



UNCOVERING THE DIRTY SECRETS OF A FOOD PARADISE

Young Journalists Go Undercover

Estelle Low & Miak Aw



Singapore is universally known as a food paradise, but far less is known about the enormous amount of waste generated daily by individuals, supermarkets, food outlets and hotels. 20-something investigative journalists Miak Aw and Estelle Low go undercover to shed light on how much we waste as a nation and why this needs to change.

About the Authors



(L-R) Estelle Low and Miak Aw are graduates of the Wee Kim Wee School of Communication and Information at Nanyang Technological University (NTU). Food Waste Republic was the culmination of their final-year project, which they undertook with fellow NTU student of journalism, Chen Wei Li. The writers have set up a website called Food Waste Republic to serve as an online resource to educate Singaporeans about wastage in the country and how to do more to prevent it.

INTRODUCTION

In the boisterous conviviality of a wedding banquet dinner, two waitresses exchanged surreptitious looks each time they had to clear a table of leftovers. While other waiters at the same event scrambled to knock off promptly at 11.30pm, the two headed to the kitchen to chat with the kitchen staff to find out more about how much food would go to waste that evening. After having put in some arduous hours of waitressing work and a bit of snooping, the girls shut their palm-sized notebooks, in which they had scribbled their observations for the night, as well as the mobile numbers of kitchen staff and fellow waiters. It had been a revealing night of investigative, undercover reporting.

Singapore has a reputation for being a gastronomic utopia, with an endless array of dishes available for sampling by the keen connoisseur or the merely curious. But the idea that we waste food just as much as we indulge in and relish it is a little less known.

DEVELOPING THE IDEA – INVESTIGATING FOOD WASTAGE IN SINGAPORE

As lifestyle and photo editors of *The Nanyang Chronicle* – a student-run campus newspaper published by the Wee Kim Wee School of Communication and Information at the Nanyang Technological University – we had been mulling over what our final-year project would focus on. As food lovers, we wanted to develop a story that would touch on what every Singaporean loves: Eating. But the decision to focus on food waste developed by chance. Inspiration struck us during one brainstorming session at a fast food outlet when we saw leftovers being discarded after customers had left. That was when we began questioning ourselves about food wastage in Singapore.

It took us a while to realise that we would learn more by applying for jobs as waitresses. Our initial approach was quite different, and in retrospect, somewhat naive. In January 2010, we sent emails to over 100 food and beverage companies, requesting for interviews to find out more about food wastage, as well as to learn more about the food and beverage industry in general. Our questions were wide-ranging and non-specific and we only brought up the issue of wastage peripherally. It had taken us five to six months of leg-work to finalise our news-lines, so we approached the field with enthusiasm and optimism.

Unfortunately, fewer than 10 replied, of which more than half were rejection emails, citing reasons of confidentiality and lack of time for not being able to help. Cold calling did not work either. Corporate



From left, Ms Miak Aw, Ms Estelle Low and Mr Chen Wei Li, the three NTU journalism students who collected food waste from over 150 households to determine the degree of food waste generated by families in Singapore.

communication representatives were more interested in sharing their latest press releases than trying to persuade their bosses to reveal sensitive and perhaps, contentious food wastage data. Replies were curt and defensive, often punctuated with words like “confidentiality” and “against our policy.” Eyebrows were further raised when we introduced ourselves as student journalists.

REVISING THE STRATEGY – INVESTIGATIVE JOURNALISM

A straightforward approach that touched on a topic like food wastage led to dead ends. With our credibility in question, overcoming limited information access proved to be our toughest obstacle. We revised our strategy and tried speaking to ground-level staff in supermarkets and food establishments. As the ones assigned with the duty of disposing of discarded or leftover food, these people were ostensibly best placed to provide us greater insights on food wastage. From there, we tried to speak to the rank-and-file workers as well, by masking our assignment as a business project (to find out more about inventory management) and an art project (to take photos of food wastage).

This was a turning point in the development of our project. As students interested in both investigative journalism and matters pertaining to the public interest, we had to devise methods that would allow us to glean more data on food wastage. Before quoting our sources, however, we called them to let them know who we were and informed them about our journalism project. We were motivated by a number of important questions: Do Singaporeans know how much food is wasted on a daily basis across the island? Are there Singaporeans struggling without enough to eat? What are the environmental costs of food wastage and are there alternatives to merely disposing of discarded food?

It was at this juncture that we signed up to work as banquet waitresses. It turned out to be a more productive route to learning more about food wastage in Singapore. We had never worked in the food and beverage industry so it was an eye-opener. By the time an 8-course dinner had reached its 6th dish, the guests were too satiated. Most of the food remained uneaten, or unfinished. Based on our observations and information shared by staff working in this industry, up to 30 per cent of the food served ended up in the garbage bin.

GOING 'UNDERCOVER' – BANQUET WAITRESSING & RESEARCH

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It has been reported that approximately 606 million kilos of food waste was generated in Singapore in 2009.¹ Numbers aside, it was difficult to make the topic of food wastage relevant to the average Singaporean, especially when food is easily available in the country.

To ferret out more facts on food wastage in Singapore, we spoke to over 200 people, most of whom were staff and personnel working in supermarkets and food retail outlets. During term break, our families suggested that we collect food waste from houses, since we had limited data on food wastage in Singapore. We established a target: We decided to collect food waste from 50 Housing Development Board apartments (HDBs), 50 condominium apartments and 50 private estate homes. We chose to conduct this exercise in Sembawang (northern Singapore) and Serangoon (north-eastern Singapore), areas we were familiar with as we all lived in neighbourhoods in these two locales. We even spied on bakeries in Sembawang that dumped unsold bread and shot video footage, unbeknownst to the bakery owners.

INITIAL FINDINGS

These unconventional, and some might say, not entirely above-board methods, were nonetheless both fruitful and revealing. For one, our initial research revealed that communities in developed countries like Singapore tend to favour perfect-looking fruits and vegetables – a tendency that is perpetuated by the manner in which large supermarkets display and encourage consumers to only buy seemingly 'perfect' produce. This leads to daily food wastage. Our interviews and observations indicate that at Pasir Panjang Fruits and Vegetables Wholesale Centre, imported fruits and vegetables undergo rounds of cosmetic grocery filtering. Perfect-looking ones make it to display shelves in supermarkets while those with slight blemishes wind up in the bin. Up to 300,000 kilos of food waste is churned out in the wholesale centre every day. This does not include the slightly defective fruits and vegetables discarded by supermarkets and individual shoppers.²

The food retailers we spoke to claimed to have zero food wastage as wastage eats into profits. However, we found out that food retailers, usually the larger ones, end up wasting food unwittingly. Rank-and-file workers are told to display enough food to fill up the shelves. We learnt about what some marketing experts refer to as the 'full-shelf theory'. According to this theory, full shelves in supermarkets excite shoppers and encourage them to buy more produce. Following this theory, food retailers stock their display shelves with an abundance of perfect-looking produce to entice shoppers.

Reducing food wastage becomes the least of their concerns. At a bakery we tracked, the shelves were stocked full with freshly baked bread an hour before closing time. In an effort to determine just how much of this bread would go to waste, we told the retailers that we had lost something and sought permission to search the bags in the bin centre. At the bin centre, we estimated that the bakery had thrown away 200 pieces of bread that night.



To find out how food gets wasted in the food production line, Mr Chen Wei Li, Ms Miak Aw and Ms Estelle Low (from left) masked their project as a business module and gained access to a food factory where they covertly took snapshots of food wastage.

THE FUTURE FOR FOOD WASTE SINGAPORE

Singapore's English language dailies, such as *The Straits Times* and *TODAY*, have in the past featured stories on food waste recycling as a possible solution to the problem of food wastage. The idea is not an uncommon one: To turn food waste into useful energy, such as compost or bio-gas, is regularly practiced in other developed countries and many Singaporeans are slowly, but surely, catching on to the idea.³ Besides that, a non-profit organisation *Food From The Heart* collects and distributes unsold, edible bread to the needy and its beneficiaries daily.

But a broad policy change towards food recycling is still untenable. IUT Global, an environmental waste technology and management company with its headquarters in Singapore, launched an initiative in 2007 in collaboration with an Austrian partner, to revolutionise food waste recycling in Singapore.⁴ However, the treatment plant reports that it is working at half capacity because universities, hotels and shopping malls still largely fail to separate their waste at the source to send it for recycling and treatment.⁵ At the same time, Singapore's National Environment Agency (NEA) has reported that if Singapore continues to generate waste for incineration at the current rate, it will simply become unsustainable in the long-run.⁶ Legislating food waste recycling seems to be a possible solution to the problem. However, our research with the NEA has revealed that based on their observations

and experiences, the agency does not feel its citizens are ready for such a change, given that the recycling of basic materials such as paper and plastics is still not a widespread practice in the island-nation. Singaporeans are still not accustomed to throwing recyclables into the right bin. Based on our interviews and observations, convenience overrides environmental-consciousness in this country.⁷ Most of us would rather dump our trash into the nearest bin than to voluntarily seek out recycling bins.

In sum, food waste is more than just the simple act of throwing away edible food. Our research and field work showed us that the problem prevails because modern society does not understand the source of the food that they find on the shelves of supermarkets. In essence, we learned that society has scant appreciation for how and where their food is grown (or raised) and what the actual food production process involves in terms of labour, effort and the impact on the environment.

As a result, food waste becomes a matter of economic expediency for the food and beverage industry and is of no consequence to a citizenry that has no concrete understanding of deprivation and hunger.

CONCLUSION

Despite our difficulties in researching this project, our brief stint as investigative journalists has revealed to us one humbling fact: food wastage is a problem that runs deep in our society.



From left, Ms Miak Aw, Ms Estelle Low and Mr Chen Wei Li snooped around a bin centre in Suntec City as one of the ways to understand the causes of food wastage in the tight-lipped food industry.

Embarking on this investigative project was a challenge. We were frequently insulted by our sources and we were almost caught on several occasions when we covertly filmed food retailers regularly dumping edible food at the end of the business day. Despite these obstacles, our team has produced an in-depth report (a total of 8 feature stories and 3 photo stories) on food wastage in Singapore.⁸ The stories can be read and downloaded from [foodwasterepublic.com](http://www.foodwasterepublic.com), a website we have subsequently set up to raise awareness about food waste in Singapore.

Looking forward, our website aims to be a resource platform on the topic of food wastage in Singapore. Besides giving our readers a better understanding of the food wastage problem in Singapore, we hope our stories will encourage individuals to spearhead an anti-food wastage movement, or at any rate, think twice before they throw out leftovers at the end of a meal. While we began as unassuming student journalists, we have come to the tail-end of our final year project a lot wiser and a lot more passionate about social issues in Singapore.

For more, please visit: www.foodwasterepublic.com

¹ Ong Dai Lin, "Letting it all go to waste," *TODAY*, April 16, 2010. <http://www.todayonline.com/Singapore/EDC100416-0000074/Letting-it-all-go-to-waste>.

² Interview with a waste management company that wishes to remain anonymous.

³ IUT Global Pte Ltd, <http://www.iutglobal.com>. City Farmer News, "Composting in the Tropics – Singapore Style," <http://www.cityfarmer.info/2008/12/09/composting-in-the-tropics-singapore-style>. Composting in Singapore Blog, <http://compostinginsingapore.wordpress.com> and ZeroWaste SG Blog, <http://www.zerowastesg.com/2009/02/04/start-composting-at-home>.

⁴ Tan Lay Leng, "Food Fuels Energy Plant" in *Innovation – The Magazine of Research and Technology*. Volume 9, No. 1. <http://www.innovationmagazine.com/innovation/volumes/v7n3/coverstory4.shtml>.

⁵ Victoria Vaughan, "Food Recycling Plant Going To Waste", *The Straits Times*, May 7, 2010. <http://wildsingaporenews.blogspot.com/2010/05/going-green-in-singapore-hits-and.html>.

⁶ National Environment Agency, Environmental Protection Division Annual Report 2004, "From 1970 to 2000, the amount of waste disposed of increased six times. At that rate, we would need to build a new incineration plant every 5 – 7 years and a new landfill the size of Semakau Landfill (current offshore landfill) every 25 – 30 years. This is not sustainable." <http://www.nea.gov.sg/cms/pcd/EPDAnnualReport2004.pdf>

For 2009 statistics, see:

⁷ Yeo Sam Jo, "What Rubbish", in *The Straits Times*, June 14, 2009. http://www.straitstimes.com/Breaking+News/Singapore/Story/STIStory_390356.html

⁸ Food Waste Republic, www.foodwasterepublic.com.