IFTSA Developing Solutions for Developing Countries Product Development Competition RULES AND GUIDELINES

BACKGROUND

The IFTSA is committed to engaging student members from around the world and utilizing their scientific skills to serve a bigger cause. The IFTSA Developing Solutions for Developing Countries (DSDC) competition promotes the application of food science and technology and the development of new products and processes that are targeted at improving the quality of life for people in developing countries.

PURPOSE

1. To promote the use of food science and innovative thinking as tools to improve the development, safety, and distribution of food in developing countries
2. To promote global awareness of issues related to food availability, nutrition, and health
3. To build a cohesive community of the next generation of food science leaders and to use IFT as the catalyst for creating and supporting the community
4. To provide a link between government, international organizations, students and IFT regarding food problems in the developing world
5. To provide IFT student members with a platform to develop relationships with other students and food science professionals that have a common interest
6. To energize the best and brightest food science students to harness their energy and passion to explore the limitless opportunities to address global food challenges; and
7. To leverage a holistic approach to address food system challenges.

SPONSOR

Feeding Tomorrow Fund

Revised October 2024

SCHEDULE

Date	Event
February 1, 2025	Preliminary application deadline
March 1, 2025	Finalists notified
May 1, 2025	Finalist proposals deadline
July 13 - July 16, 2025	IFT FIRST in Chicago

2024-2025 THEME

Facing the challenges of climate change, rising pollution, and increasing environmental pressures, developing countries are compelled to adopt sustainable solutions. Create innovative food product and packaging material that can be produced locally within a selected developing country that addresses local economic and cultural needs, all while minimizing the carbon footprint and environmental impact.

2024-2025 THEME CRITERIA

Is your food product and packaging material designed for a developing country? Raw materials from which the product is made must be native and locally sourced to a developing country, and the packaging should be tailored to the needs of a specific developing country.

Does your food product and packaging material reduce plastic waste and minimize environmental impact? The food product and packaging should cause minimal long-term harm to the soil, water, or air. Participants are encouraged to explore innovative materials, such as plant-based biopolymers, that can be easily produced in developing regions.

Does your food product and packaging material produce minimal emissions and have a low environmental cost? Participants must calculate the impact (carbon footprint, energy, water, etc) of their process of making the food packaging, considering, raw materials sourcing, manufacturing, transportation and end-of-life (Raw Material Sourcing: Assess the carbon emissions from sourcing and transporting the raw materials; Manufacturing: Evaluate energy usage, including electricity and fuel required for the production process; Transportation:

Estimate the emissions involved in distributing the packaging locally or regionally; End-of-Life: minimizing emissions during degradation).

Is the food product and packaging material economically sustainable? The cost of production, availability of materials, and potential for scalability must be considered to ensure the food product and packaging is economically viable.

GENERAL COMPETITION RULES

1. The judges will be evaluating the rationale behind the proposal, the scientific value of the proposed concept, the technical problem-solving skills, the economic feasibility, and the societal impact on developing countries. Ultimately, the entry must benefit the quality of lives of people in developing countries and should be applicable to such a setting. The competition theme will be released during the fall of the current competition year. The purpose of the theme is to promote issues that are relevant and urgent and to allow for common ground when evaluating the entries.
2. Entries must consist of a proposal for a new food product/ packaging/ process. Teams may not enter their product in competitions outside of IFT.
3. Teams may not enter their product in more than one IFTSA competition.
4. To control the emphasis and fairness of the competition, the following limitations will be enforced:
5. Judges will not award extra points for the size of sensory panels or source of panelists. The purpose of this rule is to eliminate the possibility of teams earning extra points for their ability to collect more sensory data due to a larger number of team members or ability to travel. Rather, teams will be judged on how they went about gaining insights about the approval of their product from their potential consumers
6. Since the focus of this competition is on food science skills in product development, judges will not give points for the quality of package graphics or other advertising material.
7. All parts of the competition will be conducted in English.
8. If a team is chosen as a finalist, all participants of the finalist team agree to NOT claim any intellectual property rights (including patent rights) as to any material created in connection with the competition. As the purpose of the competition is to create and develop ideas which can be leveraged in the developing world, all finalist submissions may be shared with the sponsoring company and affiliated groups.
9. All written proposals must be submitted via the submission portal on IFT.org in both .doc and .pdf format to the competition chair by the deadline.

ELIGIBILITY

1. At least one (1) team member must hold Student Member status in the Institute of Food Technologists (IFT) at the time of the submission of the preliminary report. All team members must hold Student Member status if the team competes in finals.
2. Teams must have at least two (2) and no more than five (5) members.
3. All team members do not need to be enrolled at the same university.
4. Each team member must be registered as a student at the university they represent during the Fall semester before the competition. (If participating in the finals at IFT FIRST, the student need not be currently enrolled.)
5. Teams may consist of undergraduate students, graduate students, or a combination thereof.
6. Each university may submit as many unique entries (teams) as they wish per year. Students may not be on more than one (1) team and each submission must be unique to other entries.
7. Entries must be the students' work. Professors may be consulted and referenced but may not be a major contributor to the actual work.
8. Industry support such as donation of ingredients or use of equipment is allowed and encouraged but should not be acknowledged by any team in the preliminary or final proposal, oral presentation, or product tasting sessions. (Penalties will apply if a violation occurs.)
9. Projects from product development classes are eligible in the competition.
10. MS, Ph.D., summer internship, research, or other such projects are NOT eligible in the competition.
11. The chair of the competition and Vice President of Competitions will be excluded from participating on any competing team of this competition during the year of their service.
12. Members of the most recent first place team of this competition are NOT eligible to compete in this competition. Members are encouraged to compete in another IFTSA competition.

PRELIMINARY ROUND PROCEDURES

Application

Teams must submit their application via the submission portal on IFT.org by February 1st at 11:59 pm CST (Chicago Time UTC-6). Applications received after February 1st will not be accepted.

Submissions include (but are not limited to): Proposal (both word and PDF format), IFT membership numbers, Advisor letter. Please start your submission early to ensure you have all necessary information.

Preliminary Written Proposal

1. The Preliminary Proposal is limited to four (4) pages or less, not including the following mandatory pages: one (1) title page, one (1) page for a photograph or visual illustration of the product, one (1) appendix page used at the discretion of the contestants, and reference page(s).
2. The report must be typed double-spaced with 12-point Times New Roman font. All text and figures must be on 8.5 × 11.0" paper with 1" margins.
3. The Title Page should include the title of the report and date. No university affiliation or student names should be included on the title page.
4. Names of sponsor companies, any university, students, or other indication of team location are NOT acceptable in the Preliminary Proposals.
5. References: All references cited within the proposal must follow the *Journal of Food Science* formatting. The list of references must be submitted as separate .doc and PDF documents with the preliminary proposal. If a problem arises with reference credibility, a Judge may contact the competition chair for verification.
6. A separate cover letter from the Department Head or a professor, verifying the originality of work and the team's compliance with the competition rules, is to be submitted as a separate PDF document with the preliminary proposal. The standard format for the certificate of originality may be obtained from ift.org.

Judging

1. Each submission will be reviewed by at least three (3) judges.
2. Each entry will be scored based on 100 points, with the points to be distributed as shown in the rubric.
3. Judges will select a maximum of six (6) finalists.
4. All competing teams will be informed of only their respective scores and judges' comments. Each Judge will provide 1-2 sentences of feedback at a minimum.
5. The finalists will be selected as follows by the judges and Product Development Chair
    a. All point scores are converted into rank scores (highest score out of 100=1, second highest score out of 100=2, etc.).
    b. Rank scores are totaled for each team (one rank score per judge).
    c. The lowest six scores are designated as the finalists.

   d. In the event of a tie, the two lowest rank scores will be added for each group, and the team with the lowest score will advance. If this fails, the judges will be asked to make a decision.
6. Finalists will be notified of their status by March 1, 2025.

FINAL ROUND PROCEDURES

Responsibilities of finalists include the preparation of a final written proposal and oral presentation.

Application

Finalists must submit their final proposal, in both .doc and PDF formats, via the submission portal on IFT.org by May 1st at 11:59 pm CST. Proposals received after the deadline will not be accepted.

Final Written Proposal

1. The maximum number of pages for the final written proposal is twenty-five (25). This number DOES include all portions of the document (Including but not limited to title page, photograph page, proposal body text, references, process flow diagram, references, and appendices)
2. The proposal must be typed, double-spaced with 12-point Times New Roman font. All text and figures must be on 8.5 ×11.0" white paper with 1” margins.
3. The title page, for which there is no specific required format, must include the title of the proposal and date.
4. Include a 5" × 7" color photograph in the final written proposal. Additional images throughout the report are optional.
5. References should be added at the end of the proposal and must be in the *Journal of Food Science* format.
6. Teams' anonymity is no longer required.

Oral Presentation

7. For the components taking place at the IFT Annual Event, please note the following: the oral presentations are meant to showcase your concept and how it fits the theme of the competition.
8. Finalists will present a fifteen (15) minute oral report followed by a fifteen (15) minute question/answer period. This presentation should give an overview of what the product

is, why it is desirable, and how it was developed. This is your chance to showcase the entire product development journey and the work your team has done. All areas of the written proposal should be addressed. The audience will include: three Mars Wrigley Judges, at least two additional Judges, and the invited public from the conference: peers, industry, and conference visitors.

9. The presentations will be open to the public; however, only judges may ask questions.
10. A maximum of three team (3) members will present the report; others may speak during Q&A if present
11. A PowerPoint presentation is required. The Chair will provide finalists with details concerning the PowerPoint presentation (format, version, file size, etc.).
12. Time limits will be enforced. The competition chair will keep track of time.
13. The Oral Presentation should include the Product and Process Description clearly explained as well as the major technical difficulties. Other areas should include Safety/Shelf Life, Originality, Economic Feasibility, Marketing, and Sustainability. It is very important that you explain why your product is designed for developing countries and the theme.

Judging

Final proposals will be scored based on **200** points.

1. At least three judges will be chosen from industry or academia, with practical product development experience
2. Up to three judges will be appointed by the sponsor whenever possible
3. Judge identities will remain anonymous until the final competition
4. Judges are required to evaluate products by point totals, not personal preferences
5. Judges may penalize or disqualify submissions that they believe do not follow the year's theme.

AWARDS

1. A max of six teams will make it to the finals. The teams will all be judged against one another in the finals.
2. Each finalist team will receive a travel and registration reimbursement of up to $1800.
3. The 1st place winner will receive $3,000, the 2nd place winner will receive $1,500, and the 3rd place winner will receive $500.

NOTES

- Copyright and trademark violations will not be tolerated. Teams who submit a product that features a character or franchise that they do not have explicit rights will be disqualified.
- All participants of the finalist team agree NOT to claim any intellectual property rights (including patent rights) as to any material created in connection with the competition. As the purpose of the competition is to create and develop ideas which can be leveraged in the developing world, all finalist submissions may be shared with the sponsoring company and affiliated groups.
- Entry into this competition implies the release of IFT and IFTSA from any liability for damages incurred as a result of this competition.
- Any team or team member that does not follow the IFT Event Code of Conduct will risk being disqualified.

CHALLENGES AND PENALTIES

Challenges based on rule infractions during oral presentations must be made immediately after the presentation, and no later than the finalization of scores. It is the duty of the Chair to ensure that infractions in written proposals and product tastings are noted. Scores should be considered finalized by one (1) hour prior to start of the IFTSA Closing Ceremony. No challenges will be entertained once this time has passed.

Challenges must be referred to the Chair and/or VP of Competitions. The Chair will refer challenges to the VP of Competitions, IFTSA Office of the President, and IFTSA Staff Liaison. It is the necessary duty that all Competition Chairs, VP of Competition, and IFTSA Office of the President report any infractions they receive or notice during competition. Final decisions on challenges, penalties, and IFT Code of Conduct will be made by the IFTSA Staff Liaison and disseminated to necessary parties. This may include input from judges.

QUESTIONS

Contact the IFTSA DSDC Competition Chair via email at iftsa.dsdc@gmail.com.

Developing Solutions Preliminary Proposal Rubric

Rubric Category	Product Pitch	Product Description	Process Description	Technical Problem Solving	Impact
Points	30	10	15	15	30
Category Description	Introduce and pitch the product. Convince the reader that the product has potential by describing what it is, why it would appeal to the target consumers, and why it would be beneficial in the selected region.	Detail the ingredients, introducing any uncommon inclusions, and briefly describe the importance of each ingredient in the product.	A description of the product's commerical manufacture procedure (large-scale, not benchtop) that includes all processing steps and important processing parameters (i.e temeratures, times, concentrations, water activities, etc.). Justify the purpose of each detail in maintaining the saftey and quality of the product. Include a process flow diagram.	A short description of one technical challenge, and its solution, that was encountered during product formulation or process development. Detail what problem was encountered, how it was solved, and justify why the solution used was the best choice.	Describe how the product will impact the target region and justify why. Provide some details about how the product would be accessable (logistically and financially) to people in the target region. The product, and this section, should inherently address the prompt.
Rubrics Breakdown	**Appeal of the Product (10 Points)**	**Description of Ingredients (5 Points)**	**Completeness of Commerical Manufacturing Plan (5 Points)**	**Technical Problem Solving Success (10 Points)**	**Product Impact (10 Points)**
	10-8 Points: Justifies why *many* target consumers will prefer this product over alternatives.	5-4 Points: Provides a clear description of the product's ingredients.	5-4 Points: Process description is highly detailed and is not missing any important steps or processing parameters.	10-8 Points: Justifies why the given solution was the best choice considering the context of the product *and* demonstrates that the technical problem is fully resolved.	10-8 Points: Provides a detailed evaluation of how the product will impact the target region, justified with sound logic and evidence (where needed).
	7-4 Points: Justifies why *some* target consumers will prefer this product over alternatives.	3-2 Points: Omits a few major ingredients from the description.	3-2 Points: Process description is missing a few minor details *or* contains a few minor mistakes that could lead to an undesirable product.	7-4 Points: The solution is either partially unjustified *or* the technical problem is not fully resolved.	7-4 Points: Describes the product's impact in the target region, but is either missing minor impacts or does not justify its claims well.
	3-0 Points: Does not justify why target consumers will prefer this product or does not differentiate itself at all.	1-0 Points: Fails to adequately describe the product composition.	1-0 Points: Commerical manufacture will not be feasible due to being unclear, incomplete, or highly problematic. No points should be given to a proposal which only describes the benchtop process instead of the scaled-up commerical manufacture.	3-0 Points: The solution is not justified *or* the technical problem is not resolved.	3-0 Points: The description of product impact is incomplete or completely unjustified.

Need for the Product (10 Points)	**Ingredient Importance (5 Points)**	**Process Flow Diagram (5 Points)**	**Demonstration of Food Science Knowledge (5 Points)**	**Adhereance to Prompt (10 Points)**
10-8 Points: Justifies why the product would be *very* beneficial to the selected region.	5-4 Points: Provides justification of why each major ingredient is important in the formulation.	5-4 Points: Process flow diagram clearly summarizes all steps and parameters of the product's commerical manufacture.	5-4 Points: Demonstrated the application of technical food science knowledge during the process of problem solving.	10-8 Points: Product completely addresses all aspects of the DSDC competition prompt.
7-4 Points: Partially justifies why the product *would* be beneficial to the selected region but doesn't support the claim completely.	3-2 Points: Flawed logic or ignored ingredients undermine the justification.	3-2 Points: Process flow diagram is missing minor steps or is unclearly organized.	3-0 Points: Did not demonstrate the application of technical food science knowledge during the process of problem solving.	7-4 Points: Product only addresses some aspects of the DSDC competition prompt.
3-0 Points: Does not justify why the product would be beneficial to the selected region.	1-0 Points: The section does not provide any reasoning for the importance of ingredients.	1-0 Points: Process flow diagram is missing major steps.	**Total=15 (Technical Problem Solving)**	3-0 Points: Product does not address the DSDC competition prompt.

Total=10 (Product Description)

Description of Product (10 Points)
10-8 Points: Describes the product clearly and completely.
7-4 Points: Some aspects of the product are unclear, though the general idea is communicated.
3-0 Points: The product idea is unclear or incomplete, hindering the understanding of this proposal.

Total=30 (Product Pitch)

Product Saftey and Quality (5 Points)
5-4 Points: Justifies why the process will ensure a safe and high-quality product.
3-2 Points: Partially justifies why the process will ensure a safe and high-quality product, but omits key details or includes mistakes.
1-0 Points: Does not justify why the process will ensure a safe and high-quality product.

Total=15 (Process Description)

Accessability (10 Points)
10-8 Points: The product is highly accessible to people in the target region.
7-4 Points: The product is somewhat accessible to people in the target region.
1-0: The product is not accessible to people in the target region.

Total=30 (Impact)

Developing Solutions Final Proposal Rubric

Rubric Category	Product Pitch	Technical Product Description	Process Description	Technical Problem Solving	Safety/Shelf Life	Economic Feasibility	Impact	Adherance to Prompt
Points	15	10	10	10	10	20	20	5
Category Description	Introduce and pitch the product. Convince the reader that the product has potential by describing what it is, why it would have appeal to the target consumers, and why it is needed in the selected region.	Detail the formulation and justify all components. Describe the packaging system in depth and justify the choices made. Include a nutritional label and justify any nutritional claims (if applicable).	A highly detailed description of the product's commerical manufacture procedure (large-scale, not benchtop) that includes all processing steps and important processing parameters (i.e temeratures, times, concentrations, water activities, etc.). Justify the purpose of each step and parameter. Describe the equipment that will be used. (no need to name specific company, size, or spec number of equipment). Include a process flow diagram that includes all processing steps and the critical control points from the HACCP plan. Briefly describe some potential issues that could arise when the product formulation is scaled-up to commerical manufacture in the target region.	A detailed description of two (or more) technical challenges, and their solutions, that were encountered during product formulation or process development. Justify why these were the most prominent/important problems facing the product. Detail what problem was encountered, how it was solved, and justify why the solution used was the best choice.	Create a detailed HACCP plan (Hazard Analysis and Critical Control Points) that demonstrates how the commerical processing will prevent all types of hazards. Briefly describe the GMP's (good manufacturing practices) that would be most relevant to the processing facility making the product. State the shelf-life of the product and thoroughly justify how that time was chosen.	State and justify the product price in relation to local income, competitors, and the preferences of target consumers. Justify why the product will be profitable by comparing the product price to any ingriedient/packaging price information that can be gathered. (If exact data is not available, state that then use logic to justify why you beleive it will be profitable). Discuss the supply chain logistics of producing and distributing the product in the target region.	Describe how the product impacts the target region in as much detail as possible. Justify why the product could quickly and feasibly start production in the target region.	Provide a very brief (2-4 sentences) summary of how your product addresses the competition prompt. (It was likely perfectly clear throughout your entire proposal, but summarize it again here so it will be absolutely clear for the judging this category)
Rubrics Breakdown	**Description of Product and Packaging (5 Points)**	**Description and Justification of Formulation (5 Points)**	**Completeness of Commerical Manufacturing Plan (5 Points)**	**Technical Problem Solving Success (5 Points)**	**Product Saftey (5 Points)**	**Profitability (5 Points)**	**Product Impact (15 Points)**	**Adhereance to Prompt (5 Points)**
	5-4 Points: Describes the product and packaging clearly and completely.	5-4 Points: Justifies the use of every ingredient by describing their functionalities in the product and defending their inclusion.	5-4 Points: Process description is highly detailed and is not missing any important steps or processing parameters. Product commerically manufactured using this process (as written) would be safe, high quality, and consistent with the product's description.	5-4 Points: Justifies why the given solution(s) was the best choice considering the context of the product *and* demonstrates that the technical problem(s) is fully resolved.	5-4 Points: Describes all potential hazards in the product and how they will be completely controlled at the critical control points. All GMP's which are highly relevant to the product are included. This product will be manufatured safely if production started immediately.	5-4 Points: Demonstrates with evidence or strongly justifies with logic why the product will be profitable.	15-11 Points: Provides a highly detailed, comprehensive evaluation of how the product will impact the target region, justified with adequate evidence (where needed).	5-4 Points: Product completely addresses all aspects of the DSDC competition prompt.
	3-2 Points: Some aspects of the product are unclear, though the general idea is communicated.	3-2 Points: Flawed logic or unjustified ingredients undermine the description of the formulation.	3-2 Points: Process description is missing a few minor details *or* contains a few minor mistakes that could lead to an undesirable product.	3-2 Points: The solution(s) is either partially unjustified *or* the technical problem(s) is not fully resolved.	3-2 Points: Minor mistakes or ommisions in the HACCP plan need to be corrected before the product can be manufactured safely. Some highly relevant GMP's are missing.	3-2 Points: The product could be profitable, but evidence or justification supporting profitability is unconvincing.	10-6 Points: Describes the product's impact in the target region, but is either missing minor impacts or does not justify its claims well.	3-2 Points: Product only addresses some aspects of the DSDC competition prompt.
	1-0 Points: The product idea is unclear or incomplete, hindering the understanding of this proposal.	1-0 Points: The ingredient fuctionalities are either not included or the section does not provide any reasoning for their selection of ingredients.	1-0 Points: Commerical manufacture will not be feasible due to being unclear, incomplete, or highly problematic. No points should be given to a proposal which only describes the benchtop process instead of the scaled-up commerical manufacture.	The solution(s) are not justified *or* the technical problem(s) is not resolved.	1-0 Points: Major mistakes or ommisions undermine the product's potential to be manufactured safely with this plan.	1-0 Points: Wildly unrealistic estimates, or large logical mistakes undermine the claim that the product will be profitable.	5-0 Points: The description of product impact is incomplete or completely unjustified.	1-0 Points: Product does not address the DSDC competition prompt.
								Total=5 (Adhereance to Prompt)

Appeal of the Product (5 Points)	**Description and Justification of Packaging (5 Points)**	**Process Flow Diagram (5 Points)**	**Importance/Prominence of Technical Problems (5 Points)**	**Shelf Life (5 Points)**	**Justifies Product Price (5 Points)**	**Feasibility of Starting Production (5 Points)**
5-4 Points: Justifies why *many* target consumers will prefer this product over alternatives.	5-4 Points: Justifies the product's packaging by describing their packaging system and defending the choices made during its creation.	5-4 Points: Process flow diagram clearly summarizes all steps and parameters of the product's commerical manufacture. Critical control points are included.	5-4 Points: Solving these problems were vitally important to the viability of the product, drastically improving its feasibility, saftey, profitability, or quality.	5-4 Points: Discusses the expected shelf life and its mode of failure with a thorough justification that support the predicitions.	5-4 Points: Clearly justifies a realistic product price in relation to competitors and the preferences of target consumers.	5-4 Points: The product and its production process could be quickly and feasibly implimented because of the completeness and attention to detail of this report.
3-2 Points: Justifies why *some* target consumers will prefer this product over alternatives.	3-2 Points: The description of the packaging is missing minor details *or* some flawed logic undermines their packaging choices.	3-2 Points: Process flow diagram is missing minor steps.	3-2 Points: Some problems discussed were important to product viability, but one was not a prominent problem. It is unclear why it was included *instead of other large issues*.	3-2 Points: The shelf life estimate, while potentially accurate, is not adequately justified.	3-2 Points: Partially justifies a realistic product price.	3-2 Points: The product and process has potential to be feasibly implimented, but minor revisions or additional information are needed before implimentation.
1-0 Points: Does not justify why target consumers will prefer this product or does not differentiate itself at all.	1-0 Points: The description of the packaging is missing major details *or* their packaging choices are deeply flawed.	1-0 Points: Process flow diagram is missing major steps or is unclearly organized.	1-0: The problems discussed were not relevant to product viability. Either the team is unaware of larger issues or these larger issues were ignored for the sake of this section.	1-0 Points: The shelf life estimate is unrealistic and completely unjustified.	1-0 Points: Product price is either completely unjustified or unrealistic.	1-0 Points: It is unclear if the product/process could be feasibly implimented. This idea needs major revisions or much more additional information.
	Total=10 (Technical Product Description)	**Total=10 (Process Description)**	**Total=10 (Technical Problem Solving)**	**Total=10 (Safety/Shelf Life)**		**Total=20 (Impact)**

Need for the Product (5 Points)
5-4 Points: Justifies why the product would be *very* beneficial to the selected region.
3-2 Points: Partially justifies why the product *would* be beneficial to the selected region but doesn't support the claim completely.
1-0 Points: Does not justify why the product would be beneficial to the selected region.
Total=15 (Product Pitch)

Practicality and Logistics in Target Region (10 Points)
10-8 Points: Completely and accurately addresses how the product would manage the supply chain in the target region (including ingredient supply, product processing, and product distribution), with no missing gaps.
7-4 Points: Misses some aspects of the supply chain in the target region.
3-0 Points: Does not discuss the supply chain of ingredients and/or the distribution of the product.
Total=20 (Economic Feasibility)

Developing Solutions Oral Presentation Rubric

Rubric Category	Product Description	Process Description	Safety/Shelf Life	Practicality / Logistics of Implimentation	Impact on Developing Country	Persuasion of Product's Potential to Succeed	Verbal Presentation	Quality and Content of Slides	Ability to answer questions
Points	5	10	10	15	10	10	10	5	25
	An evaluation of how well the group introduced the product, its packaging, its formulation, and its nutrition.	An evaluation of how well the presenters describe the product's commerical manufacture procedure (large-scale, not benchtop). Speakers mention all important processing steps and parameters. They also include a visually-appealing, readable process flow diagram that includes all processing steps.	An evaluation of how well the presentation explains the few, most important points in the HACCP plan (Hazard Analysis and Critical Control Points). The speakers demonstrate how the commerical processing plan will prevent the most prevalent hazards. The presenters discuss the shelf-life of the product and thoroughly justify how that time was chosen.	The presentation justifies why the product could be practically and quickly implimented in the target region. The product will fit well into the supply chain.	Presentation clearly demonstrates how the target community/country benefits from the product, with evidence to support their claims.	An overall evaluation of how well the presenters persuaded the audience of the product's potential to succeed (with the audience being comprised of food scientists who are familiar with the challenges of product development). Would the product be appealing, unique, beneficial, profitable, practical, and safe if it were going on the food market today in the target region?	An evaluation of the spoken aspect of the presentation. Speakers are confident and engaging in their delivery. The oral presentation follows a clear and logical flow (i.e. the audience can follow the presenters when they transition between topics and can understand when they introduce new ideas).	An evaluation of the visual aspect of the presentation. Presentation slides are well organized, visually appealing, and can be understood quickly. While the presentations' content will vary depending on how teams wish to "pitch" different products, the oral presentation should at least contain some information regarding the formulation, packaging, production process, profitability, and saftey of the product.	Demonstrates the ability to answer questions clearly and correctly, utilizing logic or evidence as support.
	Description of Product, Packaging and Formulation (5 Points)	**Process Flow Diagram (5 Points)**	**Product Saftey (5 Points)**	**Practicality and Logistics in Target Region (10 Points)**	**Product Impact (10 Points)**	**Persuasion of the Product's Potential (5 Points)**	**Speaker Engagement (5 Points)**	**Organization of Slides (5 Points)**	**Content of Answers (20 Points)**
	5-4 Points: Describes the product, packaging, and formulation clearly and completely.	5-4 Points: Process flow diagram clearly summarizes all steps and parameters of the product's commerical manufacture.	5-4 Points: Discusses the few most prevalent hazards in the product and how they will be completely controlled. This product will be manufatured safely if production started immediately.	10-8 Points: Completely and accurately addresses how the product would manage the supply chain in the target region (including ingredient supply, product processing, and product distribution), with no missing gaps.	10-8 Points: The product will have a beneficial impact on the lives of people in the target region. The presentation justifies their claims with adequate evidence and sound logic.	5-4 Points: The presentation convinces the audience (as Food Scientists) that this product would feasibly succeed as a real food product, considering all aspects of product development (profitability, practicality, saftey, etc.).	5-4 Points: Speakers are highly confident and engaging while maintaining strong vocal projection throughout. (Though please understand that English may not be everyone's first language)	5-4 Points: Slides are exceptionally well-organized with very clear content, being quickly understood and visually appealing.	20-14 Points: The team provides thorough and convincing answers to questions, with sound logic or scientific reasoning.
	3-2 Points: Some aspects of the product, packaging, or formulation are unclear, though the general idea is communicated.	3-2 Points: Process flow diagram is difficult to view or understand.	3-2 Points: Major mistakes or prevalent ommisions in the HACCP plan need to be corrected before the product can be manufactured safely.	7-4 Points: Misses some aspects of the supply chain in the target region which would lead to issues in production or distribution.	7-4 Points: The product will have a beneficial impact on the lives of people in the target region. The presentation somewhat justifies their claims, but lacks some evidence or contains some logical flaws.	3-2 Points: The presentation *partially* convinces the listener of this product's potential, but some aspect of the product needs more development or justification.	3-2 Points: Speakers show limited confidence, with noticeable lapses in engagement and vocal delivery.	3-2 Points: Slides are somewhat organized, with some mistakes hindering the clarity of content or visual appeal.	13-7 Points: The team provides adequate responses to most questions, but with some aspects left unaddressed or unjustified.
	1-0 Points: Many aspects of the product, packaging, or formulation are unclear, hindering the understanding of this presentation.	1-0 Points: Process flow diagram is missing major steps or is very unclearly organized.	1-0 Points: The saftey of the product is not discussed.	3-0 Points: Does not discuss the supply chain of ingredients, processing and/or the distribution of the product.	3-0 Points: It is unclear if the product will have a beneficial impact on the lives of people in the target region due to non-existent evidence or major logical flaws.	1-0 Points: The presentation *does not* convince the listener that this product could feasibly succeed as a real food product on the market.	1-0 Points: Speakers lack confidence, with frequent hesitations and a lack of engagement.	1-0 Points: Slides are poorly organized and difficult to understand.	6-0 Points: The team is unable to adequately answer questions.
	Total=5 (Product Description)				**Total=10 (Impact)**			**Total=5 (Quality and Content of Slides)**	

Completeness of Commerical Manufacturing Plan (5 Points)	**Shelf Life (5 Points)**	**Feasibility of Starting Production (5 Points)**
5-4 Points: Product commerically manufactured using this process would be safe, high quality, and consistent with the product's description.	5-4 Points: Discusses the expected shelf life and its mode of failure with a thorough justification that support the predicitions.	5-4 Points: The product and its production process could be quickly and feasibly implimented because of the completeness and attention to detail of this presentation.
3-2 Points: The processing plan contains a few minor mistakes that could lead to an undesirable product.	3-2 Points: The shelf life estimate, while potentially accurate, is not adequately justified.	3-2 Points: The product and process has potential to be feasibly implimented, but more issues need to be thought out before implimentation.
1-0 Points: The processing plan will not be feasible due to being highly problematic.	1-0 Points: The shelf life estimate is unrealistic and completely unjustified.	1-0 Points: It is unclear if the product/process could be feasibly implimented. This idea needs much more detail.
Total=10 (Process Description)	**Total=10 (Safety/Shelf Life)**	**Total=15 (Economic Feasibility)**

Appeal of the Product (5 Points)	**Logical Flow (5 Points)**
5-4 Points: Justifies why *many* target consumers will prefer this product over alternatives.	5-4 Points: The oral delivery follows a clear and logical flow, effectively transitioning between topics.
3-2 Points: Justifies why *some* target consumers will prefer this product over alternatives.	3-2 Points: The flow of the oral delivery can be understood, but certain moments are difficult to follow.
1-0 Points: Does not justify why target consumers will prefer this product or does not differentiate itself at all.	1-0 Points: The oral delivery is disorganized and difficult to follow.
Total=10 (Peruasion of Potential)	**Total=10 (Confidence in delivery)**

Confidence and Clarity of Answers (5 points)
5-4 Points: The team responds clearly and confidently to questions.
3-2 Points: The team's responses to questions are able to be understood, but somewhat lack clarity *or* confidence.
1-0 Points: The team's responses to questions are not able to be understood, being completely unclear and unconfident.
Total=25 (Ability to answer questions)