‘Superfood’ Provides the Seed for a New Business and Novel Culinary R&D at George Brown College

by Lisa E. Boyes

Whichever way you slice it—or, in this case, pour it—quinoa (pronounced “keenwah”) is a superfood that could spell a superb opportunity for a new Toronto-based business owner, Marie Amilcar of Your Fitness Dish Inc. Food scientists and students in George Brown College’s Centre of Hospitality and Culinary Arts are helping the entrepreneur formulate that opportunity, with seed funding from the college’s Office of Research and Innovation.

Amilcar aims to bring to market Canada’s first line of quinoa-based, non-dairy beverages, called “QuinWow,” for consumers with lactose intolerance and a range of other diet and health needs. Quinoa, an ancient grain that South Americans have consumed in diverse dishes for thousands of years, is not yet commonly used in North American foods or beverages. With a pleasant, nutty flavour, quinoa contains, unlike rice alternatives, all nine essential amino acids, making it a complete protein for vegetarian and vegan diets. It’s also very rich in iron, manganese, magnesium, calcium, fibre, vitamins and minerals, and is gluten-free, for those with allergies or digestive disorders.

Says Amilcar, “Many people see this beverage as more than a milk alternative, given its many nutritional attributes, and George Brown College has been instrumental in helping us bring this product to the market as quickly as we have.”

Amilcar was connected to George Brown College and food scientists Winnie Chiu and Moira Cockburn through Amilcar’s membership in the Toronto Food Business Incubator (TFBI), a not-for-profit organization that provides development services to food-industry micro-enterprises. The college and TFBI have worked together previously on other applied research food projects with industry partners. Amilcar had developed a base beverage formulation using quinoa and needed R&D expertise to create the optimum recipe and further develop it with different flavours.

“We worked with Marie throughout the process,” says Cockburn, “sourcing commercially available ingredients, optimizing the formula, establishing processing methods and preparing for larger batch scale-up.” Central to this process has been the conversion of volume-based ratios of recipe ingredients to manufacturing-standard, weight-based measures, which produce a consistent quality product, batch after batch.
Initial and ongoing consumer taste-testing has literally fed into the development process over much of the past year, while students in the Culinary Management Nutrition Program have also been working with the industry partner to assess the market potential of the new product line and to help develop the formulation. Irene Ngo is the lead student research assistant on the project: “Working on this project has been a great learning experience,” says Ngo. “It pushed me to think of out-of-the-box solutions, while also applying techniques I learned from my food science class.” Students interested in learning more about food science volunteer to work on such food-development projects, and Cockburn is also a program instructor.

"Being able to outsource part of the product-development process has helped us focus on other areas like promotion and marketing," says Amilcar. During the next phase, which is mass production of the QuinWow beverage, Amilcar adds, "I will continue to rely on the expertise of the staff and students at George Brown College."