

MOVE Consulting Group

<u>Team Member Name</u>	<u>Year</u>	<u>Major</u>
Member 1: Tristan Bird	Freshman	Business Administration
Member 2: Ryan Rexford	Freshman	Business Administration
Member 3: Joseph Kim	Freshman	Human Biology

Advisor(s): Aidan Williams

Topic: The PepsiCo Revolution: Ending Microplastics for a Healthier Future

Audience: PepsiCo Board of Directors

Sustainable Development Goal

SGD #3: Ensure healthy lives and promote well-being for all at all ages.

SGD #12: Ensure sustainable consumption and production patterns.

Executive Summary

PepsiCo is one of the largest food and beverage companies in the world, and as such, they have a unique responsibility to ensure their products are safe for human consumption and the environment. New and emerging research suggests that microplastics can cause hormonal imbalances, contain endocrine-disrupting substances affecting fertility, and lead to the development of certain cancers. Additionally, microplastics can disrupt aquatic ecosystems and food chains, which may ultimately be consumed by humans. PepsiCo is a leading user of single-use plastic bottles created using Polyethylene Terephthalate (PET) and Recycled Polyethylene Terephthalate (rPET). PET and rPET plastic bottles are known to release upward of 250,000 nanoplastic particles per liter, posing a significant risk to humans and the environment.

We urge PepsiCo to take a proactive, rather than reactive approach in stopping the emerging microplastic health crisis. PepsiCo should implement a 10-year directive phasing out traditional virgin PET to rPET in the first 5 years. After the 5-year mark, PepsiCo should start the transition to bioplastic-like Polylactic Acid (PLA) for their single-use plastic bottles by 2035. PLA is derived from corn and sugarcane making it recyclable, compostable, biodegradable, and incinerable under proper industrial conditions. Furthermore, due to its organic structure, PLA doesn't release microplastics. While scaling and implementing PLA into the PepsiCo supply has its challenges, given PepsiCo's strong financial position and industry-leading presence, investing in PLA manufacturing and processing is perfectly feasible. As an industry leader in the food and beverage industry, PepsiCo can start an industry shift truly prioritizing the health of consumers and the environment.