

Environmental Impact Comparison of Just Salad's Reusable Bowl and Disposable Containers



Challenge

Just Salad was interested in a life cycle assessment (LCA) to compare the environmental impacts of their Reusable Bowl Program (MyBowl) as compared to a disposable fiber bowl.

Solution

NYSP2I performed an ISO 14040/44 compliant comparative assertion LCA of the MyBowl Program and a comparable disposable fiber bowl.

Results

- The results of the LCA show that after just two uses, the MyBowl has less global warming impacts than the disposable fiber bowl. These findings are substantiated through Monte Carlo uncertainty analyses with 95% confidence.
- The results also show that the MyBowl results in less water consumption impacts after the second use as compared to the disposable bowl, though highly uncertain water consumption data prevents these estimates from being substantiated at the 95% confidence level.

Just Salad

[Just Salad](#) is a fast-casual restaurant concept founded in 2006, with locations across New York, New Jersey, Florida, Illinois, Pennsylvania, and North Carolina. The company's mission is to make Everyday Health and Sustainability Possible.

Just Salad is home to the world's largest and longest-running restaurant [Reusable Bowl Program](#), which was introduced in 2006 at the company's very first location. Under the program, customers purchase a reusable bowl for \$1, wash it at home, and bring it back to the store for refilling. A free salad topping is provided with every use of the bowl. The program is designed to reduce waste

"NYSP2I's life cycle assessment of our MyBowl program has provided powerful validation of the environmental benefits of reuse. These actionable insights will help us design strategies to incentivize higher rates of reuse among our customers, which will in turn conserve natural resources and reduce greenhouse gas emissions. We thank the NYS2PI team for their diligence throughout the project."

by displacing the need for single-use bowls.

Challenge

To quantify the environmental benefits of Just Salad's Reusable Bowl Program (MyBowl) versus single-use containers, Just Salad sought a full life cycle assessment (LCA) covering multiple environmental indicators. Just Salad was particularly interested in evaluating how many reuses of the MyBowl were needed to result in lower global warming and water consumption impacts compared to disposable bowls.

Solution

New York State Pollution Prevention Institute (NYSP21) performed an ISO 14040/44 compliant comparative assertion LCA of the MyBowl program and a comparable disposable fiber bowl. The goal was to compare environmental impacts of the two containers, with a particular focus on global warming and water consumption.

Data and findings represent impacts associated with each use of the bowls. The MyBowl is filled, used, and then washed by the customer prior to reuse. The disposable fiber bowl is filled, used, and either landfilled or composted.

Results

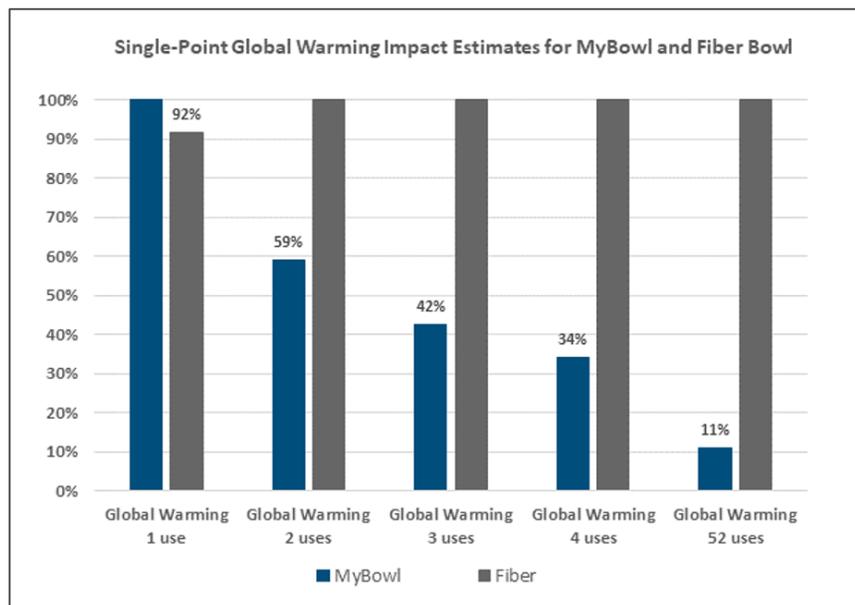


Figure 1. Single-Point Global Warming Impact Estimates (greenhouse gas emissions) for MyBowl and Fiber Bowl

Single-point estimate LCA results show with each wash and reuse of the MyBowl, the global warming impacts, or impacts from greenhouse gas emissions, shrink in comparison to each use of a disposable fiber bowl as follows:

- After two uses, the MyBowl results in 41% fewer greenhouse gas emissions
- After three uses, the MyBowl results in 58% fewer greenhouse gas emissions
- After four uses, the MyBowl results in 66% fewer greenhouse gas emissions
- After 52 uses, the MyBowl results in 89% fewer greenhouse gas emissions
- Single-point estimate results were substantiated through Monte Carlo uncertainty analysis with 95% confidence.

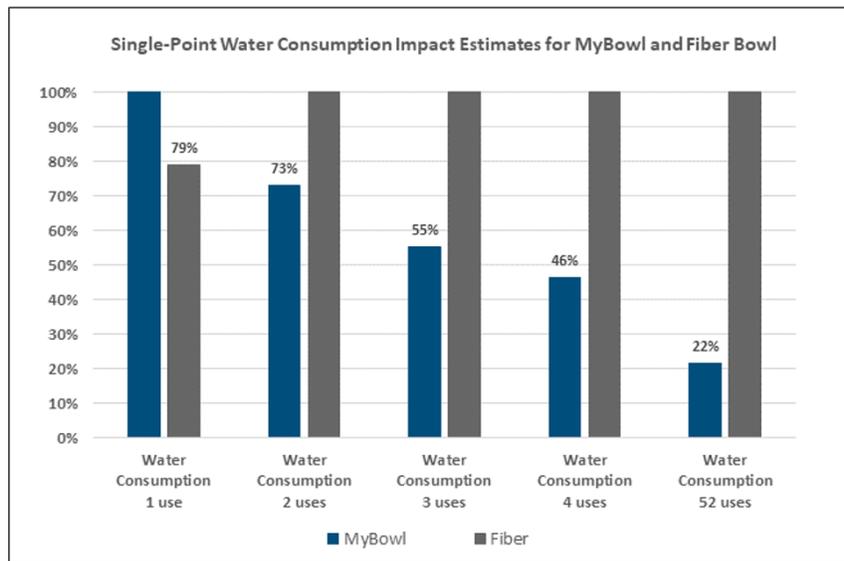


Figure 2. Single-Point Water Consumption Impact Estimates for MyBowl and Fiber Bowl

Single-point estimate LCA results show with each wash and reuse of the MyBowl, the water consumption impacts shrink in comparison to each use of a disposable fiber bowl as follows:

- After two uses, the MyBowl results in 27% less water consumption
- After three uses, the MyBowl results in 45% less water consumption
- After four uses, the MyBowl results in 54% less water consumption
- After 52 uses, the MyBowl results in 78% less water consumption
- A lack of precise water consumption data through the supply chain has made it impossible to substantiate these results with 95% confidence

The results of the LCA show that after just two uses, the MyBowl has less global warming impacts than the disposable fiber bowl. These findings are substantiated through Monte Carlo uncertainty analyses with 95% confidence. Single-point estimates also show that the MyBowl results in less water consumption impacts after the second use as compared to the disposable bowl, though highly uncertain water consumption data prevents these estimates from being substantiated at the 95% confidence level. To maximize the water-conservation and greenhouse gas emission benefits of reusables versus disposable containers, Just Salad recommends that customers wash the Reusable Bowl in a full dishwasher at the most energy- and water-efficient setting possible.

Partners



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