



Company/Product: Ripely

Concept: Using food to save food

Elevator Pitch: For food retailers and consumers who suffer from losses of money, time, and convenience as a result of the inherently short shelf life of fresh food. Ripely is a mixture of protein and water that can be sprayed onto fresh food in order to increase shelf life by 100% or more. Ripely is safe, edible, odorless, tasteless, invisible, and comes at no expense to food quality.

Problem We Are Solving: Every year 30-40% of all food production in the US and worldwide is wasted, resulting in losses of \$161 billion domestically and over \$1 trillion globally. This is due to the short shelf life of most fresh foods, including produce and meats. Food retailers suffer from decreased margins and supply chain difficulties due to food waste. Likewise, consumers interested in eating fresh whole foods face daily inconveniences and monetary losses due to frequent shopping trips and food waste in the home.

Solution (High Level): Ripely uses food to save food by producing specialty proteins using a timeless, food-safe process (a yeast fermentation that is akin to beer making). The proteins that Ripely produces are protected by a provisional patent, but share similarities to a protein that is harvested from animals and called fibroin. Fibroin is FDA approved as GRAS, and is edible and highly biocompatible with humans. It has been shown that fresh food items coated in an invisible, tasteless, odorless, and edible coating of fibroin protein show a doubled shelf life, enhanced resistance to mechanical damage, inhibited microbial growth, and retention of moisture and nutrition. Ripely builds upon this work to create improved fibroin that has superior food saving ability, is more easily applied to food, and is 100% animal-free.

Market Analysis Overview: Ripely's edible coatings fall under the Edible Films and Coatings Market. In the US, this market was valued at \$2.4 billion in 2019, and is expected to reach \$4.45 billion by 2027. This market is dominated by artificial and indigestible petroleum waxes which don't increase shelf life, can only be applied to a few foods, and are viewed negatively by consumers. Ripely's ability to sell to consumers and the use of edible proteins represent a new market opportunity and disruptive product within the Edible Films and Coatings Market. Ripely is seeking \$100,000 in seed funding in order to enhance MVP development and facilitate beta testing among consumers and food retailers.

Team & Contact Info:

Alex Connor, Ripely CEO, Chemical and Biological Engineering PhD Student at Rensselaer Polytechnic Institute.

Email: connoa5@rpi.edu

Mobile: (724) 759 8034

LinkedIn: <https://www.linkedin.com/in/alex-connor-81212bb6/>