



Educational Cultural Change as a Solution to Food Loss and Waste

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As a society with increasing needs and demands, consumption is growing exponentially. Nations across the globe are met with the pressures of producing more food at a faster rate in order to meet the accelerating population growth. This begs the question, what happens to the excess food that is not consumed?

Food waste takes place at various levels ranging from farms, food manufacturers, consumer-facing businesses and households¹. This could be due to several reasons including low market prices and high economic cost, the demand for not just more products but variety for a single product and the consistency and freshness of those products, lack of knowledge on repurposing ingredients and the right methods to store them within households. A significant amount of food waste, approximately 25%, occurs within households at the consumption stage in medium- to high-income countries². Why are we wasting all this food that is produced *for us*?

The notion of “when in doubt, throw it out” is long-standing, especially when there is a lack of food knowledge. It is important to throw doubt out of that phrase. The cultural growth and evolution of a society stems in large part from the quality of the education system. Schools, colleges, and universities act as vehicles for developing sustainable mindsets and driving effective change. This starts early. Focusing on young people is an opportunity to create a culture change not just within these institutes but within households and the greater community as well. The knowledge and behaviours that they absorb and implement has a trickle down effect since it can positively impact the actions and mindsets of their family members and neighbors.

So how do we end food waste and foster a more sustainable culture? Strategies need to be implemented throughout the education system - logistics, communication, quality control, and in- and out-of- classroom activities. Lunch is often served too early, before recess, and the students have limited time to eat the food that lacks diversity. If the timing is adjusted to post recess when the children have

¹ ReFED. “A Roadmap To Reduce U.S. Food Waste by 20 Per cent.” 2016.

² Gustavsson, et al. “Global Food Losses and Food Waste.” FAO. 2011.

built an appetite *and* additional time is allotted to them, they might end up consuming more and wasting less.

One way to nudge students to consume healthier foods is by incorporating programs like the [Smarter Lunchroom Movement](#) powered by Cornell³. This movement includes strategies such as labeling foods with fun names like 'X-Ray Vision Carrots' or 'Asparagus rex'. Increasing the appeal towards food can help bust the myth that food that does not look perfect is not edible and promote the motto of **embracing imperfection**.



Schools can also attempt to serve meat on alternate days and promote a more plant based diet that not only reduces the overall meat consumption and in turn contributes to the reduction of greenhouse gas emissions, water usage, and eutrophication (among other issues), but also enables students to understand the importance of inculcating a plant-based lifestyle. An intervention conducted in Maryland, testing substitutes for popular lunch items , found that school kids would readily consume soy-based alternatives of beef patties, regular pastas, and

chicken nuggets though it is important to caveat that the soy-based items were not identified as such on the menus. This demonstrated that students did not have rigid consumption preferences between meat and plant-based food items⁴.



Active interventions can help foster sustainable behaviour among students. Dedicating school hours to gardening - growing fruit and vegetable patches within or outside of school premises (in a monitored fashion), might not only instill favorable attitudes but it can allow schools to serve these same fruits and vegetables to the children, hence, promoting their hard work and building a trusting relationship with their food. This particular intervention was conducted across 16 elementary schools in Texas where more than

³ Cornell University. "Nudging Children to Eat Healthier: Smarter Lunchrooms Movement". 2017.

⁴ Soy Goes to School: Acceptance of Healthful, Vegetarian Options in Maryland Middle School Lunches. Lazor et al. 2010

50% of the kids were Hispanic and where more than 50% of the students participated in the free and reduced lunch program (FRL). The intervention significantly increased vegetable intake by half a serving⁵.

Distribution of leftover food can be practiced within and outside classrooms as well. Inter- and intra-class potlucks are a great opportunity for students to bring leftover food to school. An additional benefit to this is that students are exposed to foods from different cultural backgrounds which can foster a richer sense of inclusion. External distribution can involve collaborating with other schools in the neighbourhood and establishing a food sharing program, donating at shelters and orphanages, and setting up food stalls with excess food at fairs and farmers markets that involve student volunteers. It is also imperative to bust the myth that food that does not look perfect is inedible. Serving students imperfect looking foods early on can help embrace the imperfect by normalising the aesthetic. This can impact not just their own purchasing habits in the future but also that of their parents while they go grocery shopping together.

Education can play a vital role in bringing about cultural and mindset changes in the present and in the future towards managing food loss and waste in a sustainable manner. More importance needs to be given to the youth and their ability to propel this movement forward in order to realise not just SDG 12.3 but all the other sustainable development goals that are impacted simultaneously. As Chef Ann very rightly states, “We can save the planet if we empower school food professionals to make more sustainable healthy choices for the planet.”

⁵ School-based gardening, cooking and nutrition intervention increased vegetable intake but did not reduce BMI: Texas sprouts - a cluster randomized controlled trial. Davis et al. 2021.