



Research Chefs Association Evolution of Food Waste Student Competition Manual

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SECTION 1: BACKGROUND INFORMATION

Research Chefs Association & the Evolution of Food Waste Product Development Student Competition:

The Research Chefs Association (RCA) is the leading professional community for food research and development. As such, the RCA is the premier source of culinary and technical information for the food industry and is committed to the advancement of Culinology® –the integration of culinary arts and food science. Founded in 1996, the RCA has rapidly grown to more than 2,200 members, including chefs, food scientists, technologists, writers, nutritionists, academicians, researchers, consultants, sales and marketing professionals, suppliers, co-packers, distributors and students. Since 2007, the RCA has sponsored the Student Culinology® Competition to highlight student talent and achievement through competition.

To meet the demands of the evolving food industry, the RCA has created the Evolution of Food Waste Product Development Student Competition in 2016. Established by the RCA Student Committee, the Evolution of Food Waste Competition challenges student teams to formulate commercialized products, increase nutritional content through value-added processing, and troubleshoot cost reduction strategies repurposing byproduct ingredients historically considered food waste.

On Thursday, March 14, 2019 in Louisville, KY, the RCA will hold the final portion of the Evolution of Food Waste Product Development Student Competition.

Purpose:

The purpose of the competition is to:

- Encourage students to develop a food product using waste byproducts commonly produced within the industry.
- Provide a creative opportunity for students to network with food industry professionals.
- Challenge students to apply Culinology® concepts towards developing a sustainable food product that can be marketed on a large scale.
- Promote student talent and develop connections within the industry to provide a platform that will allow students to spotlight their food science and culinary skill set.

Eligibility:

- All contestants, including the alternate, must be active RCA members (student membership fee is \$30.00 per student). Competing team members must register to attend the conference.
- Teams will consist of up to five (5) students and two (2) alternate students (optional).
- Teams may include up to two graduate students.
- Students graduating in December 2018 and not continuing their studies are not eligible to compete.
- A faculty sponsor is required for the verification of the students' eligibility and originality of the work submitted. Note: a faculty member may sponsor no more than two teams.

- Faculty and other industry sources may be consulted and if utilized their participation must be documented by the team as part of their proposal's bibliography, but consultants cannot be a major contributor in the actual work.
- A "team leader" must be designated to act on behalf of the team.
- Each winning team is only eligible to receive one prize to be divided and disbursed by the faculty sponsor.
- Only one (1) team from each school may be selected to compete.
The proposed product must be an original concept that may not have been submitted in a previous contest, a commercial product or in the process of becoming a commercial product.

Competition Timetable:

Phase I: Students will submit a letter of intent to Tori Clucas at TClucas@culinology.org by **December 14, 2018** that includes the following: team name, school name, team member names and emails, team leader, graduation date, faculty sponsor info, as well as the address you would like the sponsored ingredients shipped to.

Phase II: Students will develop a proposal for a new food product using ingredients considered food waste commonly found within the industry. Students will select **at least one** food waste item from the list of "Recommended Waste Ingredients" and develop a product using their chosen ingredient as the featured ingredient. Teams will be required to create a product that will highlight the chosen ingredient and develop a innovative commercialized concept. Teams will submit a written proposal to the Research Chefs Association that will describe the product concept and waste ingredient. Innovative teams will use multiple ingredients from the list.

Phase II: Following the proposal round (Phase I), up to three (3) finalists will be chosen and advance to the on-site competition at the 2019 RCA Conference. The finalists will travel to the conference to present their product to the judges.

The presentation requirements are as follows:

- Provide 55 (2 oz.) portions of their product (5 for the judging panel and 50 portions for attendees)
- Prepare a ten (10) minute presentation highlighting their product
- Host a 10-minute question and answer session with the judges to provide feedback and explanation

SECTION 2: Phase I – Letter of Intent

Letter of Intent

By **December 14, 2018** submit a letter of intent to Tori Clucas at TClucas@culinology.org that includes the following: team name, school name, team member names and emails, team leader, graduation date, faculty sponsor info, as well as the address you would like the sponsored ingredients shipped to. If you want samples of the sponsored ingredients, letter of intent should be submitted before January 18.

SECTION 3: Phase II – How to Enter and Proposal

How to Enter:

By January 18, 2019 submit your Proposal to the Research Chefs Association, attention Tori Clucas at tclucas@culinology.org. “Evolution of Food Waste Proposal” should include the following: Team Name, School Name, Team member names including team leader, graduation date and contact info, faculty sponsor info.

- By January 18, 2019 submit a written proposal. All teams are required to use **at least one** of the “Recommended Waste Ingredients” from the listed provided. The concept, idea and formulation must be unique and developed exclusively for this competition.
- By February 1, 2019 team leaders will be informed whether their team has been selected to move into the finals. Proposal scores will count towards 50% of a finalist team’s final score.
- The on-site component of the Evolution of Food Waste Product Development Student Competition will occur on March 14, 2019 at the RCA Conference in Louisville, KY. Here, students are required to present a brief ten (10) minute oral presentation, five (5) samples for the judges and fifty 50 (2 oz.) samples for the audience, and a ten (10) minute Q&A session with the judges. Guidelines for the oral presentation and Q&A session are outlined in “Section 3” below. This portion will count towards 50% of the overall team’s final score.

Proposal

Proposal Background (100 Points)

- By the due date of January 18, 2019, all teams must submit their complete proposal. NO EXCEPTIONS. Incomplete proposals will not be accepted.
- *Requirements* - Teams must pick **at least one** waste ingredient from the

“Recommended Waste Ingredients.” Once the proposal is submitted, students may not change their waste ingredient.

- *Format* – the proposal must be formatted using Times New Roman, 12 point font, 1.5 line spacing, and 1” margins. Please number all pages.
- *Submissions* – Teams will submit electronic PDF versions and Word doc files of their proposal in two parts:

Part I: Biographical Information

- Title Page with team names, faculty advisor name, university affiliation.
- Faculty verification letter
- One-paragraph biographies of the team members and faculty advisor, including area of study, each person’s food “philosophy,” and identification of the team leader (1 page maximum). Provide a digital photograph of the team and faculty advisor. Also list on a separate page each participant’s home addresses, telephone numbers, email addresses and university/school affiliation.

Part II: Proposal Body

- Title Page

- Proposal Body (See below for components.) The proposal may not exceed twenty (20) pages; including the title page, the page for photographs, and the appendix page(s) to use as needed.

Judges will select a maximum of three (3) finalists. Finalists will be notified by February 1, 2019.

Proposal Content:

Complete final proposals will contain the following elements:

(Note: Please do not include any information in the Proposal Body which could identify team members or their university affiliation—any proposals which do will be considered incomplete.) Should be no longer than twenty (20) pages including title page, table of contents, bibliography and appendix.

- Title Page
- Table of Contents
- Proposal Body (See below for components)
- Appendix
- Bibliography

Proposal Body - Proposals will be judged on the following eight elements worth a total of 200 points:

1. A two-page (max) Sell Sheet which includes information on the following elements (40 Points):
 - a. A one-paragraph executive summary including the following: name and description of your product.
 - b. Explanation of how your product may effectively utilize food waste produced by the industry, as well as its sustainability as a whole.
 - c. Explanation of target market and basis for potential success of your product.
 - d. Photo
 - e. Nutritional fact panel
 - f. Packaging
 - g. Shelf-life
 - h. Serving options
 - i. Ingredient statement, with reference to allergens
2. Background/description of commercialized product. Teams must provide substantial evidence on why the ingredient is considered as a waste byproduct and how lessening this substance may benefit a company, environment, or both. If evidence is not provided to substantiate the ingredient as a waste byproduct, then the proposal will be disqualified from the competition. (20 points)
3. The application formulation sheet for one (1) serving of each commercialized item component (e.g. pastry, filling, sauce etc.) should be comprised of the following five columns (See **Appendix B**, page 11 of RFP). (40 points)
 - a. *Ingredient/Supplier*: All ingredients in the final product and ingredient suppliers should be identified.

- b. *Amount (g)*: The formula should be written in terms of gram weight measurements of each ingredient used to formulate each item component, listed in decreasing order of magnitude with the resulting total equal to the weight of food in one serving of sufficient size to feed one adult.
- c. *Percent (%)*: The formula should also be written in terms of the percentage of each ingredient used to formulate each item component. Percentages should be listed in decreasing order of magnitude with the resulting total equaling 100%. The waste ingredient must be the primary ingredient in the final product formulation.
- d. *Wholesale Price Per Pound (\$)*: A 500,000 portion limited production run should be used as the volume target for purposes of sourcing and pricing ingredients. Also, the price per serving of the sum total of all ingredients used for your concept should be appropriate and justified. Information for determining yield and portion size, and calculating metric conversions can be found in *The Book of Yields* by Francis T. Lynch.
- e. *Cost of Ingredient in the Formula (\$)*. Ingredient prices can be found from supplier companies you are sourcing from. Note: with regard to sponsored ingredients, teams may research and document lower competitor prices for the purpose of achieving the desired price point.
- f. Preparation instructions for the commercialized formula only need to be provided once.
 4. Identification, description, and justification of the food waste ingredient used in the Commercial Production and the components of the product, especially as they impact process feasibility – the extent to which the final product can be mass produced practically and successfully: (50 points)
 - a. Equipment and processing methods of final product.
 - b. Provide complete manufacturing instructions, including flow chart/diagram, for all commercialized formulas, for final product from raw to ready to ship.
 - c. Explanation of safety and handling precautions used in the process of final product.
 5. Impact of the food waste ingredient used and how it is effectively utilized in this product. Explain how this product or the process used highlights the waste ingredient, its projected acceptability as a consumer food product, and its benefit to the correlating sponsor company. (50 Points)
6. Originality of Concept (based on expertise of judges). (50 Points)

Recommended Waste Ingredients:

Students must select **at least one** of the below sponsored food waste ingredients. Innovative teams will use multiple ingredients from the list.

- **Flour ground from spent miller grain** provided by ReGrained
- **Lobster concentrate** provided by North Taste
- **Clam concentrate** provided by North Taste
- **Fish concentrate** provided by North Taste
- **Seafood concentrate** provided by North Taste

Products are provided by [Griffith Foods](#) and [North Taste](#). Once your Proposal is submitted you will be given a contact to work with at Griffith and/or North Taste. They will assist you with questions related to their products and the shipment of practice and competition materials.

SECTION 4: PHASE III (ON-SITE COMPETITION)

Product Sampling

On March 14, 2019 beginning at 4:00 p.m. EDT at the RCA Conference in Louisville, KY students will provide samples of their product to the judges and seated audience members for an open session during their competition oral presentations. Students will be allotted a given time slot for product sampling, as well as time to prepare product samples before the start of their competition presentations. It is the responsibility of the team to transport the product samples to the competition and store products during the event. Any available storage space such as a refrigerator or freezer will be open to competitors; however this is not a guarantee. The RCA staff will let teams know in advance and is not responsible for lost products.

The only equipment that will be provided on-site will be a microwave (1000 watts). Teams must plan accordingly to prepare their samples prior to presentations. Teams will need to provide all other equipment or tools needed for the preparation and presentation of their product. If a piece of specialized equipment is required for preparation, please notify Tori Clucas at TClucas@culinology.org no later than February 15, 2019 and staff will do their best to accommodate. Please note, specialized equipment is not guaranteed to be provided and students are advised to adapt accordingly.

Oral Presentation (100 Points)

On March 14, 2019 beginning at 4:00pm EDT at the RCA Conference in Louisville, KY finalists will present a ten (10) minute oral report at the one-site Evolution of Food Waste Product Development Student Competition

1. A maximum of five members must present the report but not all are required to present.
2. A Power Point presentation is required. The teams will be notified on details concerning file requirements after finalists are chosen.
3. A time clock will be visible to finalists, time limits will be enforced and the Competition Chair will keep track of time.
4. The Oral Presentation should cover the description of the product as well as the food waste ingredient used and its functionality in the final product. The presentation may also include other components such as the Shelf-life, Marketing, Profitability, Feasibility, and Sustainability.
5. Students will be judged based on clarity of speech, organization, quality, interest generated by audience, potential impact on sustainability, use of waste ingredient, and ability to sell the product idea to consumers and professionals alike.

Teams will be asked to submit their Power Point presentation one (1) week before the day of the competition and are advised to bring a copy of their Power Point presentation via jump drive as well.

Question and Answer Session (50 Points)

After students deliver their product presentations, judges will then begin a ten (10) minute question and answer session which will allow students to discuss any topics concerning the formulation and novelty of their product. All team members including the alternate will participate in this session.

Students will be judged based on the quality of their answers/responses to questions and feedback.

SECTION 5: JUDGING, INDEMNITY AND AWARDS

Judging Evaluation:

An expert panel of up to five (5) RCA professional members representing the food industry in the fields of the culinary arts, R&D, food science, retail and flavor/ingredients will judge the proposals, and render a decision by the date of the competition based on the Proposal elements outlined above, and all teams will receive a record of their scores following the Competition. Please see Appendix A "Scoring Sheet." These are criteria set by the RCA Education Committee whose decisions are final and binding on matters related to this contest. *Please note that proposal scores will count toward 50% of a finalist team's final score.

Post-competition, participating teams will be provided an average of the judges' scores per category for their respective team, their team's individual ranking per category and the Competition high score per category.

Indemnity:

All decisions of RCA and RCA judges are final. Application and interpretation of Competition rules are solely within the discretion of RCA. The Competition may be postponed, cancelled, or rescheduled, and prizes withheld, at the discretion of RCA. No warranties, express or implied, are given by RCA or the competition venue in connection with the Competition. Each Entrant releases RCA and the competition venue from, and waives all claims against RCA and the competition venue for, any loss, damage, expense, cost, claim, or injury to person or property arising directly or indirectly from the Competition. Each Entrant also shall indemnify, defend, and hold RCA and the competition venue harmless with respect to any claim, demand, or cause of action against RCA or the competition venue arising from any act or omission of the Entrant. Entrants consent to the use of their name, picture, and likeness by RCA for publicity purposes and irrevocably license to RCA the right to reproduce, distribute, publish, display, and otherwise use the proposals and other materials submitted in connection with the Competition, in any form and via any media. Void where prohibited by law. This Agreement shall be governed by the laws of the State of Illinois, and the sole forum for any legal action related to the Competition shall be State or federal court within Cook County, Illinois.

RCA retains the rights to the submitted application content.

Awards:

A \$1,000 award will be presented for first place.

- Finalist team members are required to be present in order to be eligible to receive an award.
- Applicable taxes are the sole responsibilities of winners.
- Award will be distributed by the faculty sponsor.
- The winning team will receive national recognition through coverage in RCA media.
- If the combined proposal and on-site scores result in a tie between two teams, judges will further question team members on any of the areas related to their participation in the Competition to determine the team's final place.
- Winning teams will be featured in a *Culinology*® Magazine article as well as a number of media outlets by the RCA.

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APPENDIX A: SCORING SHEET

Phase II

- Proposal (250 Points total)
 - A two-page (max) Sell Sheet with required elements (see above) (40 Points):
 - Background/description of commercialized product. (20 points)
 - The application formulation sheet for one serving of each commercialized item component (e.g. pastry, filling, sauce etc.) with required five columns (see above) (40 points)
 - Identification, description, and justification of the food waste ingredient used (50 points) ○ Impact of the Food Waste Ingredient used and how it is effectively utilized in this product. (50 Points)
 - Originality of Concept (based on expertise of judges). (50 Points)

Phase III

- Oral Presentation (100 Points)
- Q&A Session (50 Points)

Total possible points: 400 Points possible

