# WASTE DIVERSION: HOW WELL DO DALHOUSIE STUDENTS ON STUDLEY CAMPUS KNOW WASTE REGULATIONS?

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#### 1. EXECUTIVE SUMMARY

Halifax Regional Municipalities (HRM) currently has a solid diversion rate of 59%. While this rate is relatively high, more can still be done to increase this number. Non-residential uses account for about 58% of total landfill disposal in HRM. Therefore, it is important for large institutions like Dalhousie University to understand their waste disposal trends. Waste disposal is also a large economic cost to the Dalhousie, therefore better waste diversion at the source provides economic benefits to the university.

This research project looked at the waste sorting knowledge of students on Studley Campus of Dalhousie University. Using commonly misplaced materials, the study used a survey to test students' knowledge of waste sorting and compared it to their perceived level of knowledge. The survey also collected demographic data such as age, year of study, faculty, and hometown in an attempt to study correlations between the data. A total of 300 surveys were completed by randomly selected participants at the Student Union Building and at the Killam Memorial Library. This is not a representation sample of the population.

The survey revealed that students from provinces other than Nova Scotia tended to have a slightly better knowledge of waste sorting than those from Nova Scotia. Generally, students had a good understanding of their waste sorting knowledge, with student that perceived a higher level of knowledge doing better than those who had perceived a lower level of knowledge. The average score for all respondents was 6.5/10.

The survey also revealed that certain items – coffee cups, clean tin foil, clean plastic wrap, and plastic bottle lids – were frequently missorted about 50% of the time. These items are common, and could represent a significant portion of missorted waste.

These results may be used to guide further research on waste sorting trends and could be used to create initiatives to improve waste diversion. Item that were commonly missorted should be added to the labelling on the waste receptacles to allow those who want to learn the opportunity to do so.

#### 2. INTRODUCTION

Halifax Regional Municipality (HRM) is nationally recognized as a leader in the area of waste management, and has been for some time. By 2001, the amount of waste diverted from landfills was 59%. This diversion rate was the best in Canada, moreover one of the best in the developed world (HRM, 2013).

HRM is considered a leader with regards to sustainable waste management. Nova Scotia was the first province to implement green bin collection, rolling out 100,000 green carts in 1998. This project has been a resounding success, diverting nearly 42 000 tons of waste from landfills, annually (HRM, 2013). However, due to a growing population, in addition to the current amounts of recyclables, organic and hazardous waste going to landfills, HRM must continue to evolve to improve diversion rates.

As a part of HRM, Dalhousie must abide by municipal waste diversion guidelines. In 1996, HRM implemented a new solid waste management system (HRM, 2015). Community meetings were held, inviting members of HRM to participate, and eventually formed the Community Stakeholder Committee (CSC) (Kassirer, n.d.). The CSC eventually proposed the Integrated Solid Waste Resource Management Strategy in 1995, as a strategy for a new, efficient waste system (Kassirer, n.d.). A result of this new system was the creation of "green carts", which were eventually provided to every household in HRM (Kassirer, n.d.).

By 1998, 100,000 green bins were distributed and are now used by the vast majority of the population in Halifax (HRM, 2013). In the 16-17 years since the implementation of Halifax's solid waste management system, diversion rates have increased (HRM, 2013). In 2012, residential diversion rates of recyclables and organics were 68%, with the commercial sector also accomplishing diversion rates over 50% (HRM, 2013).

The success of this program can likely be attributed to the education that HRM implemented in 1998 when it proposed the new system (public consultation, pilot studies, and public education). As well as how simple it is for residents to participate in, as garbage, composting and recyclables are picked up in Halifax curbside biweekly.

Environmental and sustainability education may be an important factor, which influences students to dispose of their waste properly. If students are more aware of the impacts of waste ending up unnecessarily in landfills, they may be more motivated to modify their behaviour and reduce their individual impact. Waste diversion rates were studied at the University of Northern British Columbia's Prince George campus in 2008. It was found that over 70% (991 kg) of UNBC's waste stream could have been diverted from the landfill, had material been composted or recycled (Smyth D., Smyth A., & Fredeen, 2010).



Figure 2.1: 4-bin waste separation system.

Institutions such as Dalhousie University have a large role to play in the intricate waste management system. Non-residential sources were responsible for approximately 58% of total waste disposed in Nova Scotia in 2009 (HRM, 2013). The university itself was responsible for diverting 150 tons of food waste in 2011 to the Burnside and Ragged Lake composting sites, both located in HRM (Davidson, 2011).

Although the current waste diversion program in HRM has been relatively effective in comparison to other provinces in Canada, it is important not to remain stagnant with regards to sustainable waste management. There have been various studies carried out at Dalhousie to determine waste diversion rates on campus. The 4-bin – garbage, organics, paper recycling and recycling – waste system has been implemented in all HRM campuses of Dalhousie University (see Figure 2.1). In a study looking at the implementation of the 4-bin system in the Killam Memorial Library, it was found that the 4-bin system had increased rates of diversion, however a lack of education is still a barrier to full diversion (Davidson, 2011; Davidson & Owen, n.d.).

This study was designed to help determine if there is an apparent gap between how well students think they know proper waste sorting guidelines, and what they actually know. This study could indicate whether the total waste diversion is not being achieved due to a lack of knowledge, or if it may be a behavioural cause, and would provide a platform for future action. Dalhousie University must continue to lead by example to increase social acceptability, public participation, and to ensure individuals understand their own roles in the waste management system.

#### 3. METHODS

The design of this study is quantitative in nature, using a predetermined questionnaire (see Appendix A) to test participants on their knowledge of Halifax's waste diversion regulations. The questions prepared in the questionnaire were chosen to cover a broad range of materials that are commonly placed in the wrong waste stream and students were scored on their ability to properly sort these items.

Five hundred (500) surveys were printed on light green paper by the Environmental Sciences office. These surveys were divided into four, approximately one quarter of the total for each researcher. Two boxes of snack sized chocolate bars were also divided up between the researchers to be used as an incentive for participants (see Figure 3.1).



Figure 3.1: An example of the incentives that were used for the study. Image source: Dana McCauley.

The questionnaires were administered at two different locations on Dalhousie's Studley Campus: the hallway directly inside the main entrance of the Killam Memorial Library, and directly inside the main entrance of the Student Union Building. The questionnaires were given out in the early afternoon (approximately 12:00-3:00PM) of various weekdays. Individual questionnaires were completed by the students standing on location using a clipboard, and returned to the surveyors once completed. One copy of a survey that was filled out correctly was kept on hand to encourage participants to learn the right places for the items on the questionnaire and to make it simple to answer any of the participants' questions.

Data from 300 surveys was tabulated on a shared excel file, all the information that was collected on these survey was included in this file. Data collected in this study was coded numerically and easily grouped together for a cumulative analysis. All analysis that was performed on this data is fully shown and explained in the results section.

We chose to use a survey for this analysis because it allowed us to gather the most information about the most people in the shortest amount of time. The anonymous nature of the survey also encouraged participants to answer the questions honestly, and everything in our power was done to make the test fair and not lead the participants to answer one way or another. We chose to survey in the Killam and Student Union Buildings because these are very high traffic areas with a very broad range of students. We chose to survey around midday and made sure that we surveyed on different days of the week because we wanted to make sure that we got the most representative sample possible.

Because this study looks at test results from a very simple test, it is possible that with enough data collection, an accurate estimate of the knowledge level of the student population could be reached using this method. The score that a participant receives portrays the amount of knowledge that they have on the proper sorting of these specific items, and it is inferred that in order to learn where these items go, they would have had to learn where others go. The methods that were employed to get the surveys filled out were not strictly established and it is possible that we did not obtain a representative sample. Having a more systematic approach to finding students to fill out our survey may have given us a more diverse group of students and may have improved the trustworthiness of our study.

There were several challenges that we faced in conducting this study. Most of the problems that we encountered, shortage of incentives, fewer surveys filled out than planned, and finding appropriate space to conduct our study could all have been resolved if we did not also face time constraints. We did not budget enough time to get 500 surveys filled out, and in addition to that, there was several snow storms that closed Dalhousie some of our planned surveying days, which dramatically changed our scheduling for this study. While our study did face many challenges, the results of our data analysis are still a valuable indicator of Dalhousie student's waste sorting knowledge.

We chose to study students on Dalhousie's Studley campus mainly because this group was easily accessible to us and was large enough that their knowledge level about waste sorting could make a big impact on the amount of unnecessary waste going to landfills. We chose to use only ten items on our survey because we believed that given our time constraints and shortage of incentives, we could not get enough data if the survey took more than 2 minutes to complete. We also found that within these ten items, there are many that are often improperly sorted and also at least two that are supposed to go in every bin, giving us a score that represented their knowledge of all the bins.

#### 4. RESULTS

Of the desired 500 completed surveys for our data analysis, we obtained 300. From these 300 surveys, we were able to make correlations between various factors and observe different trends in our results. The overall distribution of individual scores followed the same trend as a normal bell curve distribution (Figure 4.1). Direct breakdown of the percentage of the survey population which obtained each score is graphically represented in Figure 4.2.





#### **Distribution of Waste Sorting Questionnaire Scores**



Figure 4.2: Pie-Chart Representation of Questionnaire Score Distribution.

From our survey results we were able to determine the average score per respondent, along with other measures of central tendency (Table 4.1). These results are aligned with Figure 4.1 and Figure 4.2.

Table 4.1: Measures of Central Tendency Obtained from Survey Results.

AVERAGE	6.516666667
MODE	6
MEDIAN	6
STD DEV	1.571534989

Due to the nature of our study, and the number of factors we assessed in each questionnaire, we were able to draw results from several different criteria and use these results to determine any relationships; as will be outlined in the discussion. Of the data which is relational and able to be correlated in our analysis, some key findings include the proportion of respondents who answered right or wrong for each individual survey question (Table 4.2 and Figure 4.3Figure 4.3), scores of the two most populous provinces which comprised the results – 32.67% being Nova Scotian students, 30.67% being Ontarian students – and their distribution of scores (Figure 4.4). It was determined students answered correctly to where "newspaper" and "food scraps" are placed 96.33% and 95.67% of the time, respectively (Table 4.2).





Table 4.2: Percentage of Right and Wrong Answers per Survey Item

	% Right	% Wrong
Newspaper	96.3	3.33
Coffee cups	48.33	51.67
Clean Plastic Bag	65.67	34
Soiled Napkin	68.67	31.33
Clean Tin Foil	43	56.33
Milk container	74.33	25.67
Plastic bottle lid	50	50
Clean plastic wrap	41.67	58
Wax paper	68	32
Food scraps	95.67	4.33



Figure 4.4: Distribution of Scores of Ontarian and Nova Scotian Students.

#### Number of Provincial Respondents With 10/10 Score on Questionnaire



Figure 4.5: The Number of Students from Each Province Who Scored 10/10 (Provinces with 0 students are emitted from chart).

The key result from our provincial analysis of questionnaire scores was that 0 students from Nova Scotia scored 10/10, and three students from Ontario scored 10/10, along with three other students from provinces outside Nova Scotia also scored 10/10 (Figure 4.5).

There is a total of four surveys that did not have a response for "hometown". This shows in Figure 4.1 where there is a respondent with a score of 1, and in Table 4.3 where it says that 0 people both International and Domestic had a score of 1. Our final criteria that we wanted to analyse was whether there is an apparent gap between a student's self-perceived knowledge (self-evaluation score) and their actual knowledge (actual score on questionnaire). This was analyzed and graphically represented with graphs in Figure 4.6 through Figure 4.10.

Table 4.3: Number of International and Canadian Respondents and their Score.

Score	International	Canadian
1	0	0
2	0	0
3	3	2
4	5	23
5	4	35
6	7	71
7	7	53
8	4	52
9	3	21
10	0	6
Total	33	263



Figure 4.6: Distribution of Scores of Respondents Who Self-Evaluated Their Waste Diversion Knowledge as "1/5".



Figure 4.8: Distribution of Scores of Respondents Who Self-Evaluated Their Waste Diversion Knowledge as "2/5".



Figure 4.7: Distribution of Scores of Respondents Who Self-Evaluated Their Waste Diversion Knowledge as "3/5".



Figure 4.9: Distribution of Scores of Respondents Who Self-Evaluated Their Waste Diversion Knowledge as "4/5".



Figure 4.10: Distribution of Scores of Respondents Who Self-Evaluated Their Waste Diversion Knowledge as "5/5".

Figure 4.6 through Figure 4.10 show the distribution of how much students believed they knew and what they actually knew; from these graphs it is shown that Figure 4.8, Figure 4.9, and Figure 4.10 all follow a normal distribution, while Figure 4.6 and Figure 4.7 are more varied. Only 1 student who self-evaluated as 5/5 actually scored 100% (Figure 4.10). There is an apparent trend in Figure 4.6 through Figure 4.10, being that when students thought they knew less (score of 1 or 2) the score was an average of 6 with a range that did not extend to the whole range of possible scores (Figure 4.6 and Figure 4.7); students who scored themselves as having medium knowledge (score of 3) had a distribution of scores from 1 to 10 (Figure 4.8); and students who self-evaluated themselves with high scores (4 or 5) tended to have a distribution skewed to the right of the range (Figure 4.9, Figure 4.10).

In addition to hometown, the questionnaire asked participants their faculty. Our results were primarily from Arts and Social Sciences students (32.67%), and Science students (33.33%), with an assortment of respondents from various other faculties (Figure 4.0).



Figure 4.11: Distribution of Questionnaires Respondents' Associated Faculties.

#### 5. DISCUSSION

The purpose of our study and questionnaire was to be able to determine if there is an apparent gap between what students think they know about Halifax's waste regulations, and what they actually know, based upon scores from completing our specifically designed questionnaire. Since there were various factors incorporated into our questionnaire that allowed for supplemental data to be collected (hometown, faculty, age) we were able to analyze our results further to attempt to determine if there was a correlation between any of the factors, or trends that may have appeared. However, since our data set is comprised of only 300 surveys, this is not a representative sample of Dalhousie students; since the Dalhousie student population is over 18 000. Our research did result in relevantly significant findings, and some results that were unexpected. When creating our hypothesis, we believed that Nova Scotian students would likely know Halifax's waste diversion regulations better than those students who come to Halifax from away. Our survey results found that no Nova Scotian students scored 100%, while the six students who scored 100% were from Ontario (3), Alberta (1), Saskatchewan (1), and New Brunswick (1) (Figure 4.5).

The median score on questionnaires was 6/10, roughly follows the normal distribution (Figure 4.1), however our data was slightly skewed to the right, with more students having higher scores (6 and above) than low (5 and below).

We also found that certain items were more difficult for the majority of students to correctly answer, with coffee cups, clean tin foil, clean plastic wrap, and plastic bottle lids all having a near or exactly 50/50 split of respondents who answered correct or not (Figure 4.3 and Table 4.2). This was surprising for coffee cups to be so commonly answered incorrectly, because on a lot of garbage receptacles' information sheets on Dalhousie campus, it will say "coffee cups" in garbage (specifically for our study we chose Tim Hortons' coffee cups as an example; as these have a waxy lining which makes them unable to biodegrade). Clean plastic wrap and clean tin foil were incorrectly categorized about 50% of the time on surveys, likely due to a lack of education that these are actually recyclable.

The key element we wanted to study in our analysis was whether this is a "gap" in selfperceived knowledge and actual knowledge. To assess this we incorporated a "self-evaluation" component of the questionnaire, where respondents graded themselves (before completing the 10 waste sorting questions) on how well they thought they knew where common waste items go. On average, students who scored themselves low (1 or 2 out of 5) knew more than they thought they would (Figure 4.6 and Figure 4.7); students who scored themselves in the middle (3/5) had a regular distribution with a full range of possible scores (Figure 4.8); and students who scored themselves highly (4 or 5 out of 5) generally had higher scores, or the distribution was more skewed to the right (Figure 4.9 and Figure 4.10). Since our study is uniquely designed for this project; there are no other identical studies that support our findings. There have been studies done on waste and recycling attitudes (Bao, 2011; Sutcliffe, 2009) which have conducted in depth surveys of behaviours and different attitudes which may affect an individual's willingness or likelihood of recycling and sorting waste. The goal of our survey was to be as brief and concise as possible, while protecting anonymity and collecting tangible results. We selected specific waste items which are commonly misplaced according to HRM's "commonly missorted waste items" (HRM, 2015). We chose specific items to make the questionnaire moderately challenging; and as our results indicate, HRM is correct in their report of "commonly missorted waste".

Our study only looked to determine if there was a knowledge gap between what students thought they knew and what they actually knew; it did not look to examine any attitudes or behaviours toward actual practices. Future studies could use our findings as a base line and look to study behaviours of students at Dalhousie; to determine whether students know where waste goes, and if they actually take the time and initiative to properly sort it when disposing of it. This could be done through a strategically designed survey (similar to our design, with the addition of criteria to assess for attitudes and behaviours) similar to those by Bao (2011) and Sutcliffe (2009); or through assessing participants for baseline knowledge, then using observational methods to assess if student populations will actually take the time to sort their waste, or dispose of it all in "garbage". A study like this, based upon our preliminary findings could be useful for Dalhousie and their waste diversion strategy; and provide insight into where education and awareness should be spread to increase waste diversion rates on campus.

#### 6. CONCLUSION

As previously stated, this study looks only at the knowledge level of students and their perceived knowledge and does not address waste sorting practices or attitudes. Because this study aims more to describe the student population as it is than to change it, the methods used here are not best suited to create action directly. The results of this study would be better suited for informing individuals who did want to make change in this area and ensure that they were focussing on the most pressing issue.

Our results indicate that there is a serious problem with people's knowledge of how waste should be sorted, and this fact could easily be used to encourage a group to try to change this. This study, and similar studies could be used to devise a Dalhousie Studley campus specific list of commonly missorted items poster, pamphlet or workshop. Because we collected other information, like faculty, year of study and hometown, it could be possible to target specific groups within Dalhousie who do not know the waste regulations as well as other groups. For example, we found that international students scored lower than domestic students. It might be possible to target this group as they arrive at Dalhousie, maybe with an optional workshop during Orientation Week, or even an email. In the end, our study serves to inform those people who are taking action so that they can better make changes by targeting the most problematic areas, whether those areas are found in the different groups within Dalhousie or in sorting specific waste items.

This style of research is easily repeatable, and repeating this study would allow for more reliable conclusions. Because we did get a clear normal distribution in our final data, it is likely that the ten items that we chose are a fair list to use when estimating student knowledge of waste sorting regulations. Even if this study does give us a good estimate, it may also be possible to conduct a similar study that asked the proper sorting of either more items, or simply different items. Conducting this study on a larger sample would also improve it. Because this study is easily reproduced, it could be possible to conduct it in other areas on different populations. Comparing students to staff, or Dalhousie to other Halifax universities would yield very interesting results that may also help to target groups that are missorting their waste the most. This study tells us a lot about how well Dalhousie students know Halifax's regulations and about how well they think they know how to sort their waste, but the reliability of the results of this study could be improved with more research in this area.

#### 7. REFERENCES

- Bao, R. (2011). Waste and Recycling Attitudes and Behaviour in Students in Turku. Retrieved April 13, 2015.
- Beringer, A., Wright, T., & Malone, L. (2008). Sustainability in higher education in Atlantic Canada. International Journal of Sustainability in Higher Education, 9(1), 48.
- Chaves, C. (1998). Recycling and composting on campus. BioCycle, 39(2), 48.
- Davidson, G. (2011). Dalhousie university waste auditing history 2008-2011. Halifax, N.S.: Dalhousie University Office of Sustainability.
- Davidson, G., & Owen, R. (n.d.). Sustainable waste management practices: A guide for the Nova Scotia industrial, commercial and institutional (ICI) sector. Halifax, N.S.: Dalhousie University Office of Sustainability.
- Halifax Regional Municipality. (2015). Garbage, Recycling & Green Cart. Halifax, NS.
- Halifax Regional Municipality. (2013). Solid Waste Strategy Review Otter Lake Analysis. (Item No. 12.2.1). Halifax, NS: Canada. Halifax Regional Council.
- Kassirer, J. (n.d.). Halifax Waste Resource Management Strategy. Retrieved from http://www.toolsofchange.com/English/CaseStudies/default.asp?ID=133
- Smyth, D P, Smyth, A L, & Fredeen, A L. (2010). Reducing solid waste in higher education: The first step towards 'greening' a university campus. Resources, conservation, and recycling, 54(11), 1007-1016.
- Sutcliffe, K. (2009). Leeds University Union: Waste Research; A research project to establish student behaviour and attitudes towards waste and recycling. Retrieved April 13, 2015.

#### 8. APPENDICES

APPENDIX A – COPY OF THE SURVEY

## Waste Sorting Knowledge Survey

Faculty:	Arts and Social Sciences	🗋 Dentistry	C Engineerin	g Computer Science	Graduate Studies				
	Health	🗋 Law	🗋 Manageme	nt 🗍 Medicine	☐ Science				
	Architecture and Planning	Agriculture	Other:						
Age:	18 and under	19-20	21-22	23-24	25 and ove	er			
Year of Study at Dal:	🗋 1st	🗋 2nd	🗋 4th	☐ 5th or more					
Where an	re you from? City:		Prov./State:	Countr	y:				
On a scal	le of 1-5 (1 being the	lowest, 5 being the	highest) what grad	e would you give yours	self regarding your				
Wable bol				4	5				
Place the	following items in th	neir proper waste r	eceptacle. (Check or	ne box only for each ite	em)				
	(	Garbage	Organics	Paper Recycling	Recycling				
Newsp	aper	Ο	$\bigcirc$	$\bigcirc$	$\bigcirc$				
Coffee Horton	cup (i.e. Tim	Ο	Ο	Ο	Ο				
Clean p	plastic bag	Ο	Ο	Ο	Ο				
Soiled	napkin	0	Ο	Ο	Ο				
Clean t	tin foil	Ο	Ο	Ο	Ο				
Milk co	ontainer	Ο	Ο	Ο	Ο				
Plastic	bottle lid	0	Ο	Ο	Ο				
Clean p	plastic wrap	0	Ο	0	Ο				
Wax pa Subway	aper (e.g. y paper wrap)	0	Ο	Ο	Ο				
Food s	craps	0	Ο	Ο	Ο				

Are there any other items for which you are unsure which waste receptacle they belong in?

APPENDIX B – SURVEY RESULTS

CODES:	Survey #	FACULTY	Other	AGE	YEAR AT DAL	City	Province/State	Country	SELF-E News	Coffee	Clean r	Solle	Cle	Milk	Plas C	e Wa	x Foo	d Score	Other items
FACULTY	1	5	5	3	1	Milford	ON	Canada	4 1	1	(		1 1		1 1	0	0	1 3	7
1 = Arte & Social Sciences		10		3	5	Saskatoon	SK	Canada	4 1		1	-	1 1		1 1	1	1	1 0	
	2			2		Terente	ON	Canada					1 0			0	4		=
2 = Denusuy	3	0	2	3	4	Toronto	ON	Canada	3			1				4	1	1 3	4
3 = Engineering	4	1			4	Toronto	ON	Canada	1 1			-	J U	(	0	1	0	1 4	+
4 = Computer Science	5	1		3	4	Toronto	ON	Canada	3 1		1		1 0	1	1 0	0	1	1 0	5
5 = Graduate Studies	6	10	)	3	4	Ajax	ON	Canada	3 1	1	1		1 0	(	0 0	0	1	1 (	<u> </u>
6 = Health Professions	7	10	)	3	4	Ottawa	ON	Canada	3 1	1	1		1 1	(	0 0	1	1	1 8	8 Milk Container, Soiled Napkin
7 = Laws	8	6	1	4	1			India	2 1	0	1		0 0	1	1 1	0	1	1 (	6
8 = Management	9	6	;	5	1	Halifax	NS	Canada	4 0	0 0	0 0		0 0	1	1 1	0	1	1 4	4
9 = Medicine	10	10	)	2	3	Calgary	AB	Canada	4 1	0	1		1 1	1	1 1	0	1	1 8	3
10 = Science	11	1		2	1	Calgary	AB	Canada	4 1	i 0	0	1	1 0	1	1 1	1	0	1 (	6
11 = Architecture and Planning	12	8		2	1	Ottawa	ON	Canada	3 1	0	0	)	1 0	(	0 0	0	0	1 :	3
12 = Agriculture	13	10	)	1	1	Ottawa	ON	Canada	3 1	0	0		0 1	1	1 0	1	1	1 (	8
13 = Other	14	10	)	1	1	Ottawa	ON	Canada	4 1	0	1	-	1 1	-	1 1	0	0	1 :	7 Coffee Cup
	15	8		2	1	Kingston	ON	Canada	4 1	0	1	-	1 0	-	1 1	0	0	1 0	6 Tin foil, plastic wrap
AGE	16	3		2	2	Halifax	NS	Canada	2 1		1		1 1		1 0	1	0	0 0	6 Expired unopend food
1 = 19 and under	17	10		2		Toronto	ON	Canada	4 1						1 0	0	1	1 .	Z Clean plastic wran, wax paper
2 = 10 20	10	10			-	Mindhom	ME	LICA	4							1	1	1 1	o clean plastic wrap, wax paper
2 = 19-20	10	3	•	1	1	Windham	ME DO	Ossada	4			'				1	1		0 0 - #
3 = 21-22	19	1		2	3	vancouver	BC	Canada	4		1		1 1		1 1	0	1	1 4	B Conee cup
4 = 23-24	20	1		2	2	Hartford	СТ	USA	4 1	1	1		1 0	1	1 1	0	1	1 8	3
5 = 25+	21	10	)	4	5	Pickering	ON	Canada	3 1	0	1		1 1	1	1 1	1	0	1 8	8 Wax paper, coffee cup
	22	10	)	2	1	Hogereen	Drenthe	Holland	3 1	0	1	-	1 0	1	1 1	0	1	1 :	7
	23	1		2	3	Ottawa	ON	Canada	4 1	0	0	1	0 0	1	1 0	0	1	1 4	4
	24	1		3	4	Windsor	NS	Canada	4 1	1	1		0 1	1	1 1	1	1	1 9	9 Shampoo bottles, cleaning pro
	25	7		4	1	Fergus	ON	Canada	4 1	C	1		1 1	1	1 1	0	1	1 8	8
	26	1		3	3	Vancouver	BC	Canada	4 1	0	1		1 1	1	1 0	1	0	1	7
	27	11		5	3	Halifax	NS	Canada	3 1	0	1		0 0	1	1 0	0	1	1 :	5
	28	8	5	5	4	London	ON	Canada	4 1	0	0	)	1 0	-	1 0	0	0	1 4	4 Plastic cutlery
	29	1		3	3	Tofino	BC	Canada	4 1	0	1	-	1 1	(		0	1	1 (	3
	30			3	3	Toronto	ON	Canada	4 1	1		-	1 1			1	1	1 1	
	31	1		3	3	Ottawa	ON	Canada	3 1						1 0	0	1	1	4
	20	1		2	3	Ottawa	ON	Canada	3				1 0		1 0	0	1		t
	32			2	3	Ollawa	ON	Canada	2			-				0	1		-
	33	5		5	2	Ottawa	UN	Canada	2 1		1		1 0	1	1 0	0	0	1 :	b
	34	10	)	3	4	Whycocomagh	NS	Canada	4 1	C	0 0	1	1 0	1	1 1	0	1	1 (	5
	35	10	)	4	5	Victoria	BC	Canada	4 1	0	1		1 0	1	1 1	1	1	1 8	3
	36	1		5	1	Covehead	PE	Canada	5 0	) 1	0	1	1 0	1	1 1	0	1	1 (	6
	37	1		5	5	Summerside	PE	Canada	4 1	0	1		1 1	(	) 1	1	1	1 8	3
	38	3		5	5	Shang Hai		China	3 1	0	1		1 0	(	0 0	1	0	1 :	5
	39	1		2	2	Calgary	AB	Canada	2 1	0	1		1 0	1	1 0	0	1	1 (	8 Newspaper, plastic, wax paper
	40	1		3	5	Fort McMurray	AB	Canada	3 1	1	0	)	1 0	1	1 1	1	1	1 8	8 Plastic food containers (packa
	41	6		2	2	Dublin	ON	Canada	4 1	0	1		1 0	(	0 0	0	0	1 4	4
	42	1		2	3	Whistler	BC	Canada	4 1	1	1		1 0	1	1 0	1	1	1 8	3
	43	1		3	4	Toronto	ON	Canada	4 1	0	1		1 0	-	1 0	1	1	1 :	7
	44	5	;	5	3	Ottawa	ON	Canada	3 1	0	0 0	,	1 1		1 1	0	0	1 0	3
	45	10		3	5	Halifax	NS	Canada	5 1	1			1 0	(	1	0	1	1 (	6 All items
	46	10		3	4	St Stenhen	NB	Canada	5 1		1	-	1 0		1 1	0	0	1 1	6 Food containers
	40	10		2	-	Neumarket	ON	Canada	2 4				1 0			1	4		
	47	10		2		Toronto		Canad-	3			-	1 4		1 0	1	1	1 4	2
	48	11		4	5	Ottown		Carada	4 1	1	1		1 1			1	1	4	5
	49	10		3	3	Aliasiasa		Canada	3 1			-				0	1		
	50	10		2	3	wississauga	UN	canada	1 1	1	1	- '	J 1	- 1	1 1	U	1	1 8	
	51	10	-	3	3	Pickering	UN	Canada	3 1	0	0	-	J 0	1	1 1	0	1	1 4	b
	52	10	1	3	5	Miramichi	NB	Canada	4 1	1	1	-	0 0	1	1 0	1	0	1 0	5
NOT COMPLETE***	53	10		3	4	Toronto	ON	Canada	4 1	1 1	1	<u> </u>	1 0	1	1 1		1	1 8	8
	54	10	)	3	4	Mount Uniacke	NS	Canada	4 1	1	0	1	1 0	1	1 1	0	1	1 :	7
	55	10	1	3	4	Halifax	NS	Canada	3 1	0	1		1 0	0	) 1	0	0	1 :	5
	56	10	)	3	4	Kanata	ON	Canada	4 1	0	0		1 1	(	0 0	0	0	1 4	4 Hard plastic packaging
	57	10	)	4	5	Guelph	ON	Canada	3 1	1	1		1 1	(	0 0	0	1	1	7
	58	10	)	3	4	Alliston	ON	Canada	3 1	0	1		1 1	1	1 0	1	1	1 8	В
NOT COMPLETE***	59	10	)	3	3	Halifax	NS	Canada	4 1		) 1		1	1	1 0	1	1	1 :	7
	60	10	)	3	3	Halifax	NS	Canada	3 1	1	(	1	1 0	1	1 1	0	1	1	7
	61	10	)	3	4	Dartmouth	NS	Canada	4 1	1	0		1 0		1 0	0	0	1	5 Corregated cardboard, thin car
	62	10		3		Barrie	ON	Canada	3	1	1	-	1 0		1 1	0	1	1	R
	62	10		2	3	Calgany	AR	Canada	3				. u		1 1	0		1 4	
	03	10		3	3	Durlingto -	01	Cared	2		-	-				0	1		7
	64	10		3	3	Burington		Canada	3 1	1		-			1 1	0	1		7
	65	10		2	3	Diacebridge		Canada	3 1		1	_	1 1		0	1	0		
	66	10		3	3	Calgary	AB	Canada	1 1	0		'	1 0	- 1	0	1	1	1 (	
	67	10	-	3	4	Upper Stewiacke	NS	Canada	1 1	1	(	-	1 0	1	1 1	0	1	1	(
	68	1		2	3	Alexandria	VA	USA	3 1	0	0	1	0 0	0	J 1	0	0	1 :	3
	69	8	5	3	4	Dhaka		India	3 1	1	0		0 0	0	0 0	0	0	1 :	3
	70	4		1	1	Modellia		Columbi	2 1	C	0		1 0	1	1 0	0	0	1 4	4

CODES:	Survey #	FACULT	Other	AGE	YEAR AT DAL	City	Province/State	Country	SELF-E	Newsp	Coffee	Clean p	Solle	Cle	Milk	Plas Cle	Wax	Food	Score	Other items
	71	1 1	1	3	3	Beijing		China	4	1	0	1	C	0	0	0 0	) (	) 1	. :	3
	72	2 4	в	2	3	Toronto	ON	Canada	2	1	0	0	C	0	0	) 1 )	) (	) 1		3
	73	2	1	4	4	Port-Harcourt	River state	Nigeria	4	. 1	1	0	C	0	1	0	1 1	1 (		1
	74	, 1 1	n	2		Halifay	NS	Canada		1		0	0	0	1	1		 1 1		1
	75		1	2		Chatam	ON	Canada		1	0	0	1	1				) 1		4
	76	2	5	5	2	Lalifay		Canada		1	1	0		0	0					1
	70		, ,				01	Canada			1	0			0				,	-
	77		0	3	4	Oakville	UN	Ohlas			0	1			0					4
	78	5 1	5	3	4	Suznou		China	4		0	0	U O	1 1	0			1 1		+
	79		1 Visitin	3	1	Sydney	NS	Canada	2	1	0	0	0	0	1	1 1	) (	ן ר ע		1
	80	) 10	J	2	2	Halifax	NS	Canada		1	0	1	C	0 0	0	0 0	J 1	1 1	-	1
	81	1 1	8	1	1	Vernon	BC	Canada	2	1	0	0	C	0	1	0	1 (	) 1	1 4	4
	82	2	7	4	5	Calgary	AB	Canada	3	1	0	0	C	0	0	) 1 (	0 1	1 1	1 4	4
	83	3	1	2	1	Waverly	NS	Canada	3	1	1	1	C	0	0	0 0	) (	) 1	1 4	4
	84	1 1	0	2	2	Halifax	NS	Canada	4	1	0	0	C	0	1	0	0 1	1 1	4	4
	85	5	1	3	3	Toronto	ON	Canada	1	1	0	1	C	0	1	0	1 (	) 1	1 4	5
	86	3 1	В	3	3	Burlington	ON	Canada	3	1	0	1	C	0	1	0	) (	) 1	4	4
	87	7 1	0	2	2	Port Carling	ON	Canada	3	1	1	0	1	0	0	0 0	) (	) 1	1 4	4
	88	3 1	0	2	2	Torrance	ON	Canada	3	1	0	1	C	1	1	0	) (	0 0	) 4	4
	89	9 1	D	3	3	Guelph	ON	Canada	3	1	0	1	1	1	0	0 0	0 0	0 1	1 4	5
	90	) .	1	2	2	Montreal	NS	Canada	2	1	0	1	1	0	1	0	) (	) 1	1 4	5
	91	1 1	D	3	2	Seoul		Korea	4	1	0	1	C	0	1	0	<b>)</b> 1	1 1	1	5
	92	2	1	3	4	Toronto	ON	Canada	1	1	1	0	1	1	0	0 0	) (	) 1		5
	93	3	1	3	3	Toronto	ON	Canada	4	1	1	1	C	0	0	0 0	<b>)</b> 1	1 1	1	5
	94	1 1	в	3	4	Toronto	ON	Canada	4	1	0	0	1	1	0	0 1	) (	) 1	1	5
	Q4	5	1	2	5	Toronto	ON	Canada		1	0	0	1	0	1	0	1 0	) 1		5
	06	;	3	2		Halifax	NS	Canada		1	0	1	1	1	0	0 0	) (	) 1		5
	07	, ,	-		4	Toronto	ON	Canada		4	0	4			1	0				5
	05	2	1			Burlington	ON	Canada		1	0	0	1	0	1	0		1 1		5
		, ,	4	1		Burington	Verment		-		0	0		0		0				=
	95		1	1		Burungton	vermont	Osada	-		0	0		0		0				5 
	100	1		2	3	Ottawa	UN	Canada	-		0	0	1	1	1					- styroroam
	101	۱ ۱	1	5	2	Brandon	MB	Canada	4	1	1	0	0	1	0		ן נ י	1 1		-
	102	2	1	3	4	Toronto	ON	Canada	4	1	0	1	0	0	1	0	1 (	ן ו ו		b
NOT COMPLETE***	103	3 1	0	4	4	Beijing		China	**	1	0	1	C	1	0	0 0	1 (	) 1	1 4	5
NOT COMPLETE***	104	1 1	1	3	3	Halifax	NS	Canada	**	1	0	1	C	0	1	0	1 (	) 1	1 4	5 wood packaging
	105	5	1	2	3	Ottawa	ON	Canada	4	1	0	0	1	0	0	0 0	1 1	1 1	1 4	5
	106	6 1	0	3	4	Surrey	BC	Canada	4	1	0		C	1	1	0	) (	) 1	1 4	4
	107	, .	1	2	3	Yarmouth	NS	Canada	4	1	0	1	C	0	1	1	) (	) 1	1 1	5
	108	3 1	D	1	1	Edmonton	AB	Canada	2	1	0	0	1	0	1	0	0 1	1 1	1 4	5
	109	9 1	D	1	1	Calgary	AB	Canada	4	1	0	1	1	0	0	0 0	1 (	) 1	1 4	5
	110	) .	1	3	6	Halifax	NS	Canada	4	1	0	1	C	0	1	1	) (	) 1	1 4	5
	111	1 10	0	3	4	Halifax	NS	Canada	4	0	1	0	1	1	0	1	0 1	1 1	1 6	6
	112	2 10	D	5	1	Irbid		Jordan	2	1	1	1	C	0	0	0 0	1 (	0 0	. (	1
	113	3 :	3	3	3	Halifax	NS	Canada	3	1	1	0	1	0	1	1	) (	) 1	1 6	6
	114	1	1	5	1	Bawdon	NS	Canada	ŧ	1	0	0	1	0	1	1	0 1	1 1	1 0	6
	115	5	1	2	1	Dartmouth	NS	Canada	4	1	0	0	1	0	1	0	1 1	1 1		8
	116	6	6	2	1	Sydney	NS	Canada	3	1	0	0	1	0	1	1	) 1	1 1		6
	117	, .	1	3	3	Halifax	NS	Canada	3	1	1	0	C	0	1	1	) 1	1 1		6
	118	3	1	2	2	Dartmouth	NS	Canada	3	1	0	0	1	0	1	1	1 (	) 1		6
	119	9	1	2	2	Halifax	NS	Canada		1	0	1	c	0	1	1	1 (	) 1	1	6
	120	)	1	3	4	Toronto	ON	Canada		1	0	1	1	0	0	0 0	1 1	1 1	1	6
NOT COMPLETE***	121	1	в	3		Toronto	ON	Canada	***	1	0	1		1	1	0	) 1	1 1		6
	120		4	1	4	Chenydu		China			0	1	1	1	1	0	1 1	 1 C	 ) 4	3
	100	3	R	2		Datung		China		1	1	4			4	0	1 (	· ·		3
	120	1	8	2		Toronto	ON	Canada		4	4	0	~		4	0	 	1 1		3
	124		8	1	4	Toronto	ON	Canada		4	0	1	1	0	0		1 1	1 4		3
	120		0	-	-	Brantford	ON	Conede			-	-		0	-					8
	120	, ,	1	2		Ave	ON	Conode		1		0		0	1					
	12/		4	2	2	Ayı		Canada		1	1	1	1					1		
	128		7	2	2	Gueipn		Canada	1	1	1	1	C		1	0	) ( 	1		2
	129		(	5	5	St. Jonn's	NELD	Canada	1	1	1	1	C	1	1	U	J 1	. 0	. (	
	130	) :	3	2	3	Dartmouth	NS	Canada	2	1	0	1	1	0	0	0 1 1	) 1	1 1		8
	131	1 1	6	1	1	Edmonton	AB	Canada	2	1	0	1	C	1	0	0 0	1 1	1 1		6
	132	2	1	3	4	Shelburne	NS	Canada	4	0	1	0	1	0	1	1	0 1	1 1		6
	133	3	1	2	1	***	***	***	3	0	0	1	1	1	0	0 1	1 0	0 1	(	6
	134	1 1:	3 Journa	2	1	Grand Cayman		Caymen	3	1	1	1	C	1	0	0 0	1 1	1 0	) (	8
	135	5 1	C	2	1	Orangeville	ON	Canada	2	1	0	0	1	1	1	0	<b>)</b> 1	1 1		6
	136	6 (	6	3	3	St. John's	NFLD	Canada	3	1	0	1	C	0	1	0	1 1	1 1		6
NOT COMPLETE***	137	7 4	В	3	4	Toronto	ON	Canada	***	1	0	0	C	1	1	1	1 (	) 1		6
	138	3	1	5	3	Saskatoon	SK	Canada	3	1	0	1	C	1	1	1	) (	) 1		6
	139	9	1	5	3	Vancourver	BC	Canada	4	1	1	1	C	1	0	0 0	1 (	) 1		6
	140	)	1	2	3	Kingston	ON	Canada	4	1	1	1	C	0	1	0	0 1	1 1		6

CODES:	Survey # FA	CULTY	Other	AGE	YEAR AT DAI	City	Province/State	Country	SELF-E	Newsp	Coffee	Clean p	Solle	Cie I	Milk F	las (	le W	ax Fo	od S	Score	Other items
	141	10		3		1 ***	***	***	3	1	0	1	1	1	0	0	1	0	1	6	
	140	10		- 0		- 4 E-# Diver	10	0			0			-	0	4	-	4	-	0	
	142	10		3		+ Fall River	NS	Canada	3	1	1	0	1	U	U	1	U	1	1	0	-
	143	8		1		1 Halifax	NS	Canada	1	1	0	1	0	0	1	0	1	1	1	6	1
	144	4		4	4	4 riyadh		Saidi Ar	2	1	1	1	0	0	0	1	1	0	1	6	i
	145	1		1		1 Dartmouth	NS	Canada	2	1	1	0	1	0	1	1	0	1	0	6	i
	146	10		3	:	3 Fall River	NS	Canada	3	1	0	1	1	0	1	0	1	0	1	6	
	147	13	Not sp	5		5 Diaby	NS	Canada	5	1	0	0	1	0	1	1	0	1	1	6	
	148	10		2		2 Campbelltown	NB	Canada	4	1	1	1	0	0	1	0	0	1	1	6	
	149	1		3		3 Oshawa	ON	Canada	2	1	0	0	1	1	0	1	0	1	1	6	
	150			1		1 Terente		Canada	2	4	0	0	1	4	0	4	0	4	4	6	
	150	3		1			ON	Canada	3		0	0		1	0	1	0	1	-	0	
	151	1		2		3 Vaugnan	ON	Canada	4	1	0	1	1	0	1	0	1	0	1	6	-
	152	10		4		5 Annherst	NS	Canada	4	1	1	1	1	0	1	0	0	0	1	6	
	153	5		5		5 Halifax	NS	Canada	2	1	1	0	0	0	1	1	0	1	1	6	
	154	8		2	:	3 Toronto	ON	Canada	4	1	1	0	1	1	1	0	0	0	1	6	i
	155	1		2		1 Ottawa	ON	Canada	1	1	1	1	0	1	0	0	1	1	0	6	i -
	156	10		1		1 Halifax	NS	Canada	3	1	0	1	0	0	1	1	0	1	1	6	
	157	10		2		3 Dartmouth	NS	Canada	4	1	0	0	1	1	1	0	0	1	1	6	
	158	4		2		1 Halifax	NS	Canada	3	1	1	0	1	0	1	1	0	0	1	6	
	150	. 7		5		Michiccoura	ON	Canada	2	1		1		0	0	0	1	1	-	6	
	109			0		i viississauga		Canada	3		1	1	0	0	0	0	1		-	0	
	160	1		3	4	+ ciora	UN	Canada	4	1	0	0	0	1	1	1	U	1	1	6	
	161	1		3		stephenville	NL	Canada	3	1	1	0	1	0	1	0	0	1	1	6	-
	162	7		3	4	4 Kingston	ON	Canada	4	1	0	0	0	1	1	0	1	1	1	6	
	163	1		3	4	4 Hamilton	ON	Canada	2	1	0	1	1	0	1	1	1	0	1	7	
	164	1		3		5 Ottawa	ON	Canada	5	1	1	0	1	0	1	1	0	1	1	7	Broken glass, teabags with sta
	165	10		4		5 Halifax	NS	Canada	4	1	1	1	1	0	1	1	0	0	1	7	
	166	10		4		3 Beijing		China	4	1	1	1	0	1	0	0	1	1	1	7	
	167	5		4		1 Orillia	ON	Canada	4	1	1	1	1	1	0	0	0	1	1	7	
	168	1		5		4 Cartunighot	NI	Canada	4	1	1	1	1	0	1	0	1	0	1	7	
	160	10		3		1 barrington	NS	Canada	3	1	1	1	1	1	0	1	0	0	1	7	
	170	10		2		1 Manatan	ND	Canada						0	1	4	0	4	4	7	
	170	10		2		1 Destmouth	NC	Canada	2	1		1	1	0	4	1	0	4	4	7	
	1/1	1		3			NS	Canada	4	1	0	1	1	0	1	1	0	1	1		
	1/2	6		2		Glace Bay	NS	Canada	4	1	0	0	1	0	1	1	1	1	1		
	173	6		2		1 Glace Bay	NS	Canada	3	1	0	1	1	0	1	1	0	1	1	7	
	174	10		2		1 Sackville	NS	Canada	3	1	0	1	1	0	0	1	1	1	1	7	
	175	13	Medic	1		1 Truro	NS	Canada	3	1	0	1	1	0	1	1	0	1	1	7	
	176	10		1		1 Saint John	NB	Canada	4	1	0	1	1	0	1	1	0	1	1	7	
	177	8		3	4	4 Toronto	ON	Canada	4	1	0	1	1	0	0	1	1	1	1	7	
	178	1		3	:	3 Mississauga	ON	Canada	4	1	1	1	0	1	1	0	0	1	1	7	
	179	10		3	4	4 Goderich	ON	Canada	4	0	0	1	1	1	1	0	1	1	1	7	
	180	1		3	:	2 Toronto	ON	Canada	4	1	0	1	1	1	0	0	1	0	1	6	
	181	1		5		5 Great Village	NS	Canada	3	1	0	1	0	1	1	0	1	1	1	7	
	182	8		2		2 Pictou County	NS	Canada	3	1	1	1	1	0	0	1	0	1	1	7	
	183	3		2		1 Bedford	NS	Canada	4	1	1	1	1	1	0	0	0	1	1	7	
	184	7		5		5 Toronto	ON	Canada	3	1	1	0	1	0	1	0	0	1	1	6	
	185	1		2		2 Grimshy	ON	Canada	3	1	0	1	1	1	1	0	1	0	1	7	
	196	10		2		2 Sudnov	NS	Canada	2	0	0	1	1	0	- 1	1	1	1	1	7	
	100	10		-	-	Destroyuth	NO	Ornada		0	0	-		0	-	-	-		-		
	187	13		3	•	3 Dartmouth	N5	Canada	4	1	1	0	1	0	1	1	U	1	1		
	188	1		2		z Nassau	NP	Banama	3	1	1	1	0	1	0	U	1	1	1	7	
	189	1		3	4	+ Halitax	NS	Canada	5	1	1	0	1	1	1	1	U	U	1	7	plastic pens, pencils
	190	1		3	:	3 Toronto	ON	Canada	4	1	0	1	0	1	1	0	1	1	1	7	
	191	1		3	4	4 Toronto	ON	Canada	3	1	1	1	0	1	1	0	0	1	1	7	lighters
	192	1		2	:	3 Ottawa	ON	Canada	4	1	1	1	0	0	1	1	0	1	1	7	
	193	10		4	4	4 Victoria	BC	Canada	4	1	0	1	1	0	1	1	0	1	1	7	Lightbulbs
	194	10		3	4	4 Dartmouth	NS	Canada	5	1	0	1	1	0	1	1	0	1	1	7	
	195	5		3		1 Toronto	ON	Canada	5	1	0	1	1	1	0	1	0	1	1	7	
	196	1		5		2 Dartmouth	NS	Canada	4	1	1	0	1	0	1	1	0	1	1	7	
	197	8		4		4 Svdnev	NS	Canada	3	1	1	1	0	0	1	1	0	1	1	7	
	198	10		2		3 Toronto	ON	Canada	4	1	1	1	0	1	1	0	1	0	1	7	
	199	1		3		3 Saskatoon	Sk	Canada		1		1	1	0	1	1	1	0	1	7	
	200	10		4		1 Burlington	ON	Canada		4	0		4	1		4	0	1	1		
	200	10				1 Montros	00	Canada	1	1	0			4	1	0	0	1	1	-	
	201	10		0		+ wonued	NC	Carlada	3	1	1	1			0	U	1	1	-		
	202	6		- 3		nalitax	INS .	Canada	5	1	1	0	1	1	0	1	1	U	1	7	
	203	8		3		Nanjing		China	3	1	0	1	1	0	1	1	U	1	1	7	
	204	1		3	4	4 Ancaster	ON	Canada	4	1	1	0	1	1	1	0	0	1	1	7	
	205	1		3	4	4 Adeliade		Australia	4	1	0	1	0	1	1	1	1	0	1	7	
	206	1		2	:	2 Mississauga	ON	Canada	4	1	1	1	1	0	1	0	1	1	1	8	
	207	10		3	4	4 Halifax	NS	Canada	4	1	1	0	1	1	1	1	0	1	1	8	1
	208	5		5		5 Eastern Passage	NS	Canada	5	1	0	1	1	1	1	0	1	1	1	8	Pizza Boxes
	209	1		4	-	4 Vancouver	BC	Canada	3	1	0	1	1	1	1	0	1	1	1	8	
	210	10		2		2 Halifax	NS	Canada	3	1	1	1	1	1	1	0	1	0	1	8	

CODES:	Survey #	FACULT	Other	AGE	YEAR AT DAL	City	Province/State	Country	SELF-E	Newsp	Coffee	Clean p	Solle	Cle	Milk	Plas	Cie \	Nax	Food	Score	Other items
	21	1	6	4		Cole Harbour	NS	Canada	1	1	0	1	0	1	1	1	1	1	1		3
	21	2	6			Moncton	ND	Canada			0		1			1		- 1			
	21.	2		4			IND	Canada	2		0			0		1	1				
	21	3	1	2	2	2 Kingston	NS	Canada	4	1	0	1	1	0	1	1	1	1	1	1	3
	21	4 1	0	3	4	Toronto	ON	Canada	4	1	1	1	1	1	1	0	0	1	1	1	3
	21	5	8	4	. 3	B Dhaka		India	4	1	1	1	0	1	1	0	1	1	1	1	3
	21	6	1	4	. 4	4 Wolfville	NS	Canada	5	i 1	0	1	1	0	1	1	1	1	1	1	3
	21	7 1	0	2	2	2 Toronto	ON	Canada	5	5 1	1	C	1	1	1	1	0	1	1	1	3
	21	3	5	5	ŧ	5 Lunenbura	NS	Canada	5	5 1	1	1	1	0	1	1	1	0	1		3
	21	-	1	1		Halifax	NS	Canada	1	1	0	0	1	1	1	1	1	1	1		3
	20	- 1 1	0	2		St Martin		Carriboa			1	0		1		0		- 1			
	22							Cambea								0	-				
	22		3	2		Sackville	NS	Canada	5	) 1	1	1	1	1	U U	0	1	1	1		3
	22	2 1	0	2	2	2 Belmont	ON	Canada	5	5 1	1	1	1	1	C	0 0	1	1	1	1	3
	22	3	1	2	1	I Saint John	NB	Canada	2	2 1	1	1	1	0	C	) 1	1	1	1	1	3
	22	4 1	0	2	1	Halifax	NS	Canada	3	3 1	1	1	1	0	1	1	0	1	1	1	3
	22	5	1	2	. 2	2 Calgary	AB	Canada	4	1	1	1	1	0	1	1	1	0	1	1	3
	22	6	1	2	. 2	2 Halifax	NS	Canada	3	3 1	1	1	1	0	1	1	0	1	1	1	3
	22	7	8	3		8 Milton	ON	Canada	3	1	1	1	1	0	1	1	0	1	1	1	3
	22	3	1	2		Halifax	NS	Canada	3	1	1	1	1	0	1	1	0	1	1	1	3
	22	2	6	1		Hammond Plains	NS	Canada			1	1	1	0	1	1	0	1	1		3
			0	-			NO	Oanada						0			4				
	23	, 1 ,	0	3		XBIIIBLI	GVI	Canada	4	1	1	1	1		1	1	1	0	1	1	
	23		3	2	3	rarmouth	INS	Canada	4	+ 1	0	1	1	1	1	1	1	0	1	1	5
	23	2	1	2	2	London	ON	Canada	2	2 1	0	1	1	1	1	1	0	1	1	1	3
	23	3 1	0	3	2	2 Halifax	NS	Canada	3	8 1	1	1	1	0	1	1	0	1	1	1	3
	23	4	6	1	1	Halifax	NS	Canada	3	8 1	1	1	1	0	1	1	0	1	1	1	3
NOT COMPLETE***	23	5	6	1	1	***	***	***	3	3 1	1	1	1	0	1	1	0	1	1	1	3
	23	6	6	3	1	Bridgetown	NS	Canada	4	1	1	1	1	0	1	1	0	1	1	1	3
	23	7	1	5		5 Korla		China	4	1	1	1	1	0	1	1	0	1	1	1	3
	23	3	1	2		2 Halifax	NS	Canada	3	3 1	1	C	1	1	1	1	0	1	1	4	3
	23	4	6	2		Halifax	NS	Canada	1	1	1	1	1	0	1	1	0	1	1		3
	24	1 1	3	5		8 Montreal	00	Canada	-	. 1		1	1	1		0	1	1	1		3
	24	1	1	4		Providence	QU DI	LICA		, i , i	1			1		1	- 1	1			2
	24	1 D	1	4		Titeguille		Canada			1	1				1	- 1	1			
	24.	2		4		o ritesville	IND .	Canada	4					0			1				
	24	3 .	4	2	1	Portage la Point	MB	Canada	4	1	1	1	1	1	1	0	1	1	1	5	9
	24	1	1	3	4	Halifax	NS	Canada	5	5 1	1	1	1	1	1	0	1	1	1	9	3
	24	5 1	1	3	4	Bridgewater	NS	Canada	4	1	1	1	1	0	1	1	1	1	1	9	3
	24	6	1	3	1 3	3 Coldstream	BC	Canada	4	1	0	1	1	1	1	1	1	1	1	9	9
	24	7 1	0	3	1	I Saint John	NB	Canada	3	3 1	1	1	1	1	1	1	0	1	1	9	9
	24	3 1	0	2	2	2 Moncton	NB	Canada	3	8 1	1	1	1	1	1	1	0	1	1	9	9
	24	9	5	5		5 Halifax	NS	Canada	5	i 1	1	1	1	0	1	1	1	1	1	9	9
	25	) 1	0	1	1	I Halifax	NS	Canada	3	8 1	1	1	1	1	1	1	0	1	1	9	9
	25	1 1	0	4		5 Newglascow	NS	Canada	3	3 1	1	1	1	1	1	1	0	1	1		9
	25	2	1	2	. 1	2 Mission	BC	Canada	3	3 1	0	1	1	1	1	1	1	1	1		9
	25	3	6	5	1 2	Benin		Nigeria	5	5 1	1	1	1	1	1	0	1	1	1	9	9
	25	4 1	1	2		St. Margerets Ba	NS	Canada	4	1	1	1	1	0	1	1	1	1	1		9
	25	5	1	3	4	Halifax	NS	Canada	4	1	1	1	1	1	1	1	0	1	1		Boxboard
	25	- 3 1	1	3		Saskatoon	SK	Canada	4	. 1	1	1	1	1	1	0	1	1	1		3
	25	7		5		Dortmouth	NC	Canada			1	1		1		0		- 1			
	25	r > 1	1	2		Darthouth	143	China		, ,	1		4	1		0	- 1	- 1			
	25	· 1	5		4	New Mic	NC	Concil	4		1		1	1		0			1		, 
	25		4	5	4	New Willes	00	Canada	2	. 1	1	1	1	1	1	0	1	1	1	1	2
	26		-	3	4	+ burnaby	DC	Canada	3	1	1	1	1	0	1	1	1	1	1		1
	26	1 1	3	5		Saskatoon	SK	Canada	5	1	1	1	1	1	1	1	1	1	1	10	J
	26	2 1	0	3	4	Calgary	AB	Canada	4	1	1	1	1	1	1	1	1	1	1	10	1
	26	3 1	0	5	6	5 Toronto	ON	Canada	3	8 1	1	1	1	1	1	1	1	1	1	10	antiperspirant
	26	4 1	1	2	2	2 Richmond Hill	ON	Canada	4	1	1	1	1	1	1	1	1	1	1	10	
	26	5 1	0	3	3	3 Goosebay	NB	Canada	4	1	1	1	1	1	1	1	1	1	1	10	
	26	6	1	5	i 4	Halifax	NS	Canada	4	1	0	C	1	0	1	1	0	0	1		5
	26	7 1	0	5		B Halifax	NS	Canada	3	8 1	1	1	1	0	1	1	0	1	1	1	3
	26	3 1	0	2	4	1	SK	Canada	4	0	0	1	1	0	1	1	0	1	1		3
	26	9 1	0	3	1 1	Fredrickton	NB	Canada	3	1	0	1	0	1	1	1	1	1	1	1	3
	27	) 1	0	A		1					1			0 0		0 0	0	0			1
	27	1 4	0	- 4		L linan	SD	China		. 0	. 1	4					1	1			7
	21	· 1	2	3		Vicakhanehne	5D	India	4	· 1	1					0	1	1			
	2/2	<u>-</u>	0 0	4		Change	Cuenudara	nuia Chir-	4		1		- 0	1	1		0	0	1	- '	J
	27	5	8	3	4	snenznen	Guanydong	China	2	: 1	1	1	0	0	_ C	0	U	0	1		+
	27	4 1	0	2	1 3	3 Oakville	ON	Canada	4	1	0	C	1	0	1	0	0	0	1	4	1
	27	5	1	3	3	B Piccadilly	NFLD	Canada	3	8 1	1	C	0	0 0	0	0 0	1	1	1		5
	27	6	1	2	2	2 Mississauga	ON	Canand	2	2 1	1	1	0	0	1	1	0	1	1	1	7
	27	7 1	0	2	2	2 Lower Sackville	NS	Canada	4	1	1	C	0	0	0	1	0	0	1	4	1
	27	3	8	3	3	3 Toronto	ON	Canada	4	1	0	C	1	1	1	0	0	1	1		3
	27	Э	3	5	1	Lake Echo	NS	Canada	3	8 1	0	1	0	1	1	0	1	0	1		3
	28	0	6	2		3 Ottawa	ON	Canada	1	1	0	1	0	0	0	0 0	1	1	1		5

CODES:	Survey #	FACULTY	Other	AGE	YEAR AT DAL	City	Province/State	Country	SELF-E	Newsp	Coffee	Clean p	Solle	Cie	Milk	Plas	Cle	Wax	Food	Score	Other items
	281	1		2	3	Queensville	ON	Canada	3	1	0	1	0	1	0	0	1	0	1	5	5
	282	10		2	2	Toronto	ON	Canada	2	1	0	0	1	0	1	1	0	0	1	5	5
	283	5		5	1	Vancouver	BC	Canada	4	1	0	1	1	1	1	0	1	1	1	8	Pizza Boxes
	284	10		2	1	Edmonton	AB	Canada	4	1	1	0	0	0	1	0	0	1	1	5	5
	285	3		2	2	Halifax	NS	Canada	4	1	0	0	1	0	1	1	0	0	1	5	5
	286	1		1	1	Halifax	NS	Canand	2	1	0	1	0	0	1	0	1	0	C	4	
	287	10		4	5	Ottawa	ON	Canada	4	1	1	1	1	1	1	1	1	1	1	10	)
	288	1		5	4	Nuohagport	MA	USA		1	1	1	0	1	0	0	1	1	1	7	,
	289	1		2	2	Ottawa	ON	Canada	3	1	0	1	0		1	0	1	1	1	6	6
	290	7		4	3	Charlottetown	PEI	Canada	3	1	0	0	1	0	1	1	0	1	1	6	5
	291	6		3	2	Moncton	NB	Canada	2	1	0	1	0	1	1	0	1	1	1	7	,
	292	10		3	4	Middleton	NS	Canada	4	1	0	1	1	1	1	1	0	0	1	7	,
NOT COMPLETE	293	5		4	4	Sydney	NS	Canada	4		1	1	1	0	1	0	1	1	1	7	,
	294	10		3	4	Barrington	NS	Canada	2	1	1	1	1	1	1	1	0	1	1	g	)
	295	5		4	1	Montreal	QC	Canada	3	1	0	1	0	1	0	0	1	1	1	6	5
	296	10		3	5	Halifax	NS	Canada	4	1	1	0	0	1	1	0	0	1	1	6	6
	297	5		5	5	Thunder Bay	ON	Canada	4	1	1	1	1	1	1	0	1	0	1	8	3
	298	10		4	5	Dartmouth	NS	Canada	3	1	1	0	1	0	1	0	0	1	1	6	6
	299	10		4	5	Thornhill	ON	Canada	4	1	1	1	1	0	1	1	0	1	1	8	Reusable water bottles
	300	10		3	3	Calgary	AB	Canada	4	1	1	1	1	0	1	1	0	1	1	8	leafy green" (spinach) bags