

**AMS CATERING SERVICE: DROP OFF MODEL**

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## Executive Summary

The UBC Alma Mater Society (AMS) provides catering services on campus. Wanting to move towards becoming more sustainable, they were looking for potential products out in the market which would eventually help them shift towards using single-use products and phasing out the China. Part of the problem description was to find either recyclable or compostable utensils serving to various products such as containers, cups, lids, wraps, cutlery, dispensers, etc.

The products need to meet the criteria of functionality, sharpness and competitiveness, not deteriorate the food consumption experience, sturdiness, use of as less packaging as possible and visual appeal.

The following are the compostable products chosen with their reasoning:

**Container:** Stalkmarket brand, 2-partition section, made from sugarcane fiber, sturdy, maintains food consumption experience (impermeable and non-toxic), \$26/100 containers

**Hot Drink Cups:** World Centric brand, heat resistant up to 200deg F, cups made out of three lines of compostable hot paper made out of plants, FSC, BPI certified, \$12.50/100 cups

**Cold Drink Cups:** Jaya brand, passed ASTM D6400 standards, polished look, made from natural sustainable resource, \$9.50/100 cups

**Lids:** Jaya brand, made from corn, user friendly, fully degrades when composted, \$4.50/100 lids

**Wraps:** Natural Kraft brand, FDA approved, microwaveable and freezer safe, does not deteriorate the food consumption experience, \$2.10/100 units

**Cutlery:** Etsy brand, lowest cost option, USDA,CFIA approved, made from FSC certified birch wood, sturdy and visually appealing, \$46/100 sets

**Stirrer:** RY brand, made from sustainable beach wood, good for both cold or hot drinks, does not discolour or impair taste of the beverage, uses 50% less packaging than before, \$2.30/100 sticks

**Beverage Dispenser:** Kraft brand, user friendly, one piece, lightweight and insulates beverages for up to 3 hours, \$11.63/dispenser

**Coffee Take out Container:** Kraft brand, offers insulation for up to 3 hours, one piece, lightweight and compatible with other carafe systems, \$3.91 per container.

The following are the recyclable products' brands and materials of use for each utensil chosen:

Three brands were chosen: **Eco-Products, Solo Cup and The WEBstaurant store**

**Cold drink cups and lids:** Recycled polyethylene terephthalate (RPET) or polyethylene terephthalate (PET)

**Hot drink cups:** Paper; **Lids:** Polystyrene (PS)

**Stirrer and Cutlery:** Polypropylene (PP)

**Personal Food container:** RPET, PP

Considering the two options and assessing the graphs comparing the costs of recyclables with the compostable option, there is no clear distinction between which one to use. The major consideration of selecting the compostable products however, would be that the user is not required to segregate the food items from the products itself, thus making the disposable process much more effective and ensuring that the consumer has done their part.

As part of the recommendations, it would be nice to provide bio-degradable garbage bags as they promote single stream of waste disposal. Additionally, by considering for FIFO (First In First Out) approach, it would ensure that the products that came in first, would be used up first and sent out for composting first. Providing organic trays and plates with the meal would also be valuable.

If opting for the recyclables, we recommend that the client implement the products from The WEBstaurant Store as it offers the lowest per unit cost and it is also recommended to try to implement something other than polystyrene for the lids as this material is non-recyclable.

No matter what option is implemented, consideration towards shifting to either is a step forward toward becoming more sustainable. This would save the client time by not having to pick up the products after use and, more importantly, would offer an environmentally friendly option. People often do as they are told when given incentives to do so, however the incentives will have to look promising for people to consider taking the time and doing their part.

# 1. Introduction

Located at the Student Union Building, the UBC Alma Mater Society (AMS) Catering provides its service to events all over campus, from meetings and conferences to full service fine dining. AMS Catering is fully committed to sustainability, by providing its services that promote sustainable practices such as using organic, seasonally and locally produced foods, not to mention the support of a fair trade market.

AMS Catering uses its waste from the food preparation and leftovers for composting. This, coupled with its flexibility to new ideas in an effort to moving towards a lean culture, consisting of a resource optimization that leads to a reduction on the carbon footprint along with an increase of productivity and customer satisfaction puts them ahead as leading providers of this service.

## 2. Problem Statement/ Objectives

### Problem Statement

Currently the UBC AMS Catering provides its catering service to the whole campus. 50% of its service already puts into practice the use of single-use products, however the remaining 50% still relies on non-disposable glassware, dishes and cutlery. As a consequence this slows down the efficiency of the team and more importantly increases the environmental footprint, as AMS Catering not only has to plan the delivery of the catering but also the pick-up of the aforementioned products, having to allocate people in doing this instead of preparing for future ongoing or future orders.

### Objectives

- Providing an efficient single use drop-off model taking into account the three sustainability pillars:
  - **Environmental.** Using environmental friendly containers, cutlery and packaging. These are either compostable or recyclable or a combination of both.
  - **Economical.** By carrying out a value engineering analysis, the optimal combination of compostable and recyclable products will be used to meet the client's budget.
  - **Society.** In our search for the best model we are looking to preserve the consumption experience by the costumers.
- Increasing AMS Catering productivity by eliminating the need of picking up non-disposable glassware, dishes and cutlery.
- Facilitating sustainable practices to customers such as composting and recycling by providing these types of products.

The products should also be:

- Functional
- Sharp & Competitive
- Sturdy
- Using as less packaging as possible
- Visually appealing

### 3. Project Scope

AMS provides catering service to many clients on campus at UBC, currently AMS is interested in moving to a single use model for its cutlery, service trays and coffee services. As part of the objective, the product must be functional, sharp and competitive, while maintaining visual appearance and not deteriorating the food consumption experience. In addition, these products should have as little packaging as possible, as well as explicitly showing that the product is recyclable or compostable. The product also must be sturdy and user friendly.

As consultants working on this assignment, our objective is to find the optimal combination of single use products for consumption of coffee, sugar, cream, cookies, sandwiches, teabags, and salads.

The expectation for this project is that the consumers will be able to dispose off the products in a sustainable manner with as little effort on their part as possible. In addition, the expectation is that AMS catering will be able to save on labour, time and fuel for having people scheduled to pick up the cutlery items and leftovers.

### 4. Preliminary Combination Specification

#### 4.1 Combinations Ranking Basis

Ranking Standard

	Price	Material	User Experience
5	Highest	100% Compostable 100% Post-consumer recycled content	Most comfortable
4	Relatively high	80% compostable or Post-consumer recycled content	Relatively comfortable
3	Average	60% compostable or Post-consumer recycled content	Average
2	Relatively low	40% compostable or Post-consumer recycled content	Relatively uncomfortable
1	Lowest	0% Compostable 0% Post-consumer recycled content	Very uncomfortable

**Table 4.1 Ranking Standard.**

70% Price + 20% Material + 10% User Experience

Our group picked up 3 compostable and 3 recyclable sets of food tools separately. Those tools includes food containers, hot cup, cold cup, lid, cutlery, wrap, and stirrers. Then we based on the criterion of 70% Price + 20% Material + 10% User Experience to pick up the best combinations.

## **4.2 Recommended Products**

To explore the varieties of products available in the market, as a group we came up with a consensus to find and dedicate three different brands for each product. From these three brands, based on our objectives, we selected the best brand for each product.

We divided our search based on having an “Only Compostable” and an “Only Recyclable” option. This way, the client is able to decide and commit to the option that He/She finds most desirable to suit their purposes.

## **5. Final Combination Specification**

The final selection of products were again divided into either the Composting or Recycling alternative. The following sections present our final choices to implement for each of the products.

### **5.1 Compostable**

In an effort to strive towards sustainability, composting offers the following benefits:

1. Reduces Greenhouse Gases
2. Provides upstream benefits that allow for further conservation of resources.
3. Enrichment of soils, assists in remediation of contaminated soils

In addition to this, by choosing compostable products, the user is not forced into separating the leftover food in the product from the product itself. Rather, the user can simply throw out the whole product with any leftovers due to the compostable nature of the selected products.



	<u>Container</u>	<u>Cup (hot)</u>	<u>Cup (Cold)</u>	<u>Lid</u>	<u>Wrap</u>	<u>Cutlery</u>	<u>Stirrer</u>
<b><u>Brand</u></b>	Stalkmarket	World Centric	Jaya	Jaya	Natural Kraft	Etsy	Eco-product (Cold) RY Wooden Stirrers (Hot)
<b><u>Size</u></b>	1000 ml	12 oz	12 oz	12 oz	N/A	N/A	N/A
<b><u>Material</u></b>	fiber	Paper	Made from Natural Sustainable resource	PLA	fiber	Wood	Made from Natural Sustainable resource/ Wood
<b><u>Color</u></b>	white	white	clear	clear	brown	White	black/ brown
<b><u>Price (per 100)</u></b>	\$26	\$12.50	\$9.5	\$4.5	\$2.1	\$46	\$2.2/ \$2.3
<b><u>Compostable</u></b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b><u>Partition #</u></b>	2	N/A	N/A	N/A	N/A	N/A	N/A
<b><u>Link</u></b>	<a href="http://tinyurl.com/kdo47g8">http://tinyurl.com/kdo47g8</a>	<a href="http://tinyurl.com/9ngatux">http://tinyurl.com/9ngatux</a>	<a href="http://tinyurl.com/kx17jru">http://tinyurl.com/kx17jru</a>	<a href="http://tinyurl.com/kuxdhcx">http://tinyurl.com/kuxdhcx</a>	<a href="http://tinyurl.com/ln7cdnp">http://tinyurl.com/ln7cdnp</a>	<a href="http://tinyurl.com/q4nzs2n">http://tinyurl.com/q4nzs2n</a>	<a href="http://tinyurl.com/n6rqllw">http://tinyurl.com/n6rqllw</a>

**Table 5.1.1 Summary of the prices for the most optimum compostable brand.**

	<u>Catering Beverage Dispenser</u>	<u>Coffee Take Out Container</u>
<b><u>Brand</u></b>	WEBstaurant	WEBstaurant
<b><u>Size</u></b>	3 gallon	96 oz.
<b><u>Material</u></b>	Cardboard	Cardboard
<b><u>Color</u></b>	White/Brown	White/Brown
<b><u>Price (1 pack)</u></b>	\$11.63	\$3.91
<b><u>Link</u></b>	<a href="http://tinyurl.com/mwe3jnb">http://tinyurl.com/mwe3jnb</a>	<a href="http://tinyurl.com/ken3djw">http://tinyurl.com/ken3djw</a>

**Table 5.1.2 Beverage Dispenser and Container.**

Seen above in Table 5.1, the selection of the best products for each product type vary from supplier to supplier. Products from each different supplier provide specific features and options that best match our client’s objective. From the table, it’s not hard to see that the suppliers to contact for these products include: Stalkmarket, Jaya, Planet+, Natural Kraft, Eco-Products and WEBstaurant.

To assess each individual compostable product and our decision behind choosing it, please refer to the following section

### **5.1.1 Individual Product Basis of Selection- Compostable Products**

#### **Container**

The material of construction for the three brands are either Fiber based or a Sugarcane Clamshell. The chosen colours were white in this case. For two of the brands (Stalkmarket and Biodegradable), the total cost of 100 containers are valued the same (\$26). The decision behind choosing the Stalkmarket brand then was that this was more visually appealing, and it also featured 2 partition sections which would allow the client to store different food items in the same container. The third brand (also from Stalkmarket) was not considered because not only was it a single compartment type, but it was also 1.5 times more expensive than the other two products mentioned earlier.

#### **Beverages**

The beverages were compared on basis of a 12-oz cup and lid size.

#### **Cups for Hot Drinks**

The cups for hot drinks were selected from World Centric. These cups are made out of three lines of compostable hot paper, lined with an ingredient named “NatureWorks Ingeo” that is made out of plants grown in the USA. The added feature of this cup is that unlike the other two, this one is actually heat

resistant up to 200 deg F. They also offer the traditional white paper cups made using Elemental Chlorine free paper as this enforces its commitment to responsible forestry. These cups are additionally made from FSC(Forest Stewardship Council) certified paper and are Biodegradable Product Institute (BPI) certified. In a recent survey of 10 random people, it was found that now 9/10 would choose this cup offered by World Centric. This survey was conducted after people were now told that the previous product suggested from Planet+ was in-fact not compostable. The third brand (World art) was not considered in the selection because it cost approximately 3 times as much as the products from Planet+.

### **Cups for Cold Drinks**

For this case, we considered products from 3 different suppliers (Eco-product, Jaya and GreenStripe). GreenStripe was eliminated due to its significantly higher cost (2 times as much as that of the Jaya product) and because it was a simple plastic compostable cup. The product from Jaya, on the other hand was made from PLA Lamination once again and it was deemed to be fully compostable in a facility in 90-120 days. Additionally, it's designed such that one size fits all flat or dome types of lids, making it convenient and user friendly as the user does not have to search for the correct lid type. The other key feature is that the Jaya branded product meets ASTM D6400 compostable plastic standards which further shows that the product has been tested. Finally, it has a very polished and sophisticated look that makes it both visually appealing and gives it a sturdy and competitive edge over the other two brands. Considering these factors, the Jaya branded cup for cold drink was chosen.

### **Lids**

Choosing the lids was rather much easy, now that the decision on the cups was made. Two lids, Jaya branded were considered for selection. Out of the two, the PLA laminated flat style lids were selected over the non-flat lids. The flatter lid styles were believed to be more user-friendly and in-fact were also priced less at \$4.50 per 100 lids. While both Jaya branded lids show similar features, the selection in this case was entirely based on the unit cost as well as the user-friendliness aspect of the lid. The Eco-products branded lids were discarded from consideration because they were very much overpriced and also were not one size fit all, meaning that the client would be required to buy multiple different cartons, each to cover a different sized cup. Thus, from all these considerations, the best lid selected is the Jaya branded (flat styled) lid.

### **Wrap**

The selection of the Sandwich wrap product was not a difficult one. One of the brands, NatureFlex offered clear sandwich wraps, but at the cost of \$9.70 per 100 wraps. This is significantly higher in comparison to the wrap offered by Natural Kraft, priced only at \$2.10 per 100 wraps. Just from this basis, NatureFlex was automatically eliminated. The Natural Kraft product also has many features required of any sandwich wrap – It is microwaveable and freezer safe, FDA approved to be grease resistant, fully compostable and also has an extended lip that allows proper fold over to keep food fresh at all times. We decided to opt for the standard type of Sandwich bag as opposed to choosing the Poly-coated Sandwich/Freezer Wrap, the third wrap product also offered by Natural Kraft. This is because in comparison to the standard wrap, there is no additional feature offered by the polycoated wrap, and the unit cost of the polycoated wrap was also higher. This made it easy to collectively reach our decision on the wrap type.

### **Cutlery**

The cutlery composes of a Fork, a Spoon and a Knife. Two brands were compared in order to reach a decision (Etsy(\*2 products) and Aspenware). Initial observations showed that the unit cost of Aspenware was significantly higher than the other two brands, hence eliminating this option. The brand from Etsy (set of 75 Disposable wooden utensils) was chosen over the other Etsy brand simply due to cost. Additionally, this specific product from Etsy was also chosen over the other because of the various certifications (USDA-US Department of Agriculture, CFIA- Canadian Food Inspection Agency). Overall, this product from Etsy is eco-friendly and made from FSC certified birch wood and more importantly, it is sturdy and visually appealing, serving our purpose.

### **Stirrer**

The stirrers were found from three suppliers (Royal Paper, Eco-Products and RY). For a pack of 100 stirrers, the unit cost of Royal Paper branded stirrers was a staggering 7 times higher than that of RY or Eco-Products. Immediately, Royal paper stirrers were discarded from consideration. The stirrers made by Eco-Products are very effective in stirring cold beverages, but not hot beverages. For coffee and tea, we can use the wooden stirrers from RY, made from natural wooden product from areas where reforestation is encouraged. These stirrers are biodegradable and also come in 50% less packaging than before. Thus, through a mutual decision, we figured it is best to implement two brands of stirring sticks in this case – 1) Eco-Products straws for cold drinks, 2) RY Wooden straws for hot drinks (coffee and tea).

### **Beverage Dispenser**

In terms of the beverage dispenser, the best one we came up with is the 3 Gallon one from Kraft, supplied by WEBstaurant. This is a disposable one time use product. It also features built-in handles which makes it easy to transport the dispenser from one place to another. Inside, there is an angled platform which allows liquid flow from the insulated container into the spout, thereby also minimizing waste. The insulation is provided for up to 3 hours. Other features include its “one piece” look which allows for flat storage and assembly within seconds. This product currently is sold through WEBstaurant for \$111.63 for a case of 10 dispensers. If we assume that the average person drinks 10 oz of coffee, then 3 gallons would be sufficient to supply a group of 35-40 people. The design is available in either white or brown and the material of construction is cardboard, which is compostable. The dimensions of this dispenser are approximately: 9” by 8.75” by 19.5” (L by W by H respectively).

### **Coffee Take out Container**

The selected coffee take out container is also designed from cardboard material, ensuring ease of composting. This is a 96 oz coffee storage container which has an inner bag embedded that will automatically inflate when coffee is poured into. Similar to the beverage dispenser, the take out container offers insulation of the liquid for up to 3 hours. The feature of this design is that it is compact and uses less packaging which is desirable, while also occupying minimal storage space. The dimensions of this product are approximately: 9” by 6.5” by 8” (L by W by H respectively). Each case is sold with 25 containers at a unit price of \$3.91 per one container. The coffee storage capacity of this product is perfect for a smaller group of about 5-10 people and an excellent choice for small group meetings or small scale events.

## 5.2 Recyclable

	<u>Cold Cups</u>	<u>Lids (for cold drink)</u>	<u>Hot Cups</u>	<u>Lids (for hot drink)</u>	<u>Stirrer</u>
<u>Brand</u>	WEBstaurant	WEBstaurant	WEBstaurant	WEBstaurant	WEBstaurant
<u>Size</u>	12 oz.	12 oz.	12 oz.	12 oz.	7 in (round)
<u>Material</u>	RPET	PET	Paper	PS (Non-recyclable)	PP
<u>Color</u>	Clear	Clear	White	White/Black	Red
<u>Price (per 100)</u>	8.46	2.94	7.37	6.51	0.32
<u>Link</u>	<a href="http://tinyurl.com/lwpuy4b">http://tinyurl.com/lwpuy4b</a>	<a href="http://tinyurl.com/mv4s2ra">http://tinyurl.com/mv4s2ra</a>	<a href="http://tinyurl.com/mcyy9b4">http://tinyurl.com/mcyy9b4</a>	<a href="http://tinyurl.com/l2xrxaw">http://tinyurl.com/l2xrxaw</a>	<a href="http://tinyurl.com/l3wu8bj">http://tinyurl.com/l3wu8bj</a>

Table 5.2.1 Summary of the prices for the most optimum recyclable brand.

	<u>Personal Food Container</u>	<u>Cutlery (fork, knife and spoon)</u>
<u>Brand</u>	WEBstaurant	WEBstaurant
<u>Size</u>	9" x 9" x 2 3/4"	-
<u>Material</u>	PP	PP
<u>Color</u>	Black w/ clear lid	White
<u>Price(\$/100units)</u>	48.52	3.04
<u>Link</u>	<a href="http://tinyurl.com/qhk4u6l">http://tinyurl.com/qhk4u6l</a>	<a href="http://tinyurl.com/kknqexl">http://tinyurl.com/kknqexl</a>

Table 5.2.2 Containers and Cutlery.

There were three brands that were considered in the decision matrix for each category of utensils. The brands considered were: (1) Eco-Products, (2) Solo Cup, (3) The WEBstaurant Store. Table 5.2.5 shows the full specifications of each brand while Tables 5.2.1 and 5.2.2 depict the decisions for the best option arrived at for the different utensils. Figure 5.2.3 below summarizes the findings for the prices from the three brands.

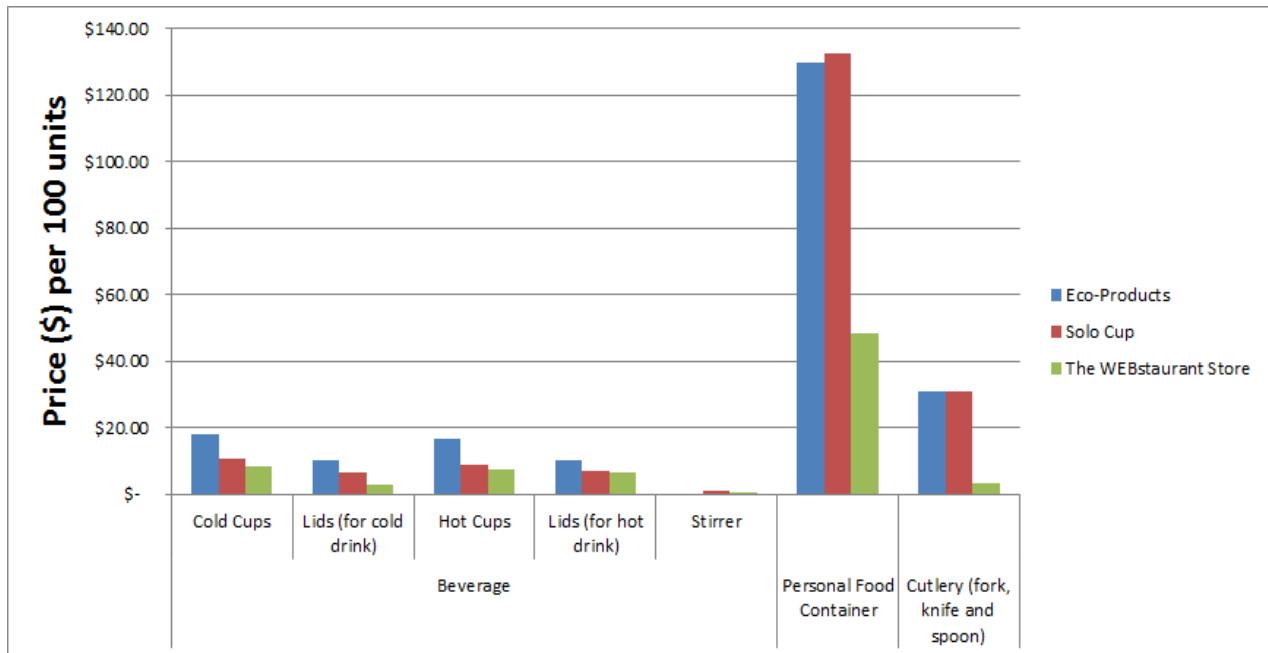


Figure 5.2.3 A comparison of the prices for the three brands for the recyclable option

### 5.2.1 Individual Product Basis of Selection- Recyclable Option

#### Beverages:

A 12-oz cup and lid size were chosen as the basis of comparison for the different brands.

#### *Cold Drink Cups:*

The material of use for all three brands was recycled polyethylene terephthalate (RPET) and all three were clear/transparent in colour. Hence, price was the main driver in choosing the best option. Although brand 1 uses 25% post-consumer recycled plastic bottles whereas the other two brands use 20%, the profound price difference with brand 3 renders it an expensive option. Weighing the three categories of price, material, and usability, it was decided that brand 3 is the most optimum option.

#### *Lids for Cold Drink Cups:*

The material of use for brands 2 and 3 was polyethylene terephthalate (PET) and are transparent in colour while the material for brand 1 was 25% post-consumer RPET and is white in colour. Although 1 might seem to be a more environmentally responsible option due to the RPET, the drastic price difference with brands 2 and 3 makes it costly. Again, brand 3 was chosen as it was the least expensive in addition to the transparent colour that matches with that of cold cups.

#### *Hot Drink Cups:*

All three brands use white paper for hot drink cups; brands 1 and 3 use 24% post-consumer recycled paper while brand 2 uses 10% post-consumer recycled paper. Brand 3 was chosen based on the price difference of the three brands. Moreover, brand 3 is not only less expensive than 2, it also uses more post-consumer recycled paper.

*Lids for Hot Drink Cups:*

All three brands use polystyrene (PS), which is non-recyclable (code 6). The three different lids are available in white and black colours. Brand 1 is again significantly more expensive while brands 2 and 3 are comparable in cost. However, brand 3 is more desirable as it uses 25% post-consumer recycled material.

*Stirrer:*

Brand 1 did not have the option for a recyclable product while brands 2 and 3 did. The material of use in both brands was polypropylene (PP) and the stirrer was red in colour. However, brand 3 was chosen as it is less expensive than 2.

**Personal Food Container:**

All three options were black in colour with a clear transparent lid. Brand 1 uses 100% post-consumer RPET but it has only one compartment. Brands 2 and 3 use PP and have three compartments. Brand 3 was viewed as the most optimum option due to the substantially lower price compared to the other two brands as well as due to the advantage of having three compartments.

**Cutlery (fork, knife, and spoon):**

All three brands use PP, with brand 1 using 100% recycled content. Brand 1 is black in colour while 2 and 3 are white. Again, brand 3 was chosen as it is the most economical option.

## 7. Cost Analysis

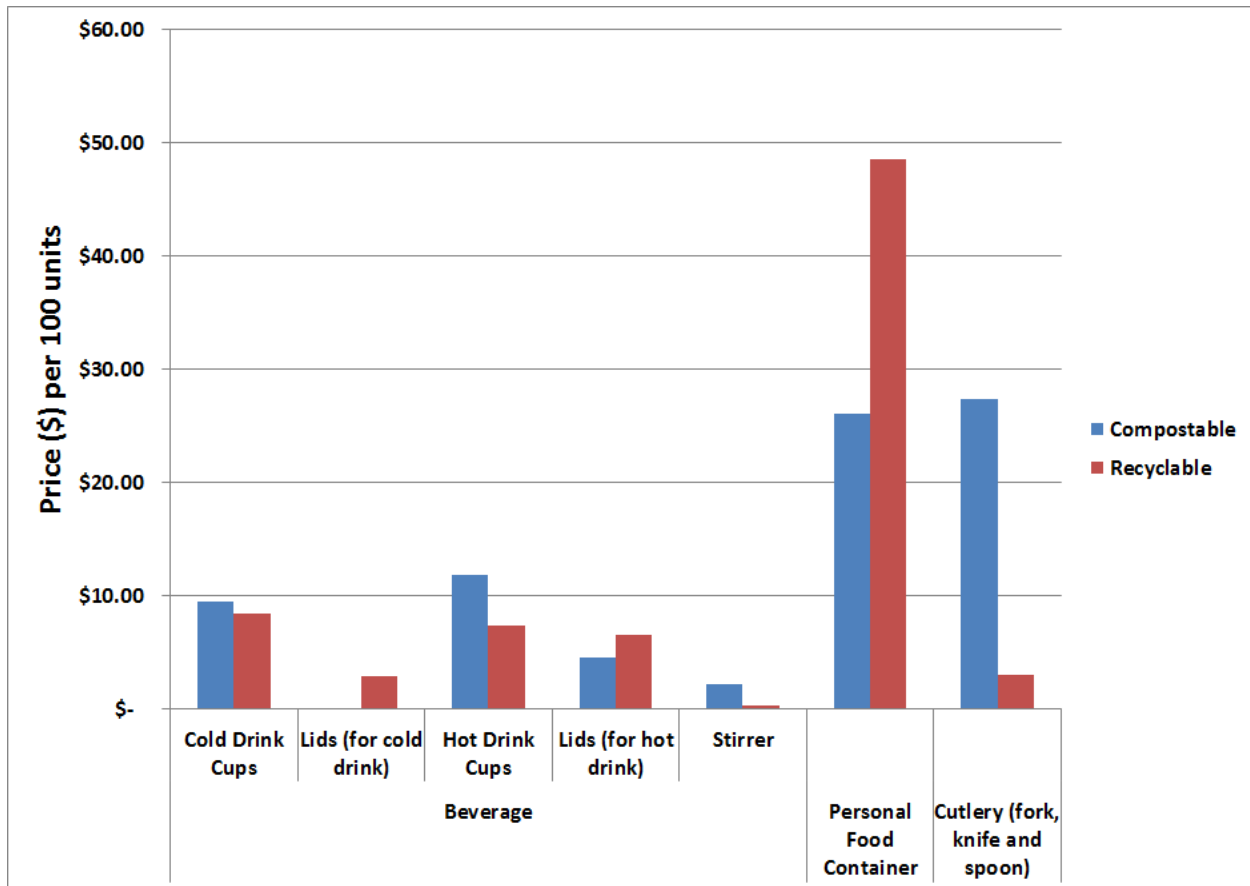


Figure 7.1.1: A comparison of the prices for the best compostable and recyclable options

## 8. Recommendations/Considerations

### 8.1 General

Implement Liquid Sugar instead of solid sugar: This would reduce the amount of solid paper sachets waste from used-up solid sugars. Additionally, liquid sugar is far sweeter than solid because it composes of a balance of glucose and fructose, thereby requiring less amounts to achieve the same level of sweetness.

### 8.2 Compostable Products

- Buy products in bulk: Some suppliers offer discounts on bulk purchases. This should be implemented since re-stocking is evidently important for the business.
- Provision of bio-degradable garbage bags: After consumption, the user can easily dispose of all compostable items (products, left over foods) in the garbage bag and send it off for composting. This saves time and effort on the user's part.

### 8.3 Recyclable Products

All in all, and as alluded by Figure 5.2.3, it was concluded that brand 3 (The WEBstaurant Store) is the most optimum option for all utensils. This is because the prices for this supplier are substantially lower in



comparison with the other two as well as the colours seem to match better amongst the utensils, thus giving the kit an aesthetical advantage as they are all coming from the same supplier. Hence, if the recyclable option was to be implemented, The WEBstaurant Store is the brand that is recommended. The only shortcoming in the recyclable option was with the hot drink cup lids as the material of use, polystyrene, is not recyclable. However, since lids do not have a big volume and since they are easily separable from cups, disposing of the lid is not that big of an issue and it does not compromise the ease of use of the food service kit.

In addition, buying in bulk drastically reduces costs. The prices in this study were based on 100 units, which is relatively small for a client the size of UBC. Hence, as quantity ordered increases, the cost decreases.

## 9. Conclusion

By inspection of Figure 7.1.1, it can be seen that there is no consistent trend amongst the price differences of the best compostable and best recyclable options. In other words, it would be difficult to say that one option is cheaper than the other, but rather certain recyclable utensils are cheaper than their compostable counterparts, and vice versa. The most optimum recyclable option based on price, material, and usability would be The WEBstaurant Store brand. The major benefit however of opting for the compostable option is that the consumer is not required to spend additional time segregating leftover food items with the products and can in-fact dispose of everything at once.

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APPENDIX

Table 5.2.4 Compostable Products Matrix

	Compostable Utensils						
	Container	Cup (hot)	Cup (cold)	Lid	Wrap	Cutlery	Stirrer
<b>Brand</b>	Stalkmarket	World art	Eco-product	Jaya	Natural Kraft	Etsy	Wooden Coffee Stirrer
<b>Size</b>	1000ml	12 oz	9 oz	9/12/16/20/24-Ounce	12" x 12"	N/A	N/A
<b>Material</b>	fiber		Made from Corn	PLA	fiber	Wood	Wood
<b>Color</b>	white fiber	green	clear	clear	brown	white	Brown
<b>Price (\$C/100 units)</b>	26	36	13.4	4.5	4.5	48.32	2.3
<b>Compostable</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Partition numbers</b>	2-Partition Food Container	N/A	N/A	N/A	N/A	N/A	N/A
<b>Website link</b>	<a href="http://tinyurl.com/kdo47g8">http://tinyurl.com/kdo47g8</a>	<a href="http://tinyurl.com/ot7fs8d">http://tinyurl.com/ot7fs8d</a>	<a href="http://tinyurl.com/l2a4sfc">http://tinyurl.com/l2a4sfc</a>	<a href="http://tinyurl.com/kuxdhcx">http://tinyurl.com/kuxdhcx</a>	<a href="http://tinyurl.com/mlftd8g">http://tinyurl.com/mlftd8g</a>	<a href="http://tinyurl.com/l645hy6">http://tinyurl.com/l645hy6</a>	<a href="http://tinyurl.com/p5xz4kk">http://tinyurl.com/p5xz4kk</a>
<b>Brand</b>	Biodegradable	Planet+	Jaya	Eco-product	NatureFlex	Etsy	Eco-Products
<b>Size</b>	8*8*3	12 oz	12 oz	12/16/20 Ounce	14" x 14"	N/A	N/A
<b>Material</b>	Sugarcane Clamshell	Made from Natural	Made from Natural	PLA	fiber	Wood	Made from Natural
<b>Color</b>	white fiber	brown	clear	clear	clear	White	Black
<b>Price (\$C/100 units)</b>	26	12.3	9.5	11.1	9.7	46	2.2
<b>Compostable</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Partition numbers</b>	1	N/A	N/A	N/A	N/A	N/A	N/A
<b>Website link</b>	<a href="http://tinyurl.com/klxob4c">http://tinyurl.com/klxob4c</a>	<a href="http://tinyurl.com/kkpjbj">http://tinyurl.com/kkpjbj</a>	<a href="http://tinyurl.com/kxl7jru">http://tinyurl.com/kxl7jru</a>	<a href="http://tinyurl.com/pg08v4g">http://tinyurl.com/pg08v4g</a>	<a href="http://tinyurl.com/lzqgzp">http://tinyurl.com/lzqgzp</a>	<a href="http://tinyurl.com/q4nzs2n">http://tinyurl.com/q4nzs2n</a>	<a href="http://tinyurl.com/n6rqllw">http://tinyurl.com/n6rqllw</a>
<b>Brand</b>	Stalkmarket	World Centric	GreenStripe	Jaya	Natural Kraft	Aspenware	Royal Paper
<b>Size</b>	1000ml	12 oz	12 oz	9/12/16/20/24-Ounce		N/A	N/A
<b>Material</b>	fiber	Paper	Plastic (compostable)	PLA	fiber	Wood	Wood
<b>Color</b>	white fiber	white	clear	clear	brown	white	Brown
<b>Price (\$C/100 units)</b>	34.5	12.5	18	6.2	2.1	300	15.4
<b>Compostable</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Partition numbers</b>	1	N/A	N/A	N/A	N/A	N/A	N/A
<b>Website link</b>	<a href="http://tinyurl.com/n3w2amx">http://tinyurl.com/n3w2amx</a>	<a href="http://tinyurl.com/9ngatux">http://tinyurl.com/9ngatux</a>	<a href="http://tinyurl.com/lz4qqo">http://tinyurl.com/lz4qqo</a>	<a href="http://tinyurl.com/mjh7omd">http://tinyurl.com/mjh7omd</a>	<a href="http://tinyurl.com/ln7cdnp">http://tinyurl.com/ln7cdnp</a>	<a href="http://aspenware.ca/about/product-line/">http://aspenware.ca/about/product-line/</a>	<a href="http://tinyurl.com/or8z3dv">http://tinyurl.com/or8z3dv</a>

Table 5.2.5 Recyclable Products Matrix

Recyclable Utensils							
	Beverage					Personal Food Container	Cutlery (fork, knife and spoon)
	Cold Cups	Lids (for cold drink)	Hot Cups	Lids (for hot drink)	Stirrer		
<b>Brand</b>	Eco-Products	Eco-Products	Eco-Products	Eco-Products	Eco-Products	Eco-Products	Eco-Products
<b>Size</b>	12 oz.	12 oz.	12 oz.	12 oz.	12 oz.	8 15/16" x 8 3/4" x 1 9/16"	-
<b>Material</b>	RPET	RPET	Paper	PS (Non-recyclable)	no recyclable product	RPET	PP
<b>Color</b>	Clear	White	White	White/Black		Black w/ clear lid	Black
<b>Price (\$US/100)</b>	16.56	9.32	15.28	9.4		119.34	28.28
<b>Price (\$C/100)</b>	18	10.13	16.61	10.22		129.75	30.75
<b>Link</b>	<a href="http://tinyurl.com/kdyd86b">http://tinyurl.com/kdyd86b</a>	<a href="http://tinyurl.com/mzhwd9e">http://tinyurl.com/mzhwd9e</a>	<a href="http://tinyurl.com/n4njcnk">http://tinyurl.com/n4njcnk</a>	<a href="http://tinyurl.com/kx7fhyx">http://tinyurl.com/kx7fhyx</a>		<a href="http://tinyurl.com/dzvk1w">http://tinyurl.com/dzvk1w</a>	<a href="http://tinyurl.com/lrz4pn6">http://tinyurl.com/lrz4pn6</a>
<b>Specifications</b>	25% post-consumer recycled plastic bottles	Made from 25% post-consumer recycled PET	24% post-consumer recycled office paper	25% post-consumer recycled polystyrene		100% post-consumer recycled PET	Individually wrapped kit
<b>Brand</b>	Solo Cup	Solo Cup	Solo Cup	Solo Cup	Solo Cup	Solo Cup	Solo Cup
<b>Size</b>	12 oz.	12 oz.	12 oz.	12 oz.	7 in (round)	10 25/128" x 10 25/128" x 1"	15.8 in
<b>Material</b>	RPET	PET	Paper	PS (Non-recyclable)	PP	PP	PP
<b>Color</b>	Clear	Clear	White	White/Black/Brown	Red w/ white	Black w/ clear lid	White
<b>Price (\$US/100)</b>	9.56	5.88	8.13	6.38/7.60/5.52	0.86	122.08	28.38
<b>Price (\$C/100)</b>	10.39	6.39	8.84	6.94/8.26/5.99	0.93	132.73	30.85
<b>Link</b>	<a href="http://tinyurl.com/k8fgws5">http://tinyurl.com/k8fgws5</a>	<a href="http://tinyurl.com/kmu3yxg">http://tinyurl.com/kmu3yxg</a>	<a href="http://tinyurl.com/jwguc4b">http://tinyurl.com/jwguc4b</a>	<a href="http://tinyurl.com/kxmju3u">http://tinyurl.com/kxmju3u</a>	<a href="http://tinyurl.com/n7jbl5">http://tinyurl.com/n7jbl5</a>	<a href="http://tinyurl.com/lhzsxpj">http://tinyurl.com/lhzsxpj</a>	<a href="http://tinyurl.com/loel7do">http://tinyurl.com/loel7do</a>
<b>Specifications</b>	At least 20% post-consumer recycled material		At least 10% post-consumer recycled fiber			The three individual compartments, one 18 oz. and two 5 oz. Microwave-safe container	Individually wrapped kit
<b>Inventory No.</b>	RTP12BARE	662TS	412RCN-J8484	TLB316-0007/TLB316-	SF7RG-0011	Base:976026-PP04	RSW72-0007
<b>Brand</b>	The WEBstaurant Store	The WEBstaurant Store	The WEBstaurant Store	The WEBstaurant Store	The WEBstaurant	The WEBstaurant Store	The WEBstaurant Store
<b>Size</b>	12 oz.	12 oz.	12 oz.	12 oz.	7 in (round)	9" x 9" x 2 3/4"	-
<b>Material</b>	RPET	PET	Paper	PS (Non-recyclable)	PP	PP	PP
<b>Color</b>	Clear	Clear	White	White/Black	Red	Black w/ clear lid	White
<b>Price (US\$/100 units)</b>	7.78	2.7	6.78	5.99	0.29	44.63	2.8
<b>Price (\$C/100 units)</b>	8.46	2.94	7.37	6.51	0.32	48.52	3.04
<b>Link</b>	<a href="http://tinyurl.com/lwpu4b">http://tinyurl.com/lwpu4b</a>	<a href="http://tinyurl.com/mv4s2ra">http://tinyurl.com/mv4s2ra</a>	<a href="http://tinyurl.com/mcy9b4">http://tinyurl.com/mcy9b4</a>	<a href="http://tinyurl.com/l2rxaw">http://tinyurl.com/l2rxaw</a>	<a href="http://tinyurl.com/l3wu8bj">http://tinyurl.com/l3wu8bj</a>	<a href="http://tinyurl.com/qhk4u6l">http://tinyurl.com/qhk4u6l</a>	<a href="http://tinyurl.com/kknqexl">http://tinyurl.com/kknqexl</a>
<b>Specifications</b>	20% post-consumer recycled content		24% post-consumer fiber	25% post-consumer recycled content		The three individual compartments, one 22 oz. and two 9 oz. Microwave-safe container	Individually wrapped kit

(\$C 1.0872 = \$US 1.00; quoted April 9, 2014, at 16:30 ET, Source: Bank of Canada)

Best Option