

# A HEALTHY TWIST ON A VENEZUELAN FAVORITE

THE AREPA, A POPULAR VENEZUELAN DISH, GETS NEW LIFE ON (AND OFF) THE SHELF WITH HELP FROM FIRST

## SHELF-LIFE TESTING

### PROJECT ESSENTIALS

**Principal Investigator:**  
Candace Rambert &  
Susan Plummer  
**Years Active:** 2015-16  
**Lab:** Food Innovation &  
Research Studio

**Support from:**  
Federal Economic  
Development Agency  
for Southern Ontario  
(FedDev)

NSERC

**Industry Partners:**  
Las Reinas

Las Reinas—which translates from Spanish to “the queens”—is a Toronto-based start-up and Latin-inspired food products brand, which focuses on offering healthy ready-to-eat and pantry products.

Owners Beth Paz and Eloisa Bertorelli both of Venezuelan decent, founded Las Reinas after seeing a market gap for people seeking to maintain a healthy diet who do not want to sacrifice the vibrant flavors of Venezuelan cuisine.

“Our product was very artisanal—we sold at farmer’s markets in Toronto and wanted to start making bigger batches to sell to stores,” says Beth Paz, Finance and General Business Logistics Managing Partner for the company.

Their cornerstone product was the Venezuelan arepa—a traditional South American savory cake that can be eaten either stuffed like a pita, or topped with protein, cheese or vegetables. Typically, arepas are simply made from corn flour, salt and water but Las Reinas has added a very unique twist on tradition by adding vegetables

The exclusive use of fresh vegetables and ingredients meant that the veggie arepas didn’t last more than a week in the fridge. To expand their market and better meet the needs of their customers, Las Reinas wanted to explore ways to make their product last longer.

Their idea was to use seasonal and locally sourced ingredients in a line of frozen arepas which would be designed to be

toasted at home and filled with any number of healthy options. The inclusion of superfoods and seeds like flax, sunflower seeds and chia gave a delicious extra dose of healthy nutrients.

Las Reinas partnered with the Food Innovation & Research Studio (FIRST) to develop a line of three freezer ready arepa recipes: kale/cilantro, carrot, and beet. The George

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BETH PAZ, FINANCE AND GENERAL BUSINESS LOGISTICS MANAGING PARTNER, LAS REINAS

Brown research team included Candace Rambert (Culinary Technician), Susan Plummer (Applied Research Food Scientist) and Kelly-Anne Kerrigan, a Student Researcher from the Culinary Management – Nutrition program.

The next step? Shelf-life testing. Las Reinas needed to know how long their delicious product would last in the average consumer freezer. To do this, the research team conducted several experiments including testing different packaging materials. Arepas were frozen, tasted and evaluated over the course of a few months. The team monitored the frozen arepas for changes in taste, appearance and freshness.

Student Kelly-Anne Kerrigan gained a lot of valuable experience during the project. “I learned that proper ingredient selection and sourcing is significant when wanting your product to have a longer shelf life,” she says, “and the importance of proper packaging, especially since the arepas were to be frozen.”

The arepas are confirmed to last at least 12 weeks (3 months) frozen. Las Reinas now have three freeze thaw stable formulae that are ready to take to a larger scale production and confidently sell to their customers.

“I would recommend other small businesses that want to take their product to the next level to partner up with [FIRST]—the team is very professional, approachable and take their job really seriously,” says Beth. “Our product was very ethnic and we were impressed by how much research they did on the traditional arepa recipes to bring recommendations on our twist on the tradition.”