

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



### Challenge

Just Salad was interested in a life cycle assessment (LCA) to compare the environmental impacts of their BringBack bowl as compared to a single-use container.

### Solution

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

### Results

- The results of the LCA show that after just two uses, the BringBack bowl 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 BringBack bowl 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 began operating a reusable bowl program in 2006 to reduce waste from single-use packaging. In 2021, the company extended this reusable bowl program to digital orders. Under this program, called BringBack, customers ordering via the Just Salad mobile app elect to receive their order in a reusable container. The

*"NYSP2I's life cycle assessment of our BringBack 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."*

customer then returns the bowl to Just Salad for washing and sanitation, and the bowl is subsequently reused.

## Challenge

To quantify the environmental benefits of Just Salad's Reusable Bowl Program (heretofore termed "BringBack") 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 BringBack were needed to result in lower global warming and water consumption impacts compared to disposable bowls.

## Solution

New York State Pollution Prevention Institute (NYSP2I) performed an ISO 14040/44 compliant comparative assertion LCA of the BringBack bowl 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 BringBack is filled, used, and then returned to Just Salad for washing and sanitizing prior to reuse. The disposable fiber bowl is filled, used, and either landfilled or composted.

## Results

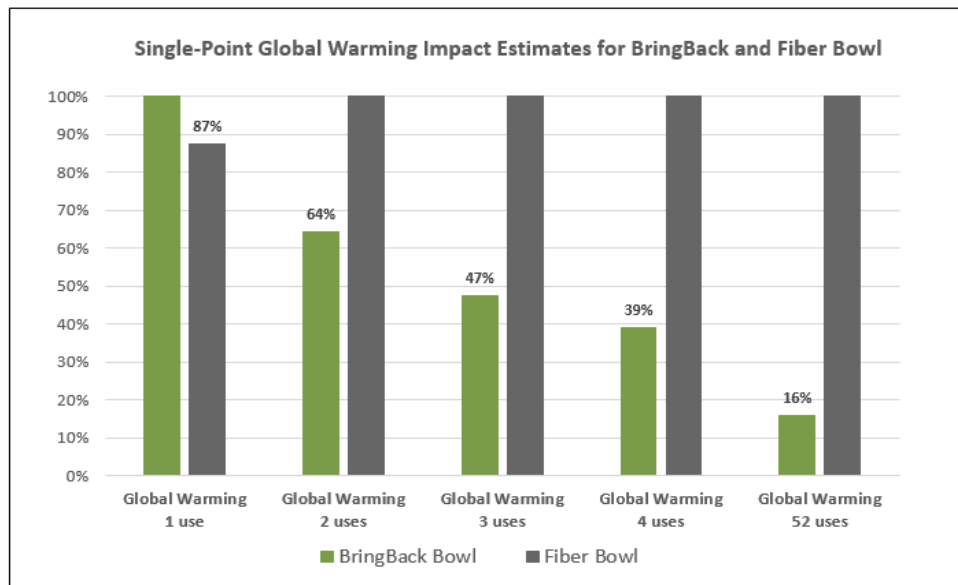


Figure 1. Single-Point Global Warming Impact Estimates (greenhouse gas emissions) for BringBack and Fiber Bowl

Single-point estimate LCA results show with each wash and reuse of the BringBack bowl, 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 BringBack bowl results in 36% fewer greenhouse gas emissions
- After three uses, the BringBack bowl results in 53% fewer greenhouse gas emissions
- After four uses, the BringBack bowl results in 61% fewer greenhouse gas emissions
- After 52 uses, the BringBack bowl results in 84% fewer greenhouse gas emissions

Single-point estimate results were substantiated through Monte Carlo uncertainty analysis with 95% confidence.

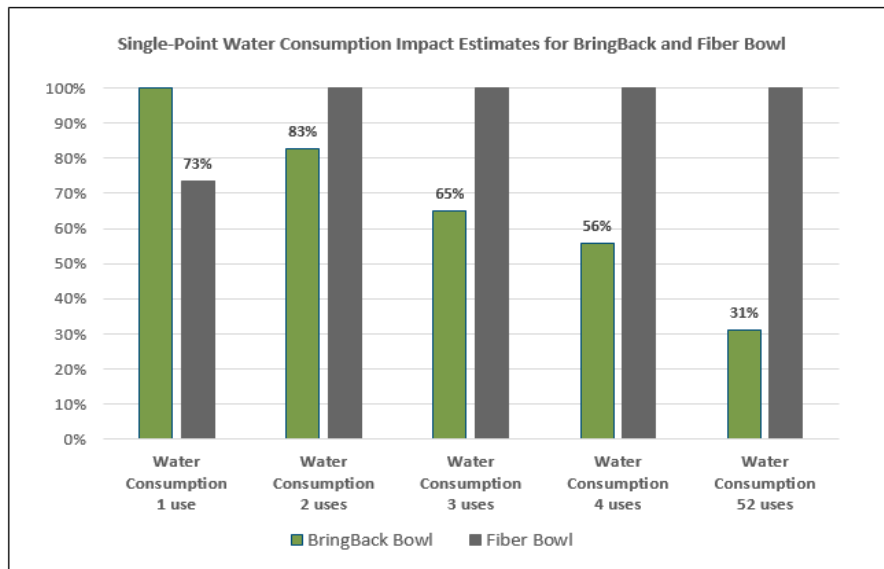


Figure 2. Single-Point Water Consumption Impact Estimates for BringBack and Fiber Bowl

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

- After two uses, the BringBack bowl results in 17% less water consumption
- After three uses, the BringBack bowl results in 35% less water consumption
- After four uses, the BringBack bowl results in 44% less water consumption
- After 52 uses, the BringBack bowl results in 68% less water consumption
- A lack 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 BringBack bowl 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 BringBack bowl 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.

## Partners



☎ 332-213-0101  
 @ sustainability@justsalad.com  
 🌐 www.justsalad.com  
 🏠 663 Lexington Ave  
 New York, NY 10022

## For more information please contact us:

☎ 585-475-2512  
 @ nysp2i@rit.edu  
 🌐 rit.edu/nysp2i  
 🏠 111 Lomb Memorial Drive, Bldg 78  
 Rochester, NY 14623