

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 select any number of team members to help you complete this task, or work as an individual. You have until April 2011, 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.



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

MORE THAN \$6,000 IN PRIZES!

Registration Submission Deadline – February 28, 2011

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 July 2011 in Vancouver 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 Vancouver in July 2011 to compete against the other provincial winners (will receive travel, accommodations and meals).
- 2) A chance to showcase your abilities in practical applications.
- 3) Gain food product development experience.

2011 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 are gluten-free and have a low glycemic index, great for celiacs and people with diabetes. As a legume, they also pull their own nitrogen from the atmosphere, reducing reliance on fertilizers and making pulses and 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 (AACCI). 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.

¹ 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 2011

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.

- Participants must be students as of the winter session (January to April 2011) immediately preceding the competition in a post-secondary institute (University, College, Technical College, Culinary School).
- Teams may be made up of any number of students, but 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.
- Each school may enter more than one team.
- Each entry must be an original concept by the student(s).
- 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.
 - Commercially available Canadian pulse crops and products include;
 - 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.
 - 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).
 - 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 precooked) and bean flakes (pre-cooked).
 - 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) or email to tder@pulsecanada.com prior to March 31.

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 which will be displayed on the day of the product development competition.

Presentation and product tasting

Teams must prepare a 10-15 minute oral presentation (PowerPoint or other) and samples of their final product (enough for at least six judges) 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
TOTAL	140

* 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 provincial pulse grower associations, 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.
- 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 \$100 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 July in Vancouver.

Pulse Product Development Competition Finals

- Vancouver, July 10-13, 2011
- 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 in July in Vancouver.

- 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 Vancouver 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*

- Student sign up by February 28, 2011 (see details below).
- Written 3-4 page report March 31, 2011 to be submitted to Pulse Canada.
- Provincial competition in April (to be held at an institution selected in each province).
- National competition to be held between July 10-13 in Vancouver.

*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 28, 2011:

- 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, Food Innovation
Pulse Canada
204 925 3783
tder@pulsecanada.com

CANADIAN MANUFACTURERS OF PULSE FLOURS and FRACTIONS

SUPPLIER	PRODUCTS
Best Cooking Pulses, Inc. Margaret Hughes - Sales & Marketing 124 -10th Street NE Portage la Prairie, Manitoba Canada, R1N 1B5  Tel (204) 857 4451 E-mail margaret@bestcookingpulses.com www.bestcookingpulses.com	Conventional and Organic . - 'Best Pea Fiber' (approved as a <i>dietary fiber</i> in Canada and US) - Yellow and Green Split Pea Flours, Whole Green Pea Flour - Pulse Flours and Custom Grinds - Yellow and Green Split Peas, Whole Peas
Nutri-Pea Limited 880 Phillips Street, Portage la Prairie, Manitoba Canada, R1N 3B7  Tel 1-877-564-3625 E-mail sales@nutripea.com www.nutripea.com	- Pea Protein Isolates - Native and Modified Pea Starches - Dietary & Functional Pea Fibres - Pea Flours - Custom Blends <i>Pea ingredients derived through wet-process manufacturing</i>
Parrheim Foods Glenn O'Hara - General Manager 817 48th Street East Saskatoon, Saskatchewan Canada, S7K 0X5  Tel (306) 931 1655 E-mail glenn@parrheimfoods.com www.parrheimfoods.com	- Pulse Flours - Pea Protein - Pea Starch - Pea Fibre - Bean Protein - Bean Starch - Barley Beta-glucan <i>Pea ingredients derived through dry-process manufacturing</i>
Infra-Ready Foods Mark Pickard, President 850C 56th St. E. Saskatoon, Saskatchewan Canada, S7K 5Y8  Tel (306) 242 4950 E-mail info@infreadyproducts.com www.infreadyproducts.com	- Pre-cooked, pre-cooked flaked, or pre-cooked and powdered lentils (large and small green; red; french) - Pre-cooked or pre-cooked and powdered beans (pinto, black, pink, great northern, navy, red) - Pre-cooked or pre-cooked and powdered chickpeas <i>Pulses are pre-cooked using infrared cooking technology</i>
Diefenbaker Seed Processors Ltd. P.O. Box 69 Elbow, Saskatchewan Canada, S0H 1U0 Tel (306) 644 4704 E-mail admin@dspdirect.ca www.dspdirect.ca	- Chickpea Flour (Besan) - Yellow Pea Flour Also Available - Desi Chickpeas - Yellow and Green Split Peas, Whole Peas - Red and Green Lentils, Split Red Lentils - Beans (kidney, navy, black, pinto, small red)

SUPPLIER (cont'd)	PRODUCTS (cont'd)
Grain Process Enterprises Ltd 115 Commander Blvd Scarborough, Ontario Canada, M1S 3M7 Tel (416) 291 3226	- Chickpea Flour - Pinto Bean Flour - Yellow Split Pea Flour
K2 Milling Ltd 55 Industrial Road, PO Box 154 Tottenham, Ontario Canada, L0G 1W0 Tel (905) 936 3494 E-mail k2milling@hotmail.com www.hayhoe.com	- Pea Flour - Navy Bean Flour - Kidney Bean Flour - Lentil Flour <i>K2 Milling is a custom manufacturer of pulse flours</i>
Mountain Meadows Food Processing (2004) Ltd. Site 13, Box 45, R.R. 1 Legal, Alberta T0G 1L0 Canada Tel (780) 961 2470 Email info@peabutter.ca	- Pea Butter - Pea flour
Brar Natural Flour Mills 101 Plymouth St. Winnipeg, MB. R2X 2V5 Tel (204) 697 9441 2131 Queen Street Abbotsford, BC, V2T 6J3 Tel (604) 859 3030 Email lahorabrar@yahoo.com	- Brar Chickpea (100%) Flour (Besan) - Sher Whole Chickpea (100%) Flour (with hulls)