation covers no key points from the presentation</p> <p>1</p>

<p><b>Content - Each team member demonstrates full knowledge and understanding of the project being presented</b></p> <p><b>(10 points)</b></p>	<p>All team members demonstrated an accurate, well developed understanding of the entire project, as evidenced during the presentation. They were easily able to answer all questions asked of them and each team member participated in this part of the presentation.</p> <p>10 - 9</p>	<p>All team members participated in the presentation for roughly the same time period, with most demonstrating a well-developed understanding of the project, as evidenced during the presentation. They were easily able to answer all questions asked of them but not all team members participated in this part of the presentation.</p> <p>8 - 7</p>	<p>All team members demonstrated an understanding of the entire project as evidenced during the presentation. They were not able to answer all questions asked of them.</p> <p>6 - 5</p>	<p>The team members demonstrated some understanding of the project, however a number of key components were not well understood as evidenced during the presentation. They were unable to answer many of the questions asked of them during this part of the presentation.</p> <p>4 - 3</p>	<p>The team members did not demonstrate an understanding of the entire project as evidenced during the presentation. They were unable to answer any questions asked of them during this part of the presentation.</p> <p>2 - 0</p>
<p><b>Content - Any limitations to product process or project are discussed and solutions or suggested future work required discussed</b></p> <p><b>(10 points)</b></p>	<p>Well covered and demonstrated an in depth understanding of the limitations. Ability to suggest possible solutions to any problems encountered</p>	<p>Somewhat covered but did not demonstrate an in depth understanding of limitations. Some possible solutions to problems encountered during the project or future work was suggested</p>	<p>Not well covered but some suggestions for solutions and or future works was provided but not very in depth</p>	<p>Not well covered and no suggestions of solutions or future work was provided</p>	<p>Not covered at all</p>

		during the project and future work suggested				
		10 - 9	8 - 7	6 - 5	4 - 3	2 - 0
	<b>Speed of delivery</b>  <b>(5 points)</b>	Speed was of a good pace, neither too fast or too slow	Speed was either slightly too fast or slightly too slow	Speed of delivery was too fast or too slow	Speed of delivery was much too fast or much too slow.	Speed of delivery was not satisfactory as was too fast to keep up or so slow as to be difficult to keep track of what was being presented upon.
		5	4	3	2	1 - 0
	<b>Volume too soft/loud</b>  <b>(5 points)</b>	Volume of delivery was at a pleasant volume with speaker neither yelling or raising their voices or too soft making them difficult to hear	Volume of delivery was either slightly too loud or slightly too soft	Volume of delivery was either too loud making it unpleasant to listen to or too soft making it difficult to hear with any accuracy what was	Some or all of the speakers spoke too loudly or too softly, making it difficult to hear what was being said or too loud making it difficult to listen too.	Entire presentation was too loud or too soft.

		5	4	being said. Or slightly too soft 3	2	1 - 0
<b>Pronunciation of key terms – accuracy</b>  (5 points)	All terms correctly Pronounced by all team members	5	Most terms correctly Pronounced by all team members 4	A number of terms mispronounced by some team members terms 3	A large number of terms mispronounced, or a few terms mispronounced consistently throughout presentation by 1 or more team members 2	Far too many errors with pronunciation of terms  1 - 0
<b>Pitch, tone and emphasis</b>  (10 points)	Well used for emphasis of key points by al team members	10 - 9	Well used for emphasis of key points by some of the team members 8 – 7	Could have been used to greater effect for emphasis of points being made by all team members 6 - 5	Not used very well at all by all team members 4 - 3	Not used at all by any team members-voices were all quite flat 2 - 0

	<b>Speaking not reading</b>  <b>(10 points)</b>	All team members engaged well with the audience and used significant amounts of eye contact. Team members did not “read” all text from slides. If reading from notes it was not obvious  10 - 9	All team members engaged with the audience and used eye contact. Team members did not “read” all text from slides. If reading from notes it was not greatly obvious but could be improved upon  8 - 7	Team members needed to engage more with the audience and use more eye contact. Team members may have read from notes or slides and it was somewhat obvious but was still fairly well done.  6 - 5	Team members needed to engage more with the audience and use much more eye contact. Team members may have read from notes or slides and it was very obvious.  4 - 3	Team members did not engage well with the audience and lacked eye contact due to reading from notes or slides more than looking up.  2 - 0
	<b>Use of filler words- limited usage</b>  <b>(5 points)</b>	Excellent – no filler words used  5	Very Good - Minimal number of filler words used  4	Good - A handful of filler words used  3	Satisfactory - A substantial number of filler words used  2	Unsatisfactory/Needs Improvement - Significant number of filler words used  1 - 0

### Appendix 4: Stage 3: Product Sampling Scoring Matrix (110 points)

Criteria						
<b>Product sampling</b>	<b>Promise versus delivery is demonstrated – i.e. Product description and report is equitable to actual product</b>  <b>(30 points)</b>	Product sample meets the expectations developed from written report and oral presentation including flavour, texture and colour	Product sample mostly meets the expectations developed from written report and oral presentation including flavour, texture and colour however the description used in the report or presentation did not fully realise in the product itself for one only component i.e. Flavour, texture.	Product sample mostly meets the expectations developed from written report and oral presentation including flavour, texture and colour however the description used in the report or presentation did not fully realise in the product itself for one only component i.e. Flavour, texture or colour	Product sample mostly meets the expectations developed from written report and oral presentation including flavour, texture and colour however the description used in the report or presentation did not fully realise in the product itself i.e. Flavour, texture or colour was not quite according to the descriptions provided.	The Product sample was not as described in the report of presentation at all.
		30 - 23	22 - 16	15 - 9	8 - 2	2 - 0

<p><b>Presentation of product provides consumer appeal i.e. Packaging</b></p> <p><b>(15 points)</b></p>	<p>Packaging looks appealing to the eye. Materials chosen are appropriate for product. Colours and design used present product in favourable manner, have marketing potential.</p> <p>15 -13</p>	<p>Packaging is appealing to the eye. Materials chosen may be appropriate for the product, but other options may be more appropriate. Colours and design used present product in very favourable manner, have marketing potential.</p> <p>12 - 9</p>	<p>Packaging is mostly appealing, but design is not well presented or developed in terms of appeal to the eye (visual marketing) as artwork colours and design do not fully depict product or target market. And other materials may be more appropriate choices for this product</p> <p>8 - 6</p>	<p>Packaging is mostly appealing, but design is not well presented or developed in terms of appeal to the eye (visual marketing) as artwork colours and design do not fully depict product or target market. The chosen materials for this product are not appropriate</p> <p>5 - 3</p>	<p>Packaging is not appealing and not targeted toward chosen target market and the chosen materials are not suitable for this product.</p> <p>2 - 0</p>
<p><b>Sensory appeal of products</b></p> <p><b>(20 points)</b></p>	<p>Product flavour, texture, aroma and colour are all very appealing in consideration to the target market</p>	<p>Product flavour, texture, aroma and colour are all mostly appealing but any of these attributes may not be considered outstanding or appealing in some way in consideration of the chosen target market i.e. Flavour is too spicy and is targeted for babies</p>	<p>Product flavour, texture, aroma and colour are all mostly appealing but at least two of the attributes may not be considered outstanding or appealing in some way in consideration of the chosen target market i.e. Flavour is too spicy and is targeted for babies.</p>	<p>Product flavour, texture, aroma and colour are all mostly appealing but at least three of the attributes may not be considered outstanding or appealing in some way in consideration of the chosen target market i.e. Flavour is too spicy and is targeted for babies</p>	<p>Product flavour, texture, aroma and colour are not appealing and all attributes may not be considered outstanding or appealing in some way in consideration of the chosen target market i.e. Flavour is too spicy and is targeted for babies</p>

		20 -18	17 - 13	12 - 9	8 - 4	3 - 0
<p><b>Team members are able to answer questions during defence of product (Sampling/taste testing session)</b></p> <p><b>(25 points)</b></p>	<p>All team members contribute equally in defence (Q&amp;A session) of product. All team members are able to answer questions asked of them to a high level of technical accuracy and understanding. All team members demonstrate full knowledge and understanding of all processes and concepts of the project.</p>	<p>All team members contribute in defence (Q&amp;A session) of product, however some contributed more than the other team members. Team members are able to answer questions asked of them to an intermediate level of technical accuracy and understanding. All team members demonstrate knowledge and understanding of most of the processes and concepts of the project.</p>	<p>Not all team members contribute in defence (Q&amp;A session) of product, however some contributed more than the other team members. Team members are able to answer questions asked of them to a low level of technical accuracy and understanding. Not all team members demonstrate knowledge and understanding of most of the processes and concepts of the project.</p>	<p>Not all team members contribute in defence (Q&amp;A session) of product. Not all team members are able to answer some of the questions asked of them but struggle to answer a number of questions with any detail. Not all team members demonstrate required knowledge and understanding of the processes and concepts of the project.</p>	<p>Team members struggle to answer questions in defence or their product with any depth of understanding or knowledge of processes involved in the project</p>	

		25 - 20	19 - 15	14 - 9	8 - 3	2 - 0
	<b>Team members adequately sell product concept</b>  <b>(20 points)</b>	Demonstration of product serving suggestions, preparation techniques and discussion of key attributes are very well-presented during product sampling	Demonstration of product serving suggestions, preparation techniques and discussion of key attributes are fairly well-presented during product sampling however some more detail would enhance the presentation	Demonstration of product serving suggestions, preparation techniques and discussion of key attributes are presented during product sampling a However team members struggle to present the product in the best manner i.e. Not well thought out for serving suggestions or preparation on the day	Demonstration of product serving suggestions, preparation techniques and discussion of key attributes are presented during product sampling however some of the key attributes are not discussed or some components such as serving suggestions are not discussed. Team members also struggle to present the product in the best manner i.e. Not well thought out for serving suggestions or preparation on the day	Demonstration of product is not well-presented during product sampling and there is no presentation on key attributes of the product or serving suggestions or preparation techniques.
		20 - 17	16 - 13	12 - 9	8 - 3	2 - 0

