Awareness of the vegan lifestyle has been rising since the early 2000s, and the market has responded accordingly: Toronto’s streets are lined with vegan cupcake and raw food bars. But eating wholesome, balanced meals day to day can still be a challenge. NONA Vegan Foods, a Toronto SME, was founded by Kailey Gilchrist, a longtime vegan to accommodate the often challenging act of balancing a nourishing vegan diet with hectic schedules and busy days.

Her company’s standout product is a vegan alfredo sauce, a recipe originally passed down from her mother. After repeated encouragement from her friends, Kailey finally decided to commercialize her unique sauce, which has become hugely popular in vegan and non-vegan communities alike for its inventive flavor and health benefits. NONA’s vegan alfredo is currently being sold in eleven stores in its first year of business, with an agreement to begin rolling out into Whole Foods stores this year.

But there was one clear challenge: the shelf life of this delicious, cashew-based sauce topped out at about ten days. So NONA Vegan Foods came to FIRST to dramatically improve the shelf life of the product.

Using a combination of new ingredients, new processing methodologies, new packaging techniques and a modified product design, FIRST managed to greatly exceed expectations. Principal Investigator Rob McCurdy, M.Sc. has more than 18 years combined industry experience in both product and process development. His student researcher, Hayley Turnbull, is a fourth semester Culinary Management student, has worked on a variety of projects at FIRST including recipe development, product development and nutrition analyses.

Typically, this type of product improvement is challenging from a technological perspective due to the neutral pH nature of an Alfredo sauce. By reducing the thickness of the sauce and selecting improved raw ingredients, the research team was able to modify the cooking process to deter microbiological spoilage in the finished product. After only four sets of trials, the NONA vegan alfredo sauce was approved. The new sauce has a better visual profile, with herb flakes throughout the sauce and a more traditional “creamy white” color.

Best of all, the shelf life of NONA’s alfredo sauce has ballooned from ten days to thirteen weeks. The company has a new standardized formula, which includes the recommended processing techniques, improved raw materials specifications, laboratory results quantifying the microbial attributes of the sauce, and recommended labeling suggestions. NONA was also provided with a CFIA compliant nutritional facts panel.

With FIRST’s help, the shelf life of NONA’s alfredo sauce has ballooned from ten days to thirteen weeks.

With these changes in hand, along with some new ingredient suppliers, NONA Vegan Foods is now able to tap into a whole new market.