



## IFTSA Developing Solutions for Developing Countries Competition Rules and Regulations

### **Background:**

The Student Association is committed to engaging student members from around the world and utilizing their scientific skills to serve a bigger cause. The 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:**

- To encourage the involvement of international student members in IFT and IFTSA.
- To promote the use of food science and innovative thinking as tools to improve the development, safety, and distribution of food in developing countries.
- To provide a link between government, international organizations, students and the IFT Student Association regarding food problems in the developing world
- To promote awareness, in the United States and worldwide, about the global context of issues related to food availability, nutrition and health.
- To provide IFTSA with a platform that will enable its participants to reach out and establish connections with industry and academic institutions on an international level.

### **2011-2012 Theme:**

Mangoes--especially the Apple, Kent, and Tommy Atkins varieties--grow abundantly in Kenya, but a short harvest season, high fiber content, and typically irregular quality (size, shape, color, etc.) make it difficult for growers to realize the full potential of this crop.

Develop a mango-based product that addresses common Kenyan nutrient deficiencies and can be produced rapidly in order to realize the full potential of this crop during its short harvesting season.

### **General Competition Rules:**

Entries must consist of a proposal for a new concept readily applicable to food or water, such as a new product, process, etc. This may include, but is not limited to, concepts such as a new food product, microbiological/chemical/biochemical method, distribution system, packaging material, food delivery system, nutrient fortification concept, new use of local ingredients for a safer, more nutritious product, etc.

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 following year's **theme** will be decided by IFTSA in the fall following the IFT Annual Meeting. The purpose of the theme is to promote issues that are relevant and urgent and to allow for a common ground when evaluating the entries.

Teams do not have to represent a certain IFTSA chapter, but at least one team member or faculty advisor must hold member status in IFT at the time of the submission of the preliminary



report. All team members of the finalists are highly encouraged to become student members. Multiple teams may participate from the same chapter or University.

#### **Limitations:**

- The focus of this competition is applying food science skills; therefore, judges will not award Points for package graphics or other advertising material.
- Proposals from previous winners may not be distributed by IFTSA. All competing teams will be informed of only their respective scores and judges' comments.
- Written proposals should be e-mailed to the competition chair in both Word and PDF format and received *on or before* deadlines stated herein, including those that fall on weekends or holidays.
- All parts of the competition will be conducted in English.

If a competition rule has been breached, the competition chair will be allowed to present a report detailing the infraction(s) to the judges. The team captain/contestant will be provided a sufficient amount of time to defend their actions to the judges. The judges reserve the exclusive right to make a decision regarding the case, and to recommend an appropriate penalty, if the situation warrants. Judges will communicate their decision, which will be considered final, in a prompt fashion to both the chair and the team captain.

#### **Eligibility:**

1. At least one team member or faculty advisor must hold member status in IFT at the time of the submission of the preliminary report. All members of the finalist teams are highly encouraged to become student members to compete in the finals at the annual meeting.
2. Entries must be students' work. Professors may be consulted and referenced, but may not be a major contributor to the actual work.
3. 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 oral presentation. The competition chair will acknowledge industrial support provided to the six finalists by publishing a list of contributors in the printed program provided to the audience at the competition finals at the IFT Annual Meeting.
4. Projects from product development or other classes are eligible in the competition.
5. MS, Ph.D., or summer internship projects **ARE** eligible entries in the competition.
6. There is no limit on the number of team members; however, only a maximum of three (3) team members will present the product in the oral competition. Additional team members may be present to answer questions.
7. Each individual may only be a part of 1 submission.
8. The chair of the competition will be excluded from participating on any competing team.

#### **Preliminary Proposals:**

1. Teams must submit a copy of their proposal via e-mail (in both Word and PDF format) to the Competition Chair by January 15<sup>th</sup> at 11:59 PM CST.
2. The preliminary proposal is limited to five (5) pages, not including the title page, the page for graph representation of the entry (photograph, drawing, flow-diagram, etc.), references, and one appendix page used at the discretion of the contestants.
3. The report must be typed, double-spaced, in 12-point font, Times New Roman font with 1" margins. All text and figures must fit on 8.5" x 11" paper.



4. There is no specific required format for the title page (not included in five (5) page limit), though it should include the title of report and date. Please do not include any discriminating information on this page. Names of sponsor companies, any university, students, or other indication of team location are not acceptable on the title page, in the report, or on the product picture as these will be seen by the judges.
5. Include the following information in the body of the e-mail sent to the committee chair at the time of preliminary proposal submission.
  - a) Team members' names and IFT membership numbers
  - b) Sponsor companies, donors of goods, services, or money (if applicable)
  - c) The name, mailing address, phone number and e-mail address of a contact person to whom all correspondence should be directed.
  - d) Name of the school, name of entry, and advisor's name and contact info
6. References: All references cited within the proposal will be referred to with a number in or at the end of the sentence in which the reference was used. The list of references (which are not included in the five (5) page limit) should be included in a separate Word and PDF file emailed to the chair with the preliminary proposal. If a problem arises with reference credibility a judge may contact the Competition Chair for verification.
7. A separate cover letter from a department professor or department head verifying originality of work and the team's compliance with the competition rules is to be attached to the e-mail with the preliminary proposal.
8. Finalists will be notified no later than 6 weeks after the preliminary report submission deadline.

**Evaluation of Preliminary Proposals:**

1. Scoring will be determined by five (5) judges. The judging panel will include members from academia, industry or a U.S. government agency.
2. Each entry will be scored on a basis of 100 points, with the points to be distributed as shown here:

<b>Preliminary Proposal Evaluations</b>	<b>100 points total:</b>
Executive Summary	10 points
Application Description	15 points
Technical Problem Solving	15 points
Safety/Shelf Life/Product Quality Assurance-Control	10 points
Originality	15 points
Impact	20 points
Economic Feasibility	15 points

3. Judges will select a maximum of six (6) finalists, comprised of 3 international submissions and 3 national (U.S. & Canada) submissions.
4. All competing teams will be informed of only their respective scores and judges' comments.
5. Judges have the right to reject an entry if they believe it does not fit in with the competition's selected theme.

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*Note: Patent rights belong to the individual teams will be handled according to the respective University patent policies. IFT and IFTSA do not claim any responsibility or rights for product development ideas presented in this competition.*



### **Scoring for Selection of Finalists:**

The finalists will be selected as follows by the Judges and Competition Chair:

- All point scores are converted into rank scores (highest score out of 100=1, second highest score out of 100=2, etc.)
- Rank scores are totaled for each team (one rank score per judge).
- The lowest six scores are designated as the finalists.
- 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 provide a decision.

### **Finalists:**

Responsibilities of finalists include the preparation of the following:

- a final written proposal
- an oral presentation

### **Finalist Evaluation**

Final proposals will be scored on a basis of 200 points, distributed as follows:

- I. Final Written Proposal - 100 points
- II. Oral Presentation - 100 points

## Scoring Guidelines:

### **Final written proposal:**

1. Finalists must e-mail both Word (.doc) and PDF copies of their final proposals to the Competition Chair by May 15 (June Annual Meeting & Food Expo) or June 1<sup>st</sup> (July Annual Meeting & Food Expo) at 11:59 PM CST.
2. The maximum number of pages for the final written proposal is twenty-two (22). This number DOES include proposal body text, references, diagrams, figures, tables, flow diagrams, references and appendices. It does NOT include the one (1) title page and the one (1) picture/diagram page.
3. The report must be typed, double-spaced, 12-point font Times New Roman font with 1" margins. All text and figures must be on 8.5" x 11" paper.
4. The title page, for which there is no specific required format, must include the title of the proposal and date. A list of donors and other contributors that assisted the team should be listed ONLY in the e-mail sent to the chair with the proposal.
5. Include one page with a diagram or picture of the entry. Additional images throughout the report are optional.
6. Areas that **may** be covered, but not limited to, in the final proposal are:
  - a. Rationale
    - I. Why was the product/process chosen?
    - II. Identify and justify the need and relevance to the local region of the novel product/process
  - b. Product description/ Evaluation
    - I. Product description/use
    - II. Product formulation and ingredient/component functionality
    - III. Competitive framework
    - IV. Sensory/ Consumer test
    - V. Shelf life estimate
    - VI. Price/cost evaluation
    - VII. Package selection and basis for selection
    - VIII. Nutrition Label
  - c. Process description/ Evaluation
    - I. Process description and basis for selection
    - II. Process flow diagram
    - III. Hazard Analysis – Critical Control Points (HACCP)
    - IV. Process limits
    - V. Operating cost
    - VI. Capital investment estimate
    - VII. Patent status (apply, infringe, license)
  - d. Safety/Regulations
    - I. Safety evaluation with respect to formulations, functionality, and processing
    - II. Legal implications of the product (ingredient labeling)
    - III. Hazard Analysis – Critical Control Points (HACCP)
    - IV. Good Manufacturing Processes (GMPs)
    - V. Home use - safety hazard?
    - VI. State Regulations
    - VII. Federal Regulations
    - VIII. FDA, USDA, OSHA, EPA, etc. other regulations

- e. Impact on Developing Countries
  - I. Impact potential-problem to be solved
  - II. Economic Feasibility
  - III. Readiness of application
  - IV. Extension and mass production possibilities
  - V. Delivery logistics

*NOTE: These are suggestions and should only be considered if they are pertinent to the topic or aspect of your proposal. These headings/points may or may not be included at the team's discretion. Remember that originality is encouraged although addressing the relevant points is critical. If certain points deemed important by the judges for a particular proposal are not covered in the final paper, then that entry will be penalized accordingly*

- 7. References should be added at the end of the proposal.
- 8. Each final proposal will be scored on a basis of 100 points, with the points to be distributed as shown here:

<b>Final Written Proposal Evaluations</b>	<b>100 points:</b>
Entry Description	5 points
Application Description	10 points
Technical Problem Solving	20 points
Safety/Shelf Life/Product Quality Assurance-Control	10 points
Originality	15 points
Impact (based on rationale)	25 points
Economic Feasibility	15 points

**Oral Presentations:**

Finalists will present a twenty (20) minute oral report followed by a ten (10) minute question/answer period.

- 1. A maximum of three team members will present the report. Additional team members may be present to answer questions.
- 2. A PowerPoint computer presentation is required. The Competition Chair is responsible for bringing/acquiring a laptop computer. The Chair will provide finalists with details concerning the PowerPoint computer presentation (format, version, disk type, file size, etc.)
- 3. The presentations will be open to the public and will be allowed to ask questions as time permits, but only after the judges are done asking their questions.
- 4. If applicable, teams are encouraged to display a sample of their product. This does not mean they will need to prepare samples for tasting, as they will not be evaluated on this aspect. The international aspect of the competition makes it difficult for this competition to have a tasting/sensory portion. In order to help the judges make their decision, a picture or video displaying the product or process is required as part of the oral presentation. Physical samples of products are NOT allowed in the oral presentation. Please do not bring them.

**Oral Presentation Evaluation: 100 points**

Judged on quality, organization, communication, interest generated, potential impact on developing countries and selling the product idea to your fellow food technologists.



### **Judge Selection:**

1. There will be five judges in total. The judging panel will include members from academia, industry or a U.S. government agency.
2. Up to two judges will be appointed by our major sponsor, whenever possible.
3. Judges are encouraged to serve a three year term, or find a suitable replacement if they are unable to participate.
4. Judges or sponsors may be solicited for determining each year's theme. The following year's theme must be decided in the fall following the end of the current year's IFT Annual Meeting.
5. Judge identities will remain anonymous until the final competition.
6. Judges are encouraged to evaluate products by point totals, not personal preferences.

### **Awards:**

- A total of six teams will make it to the finals. Of these teams, three will represent international entries, and three will represent national (U.S.) entries. There will be a winner and a runner up for each of these categories.
- Each of the finalist teams will receive a certificate and a travel grant. Domestic teams will receive up to \$1,000 each and International teams will receive up to \$2,000 each.
- Each member of the finalist teams will receive a certificate listing the name of the entry and all team participants. These are subject to change based on the sponsor.
- The winners will each receive \$3,500 and the runner-up will receive \$1,500. *These are subject to change based on the sponsor.*
- The Student Association will present the first place teams with a personalized plaque after the IFT Annual Meeting & Food Expo. The top two finalist teams of each category and their winning entries may be highlighted in *Food Technology*.