

## T.I.N.Y. Solutions

<u>Team Member Name</u>	<u>Year</u>	<u>Major</u>
Andrew Carlson	2026	Management
Lily Corcoran	2028	Int. Business & Sustainability
Jillian Dabrowski	2026	Marketing & Sustainability
Alyssa De La Cerda	2026	Int. Business & Sustainability
Nicolas Vasquez	2028	Int. Business

**Advisor(s):** Astrid Schmidt-King, David Luvison, Molly Vanucci, Joseph Carrier, Keith Saylor

**Topic Title:** Nurturing little lives and healthier futures by reducing microplastic exposure

**Audience:** LifeStraw Board of Directors

### Sustainable Development Goal

SDG #3: To ensure healthy lives and promote well-being for all at all ages

### Executive Summary

T.I.N.Y. Solutions aims to reduce microplastic exposure during infancy by developing FirstStraw, an adaptable filtration accessory for baby bottles that helps protect infants during feeding. Infants are vulnerable to environmental contaminants, and emerging research shows that common feeding practices, such as warming formula or rinsing bottles, can cause plastic baby bottles to shed microplastics that infants then ingest. Studies estimate that bottle-fed infants consume more than 1.5 million microplastic particles each day, at a stage of life when their immune, digestive, and neurological systems are still developing. For parents already responsible for protecting their child's health, this invisible risk is deeply concerning and largely unavoidable with today's products.

To address this problem, T.I.N.Y. Solutions proposes pursuing strategic accreditation with the Environmental Working Group (EWG) and developing FirstStraw. This adaptable filter fits onto baby bottles and filters out microplastics without compromising nutrients, taste, or convenience. FirstStraw is designed to integrate seamlessly into existing routines, offering protection without asking parents to overhaul how they feed their child. Built on LifeStraw's filtration technology, this solution focuses on reducing exposure before harm occurs, rather than placing the burden on parents to monitor or replace products constantly. Beyond its social impact, FirstStraw represents an opportunity within the rapidly growing non-toxic baby products market, projected to reach \$475.15 billion by 2030. As awareness of microplastics accelerates and families seek safer alternatives, FirstStraw positions LifeStraw as a leader in science-backed, health-protective innovation. Most importantly, this product advances a mission-driven commitment to protecting those who cannot protect themselves. By reducing microplastic exposure at the very start of life, we can offer families peace of mind and help ensure that a child's first nourishment supports a healthier beginning.