

# MISSION: IMPULSIBLE

## STUDENT FOOD DEVELOPMENT COMPETITION



Good day Students. Your mission, should you choose to accept it, is to develop a new food product using **pulses** as an ingredient. You may have up to three team members complete this task, or work as an individual. You have until March 2012, to complete this assignment. This message will not self destruct. Please recycle this material after use in order to maintain a healthy planet.

Pulses are **the edible, dry seeds of legume** plants and include peas, beans, lentils and chickpeas.



Photo Courtesy of NAIT

Pulses are high in fibre, high in protein and low in fat. They can be used to make high fibre, low glycemic index or gluten-free foods. Be creative!

## \$6,000 IN PRIZES!

Registration Submission Deadline – February 13, 2012

Who's eligible? Post-secondary students enrolled in a food science or related discipline or culinary arts program at a University, College, Technical College or Culinary School.

Winners of the provincial competition will receive \$1,000 (1st place), \$650 (2nd place), \$350 (3rd place) prize money as well as the opportunity to compete against other provincial winners in June 2012 in Montreal, Quebec with paid travel, accommodations and meals. The final competition in July will have a prize of \$2,500 for 1st place, \$1,000 for 2nd place and \$500 for 3rd place.

What's in it for entrants?

- 1) Winning teams from each province will be invited to attend the Canadian Special Crops Association convention in Montreal, Quebec in June 2012 to compete against the other provincial winners (will receive travel, accommodations and meals).
- 2) A chance to showcase your abilities in practical food applications.
- 3) Gain food product development experience.

Additional information on Canada's pulse industry can be found on the Pulse Canada and Manitoba Pulse Growers websites, [www.PulseCanada.com](http://www.PulseCanada.com) and [www.ManitobaPulse.ca](http://www.ManitobaPulse.ca)

# 2012 Canada Student Pulse Food Development Competition

Pulses, including dry peas, beans, lentils and chickpeas, are healthy, environmentally friendly foods. Pulses are an important component of a healthy diet as they are rich in fibre and have twice as much protein as grains. They have a low glycemic index and are gluten-free, great for people with diabetes or celiac disease. As a legume, they also pull their own nitrogen from the atmosphere, reducing reliance on fertilizers and making pulses an environmentally friendly food.

Pulses are one of Canada's most important crops accounting for over \$1.5 billion annually in revenues to Canadian farmers.

Traditionally pulses have been used as soup ingredients, such as pea and lentil soups or by using beans in chilis. Chickpeas are well known as the major ingredient in hummus. However, the milling of pulses into flours or fractions of protein, starch and fibre creates enormous potential for pulses to be incorporated into foods such as in baked goods, snack foods, desserts, pastas, beverages and in meat-based products.

As part of an effort to create more diverse pulse based food products available to consumers in Canada, Canada's pulse industry is sponsoring a product development competition modeled after the product development competitions run by the Institute of Food Technologists (IFT) and the American Association of Cereal Chemists International (AACC)<sup>1</sup>. We challenge Post Secondary students at Canadian institutions to develop a new food idea using common Canadian whole pulses or their fractions (flours, fibre, starch, protein) as the major ingredient. The students are to carry the concept through marketing and production, much like a commercial product development team. This opportunity will allow students in food science and related disciplines to develop their skills as food professionals in an applied manner as well as to introduce students to a network of opportunity for future endeavors.

<sup>1</sup> Canada's pulse industry includes provincial grower associations such as the Alberta Pulse Growers Commission, the Saskatchewan Pulse Growers, Manitoba Pulse Growers Association and the Ontario Bean Growers. It also includes Pulse Canada, the national marketing arm of the industry, as well as processors and exporters of Canadian peas, lentils, beans and chickpeas that are members of the Canadian Special Crops Association (CSCA).

## Product Development Competition Rules 2012

The purpose of Canada's pulse product development competition is to stimulate new ideas and innovation of pulse based food products by students. The competition setting and creativity of students is intended to generate awareness of the possibilities and benefits of using pulses as food ingredients within the food industry. Students will see the benefits and the opportunities for them to become involved with pulse research and development and will gain from the networking opportunities as well as the experience they will get from participating in this competition.

1. Participants must be students as of the winter session (January to April 2012) immediately preceding the competition in a post-secondary institute (University, College, Technical College, Culinary School).
2. Teams may include up to three students and all team members must be legitimate students as indicated from the above criteria.
  - Teams may benefit from working with a diverse background for a team combining food science, culinary arts, nutrition, business, etc.
3. Each school may enter more than one team.
4. Each entry must be an original concept by the student(s).
5. Pulses must be present as a key ingredient in the products developed. This may include whole or split pulses, pulse flour, pulse protein, pulse starch and/or pulse fibre.
6. To maximize points for "Health Potential", teams are strongly encouraged to create a pulse-based food with at least 2 g fibre per serving and meets Canadian standards for lower or low fat, saturated fat, trans fat or sodium. See Canada's Health Check™ program for Nutrient Criteria for Grocery or CFIA's "Guide to Food Labelling and Advertising".
  - Commercially available Canadian pulse crops and products include;
    - i. **Dry Field Peas (*Pisum sativum*):** Yellow, Green, Split Yellow, Split Green, Austrian Winter, Maple, Marrowfat. Value added products include yellow and green pea flour (regular and pre-cooked) and fibre, yellow pea protein concentrates and isolates, and yellow pea starch concentrates.
    - ii. **Lentil (*Lens culinaris*):** Large Green, Medium Green, Small Green, Split Large Green, Red, Red Split, Dehulled Red, Spanish Brown, French Green, Beluga. Value added products include green and red lentil flours (regular and precooked) as well as green lentil flakes (pre-cooked).
    - iii. **Dry Bean (*Phaseolus vulgaris*):** White Pea (Navy Bean), Pinto, Cranberry, Black, Light Red Kidney, Dark Red Kidney, Great Northern, Pink, Small Red, Azuki, Otebo, Prim and Dutch Brown. Value added products include bean flours (regular and pre-cooked) and bean flakes (pre-cooked).
    - iv. **Chickpea (*Cicer arietinum*):** Desi, Split Desi, Kabuli. Value added products include desi chickpea flour.

## Product Development Competition Requirements and Judging

### Written Report

Teams must submit a brief written report to Pulse Canada (1212-220 Portage Avenue, Winnipeg Manitoba, R3C 0A5) prior to March 23, 2012.

Written report should be 3-4 pages and should include an overview of the proposed product entry including product and processing description, along with a marketing plan.

### Poster

Students will be required to develop a poster for the day of the provincial competition.

### Presentation and product tasting

Teams must prepare a 10 minute oral presentation (PowerPoint or other multimedia, e.g. video) and samples of their final product (enough for judges and about 50 audience members) on the day of the product development competition.

### Judging Criteria

Criteria*	Maximum Points
1. Originality of product	10
2. Potential use of pulses*	20
3. Health potential**	20
4. Marketing plan	10
5. Value proposition***	20
6. Product flavor/aroma	10
7. Product texture	10
8. Product appearance	20
9. Oral presentation skills	10
10. Poster layout and design	10
<b>TOTAL</b>	<b>140</b>

\* The potential total use of pulses in terms of quantity is important to the Canadian pulse industry. The more pulses incorporated into the product, and the greater potential for overall pulse use, will be looked upon favourably.

\*\* Products will be judged on their potential to convey health benefits to consumers.

\*\*\* Students should indicate estimates of production costs, potential retail sales value, comparisons with other product costs and relative value etc (this can be part of the marketing plan).

### Judges

Judges will be selected from pulse processors, academia, media and/or the food industry.

## Prizes and Other Details

- Provincial cash prizes of \$1,000 (1st place), \$650 (2nd place) and \$350 (3rd place).
- Preparation, storage and delivery of products at the competition are the sole responsibility of the team. Final food preparation and presentation space will be available to students.
- All products remain the property of entering individuals and/or team of universities, according to the school's regulations.
- Development costs (e.g. ingredients and other materials) can be reimbursed up to \$50 with receipts.
- Winning first place teams from each province will be asked to present at the national competition at the annual Canadian Special Crops Association (CSCA) convention in June in Montreal.

## Pulse Product Development Competition Finals

- Montreal, June 25-28, 2012.
- Winning first place teams from each province will be asked to present at a national competition at the annual Canadian Special Crops Association (CSCA) convention.
- The national competition will utilize the same judging schematic as the provincial competition.
- National first prize of \$2,500, second prize of \$1,000 and third prize of \$500.
- Travel covered for provincial winners to Montreal for national competition (travel, accommodations, meals) in July at the annual Canadian Special Crops Association (CSCA) convention.
- If your product cannot be prepared beforehand and brought to the meeting, Pulse Canada will find the best available preparation facilities, however no guarantee can be made that specific processing equipment will be available. Teams should notify Pulse Canada of specific equipment they may require for preparation and/or presentation of their products.
- All products remain the property of entering individuals and/or team according to the school's regulations.

## Important dates\*

- Team registration (see details below) ..... February 13, 2012
- Written 3-4 page report and mini-poster to be submitted to Pulse Canada ..... March 23, 2012
- Provincial competition ..... March/April 2012
- National competition to be held in Montreal ..... June 25-28, 2012

\*Note: Due dates and details may vary based on the educational institution.

## Registration:

If you are interested in registering for the competition, please discuss with the relevant academic supervisor and then send an e-mail to Tanya Der (tder@pulsecanada.com) with the following information by February 13, 2012:

- Team members (names, email addresses, department in which you are studying)
- Institution name
- Academic supervisor (name and contact information including e-mail)\*
- Product idea (While not a requirement for registration, you may indicate a product idea. This may be changed at a later date)

\* You will have to indicate an academic supervisor that will assist with oversight of your product development, and should have secured their approval upon registration.

Please direct all questions to:

**Tanya Der** - Manager of Food Innovation, Pulse Canada  
204 925 3783  
tder@pulsecanada.com