

Plate Waste Study Report

The plate waste study was done at Solana Santa Fe School within the Solana Beach School District. Solana Santa Fe School serves 3 lunches per day (1st lunch: kindergarten; 2nd lunch: 1st-3rd graders; 3rd lunch: 4th-6th graders). 43 out of the 137 1st – 3rd graders obtained school lunch on that day (31.4% participation). The duration of their lunch break was 20 minutes, and the students will get approximately 15 minutes of sit-down time to eat their lunch. The school operates on an Offer vs. Serve basis, and salmon burger and chicken alfredo were the two entrees options that students could pick from on the day of the study. An all-you-can-eat self-serve salad bar is available to the students every day.

The subject of this study is the plate waste that 1st-3rd grade students are having from their school lunch. It was planned that 10 before and after lunch data will be collected from each gender in the form of pictures. The students were randomly selected from the lunch line while they are waiting to get their lunch from the serving window. The data collectors asked for their permission to take pictures of their lunch before they start eating, and the student were told to bring their plates and trash to a designated table on the side of the lunch area when they are done eating. A piece of instruction cards (as shown below) were also given to the students at the time they were selected to remind them to not throw away their trash. The subject number were written on the back of the cards.

In order to collect enough data points, 12 instruction cards were made for each gender, and the data collectors were able to catch 11 boys and 11 girls from the lunch line to participate in the study. 10 boys and 10 girls brought back their plates after lunch, and their data were entered into this analysis.

The collected data were analyzed by visual estimation. The results of the study are summarized in the charts on the next page.

According to the data, the distribution of waste was similar between girls and boys. Only 5 students in total did not have any plate waste. The short length of the lunch break might be a contributor to the high plate waste among these students. Portion size might be another factor that lead to plate waste. Since the portion size for entrees were made according to high school students, the amount of food given to the 1st-3rd graders might be too much for them to consume. In addition, the portion size might vary from scoop to scoop while the staff were serving the students.

Possible ways to reduce plate waste is to increase the length of the lunch break so that the students can have longer time to eat. However, it was observed that many students actually finish eating way before the end of their lunch period. Therefore, it is also important to make sure that each of the scoops were even and done as closely as possible according to the USDA guidelines. For example, proper 8oz measuring spoodles for chicken alfredo instead of a flat spoon. This way, giving students excess amount of entrée might be prevented. Employees should be regularly trained and kitchen sites should be regularly audited to make sure the guidelines are followed.

Data Charts

	Percent Wasted and the Counts			
Gender	0-20%	21-40%	41-60%	61-80%
Girls	3	2	3	2
Boys	4	2	1	3

