

BULK FOODS STUDY

**Portland State University
MBA Program &
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Executive Summary

The goal of the Bulk Foods Study was to compare bulk and non-bulk items in regard to consumer perceptions, pricing and environmental impact. While many claims have been made regarding the benefits of buying foods in bulk, there have been few quantifiable statistics to support those claims. As a result, this study focused on gathering formal data to substantiate or dispel such assertions. The study was conducted in Fall 2011 in conjunction with Portland State University's MBA program and Food Industry Leadership Center.

The first section of the study focused on consumers. It was used to evaluate the average individual's views about bulk and non-bulk products, buying motivations and the disposal of products.

The second area of the study centered on pricing. Data was collected from a variety of retailers to compare identical or very similar products in bulk and packaged forms. Other comparisons from this data include organic versus non-organic products, name brand versus generic, and so forth.

The third section of the study evaluated the environmental impact of buying in bulk versus packaged goods. The primary analysis focused on packaging and measured bulk and non-bulk packaging. In addition, attention was given to recyclability of packaging, and the environmental impact of bulk food production and transportation. While this study was unable to assess the complete environmental impact of bulk foods, the section provides a good starting point in the comparison of bulk and non-bulk foods in regard to sustainability.

Consumer Survey Data Methodology and Analysis

Introduction

Information was gathered to discern consumer perceptions of bulk foods in regard to food waste and buying habits. Both demographic questions as well as questions directly related to bulk foods were presented. The survey was distributed online and resulted in 250 completed surveys, from a total of 271 surveys that were begun.

Methodology

An eleven question survey was administered online and disseminated via email and social media platforms. The survey was available for 22 days: from Wednesday, October 26, 2011 to Wednesday, November 16, 2011.

Both the length and the type of questions asked were developed to ensure maximum participation. The survey was kept short to ensure a sufficient number of participants. No questions required a response so participants could omit an answer if they so chose. All resp

The results of the survey are slightly skewed because the demographics of the survey do not reflect the average population in the United States. The demographics of the survey:

- Are slightly younger than the average population
- Are wealthier than the average population
- Represent more women than men

The online distribution of this survey is a likely contributor of the skewed demographic results. However, it is possible that the results may better reflect the target market for bulk foods. See **Exhibit 1** for the survey and results.

Conclusions

While many facts can be deduced from the survey, there were key findings that should be considered in regard to bulk foods:

- Buyers of bulk foods do so because they
 - Are available in any quantity
 - Are less expensive
 - Use less packaging
- The greatest concerns about bulk foods were
 - The sanitary nature of the product
 - Freshness
- The products that people are most likely to buy in bulk are
 - Nuts and seeds
 - Grains and flours
- Bulk items were slightly less likely to be thrown away than packaged items

Retail Prices Data Methodology and Analysis

Introduction

Retail prices for bulk and packaged foods were gathered in order to conduct price comparisons. The primary goal was to determine how bulk food prices compared to their packaged counterparts. The data also enabled secondary analyses, such as organic versus conventional products, and comparisons between different retail models and brands. The main challenges were to obtain data from a sufficient number and variety of retailers, to acquire a relevant number of data points, and to ensure that collected data was for comparable bulk and packaged goods.

Methodology

Data for 37 different food products was collected from twelve stores. The 37 food products were selected to reflect a variety of goods that are commonly available in both bulk and packaged product forms. The twelve stores were selected to provide data from a variety of retail environments: food cooperatives, low, mid and high-end grocery retailers. The data that was collected consisted of product prices, weights, brands, classification as bulk or packaged, classification as organic or conventional, and supplemental product information.

Food Product Selection

The 37 food products were classified within ten categories: beans (4 products), condiments (2), dried fruits (3), flours and grains (6), nuts and seeds (4), pasta (1), snacks/miscellaneous (2), spices (10), coffee/tea (3), and confectionaries (2). A detailed list of these items is in **Exhibit 2**.

The basis for the selection of the specified products within each category was as follows:

- **Beans** – Split peas, black, pinto and red (kidney) beans were selected due to their widespread availability. Lentils and other dried beans were not used due to their lower availability.
- **Condiments** – Both peanut butter and almond butter were selected since consumers can frequently use machines to grind fresh portions for themselves in retail stores that offer bulk foods. Subsequently, the comparable packaged goods that were selected had to be all-natural/preservative-free, not “no stir,” which contain additives.
- **Flour and Grains** – Basmati rice was selected as the white rice due to it being perceived as more widely available than jasmine rice; in retrospect, this may not have been the case. Brown rice was included due to its popularity amongst health-conscious consumers. Both whole wheat and white flour were included; packaged versions of the latter included both bleached and unbleached products. Instant rolled oats were selected since they frequently had a greater number of comparable packaged goods at retail stores than old fashioned oats.
- **Nuts and Seeds** – Peanuts, almonds, cashews and pistachios were each selected due to their widespread availability in both bulk and packaged forms. Roasted versions were selected because they have greater availability in packaged forms than raw.
- **Pasta** – Penne pasta was selected because it can commonly be found in both bulk and packaged forms.
- **Snacks/Miscellaneous** – Semi-sweet chocolate chips were chosen over carob chips due to their being more popular with most consumers. Vanilla granola was chosen over other types of granola because it was found to be the most commonly available type, and would therefore enable the most accurate cost comparisons. However, there was great diversity in ingredients of vanilla granola.
- **Spices** – A wide range of spices that are frequently used by consumers were selected. Whole black peppercorns were selected over ground pepper, as only the former is often available in bulk form. Conversely, ground versions of cinnamon, cloves, nutmeg and paprika were selected instead of non-ground versions due to in-store availability.
- **Coffee/Tea** – Data was gathered for whole bean packaged coffee, not ground coffee, since bulk versions were exclusively whole bean. Although numerous flavors of coffee and tea are available on the market, French roast coffee and Earl Grey tea were selected due to their relative popularity compared to other blends. Decaffeinated coffee was included to account for consumers who prefer non-caffeinated beverages.
- **Confectionaries** – Yogurt pretzels and chocolate covered almonds were included because they were two of the confectionary items that were available in both bulk and packaged forms. Nonetheless, data for these items was limited.

Store Selection

The twelve stores that were selected to gather pricing data were chosen in order to provide a mix of different types of retail and geographic environments that are frequented by consumers with divergent demographic characteristics. The stores included food cooperatives (2 stores), high-end retailers (3), budget stores (1), and national grocers (6). Due to the time and financial constraints of the research team, all selected stores were within the greater Portland, Oregon metropolitan area. The selected stores are listed in **Exhibit 3**.

Data Collection

Price data was gathered over a three week period, from October 16, 2011 to November 3, 2011. The data that was collected consisted of product prices, weights, brands, classification as bulk or packaged, classification as organic or conventional, and supplemental product information believed to be relevant. Regular or “everyday” prices were recorded instead of sale or “club” prices. For bulk foods, prices per specified weight unit (pound, ounce, etc.) were recorded. For packaged foods, the full unit price and weight was recorded. Packaged foods that consisted of a number of smaller “snack size” units were noted as such when they were recorded (e.g. one package of raisins that contained six small boxes).

Retail Pricing Data Analysis

Introduction

After gathering the data, an analysis of some of the key metrics was conducted to provide insight in regard to the pricing of packaged and bulk goods. Please see **Appendix 1** for raw data.

Methodology

Dataset

The original twelve datasets were combined onto one sheet. Two additional data points were then added; the first was a cell which converted all of the pricing of the different sized packages into dollars per pound so all products were comparable, and the second data point was a note on whether the brand was generic or national. A product was labeled as generic if the brand is manufactured and sold by a single store chain. A product was labeled national if the brand name is recognizable and the brand can be purchased at different national store chains. Please note that not all products were categorized as generic or national; many products were smaller or regional brands.

Datasheets

When looking at the data there were no major outliers, so all data collected was used. These figures were then aggregated, depending on the sheet, and averaged depending on what that sheet was comparing.

To compare pricing we used the margin difference. This number was calculated by taking the average of the bulk price minus the average of the generic price (or national, organic, etc.)

divided by the average bulk price. A positive number represents what percent more expensive it is to buy the product as a packaged generic (or national, organic, etc.). If this margin is negative it means that it is, on average, less expensive to buy the product in packaged form rather than in bulk.

Bulk vs. Packaged Sheet - Exhibit 4

The Bulk vs. Packaged Sheet compares the costs of bulk products against generic, national and the entire packaged food sample for each category. The list of products in each category can be found in Exhibit 2. When looking at this datasheet, it is important to note that the average \$/lb accounts for all of the products in that category which were packaged, not just an average of the generic and national. For example the Nut Butter category has seven generic packaged samples, 26 national packaged samples and a total of 69 packaged samples. The column entitled 'Sample Size' gives a count of the number of samples that were collected for that data type.

Bulk Organic vs. Packaged Organic - Exhibit 5

This exhibit is like the previous and compares the products by category, but it only compares organic products. Due to the low number of organic products in the data set, it was not further segregated into generic and national categories.

Bulk vs. Packaged by Product - Exhibit 6

The datasheets were compiled for each category to look at the data on the product level. Every product in the category was broken into organic or conventional and also totaled to give the price difference for all the samples. This allows the user to view only organic product samples, regular product samples or the overall sample data.

Material & Delivery Cost Analysis

In 2009 the Waste & Resources Action Programme (WRAP) in the U.K. conducted a study identifying how much waste and money spent on packaging and distribution could be saved if products were sold in bulk vs. packaged. A similar study was conducted using data from two suppliers of both bulk and packaged goods. **Exhibits 7 and 8** show the cost and waste savings for the producers of bulk foods compared to packaged foods. **Exhibit 11** is not as comprehensive as **Exhibit 10** due to a lack of material cost data.

Key Pricing Findings

Note: all comparisons were made on a per pound basis.

Key Findings on Product Categories (Exhibit 4):

- Packaged beans are 8% less expensive than bulk beans.
- Packaged generic coffee and teas are 25% more expensive than the same or similar bulk products. Overall packaged coffees and tea are 156% more expensive than bulk versions.
- Packaged national brand nut butters (almond butter and peanut butter) are 9% more expensive than bulk and overall packaged nut butter are 46% more expensive than bulk nut butters.

- Packaged national brand dried fruit is 24% more expensive than bulk versions and on average, 19% more expensive per pound than bulk dried fruit.
- Packaged generic flours and grains are 10% more expensive than bulk versions. Nationals brands are 71% more expensive and overall packaged flours and grains are 38% more expensive than bulk.
- On average, packaged nuts and seeds are 9% more expensive than bulk versions.
- On average, packaged generic spices are 245% more expensive than bulk versions, national brands are 406% more expensive and on average, overall, packaged versions are 326% more expensive than bulk versions.

Key Findings on Organics (Exhibit 5):

- On average, packaged organic products are 89% more expensive than their bulk counterparts.
- Packaged organic coffees and teas are 220% more expensive than bulk versions.
- Packaged organic confectionaries are 46% more expensive than bulk versions.
- Packaged organic nut butters are 60% more expensive than bulk versions.
- Packaged organic dried fruit is 105% more expensive than bulk versions.
- Packaged organic flour and grains are 100% more expensive than bulk versions.
- Packaged organic spices are 326% more expensive than bulk versions.

Key Findings by Product (Exhibit 6):

- Other than black beans, packaged beans are less expensive packaged than bulk beans.
- Packaged organic black beans are 42% more expensive than bulk organic black beans.
- Packaged Earl Grey tea has an average cost of \$49.52; bulk Earl Grey tea has an average cost of \$23.87, therefore the packaged version is 108% more expensive than bulk.
- Organic packaged has an average cost of \$62.52; organic bulk Earl Grey tea has an average cost of \$23.87, therefore the packaged version is 162% more expensive than bulk.
- Packaged, whole bean French roast coffee has an average cost of \$14.74; the bulk version has an average cost of \$10.19, therefore the packaged version is 45% more expensive than bulk.
- The confectionary items chocolate covered almonds and yogurt pretzels were found to be slightly more expensive in bulk than packaged.
- On average, packaged almond butter is 74% more expensive than bulk and packaged peanut butter is 39% more expensive than bulk.
- Packaged raisins, on average, are 38% more expensive than bulk versions.
- Packaged instant rolled oats are 152% more expensive than bulk.
- Packaged vanilla granola is 74% more expensive than bulk.
- Excluding sugar, all other packages spices are at least 140% more expensive than the bulk version.

Conclusions

The study found that not all products were less expensive in bulk. Overall by category, beans, pasta and snacks were found to be less expensive in packaged form while spices and coffees/teas provided the greatest savings when purchased in bulk. Organics were usually cheaper in bulk than packaged form. In fact, some organic bulk products (such as spices, black beans, almond butter, instant rolled oats, granola, raisins, yellow popcorn, dried cranberries, coffees and tea) were less expensive than comparable conventional products. The generic items provided a greater savings than the national brand items. On the product level the price differences varied widely even within the same category. Several categories showed both savings and losses from purchasing in bulk depending on the product.

Packaging Methodology

Introduction

The goal of performing packaging analysis was to measure how much packaging is used for bulk and non-bulk foods. Various packaging types of fifteen different products were weighed; the fifteen products are listed in **Exhibit 9**. The original intent was also to measure the volume, but this became a challenge as the readings were highly skewed using various beakers purchased for this experiment. Accurate volume measurements would have required a digital beaker, which was too expensive for the specified budget. The packaging waste was analyzed to assess its environmental impact in regards to recyclability and landfill time.

Methodology

A digital food scale was used to measure the weight of various samples of fifteen different products from nine of the aforementioned food categories. This yielded 73 total data points, which are listed in **Exhibit 10**. A variety of packaging forms were selected for each of the product measurements. For example, non-bulk oatmeal items that were measured included various cylinder sizes as well as single serving packages in a box. All contents were removed from the packaging, the packaging was weighed on the food scale and the measurement was recorded.

Packaging and Environmental Impact Analysis

Introduction

As one of the goals of the study was to measure food packaging waste, a logical extension of this exercise was to quantify the environmental costs associated with the packaging's disposal. A major challenge was predicting the final destination of the waste accurately– if the waste was recyclable, would it get put in the proper bin to be processed?

Transportation and manufacturing were also assessed, as bulk foods' carbon footprint is based on the greenhouse-gas (GHG) emissions from bulk foods' transportation, production, and disposal (landfill waste).¹

Landfill Waste

In 2008, the average amount of packaging waste generated by each person was 4.5 pounds per day; of that, 66.8% was sent to a landfill or incinerated.² Not all plastic that goes into curbside recycling bins gets recycled. It most often gets "collected" and not reprocessed, which inevitably does not reduce the use of virgin materials in plastic packaging.³ Plastic recycling is costly and contributes minimally to recycling goals; in fact, processing used plastics sometimes costs more than making packages from virgin plastic.⁴ The good news is that recycling one ton of plastic saves 7.4 cubic yards of landfill space,⁵ yet only 3% of plastic waste is currently being recycled.⁶ Plastic bags, like the ones used for bulk foods and product wraps are commonly recycled at the many collection programs offered through major grocery stores.⁷ Please see **Exhibit 11** for a table which shows the landfill degradation times for various forms of packaging. Although much of the trash appears to be recyclable, the EPA reports that only 33% of municipal waste is recycled.⁸

Transportation

It was difficult to assess the environmental impact of transportation associated with bulk foods. The concept of "food miles⁹," the distance that food is transported from its production until it is received by a consumer, would seemingly indicate that bulk foods result in fewer food miles (and as a result, lower GHG emissions) than packaged foods which may travel considerably longer distances. This is based on the assumption that bulk foods are often delivered to regional locations, and therefore are transported shorter distances than national packaged foods. However, the distance traveled by consumers to obtain bulk or packaged foods must also be considered. Some consumers may travel longer distances to obtain bulk foods than they do for packaged foods due to the former's limited availability; this can be seen in the consumer survey result comments. Therefore, it was impossible to measure GHG emissions from transportation associated with bulk foods without knowing the locations of the production facilities, retailers and end consumers.

It should be noted that rail transport is more environmentally-friendly than truck transport for the delivery of goods. Trucks expend 4,074 BTUs per ton mile, while class one rail transport expends 330 BTU per ton mile.¹⁰

Production

It is estimated that 83% of the GHG emissions associated with foods are a result of production processes, while only 4% can be attributed to transportation.¹¹ Although bulk food producers may operate smaller production facilities than packaged food producers, and thus generate lower levels of GHG emissions, it is also possible that packaged foods production facilities operate more efficiently. Therefore, it was impossible to determine whether bulk foods involve less of an environmental impact than packaged foods without knowing the sizes and operating efficiencies of the production facilities.

Key Packaging and Environmental Findings

- A company producing one million pounds of trail mix in bulk versus packaged form saves 26,571 pounds of waste from the landfill. It also saves over \$400,000 in material and delivery costs, which is a cost savings of nearly 80%.
- If Americans purchased all of their coffee in bulk for one year^{12,13} instead of foil packaging, it would save enough landfill waste to equal the weight of over 92,000 Honda Civics¹⁴.
- By purchasing peanut butter in bulk the average American family of four¹⁵ can save seven pounds of waste per year.
- Purchasing prepackaged oatmeal¹⁶ creates five times the waste than that of its bulk equivalent.
- If all the almonds American eat in an average year¹⁷ were purchased in bulk instead of packaged, 72,000,000 pounds of waste would be saved or the equivalent weight of 6,270 elephants¹⁸.

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Exhibit 1: Bulk Foods Survey

October 26, 2011 November 16, 2011

Administered Online

1. What is your gender?

#	Answer		Response	%
1	Male		75	30%
2	Female		171	70%
	Total		246	100%

Statistic	Value
Min Value	1
Max Value	2
Mean	1.70
Variance	0.21
Standard Deviation	0.46
Total Responses	246

Exhibit 1: Bulk Foods Survey

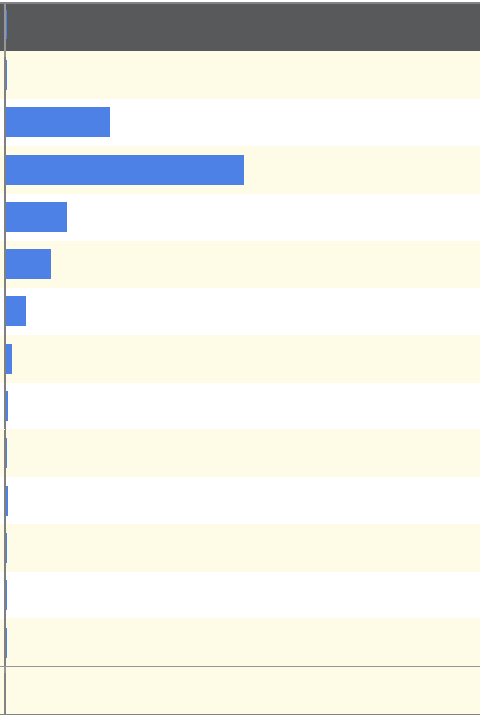
2. What is your age?

#	Answer		Response	%
1	Less than 16		0	0%
2	16 to 19		0	0%
3	20 to 24		18	7%
4	25 to 34		91	37%
5	35 to 44		63	26%
6	45 to 54		29	12%
7	55 to 64		25	10%
8	65 or over		21	9%
	Total		247	100%

Statistic	Value
Min Value	3
Max Value	8
Mean	5.06
Variance	1.95
Standard Deviation	1.40
Total Responses	247

Exhibit 1: Bulk Foods Survey

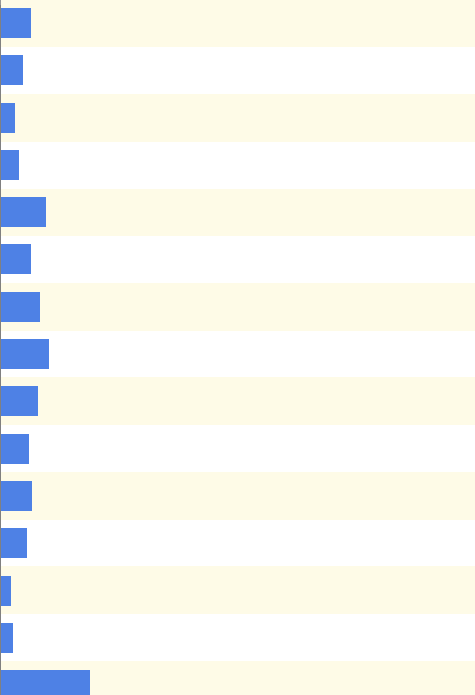
3. How many people are in your household (including yourself)?

#	Answer		Response	%
1	0		0	0%
2	1		53	22%
3	2		122	50%
4	3		31	13%
5	4		23	9%
6	5		10	4%
7	6		3	1%
8	7		1	0%
9	8		0	0%
10	9		1	0%
11	10		0	0%
12	11		0	0%
13	12+		0	0%
	Total		244	100%

Statistic	Value
Min Value	2
Max Value	10
Mean	3.32
Variance	1.49
Standard Deviation	1.22
Total Responses	244

Exhibit 1: Bulk Foods Survey

4. What is your combined annual household income?

#	Answer		Response	%
1	under \$20,000		15	6%
2	20,000-29,999		11	5%
3	30,000-39,999		7	3%
4	40,000-49,999		9	4%
5	50,000-59,999		23	10%
6	60,000-69,999		15	6%
7	70,000-79,999		20	8%
8	80,000-89,999		24	10%
9	90,000-99,999		19	8%
10	100,000-109,999		14	6%
11	110,000-119,999		16	7%
12	120,000-129,999		13	5%
13	130,000-139,999		5	2%
14	140,000-149,999		6	2%
15	150,000+		45	19%
	Total		242	100%

Statistic	Value
Min Value	1
Max Value	15
Mean	8.67
Variance	19.09
Standard Deviation	4.37
Total Responses	242

Exhibit 1: Bulk Foods Survey

5. Why do you buy bulk foods? (Please select all that apply).

#	Answer		Response	%
1				

Exhibit 1: Bulk Foods Survey

Statistic	Value
Min Value	1
Max Value	9
Total Responses	246

6. What concerns do you have about buying bulk foods? (Please select all that apply).

#	Answer		Response	%
1	I have no concerns about bulk foods.		74	31%
2	I don't know if it's fresh.		67	28%
3	I don't know if it's sanitary.		87	36%
4	I want a measured quantity.		18	8%
5	I don't know the brand.		33	14%
6	I prefer stronger/sturdier packaging.		11	5%
7	I don't know the expiration date.		58	24%
8	The products don't include cooking instructions.		24	10%
9	My preferred grocery store does not carry bulk foods.		28	12%
10	I don't think about buying bulk foods.		35	15%
11	Other (please specify)		14	6%

Exhibit 1: Bulk Foods Survey

Other (please specify)

Quicker to buy packaged.

I have to go to specialty stores for my bulk food items

It's usually more than I can use or store

There is no info regarding country of origin, nutrients, calories, etc. .

moth/pest issues

Exhibit 1: Bulk Foods Survey

7. How often do you buy the following items in bulk?

#	Question	Once a week	Once a month	Once a quarter (every 3 months)	Semi-annually (every 6 months)	Annually	Rarely to never. I don't usually buy that item in bulk.	Responses	Mean
1	Spices	4	28	42	37	16	102	229	4.48
2	Beans	3	34	33	13	16	124	223	4.69
3	Grains and flours (rice, barley, whole wheat flour, rolled oats, etc.)	8	44	50	29	11	92	234	4.14
4	Nuts and seeds	23	60	48	19	8	73	231	3.64
5	Coffee and tea	17	41	32	14	3	124	231	4.37
6	Pasta	5	28	22	11	3	157	226	4.99
7	Breakfast cereals and granola	9	34	34	16	13	126	232	4.59
8	Dried fruit	8	37	43	30	14	98	230	4.30
9	Snacks/sweets (chocolate chips, trail mix, candy, crackers, etc.)	9	45	29	35	16	98	232	4.28
10	Peanut/almond butter	7	17	27	13	5	158	227	5.05
11	Other (please specify)	2	6	7	0	0	51	66	5.17

Exhibit 1: Bulk Foods Survey

Other (please specify)
Peanuts and Almonds
Rice
Rice
honey
Protein powder
sweeteners
Maple syrup, various oils
Soaps, oils
Paper Products
protein powder
beverages
All meets
Baking supplies sugar baking powder etc
Fig Neuton bars
Dog treats

Exhibit 1: Bulk Foods Survey

Statistic	Spices	Beans	Grains and flours (rice, barley, whole wheat flour, rolled oats, etc.)	Nuts and seeds	Coffee and tea	Pasta	Breakfast cereals and Granola	Dried fruit	Snacks/sweets (chocolate chips, trail mix, candy, crackers, etc.)	Peanut/Almond Butter	Other (please specify)
Min Value	1	1	1	1	1	1	1	1	1	1	1
Max Value	6	6	6	6	6	6	6	6	6	6	6
Mean	4.48	4.69	4.14	3.64	4.37	4.99	4.59	4.30	4.28	5.05	5.17
Variance	2.46	2.71	2.89	3.33	3.55	2.61	2.98	2.83	2.94	2.40	2.87
Standard Deviation	1.57	1.65	1.70	1.82	1.88	1.62	1.73	1.68	1.71	1.55	1.69
Total Responses	229	223	234	231	231	226	232	230	232	227	67

8. How often do you throw away items that you have purchased in bulk?

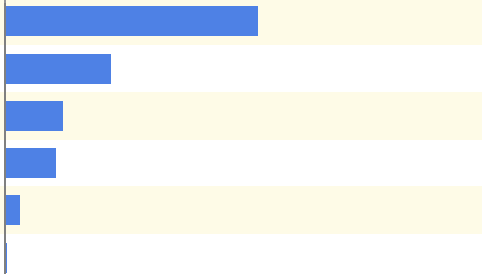
#	Answer		Response	%
1	Never		123	53%
2	Annually		51	22%
3	Semi-annually		28	12%
4	Quarterly		24	10%
5	Monthly		7	3%
6	Weekly		0	0%
	Total		233	100%

Exhibit 1: Bulk Foods Survey

Statistic	Value
Min Value	1
Max Value	5
Mean	1.89
Variance	1.32
Standard Deviation	1.15
Total Responses	233

9. How often do you throw away dry goods that you bought packaged, not in bulk? (Dry goods include items commonly available in bulk such as spices, nuts, coffee, pasta, grains, granola, etc.)

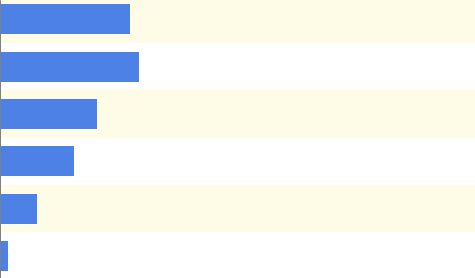





#	Answer		Response	%
1	Never		65	27%
2	Annually		69	29%
3	Semi-annually		48	20%
4	Quarterly		36	15%
5	Monthly		18	8%
6	Weekly		3	1%
	Total		239	100%

Exhibit 1: Bulk Foods Survey

Statistic	Value
Min Value	1
Max Value	6
Mean	2.51
Variance	1.70
Standard Deviation	1.31
Total Responses	239

10. Do you believe that buying in bulk allows you to waste less product by being able to buy the amount you desire?

#	Answer		Response	%
1	Definitely yes		78	33%
2	Probably yes		79	33%
3	Maybe		44	18%
4	Probably not		31	13%
5	Definitely not		6	3%
	Total		238	100%

Statistic	Value
Min Value	1
Max Value	5
Mean	2.19
Variance	1.23
Standard Deviation	1.11
Total Responses	238

Exhibit 1: Bulk Foods Survey

11. Do you have any additional comments on bulk or packaged foods?

Text Response

I buy peanuts and almonds in bulk and I can see the product before purchase. Packaged products don't provide the "view".

I would have an upfront investment cost to start purchase in bulk (to purchase suitable containers for home storage).

Like the lower cost and less Packaging

I often stock some select products marketed on the brand NEAR EAST since I cook for one though sometimes throw out leftovers.

bulk buying is great as long as people with "dreads" aren't allowed near the food bins.

I throw out bulk items because of the plastic bag breaking or ripping. I would prefer a better packaging system, one that was not plastic and could be used more than once.

Organic bulk foods is the stuff!

bulk appears to be a better deal

Sanitation definitely concerns me regarding these products.

Some items i can only find in bulk, like brewers yeast.....

A good idea, in theory, but in actual practice, the bulk bins at food co-ops (etc.), are more expensive than packaged goods, and the bulk bins at regular supermarkets are usually a mess.

I have not found nuts in bulk to be cheaper. I price it out per ounce. I guess it all depends on what is on sale.

It seems to be fresher and last longer than packaged items

No

I'm not sure the very last question hits the mark; I buy in bulk because it is easier to have a constant store of core ingredients than it is to buy them in packaged amounts. I don't waste, but the convenience lies in dealing with raw ingredients and not having to wade through marketed brands of goods.

I purchase bulk foods mainly for staples or just enough for a recipe I haven't tried before. Good luck on your Project! I love buying bulk.... I wish there were more products that were offered.

Even if I don't always choose to buy something in bulk, it is always nice to have the option. Especially if I only need a small amount and don't want/need to get a larger package.

I wish they were in every grocer. Just moved and now I have no bulk section in either of the 2 neighborhood markets. Boo.

Nope.

I want to know the turn-over rate on bulk goods. This is important when choosing whether or not to purchase a food item!

I always thought it was more expensive than pre-packaged products.

Exhibit 1: Bulk Foods Survey

Not available at my local store. sometimes pricing is not cheaper.

The environmental reasons are enough benefit for me to choose bulk.

I would buy more food in bulk if there were more stores offering this option. In my area there is very limited items sold in bulk

Concerned about people tainting bulk foods and hippy's in the back not following protocol so potential mice feces, etc...

I never think to buy in bulk. I'll have to pay more attention to the bulk bins

it allows you to try something without committing to a fixed amount

If there were a broader selection, I would seek it out more often and purchase a larger variety of items, more often.

Why do companies like Trader Joe's not have bulk? I have always wondered - it seems like their demographic would like it. It seems that the reason Trader Joe's DOESN'T carry bulk could be of some interest to this survey.

Selection is not as good and is often more expensive.

The stores near where I live are not clear, so I would never trust the food in any bulk department

More likely to try new things if I only have to purchase a little bit. Especially true for granola, protein powder, dried fruits. Easy to experiment with bulk foods!

usually not organic, however if you do not have the money you don't have the option sadly

If there were a way to make sure bulk foods were fresh and not handled by someone's grimy hands, I might buy it more. Packaged foods just seem to be safer.

Love, love, love bulk foods.

I realize that I use disposable plastic bags often - wish I used reusable containers for bulk buying. Will buy spices when available (shop may open this winter...)

The dispenser machines are not attractive to the consumer. There should be temperature conditions control.

If I notice the nuts smell rancid I throw them away. I have started dating them when I purchase them so I know how old they are now.

I don't have a strong preference either way, I rarely buy in bulk. When I have it's been on the go, quick granola for a hike or road trip.

Statistic	Value
Total Responses	39

Exhibit 2: List of Products for Pricing Data

Beans	Black
Beans	Pinto
Beans	Red (kidney)
Beans	Split Peas
Coffee/Tea	Decaf
Coffee/Tea	Earl Grey
Coffee/Tea	French
Condiments	Almond Butter
Condiments	Peanut Butter
Confectionaries	Chocolate Covered Almonds
Confectionaries	Yogurt Pretzels
Dried Fruit	Coconut (shredded)
Dried Fruit	Dried Cranberries
Dried Fruit	Raisins
Flour and Grains	Brown Rice (long grain)
Flour and Grains	Popcorn (yellow)
Flour and Grains	Rolled Oats (instant)
Flour and Grains	White Flour
Flour and Grains	White Rice (Basmati)
Flour and Grains	Whole Wheat Flour
Nuts and Seeds	Almonds (whole, roasted, shelled)
Nuts and Seeds	Cashews (whole, roasted, shelled)
Nuts and Seeds	Peanuts (roasted, shelled)
Nuts and Seeds	Pistachios (salted, in shell)
Pasta	Penne
Snacks/Misc.	Granola (vanilla)
Snacks/Misc.	Semi-Sweet Chocolate chips
Spices	Basil (whole, cut, aka Sweet Basil)
Spices	Black Peppercorns (whole)
Spices	Cinnamon (ground)
Spices	Cloves (ground)
Spices	Garlic Powder
Spices	Nutmeg (ground)
Spices	Onion Powder
Spices	Paprika (ground)
Spices	Red Pepper (crushed, chili flakes)
Spices	Sugar (white)

Exhibit 3: Store Selection for Product Pricing

Alberta Cooperative Grocery	1500 Northeast Alberta Street	97211	(503) 287-4333	10/25/2011
Food Front	2375 Northwest Thurman Street	97210	(503) 222-5658	10/20/2011
Fred Meyer's A	3805 Southeast Hawthorne Boulevard	97214	(503) 872-3300	10/16/2011
Fred Meyer's B	100 Northwest 20th Place	97209	(503) 273-2004	10/20/2011
New Seasons	1954 Southeast Division Street	97202	(503) 445-2888	10/18/2011
QFC A	5544 E. Burnside Street	97215	(503) 963-8220	10/20/2011
QFC B	3505 SE 192nd Ave. (Vancouver, WA)	98683	(360) 253-3016	11/3/2011
Safeway A	1010 SW Jefferson Street	97201	(503) 205-1849	10/25/2011
Safeway B	3930 SE Powell Boulevard	97202	(503) 772-4440	10/27/2011
Whole Foods Market	4301 NE Sandy Boulevard	97213	(503) 284-2644	10/23/2011
WinCo Foods	11250 SE 82nd Avenue	97223	(503) 654-3210	10/20/2011
Zupan's	2340 W. Burnside Street	97214	(503) 497-1088	10/27/2011

Exhibit 4: Bulk vs. Packaged

	30	\$ 1.67	39	\$ 1.42	-15.0%	0	\$ -	n/a	49	\$ 1.46	-12.6%
	42	\$ 11.59	8	\$ 14.53	25.4%	38	\$ 28.18	143.1%	107	\$ 29.66	155.9%
	20	\$ 9.72	5	\$ 7.74	-20.4%	2	\$ 6.86	-29.4%	14	\$ 9.41	-3.2%
	15	\$ 5.17	7	\$ 4.84	-6.4%	26	\$ 5.63	8.9%	69	\$ 7.57	46.4%
	27	\$ 5.08	35	\$ 4.90	-3.5%	53	\$ 6.30	24.0%	106	\$ 6.03	18.7%
	54	\$ 1.57	59	\$ 1.73	10.2%	70	\$ 2.68	70.7%	219	\$ 2.17	38.2%
	31	\$ 8.09	32	\$ 7.82	-3.3%	45	\$ 8.68	7.3%	89	\$ 8.80	8.8%
	7	\$ 2.53	12	\$ 1.62	-36.0%	12	\$ 2.26	-10.7%	35	\$ 2.51	-0.8%
	18	\$ 5.31	12	\$ 3.78	-28.8%	25	\$ 5.36	0.9%	48	\$ 5.20	-2.1%
	75	\$ 13.27	96	\$ 45.84	245.4%	169	\$ 67.19	406.3%	311	\$ 56.51	325.8%

The % Diff column represents the price difference of buying in bulk. If a number is negative bulk is more expensive, if the number is positive packaged is more expensive. Ex: Beans are on average 12.6% more expensive in bulk and 15% more expensive than generic.

The average \$/lb accounts for all of the products in that category which were packaged, not just an average of the generic and national.

A product was labeled as generic if the brand is manufactured and sold by a single store chain. A product was labeled national if the brand name is recognizable and the brand can be purchased at different national store chains.

Exhibit 5: Bulk Organic vs. Packaged Organic

	18	\$ 1.83	8	\$ 2.05	12.0%
	16	\$ 14.22	17	\$ 45.51	220.0%
	4	\$ 14.72	1	\$ 21.46	45.8%
	4	\$ 5.57	29	\$ 8.89	59.6%
	17	\$ 4.06	14	\$ 8.33	105.2%
	27	\$ 1.81	36	\$ 3.62	100.0%
	10	\$ 11.91	4	\$ 11.10	-6.8%
	5	\$ 2.70	9	\$ 3.49	29.3%
	10	\$ 6.41	5	\$ 6.33	-1.2%
	34	\$ 16.49	63	\$ 70.18	325.6%

The % Diff column represents the price difference of buying in bulk. If a number is negative bulk is more expensive, if the number is positive packaged is more expensive.

Conventional	3	\$ 1.52	8	\$ 1.64	8%
Organic	5	\$ 1.51	2	\$ 2.14	42%
Conventional	2	\$ 1.18	17	\$ 1.13	-4%
Organic	5	\$ 1.83	2	\$ 2.04	11%
Conventional	2	\$ 1.54	6	\$ 1.54	0%
Organic	4	\$ 2.12	2	\$ 2.14	1%
Conventional	5	\$ 1.39	10	\$ 1.37	-1%
Organic	4	\$ 1.97	2	\$ 1.89	-4%

Conventional	11	\$ 9.77	24	\$ 14.56	49%
Organic	6	\$ 11.64	3	\$ 15.10	30%
Conventional	0	\$ -	35	\$ 45.43	n/a
Organic	4	\$ 23.87	11	\$ 62.52	162%
Conventional	15	\$ 10.12	31	\$ 14.85	47%
Organic	6	\$ 10.37	3	\$ 13.54	31%

Conventional	7	\$ 10.46	7	\$ 9.66	-8%
Organic	3	\$ 16.29	1	\$ 21.46	32%
Conventional	9	\$ 6.93	6	\$ 7.12	3%
Organic	1	\$ 9.99	0	\$ -	n/a

Conventional	6	\$ 6.66	18	\$ 10.11	52%
Organic	1	\$ 9.49	7	\$ 17.95	89%
Conventional	5	\$ 3.05	22	\$ 3.74	23%
Organic	3	\$ 4.26	22	\$ 6.01	41%

Conventional	2	\$ 2.68	19	\$ 3.81	43%
Organic	5	\$ 4.57	3	\$ 7.57	66%
Conventional	6	\$ 9.60	30	\$ 9.20	-4%
Organic	2	\$ 7.64	4	\$ 15.12	98%
Conventional	2	\$ 2.64	43	\$ 4.06	54%
Organic	10	\$ 3.09	7	\$ 4.78	55%

Conventional	4	\$ 1.26	19	\$ 1.66	32%
Organic	5	\$ 2.28	3	\$ 3.14	38%
Conventional	5	\$ 1.29	34	\$ 2.76	114%
Organic	5	\$ 1.69	12	\$ 5.95	252%
Conventional	6	\$ 1.19	43	\$ 2.94	147%
Organic	4	\$ 1.29	7	\$ 4.12	219%
Conventional	3	\$ 0.57	41	\$ 0.70	24%
Organic	4	\$ 1.17	7	\$ 1.17	0%
Conventional	6	\$ 2.34	21	\$ 2.00	-15%
Organic	5	\$ 3.01	2	\$ 3.29	9%
Conventional	3	\$ 0.62	25	\$ 0.92	47%
Organic	4	\$ 1.02	5	\$ 1.18	16%

Conventional	5	\$ 5.76	25	\$ 5.01	-13%
Organic	3	\$ 9.46	2	\$ 8.44	-11%
Conventional	6	\$ 8.52	24	\$ 8.14	-4%
Organic	3	\$ 18.62	1	\$ 7.99	-57%
Conventional	7	\$ 3.77	22	\$ 4.85	29%
Organic	1	\$ 6.46	1	\$ 2.99	-54%
Conventional	3	\$ 8.48	14	\$ 6.31	-26%
Organic	3	\$ 9.46	0	\$ -	n/a

Conventional	2	\$ 2.09	26	\$ 2.17	4%
Organic	5	\$ 2.70	9	\$ 3.49	29%

Conventional	6	\$ 3.49	10	\$ 6.13	75%
Organic	5	\$ 3.59	2	\$ 6.25	74%
Conventional	2	\$ 5.29	33	\$ 4.75	-10%
Organic	5	\$ 9.23	3	\$ 6.38	-31%

Conventional	5	\$ 7.48	24	\$ 152.87	1944%
Organic	3	\$ 19.87	10	\$ 205.14	932%
Conventional	5	\$ 10.43	16	\$ 36.00	245%
Organic	3	\$ 16.53	8	\$ 45.44	175%
Conventional	3	\$ 5.17	31	\$ 36.44	605%
Organic	5	\$ 8.06	10	\$ 58.54	626%
Conventional	3	\$ 15.32	24	\$ 88.34	477%
Organic	5	\$ 23.06	3	\$ 78.55	241%
Conventional	4	\$ 7.58	18	\$ 23.23	206%
Organic	3	\$ 13.28	5	\$ 42.26	218%
Conventional	5	\$ 22.02	32	\$ 58.33	165%
Organic	3	\$ 28.20	3	\$ 77.07	173%
Conventional	4	\$ 7.33	18	\$ 27.98	282%
Organic	3	\$ 13.93	4	\$ 44.02	216%
Conventional	3	\$ 13.61	30	\$ 45.70	236%
Organic	4	\$ 16.35	7	\$ 56.54	246%
Conventional	4	\$ 16.23	28	\$ 52.75	225%
Organic	3	\$ 20.21	2	\$ 73.91	266%
Conventional	5	\$ 1.59	27	\$ 0.82	-48%
Organic	2	\$ 1.84	11	\$ 2.12	15%

Exhibit 7: Material & Delivery Cost Analysis

Pack size / type (typical)	8 oz bag	5.5 oz bag	14 oz tub	8 oz tub
Packaging weight:	0.25 oz	0.25 oz	1.11 oz	0.96 oz
Pallets per 1M lbs of product:	1,042	1,515	744	1,302
Estimated material costs:	\$600,000	\$872,727	\$240,000	\$820,000
Estimated distribution costs:	\$371,994	\$540,909	\$265,625	\$464,844
Bulk size / type	25 lb case	14 lb case	25 lb case	10 lb case
Packaging weight:	1.3 lb	0.75 lb	1.3 lb	0.65 lb
Pallets per 1M lbs of product:	27	51	27	69
Estimated material costs:	\$131,600	\$135,000	\$91,600	\$457,000
Estimated distribution costs:	\$9,639	\$18,207	\$9,639	\$24,633
Savings				
Packaging weight / 1M lbs:	-20,750 lbs	-47,403 lbs	26,571 lbs	55,000 lbs
Material costs / 1M lbs:	\$468,400	\$737,727	\$148,400	\$363,000
Distribution costs / 1M lbs:	\$362,355	\$522,702	\$255,986	\$440,211
Total Savings:	\$830,755 85.47%	\$1,260,429 89.16%	\$404,386 79.98%	\$803,211 62.51%

The savings lines represent how much waste or money can be reduced if the company choose to create bulk instead of packaged. A negative sum denotes that there it is more packaging weight used in the bulk product than in the packaged.

Exhibit 8: Material Cost Analysis

Pack size & type (typical)	0.26 oz bottle	2.45 oz bottle
Packaging weight:	2.71 oz	2.71 oz
Pallets per 1M lbs of product:	18,994	2,016
Estimated distribution costs:	\$5,447,479	\$718,502
Bulk size & type	16 oz bag	16 oz bag
Packaging weight:	2.58 oz	2.16 oz
Pallets per 1M lbs of product:	2,778	1,389
Estimated distribution costs:	\$395,976	\$473,052
Savings		
Packaging weight / 1M lbs:	10,261,827 lbs	971,122 lbs
Distribution costs / 1M lbs:	\$5,051,503	\$245,451
	92.73%	34.16%

Exhibit 9: Products Selected for Packaging Weighing

Beans	Black
Coffee/Tea	Coffee
Condiments	Peanut Butter
Dried Fruit	Raisins
Flour and Grains	Popcorn (yellow)
Flour and Grains	Rolled Oats (instant)
Flour and Grains	White Flour Bleached
Flour and Grains	White Rice (long grain)
Nuts and Seeds	Almonds Whole Roasted (shelled)
Nuts and Seeds	Peanuts Roasted Unsalted (shelled)
Pasta	Penne
Snacks/Misc.	Granola (Vanilla)
Snacks/Misc.	Semi-Sweet Chocolate chips
Spices	Any (all containers should be the same)
Spices	Sugar (white)

Exhibit 10: Packaging Weight Data

Bulk Packaging	-	-	-	Food Front bulk paper bag	0.55 oz
Bulk Packaging	-	-	-	Food Front big bulk plastic container for peanut butter, liquids, etc.	0.65 oz
Bulk Packaging	-	-	-	Food Front small bulk plastic container for peanut butter, liquids, etc.	0.55 oz
Bulk Packaging	-	-	-	Food Front bulk spice plastic bag with twist tie	0.20 oz
Bulk Packaging	-	-	-	Fred Meyer bulk plastic bag with twist tie	0.05 oz
Nuts and Seeds	Almonds (whole, roasted, shelled)	Fred Meyer	10 oz	Can with aluminum seal and plastic lid	1.85 oz
Nuts and Seeds	Almonds (whole, roasted, shelled)	Safeway Select	14.5 oz	Plastic container with plastic seal/lid	0.95 oz
Nuts and Seeds	Almonds (whole, roasted, shelled)	Emerald	11 oz	Plastic container with plastic lid and seal	1.60 oz
Nuts and Seeds	Almonds (whole, roasted, shelled)	Fred Meyer	8 oz	Plastic lid and container, foil seal	1.50 oz
Beans	Black Beans	Fred Meyer	16 oz	Plastic bag	0.10 oz
Coffee/Tea	Coffee (whole beans)	Stumptown	12 oz	Brown paper bag	0.45 oz
Coffee/Tea	Coffee (whole beans)	Nossa Familia	12 oz	Foil bag	0.60 oz
Coffee/Tea	Coffee (whole beans)	Peet's Coffee	12 oz	Foil bag	0.60 oz
Coffee/Tea	Coffee (whole beans)	Kivu	10 oz	Foil bag	0.55 oz
Coffee/Tea	Coffee (whole beans)	illy	8.8 oz	Metal container and metal lid	4.85 oz
Coffee/Tea	Coffee (whole beans)	Millstone	10 oz	Foil bag	0.55 oz
Coffee/Tea	Coffee (whole beans)	Fred Meyer	11.5 oz	Foil cardboard container with plastic lid	2.45 oz
Snacks/Misc.	Granola (vanilla)	Bear Naked Fit	12 oz	Resealable plastic bag	0.40 oz
Condiments	Peanut Butter	Adams	26 oz	Glass jar with metal lid	12.75 oz
Condiments	Peanut Butter	Adams	36 oz	Glass jar with metal lid	23.30 oz
Condiments	Peanut Butter	MaraNatha	16 oz	Glass jar with metal lid	9.10 oz
Condiments	Peanut Butter	Kettle	11.5 oz	Plastic jar and plastic lid with foil seal	1.85 oz
Condiments	Peanut Butter	Justin's	32 grams	Foil	0.15 oz
Nuts and Seeds	Peanuts	Planters	20 oz	Glass cylinder with	16.60 oz
Nuts and Seeds	Peanuts	Planters	34.5 oz	Plastic canister with plastic lid	4.40 oz
Nuts and Seeds	Peanuts	Fred Meyer	16 oz	Plastic container with plastic cap	1.80 oz
Nuts and Seeds	Peanuts	Emerald	16 oz	Plastic container with plastic cap	2.20 oz
Pasta	Penne	Barilla	1 lb	Cardboard box with plastic window	1.25 oz
Pasta	Penne	Monte Bello	16 oz	Brown paper bag with plastic window	0.55 oz
Pasta	Penne	Ronzoni	1 lb	Cardboard box with plastic window	1.50 oz
Pasta	Penne	Private Selection	16 oz	Cardboard box with plastic window	1.60 oz
Pasta	Penne	Private Selection	16 oz	Plastic bag	0.35 oz
Pasta	Penne	Bionaturae	16 oz	Plastic bag	0.20 oz
Pasta	Penne	Fred Meyer	12 oz	Plastic bag	0.15 oz
Flour and Grains	Popcorn (yellow)	Kroger	64 oz	Plastic bag	0.25 oz
Flour and Grains	Popcorn (yellow)	Kroger	32 oz	Plastic bag	0.20 oz
Flour and Grains	Popcorn (yellow)	Fred Meyer	9 oz	Box with 3 ct. microwave bags and plastic wrap	2.60 oz
Flour and Grains	Popcorn (yellow)	Orville Redenbacher	6.2 oz	Box with 4 ct. microwave bags and plastic wrap	2.55 oz
Flour and Grains	Popcorn (yellow)	Orville Redenbacher	30 oz	Plastic container with plastic lid and seal	1.55 oz
Dried Fruit	Raisins	Sun Maid	24 oz	Waxed lined cardboard canister with plastic lid and plastic seal	1.40 oz
Dried Fruit	Raisins	Sun Maid	15 oz	Box	1.00 oz

Exhibit 10: Packaging Weight Data

Dried Fruit	Raisins	Sun Maid	32 oz	Plastic bag	0.25 oz
Dried Fruit	Raisins	Fred Meyer	12 oz	Resealable plastic bag	0.40 oz
Dried Fruit	Raisins	Fred Meyer	7 oz	14 small boxes in one plastic bag	1.25 oz
Dried Fruit	Raisins	Sun Maid	9 oz	6 boxes in one plastic wrap	1.15 oz
Flour and Grains	Rolled Oats (instant)	Quaker Oats	42 oz	Cardboard cylinder with cardboard/plastic lid	3.20 oz
Flour and Grains	Rolled Oats (instant)	Quaker Oats	1 lb 2 oz	Cardboard cylinder with cardboard/plastic lid	1.75 oz
Flour and Grains	Rolled Oats (instant)	Private Selection (Organic)	12 oz	Cardboard box with 12 ct.	2.45 oz
Snacks/Misc.	Semi-Sweet Chocolate Chips	Nestle	12 oz	Plastic bag	0.15 oz
Snacks/Misc.	Semi-Sweet Chocolate Chips	Ghirardelli	11.5 oz	Foil bag	0.05 oz
Snacks/Misc.	Semi-Sweet Chocolate Chips	Sun Spire	9 oz	Plastic bag	0.20 oz
Spices	Spice container	Kroger	-	Tin container with plastic lid (8 cm H x 5.5 cm L x 3 cm W)	0.85 oz
Spices	Spice container	Kroger	-	Tin container with plastic lid (9.5 cm H x 7 cm L x 3.75 cm W)	1.25 oz
Spices	Spice container	Kroger	-	Plastic bottle with plastic lid (11.5 cm H x 5.5 cm Diameter)	1.15 oz
Spices	Spice container	Morton & Bassett	-	Glass jar with plastic lid and cardboard seal (10.5 cm H x 5 cm Diameter)	4.50 oz
Spices	Spice container	Kroger	-	Plastic container with plastic lid (20 cm H x 8 cm W x 7 cm Diameter)	2.60 oz
Spices	Spice container	Spice Island	-	Glass jar with metal lid and plastic seal (11 cm H x 4 cm Diameter)	4.20 oz
Spices	Spice container	Everyday Value	-	Plastic container with plastic sprinkler and plastic lid (5.5 cm H x 4 cm Diameter)	0.50 oz
Spices	Spice container	Kroger	-	Plastic container with plastic lid (13.5 cm H x 6 cm Diameter)	1.70 oz
Spices	Spice container	McCormick Gourmet	-	Glass jar with plastic lid and plastic seal (11.5 cm H x 4 cm Diameter)	4.00 oz
Spices	Spice container	Spice Garden	-	Glass jar with plastic lid (11 cm H x 4.5 cm Diameter)	4.45 oz
Spices	Spice container	Private Selection	-	Glass bottle with plastic cap (11 cm H x 4.25 cm Diameter)	5.00 oz
Spices	Sugar (white)	C&H	1 lb	Cardboard box	1.00 oz
Spices	Sugar (white)	Fred Meyer	5 lb	Paper bag	0.90 oz
Spices	Sugar (white)	Wholesome Sweeteners	1 lb	Resealable plastic bag	0.35 oz
Spices	Sugar (white)	Fred Meyer	10 lb	Paper bag	1.50 oz
Flour and Grains	White Flour (bleached)	Fred Meyer	5 lb	Paper bag	0.75 oz
Flour and Grains	White Flour (bleached)	Bob's Red Mill	5 lb	Plastic bag	0.95 oz
Flour and Grains	White Flour (bleached)	Fred Meyer	10 lb	Paper bag	1.25 oz
Flour and Grains	White Flour (bleached)	Fred Meyer	25 lb	Paper bag	4.60 oz
Flour and Grains	White Rice (long grain)	Fred Meyer (basmati)	32 oz	Resealable plastic bag	0.25 oz
Flour and Grains	White Rice (long grain)	India's Majestic	36 oz	Plastic with plastic lid	3.55 oz
Flour and Grains	White Rice (long grain)	Royal	10 lb	Burlap sack with zipper and plastic bag liner	6.05 oz

Exhibit 11: Product Packaging Landfill Time

Beans	Black	plastic bag	10-20 years
Condiments	Peanut Butter	glass	500- 1,000,000 years
Condiments	Peanut Butter	plastic	1,000 years
Dried Fruit	Raisins	paper carton/plastic	10-20 years
Dried Fruit	Raisins	carton	5 years
Flour and Grains	Popcorn (yellow)	plastic	1,000 years
Flour and Grains	Popcorn (yellow)	paper	1 month
Flour and Grains	Rolled Oats (instant)	carton	5 years
Flour and Grains	White Flour	paper	1 month
Flour and Grains	White Rice (Basmati)	plastic bag	10-20 years
Nuts and Seeds	Almonds (whole, roasted, shelled)	plastic	1,000 years
Nuts and Seeds	Almonds (whole, roasted, shelled)	tin canister	80-100 years
Nuts and Seeds	Peanuts (roasted, shelled)	plastic	1,000 years
Nuts and Seeds	Peanuts (roasted, shelled)	glass	500-1,000,000 years
Nuts and Seeds	Peanuts (roasted, shelled)	tin canister	80-100 years
Pasta	Penne	paper/plastic	1,000 years
Snacks/Misc.	Granola (vanilla)	plastic bag	10-20 years
Snacks/Misc.	Semi-Sweet Chocolate chips	plastic bag	10-20 years
Spices	Any (all containers should be the same)	glass	500-1,000,000 years
Spices	Sugar (white)	paper	2.5 months
General bulk	plastic bag	plastic bag	10-20 years
Bulk Nut Butter/liquids	plastic container	plastic	1,000 years

Appendix 1: Raw Data Collected

Alberta	Beans	Black	Y	Y	1.49	1 lb			1.49	
Alberta	Beans	Pinto	Y	Y	1.49	1 lb			1.49	
Alberta	Beans	Red (kidney)	Y	Y	1.99	1 lb			1.99	
Alberta	Beans	Split Peas	Y	Y	1.59	1 lb			1.59	
Alberta	Coffee & Tea	Decaf	Y	Y	12.99	1 lb	Café Mam		12.99	
Alberta	Coffee & Tea	Earl Grey	N	Y	4.69	1.1 oz	Choice	16 count	68.22	
Alberta	Coffee & Tea	Earl Grey	N	Y	4.69	1.41 oz	Equal Exchange	20 count	53.22	
Alberta	Coffee & Tea	Earl Grey	N	Y	6.49	1.72 oz	Numi	18 count	60.37	
Alberta	Coffee & Tea	French	Y	Y	10.99	1 lb	Café Mam		10.99	
Alberta	Dried Fruit	Coconut (shredded)	Y	Y	4.49	1 lb		medium shredded	4.49	
Alberta	Dried Fruit	Coconut (shredded)	Y	Y	3.79	1 lb		curls	3.79	
Alberta	Dried Fruit	Dried Cranberries	Y	N	23.99	1 lb		coquille	23.99	
Alberta	Dried Fruit	Dried Cranberries	N	N	6.99	10 oz	Vincent Family		11.18	
Alberta	Dried Fruit	Raisins	Y	Y	3.99	1 lb		Thompson; biodynamic	3.99	
Alberta	Dried Fruit	Raisins	Y	Y	2.59	1 lb		Thompson	2.59	
Alberta	Dried Fruit	Raisins	Y	Y	3.29	1 lb		flame	3.29	
Alberta	Flour & Grains	Brown Rice (long grain)	Y	Y	1.69	1 lb			1.69	
Alberta	Flour & Grains	Popcorn (yellow)	Y	Y	1.39	1 lb			1.39	
Alberta	Flour & Grains	Popcorn (yellow)	N	Y	3.69	8.4 oz	Newman's Own	3 count	7.03	National
Alberta	Flour & Grains	Rolled Oats (instant)	Y	Y	0.99	1 lb		thick	0.99	
Alberta	Flour & Grains	Rolled Oats (instant)	N	N	3.29	16 oz	Old Wessex Ltd.		3.29	
Alberta	Flour & Grains	White Flour Bleached	Y	Y	0.99	1 lb		unbleached	0.99	
Alberta	Flour & Grains	White Flour Bleached	N	N	4.39	5 lbs	Bob's Red Mill		0.88	
Alberta	Flour & Grains	White Flour Bleached	N	Y	6.49	5 lbs	Bob's Red Mill		1.30	
Alberta	Flour & Grains	White Rice (long grain)	Y	Y	2.69	1 lb			2.69	
Alberta	Flour & Grains	Whole Wheat Flour	Y	Y	0.99	1 lb			0.99	
Alberta	Flour & Grains	Whole Wheat Flour	N	Y	6.49	5 lbs	Bob's Red Mill		1.30	
Alberta	Nut Butters	Almond Butter	Y	N	8.49	1 lb			8.49	
Alberta	Nut Butters	Almond Butter	N	Y	13.99	16 oz	Once Again	raw	13.99	
Alberta	Nut Butters	Almond Butter	N	Y	11.99	16 oz	Hummingbird		11.99	
Alberta	Nut Butters	Peanut Butter	Y	Y	3.99	1 lb			3.99	
Alberta	Nut Butters	Peanut Butter	N	Y	5.99	16 oz	MaraNatha		5.99	
Alberta	Nut Butters	Peanut Butter	N	Y	9.99	35 oz	Woodstock Farms		4.57	
Alberta	Nut Butters	Peanut Butter	N	Y	8.49	26 oz	MaraNatha		5.22	
Alberta	Nut Butters	Peanut Butter	N	Y	4.99	18 oz	Woodstock Farms		4.44	
Alberta	Nut Butters	Peanut Butter	N	Y	7.29	16 oz	Once Again		7.29	
Alberta	Nut Butters	Peanut Butter	N	N	5.99	16 oz	MaraNatha		5.99	
Alberta	Nuts & Seeds	Almonds Whole Roasted (shelled)	Y	Y	8.99	1 lb			8.99	
Alberta	Nuts & Seeds	Cashews Whole Roasted (shelled)	Y	Y	16.69	1 lb			16.69	
Alberta	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	Y	N	3.99	1 lb		valencia	3.99	

Appendix 1: Raw Data Collected

Alberta	Nuts & Seeds	Pistachios Salted (in shell)	Y	Y	8.99	1 lb				8.99
Alberta	Pasta	Penne	Y	Y	2.49	1 lb				2.49
Alberta	Pasta	Penne	N	Y	2.99	16 oz	BioNaturae			2.99
Alberta	Snacks/Misc.	Granola (Vanilla)	Y	Y	4.99	1 lb		ginger zing granola		4.99
Alberta	Snacks/Misc.	Semi-Sweet Chocolate chips	Y	Y	10.99	1 lb				10.99
Alberta	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	4.49	12 oz	Ghiradelli			5.99
Alberta	Spices	Basil (whole, cut, aka Sweet Basil)	Y	Y	16.99	1 lb				16.99
Alberta	Spices	Black Peppercorns (whole)	Y	Y	15.00	1 lb				15.00
Alberta	Spices	Cinnamon (ground)	Y	Y	10.00	1 lb				10.00
Alberta	Spices	Cloves (ground)	Y	Y	18.90	1 lb				18.90
Alberta	Spices	Garlic Powder	Y	Y	10.00	1 lb				10.00
Alberta	Spices	Nutmeg (ground)	Y	Y	25.00	1 lb				25.00
Alberta	Spices	Onion Powder	Y	Y	12.00	1 lb				12.00
Alberta	Spices	Paprika (ground)	Y	Y	14.00	1 lb				14.00
Alberta	Spices	Red Pepper (crushed, chili flakes)	Y	Y	15.00	1 lb				15.00
Alberta	Spices	Sugar (white)	Y	Y	1.99	1 lb		evaporated sugar cane		1.99
Alberta	Spices	Sugar (white)	N	Y	6.49	2 lbs	Wholesome Sweetener			3.25
Food Front	Beans	Black	Y	N	1.49	1 lb				1.49
Food Front	Beans	Pinto	Y	N	1.49	1 lb				1.49
Food Front	Beans	Red (kidney)	Y	N	1.99	1 lb				1.99
Food Front	Beans	Split Peas	Y	N	1.49	1 lb				1.49
Food Front	Coffee & Tea	Decaf	Y	Y	14.99	1 lb		French		14.99
Food Front	Coffee & Tea	Decaf	Y	Y	11.89	1 lb		Italian		11.89
Food Front	Coffee & Tea	Decaf	N	N	11.99	12 oz	Nossa Familia	Italian		15.99
Food Front	Coffee & Tea	Decaf	N	N	15.39	12 oz	Stumptown	House		20.52
Food Front	Coffee & Tea	Earl Grey	Y	Y	19.99	1 lb	Tao of Tea			19.99
Food Front	Coffee & Tea	Earl Grey	Y	Y	21.49	1 lb	Choice			21.49
Food Front	Coffee & Tea	Earl Grey	N	N	4.49	1.7 oz	Tazo	20 ct		42.26
Food Front	Coffee & Tea	Earl Grey	N	Y	6.99	1.27 oz	Numi	18 ct		88.06
Food Front	Coffee & Tea	Earl Grey	N	Y	4.69	1.41 oz	Equal Exchange	20 ct		53.22
Food Front	Coffee & Tea	Earl Grey	N	N	3.19	1.1 oz	Stash	20 ct		46.40
Food Front	Coffee & Tea	French	Y	Y	11.99	1 lb	Equal Exchange			11.99
Food Front	Coffee & Tea	French	Y	Y	10.29	1 lb	Cate Mam			10.29
Food Front	Coffee & Tea	French	N	N	10.99	12 oz	Nossa Familia			14.65
Food Front	Coffee & Tea	French	N	N	13.49	12 oz	Peet's			17.99
Food Front	Coffee & Tea	French	N	N	15.39	12 oz	Stumptown			20.52
Food Front	Confectionaries	Chocolate Covered Almonds	Y	Y	12.89	1 lb	SunRidge Farms	dark chocolate, fair trade		12.89
Food Front	Confectionaries	Yogurt Pretzels	Y	N	7.69	1 lb	SunRidge Farms			7.69
Food Front	Confectionaries	Yogurt Pretzels	Y	N	5.69	1 lb	Glutino	gluten free		5.69
Food Front	Dried Fruit	Coconut (shredded)	Y	Y	4.89	1 lb				4.89

Appendix 1: Raw Data Collected

Food Front	Dried Fruit	Coconut (shredded)	N	Y	3.79 8 oz	Let's Do...Organic	7.58
Food Front	Dried Fruit	Dried Cranberries	Y	Y	8.29 1 lb	sweetened with apple juice	8.29
Food Front	Dried Fruit	Raisins	Y	Y	2.19 1 lb	Thompson	2.19
Food Front	Dried Fruit	Raisins	Y	Y	2.59 1 lb	Flame	2.59
Food Front	Flour & Grains	Brown Rice (long grain)	Y	N	1.89 1 lb	India	1.89
Food Front	Flour & Grains	Brown Rice (long grain)	N	Y	4.99 1 lb	Lundberg	4.99
Food Front	Flour & Grains	Popcorn (yellow)	Y	Y	1.59 1 lb		1.59
Food Front	Flour & Grains	Popcorn (yellow)	N	Y	4.89 8.4 oz	Bearitos	3 ct 9.31
Food Front	Flour & Grains	Popcorn (yellow)	N	Y	3.59 9.9 oz	Newman's Own	3 ct 5.80 National
Food Front	Flour & Grains	Rolled Oats (instant)	Y	Y	1.19 1 lb		1.19
Food Front	Flour & Grains	Rolled Oats (instant)	N	N	2.29 16 oz	Bob's Red Mill	2.29
Food Front	Flour & Grains	Rolled Oats (instant)	N	N	4.69 10.4 oz	Glutenfreeda	6 ct 7.22
Food Front	Flour & Grains	Rolled Oats (instant)	N	N	3.69 13.6 oz	Nature's Path	8 ct 4.34
Food Front	Flour & Grains	Rolled Oats (instant)	N	N	4.99 16 oz	McCann's	Irish Oatmeal 4.99
Food Front	Flour & Grains	White Flour Bleached	Y	Y	0.99 1 lb	unbleached	0.99
Food Front	Flour & Grains	White Flour Bleached	N	Y	4.69 5 lbs	Bob's Red Mill	0.94
Food Front	Flour & Grains	White Rice (long grain)	Y	N	3.59 1 lb	Indian	3.59
Food Front	Flour & Grains	Whole Wheat Flour	Y	Y	0.79 1 lb		0.79
Food Front	Flour & Grains	Whole Wheat Flour	N	N	4.09 5 lbs	Bob's Red Mill	0.82
Food Front	Nut Butters	Almond Butter	Y	Y	9.49 1 lb		9.49
Food Front	Nut Butters	Almond Butter	N	Y	24.99 16 oz	MaraNatha	Roasted 24.99
Food Front	Nut Butters	Almond Butter	N	Y	12.99 8 oz	MaraNatha	25.98
Food Front	Nut Butters	Almond Butter	N	N	11.49 16 oz	MaraNatha	11.49
Food Front	Nut Butters	Almond Butter	N	N	0.99 1.15 oz	Justin's	13.77
Food Front	Nut Butters	Almond Butter	N	N	6.99 11 oz	Kettle	10.17 National
Food Front	Nut Butters	Almond Butter	N	N	9.19 16 oz	Zinke Orchards	9.19
Food Front	Nut Butters	Peanut Butter	Y	Y	3.79 1 lb		3.79
Food Front	Nut Butters	Peanut Butter					

Appendix 1: Raw Data Collected

Food Front	Snacks/Misc.	Semi-Sweet Chocolate chips	Y	Y	8.69	1 lb			8.69	
Food Front	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	4.09	12 oz	Ghiradelli		5.45	National
Food Front	Snacks/Misc.	Semi-Sweet Chocolate chips	N	Y	5.49	10 oz	Sunspire		8.78	
Food Front	Spices	Basil (whole, cut, aka Sweet Basil)	Y	Y	18.79	1 lb			18.79	
Food Front	Spices	Black Peppercorns (whole)	Y	Y	16.19	1 lb			16.19	
Food Front	Spices	Cinnamon (ground)	Y	Y	6.89	1 lb			6.89	
Food Front	Spices	Cloves (ground)	Y	Y	26.99	1 lb			26.99	
Food Front	Spices	Garlic Powder	Y	Y	13.99	1 lb			13.99	
Food Front	Spices	Nutmeg (ground)	Y	Y	21.99	1 lb			21.99	
Food Front	Spices	Onion Powder	Y	Y	14.59	1 lb			14.59	
Food Front	Spices	Paprika (ground)	Y	Y	17.49	1 lb			17.49	
Food Front	Spices	Red Pepper (crushed, chili flakes)	Y	Y	21.79	1 lb			21.79	
Food Front	Spices	Sugar (white)	Y	N	1.39	1 lb			1.39	
Fred Meyer's A	Beans	Black	Y	Y	1.49	1 lb			1.49	
Fred Meyer's A	Beans	Black	N	N	1.39	16 oz	Fred Meyer's		1.39	Generic
Fred Meyer's A	Beans	Pinto	Y	Y	1.49	1 lb			1.49	
Fred Meyer's A	Beans	Pinto	N	N	4.19	4 lbs	Fred Meyer's		1.05	Generic
Fred Meyer's A	Beans	Pinto	N	N	2.17	2 lbs	Fred Meyer's		1.09	Generic
Fred Meyer's A	Beans	Pinto	N	N	0.79	16 oz	Fred Meyer's		0.79	Generic
Fred Meyer's A	Beans	Red (kidney)	Y	Y	2.19	1 lb		dark red	2.19	
Fred Meyer's A	Beans	Red (kidney)	N	N	3.15	2 lbs	Fred Meyer's	light red	1.58	Generic
Fred Meyer's A	Beans	Split Peas	Y	N	1.29	1 lb			1.29	
Fred Meyer's A	Beans	Split Peas	N	N	2.17	2 lbs	Fred Meyer's		1.09	Generic
Fred Meyer's A	Beans	Split Peas	N	N	1.15	16 oz	Fred Meyer's		1.15	Generic
Fred Meyer's A	Coffee & Tea	Decaf	Y	N	9.99	1 lb	Millstone		9.99	
Fred Meyer's A	Coffee & Tea	Decaf	Y	N	8.99	1 lb	Kivu		8.99	
Fred Meyer's A	Coffee & Tea	Decaf	N	N	8.49	12 oz	Kivu		11.32	
Fred Meyer's A	Coffee & Tea	Decaf	N	N	11.39	11 oz	Millstone		16.57	
Fred Meyer's A	Coffee & Tea	Decaf	N	N	12.49	12 oz	Starbucks	House Blend	16.65	National
Fred Meyer's A	Coffee & Tea	Decaf	N	N	12.99	12 oz	Peet's		17.32	
Fred Meyer's A	Coffee & Tea	Decaf	N	N	4.59	11.5 oz	Fred Meyer's		6.39	Generic
Fred Meyer's A	Coffee & Tea	Decaf	N	N	7.69	12 oz	Yuban		10.25	National
Fred Meyer's A	Coffee & Tea	Decaf	N	N	10.83	12 oz	Dunkin' Donuts		14.44	National
Fred Meyer's A	Coffee & Tea	Earl Grey	Y	Y	26.99	1 lb		Fair Trade Organics	26.99	
Fred Meyer's A	Coffee & Tea	Earl Grey	N	N	3.39	1.3 oz	Stash	box 20ct	41.72	
Fred Meyer's A	Coffee & Tea	Earl Grey	N	N	4.09	1.41 oz	Twinnings	box 20ct	46.41	National
Fred Meyer's A	Coffee & Tea	Earl Grey	N	N	2.69	1.41 oz	Private Selection	box 20ct	30.52	
Fred Meyer's A	Coffee & Tea	Earl Grey	N	N	3.89	1.7 oz	Tazo	box 20ct	36.61	National
Fred Meyer's A	Coffee & Tea	Earl Grey	N	N	3.59	1.18 oz	Bigelow	box 20ct	48.68	National
Fred Meyer's A	Coffee & Tea	French	Y	N	9.99	1 lb	Millstone		9.99	

Appendix 1: Raw Data Collected

Fred Meyer's A	Coffee & Tea	French	Y	N	8.99	1 lb	Kivu		8.99	
Fred Meyer's A	Coffee & Tea	French	N	N	8.49	10 oz	Kivu		13.58	
Fred Meyer's A	Coffee & Tea	French	N	N	11.39	10 oz	Millstone		18.22	
Fred Meyer's A	Coffee & Tea	French	N	N	15.59	20 oz	Starbucks		12.47	National
Fred Meyer's A	Coffee & Tea	French	N	N	12.99	12 oz	Peet's		17.32	
Fred Meyer's A	Coffee & Tea	French	N	N	10.99	12 oz	Starbucks		14.65	National
Fred Meyer's A	Coffee & Tea	French	N	N	9.99	12 oz	Tully's		13.32	National
Fred Meyer's A	Coffee & Tea	French	N	N	4.29	11.5 oz	Fred Meyer's		5.97	Generic
Fred Meyer's A	Confectionaries	Chocolate Covered Almonds	Y	N	7.99	1 lb		dark chocolate	7.99	
Fred Meyer's A	Confectionaries	Yogurt Pretzels	Y	N	6.69	1 lb			6.69	
Fred Meyer's A	Confectionaries	Yogurt Pretzels	N	N	2.29	5 oz	Flipz		7.33	National
Fred Meyer's A	Dried Fruit	Coconut (shredded)	Y	N	2.99	1 lb			2.99	
Fred Meyer's A	Dried Fruit	Coconut (shredded)	N	N	2.79	14 oz	Baker's		3.19	National
Fred Meyer's A	Dried Fruit	Coconut (shredded)	N	N	2.29	14 oz	Kroger		2.62	Generic
Fred Meyer's A	Dried Fruit	Dried Cranberries	Y	N	5.99	1 lb			5.99	
Fred Meyer's A	Dried Fruit	Dried Cranberries	N	N	3.19	6 oz	Ocean Spray		8.51	National
Fred Meyer's A	Dried Fruit	Dried Cranberries	N	N	5.49	12 oz	Ocean Spray		7.32	National
Fred Meyer's A	Dried Fruit	Dried Cranberries	N	Y	3.79	4 oz	Newman's Own		15.16	National
Fred Meyer's A	Dried Fruit	Raisins	Y	Y	3.19	1 lb			3.19	
Fred Meyer's A	Dried Fruit	Raisins	N	N	3.49	15 oz	Sun Maid		3.72	National
Fred Meyer's A	Dried Fruit	Raisins	N	N	6.29	32 oz	Sun Maid		3.15	National
Fred Meyer's A	Dried Fruit	Raisins	N	N	4.69	24 oz	Fred Meyer's		3.13	Generic
Fred Meyer's A	Dried Fruit	Raisins	N	N	2.69	12 oz	Fred Meyer's		3.59	Generic
Fred Meyer's A	Dried Fruit	Raisins	N	Y	3.69	12 oz	Private Selection		4.92	
Fred Meyer's A	Flour & Grains	Brown Rice (long grain)	Y	N	1.29	1 lb			1.29	
Fred Meyer's A	Flour & Grains	Brown Rice (long grain)	N	N	1.29	16 oz	Fred Meyer's		1.29	Generic
Fred Meyer's A	Flour & Grains	Brown Rice (long grain)	N	N	4.27	2 lbs	Uncle Ben's		2.14	National
Fred Meyer's A	Flour & Grains	Brown Rice (long grain)	N	N	2.39	2 lbs	Fred Meyer's		1.20	Generic
Fred Meyer's A	Flour & Grains	Popcorn (yellow)	Y	Y	1.79	1 lb			1.79	
Fred Meyer's A	Flour & Grains	Popcorn (yellow)	Y	N	1.29	1 lb			1.29	
Fred Meyer's A	Flour & Grains	Popcorn (yellow)	N	N	2.23	2 lbs	Jolly Time		1.12	National
Fred Meyer's A	Flour & Grains	Popcorn (yellow)	N	N	1.49	2 lbs	Kroger		0.75	Generic
Fred Meyer's A	Flour & Grains	Popcorn (yellow)	N	N	5.79	30 oz	Pop Secret		3.09	National
Fred Meyer's A	Flour & Grains	Popcorn (yellow)	N	N	4.79	30 oz	Orville Redenbacher's		2.55	National
Fred Meyer's A	Flour & Grains	Rolled Oats (instant)	Y	N	0.89	1 lb			0.89	
Fred Meyer's A	Flour & Grains	Rolled Oats (instant)	N	N	3.45	18 oz	Quaker		3.07	National
Fred Meyer's A	Flour & Grains	Rolled Oats (instant)	N	N	4.53	42 oz	Quaker		1.73	National
Fred Meyer's A	Flour & Grains	Rolled Oats (instant)	N	N	3.29	42 oz	Fred Meyer's		1.25	Generic
Fred Meyer's A	Flour & Grains	Rolled Oats (instant)	N	N	2.99	11.8 oz	Quaker	box, 12ct, 0.98 oz	4.05	National
Fred Meyer's A	Flour & Grains	Rolled Oats (instant)	N	Y	2.99	12 oz	Private Selection	box, 12ct, 1 oz	3.99	

Appendix 1: Raw Data Collected

Fred Meyer's A	Flour & Grains	White Flour Bleached	Y	N	0.69	1 lb			0.69	
Fred Meyer's A	Flour & Grains	White Flour Bleached	N	N	2.49	5 lbs	Gold Medal		0.50	National
Fred Meyer's A	Flour & Grains	White Flour Bleached	N	N	1.65	80 oz	Fred Meyer's		0.33	Generic
Fred Meyer's A	Flour & Grains	White Flour Bleached	N	N	5.49	10 lbs	Gold Medal		0.55	National
Fred Meyer's A	Flour & Grains	White Flour Bleached	N	N	3.39	10 lbs	Fred Meyer's		0.34	Generic
Fred Meyer's A	Flour & Grains	White Flour Bleached	N	N	4.83	5 lbs	King Arthur		0.97	
Fred Meyer's A	Flour & Grains	White Rice (long grain)	Y	N	1.69	1 lb		Basmati	1.69	
Fred Meyer's A	Flour & Grains	White Rice (long grain)	Y	N	2.59	1 lb		Jasmine	2.59	
Fred Meyer's A	Flour & Grains	White Rice (long grain)	N	N	2.99	5 lbs	Kroger Value		0.60	Generic
Fred Meyer's A	Flour & Grains	White Rice (long grain)	N	N	4.79	5 lbs	Fred Meyer's		0.96	Generic
Fred Meyer's A	Flour & Grains	Whole Wheat Flour	Y	Y	0.89	1 lb			0.89	
Fred Meyer's A	Flour & Grains	Whole Wheat Flour	Y	N	0.69	1 lb			0.69	
Fred Meyer's A	Flour & Grains	Whole Wheat Flour	N	N	4.23	5 lbs	Stone-Buhr		0.85	
Fred Meyer's A	Flour & Grains	Whole Wheat Flour	N	N	4.83	5 lbs	King Arthur		0.97	
Fred Meyer's A	Nut Butters	Almond Butter	Y	N	5.99	1 lb			5.99	
Fred Meyer's A	Nut Butters	Almond Butter	N	N	9.99	12 oz	MaraNatha		13.32	
Fred Meyer's A	Nut Butters	Almond Butter	N	N	5.99	11 oz	Kettle		8.71	National
Fred Meyer's A	Nut Butters	Almond Butter	N	N	5.99	12 oz	Blue Diamond		7.99	National
Fred Meyer's A	Nut Butters	Peanut Butter	Y	N	2.49	1 lb			2.49	
Fred Meyer's A	Nut Butters	Peanut Butter	N	N	2.16	16 oz	Fred Meyer's	natural	2.16	Generic
Fred Meyer's A	Nut Butters	Peanut Butter	N	N	4.19	40 oz	Fred Meyer's		1.68	Generic
Fred Meyer's A	Nut Butters	Peanut Butter	N	N	2.60	18 oz	Fred Meyer's	creamy	2.31	Generic
Fred Meyer's A	Nut Butters	Peanut Butter	N	Y	5.79	16 oz	MaraNatha	unsalted	5.79	
Fred Meyer's A	Nut Butters	Peanut Butter	N	N	3.93	16 oz	Adam's		3.93	National
Fred Meyer's A	Nut Butters	Peanut Butter	N	N	5.99	16 oz	Adam's		5.99	National
Fred Meyer's A	Nuts & Seeds	Almonds Whole Roasted (shelled)	Y	N	4.99	1 lb			4.99	
Fred Meyer's A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	4.99	10 oz	Fred Meyer's	unsalted	7.98	Generic
Fred Meyer's A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	3.89	8 oz	Fred Meyer's	unsalted	7.78	Generic
Fred Meyer's A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	4.65	8 oz	Blue Diamond	Conventional& salted	9.30	National
Fred Meyer's A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	3.29	6 oz	Blue Diamond	salted	8.77	National
Fred Meyer's A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	4.45	11 oz	Emerald		6.47	National
Fred Meyer's A	Nuts & Seeds	Cashews Whole Roasted (shelled)	Y	N	7.99	1 lb		Conventional& salted	7.99	
Fred Meyer's A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	16.99	32 oz	Fred Meyer's		8.50	Generic
Fred Meyer's A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	4.39	8.5 oz	Fred Meyer's		8.26	Generic
Fred Meyer's A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	8.99	8 oz	Private Selection	Deluxe	17.98	Generic
Fred Meyer's A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	6.48	8.5 oz	Planters		12.20	National
Fred Meyer's A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	Y	N	3.49	1 lb		Conventional& salted	3.49	
Fred Meyer's A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	4.25	16 oz	Planters		4.25	National
Fred Meyer's A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	2.52	16 oz	Fred Meyer's		2.52	Generic
Fred Meyer's A	Nuts & Seeds	Pistachios Salted (in shell)	Y	N	9.49	1 lb			9.49	

Appendix 1: Raw Data Collected

Fred Meyer's A	Nuts & Seeds	Pistachios Salted (in shell)	N	N	3.49	4.75 oz	Planters		11.76	National
Fred Meyer's A	Pasta	Penne	Y	Y	2.49	1 lb			2.49	
Fred Meyer's A	Pasta	Penne	N	N	1.17	16 oz	Barilla		1.17	National
Fred Meyer's A	Pasta	Penne	N	N	1.09	12 oz	Fred Meyer's		1.45	Generic
Fred Meyer's A	Pasta	Penne	N	N	2.99	12 oz	Ronzoni		3.99	National
Fred Meyer's A	Pasta	Penne	N	N	1.69	16 oz	Private Selection		1.69	Generic
Fred Meyer's A	Snacks/Misc.	Granola (Vanilla)	Y	Y	3.49	1 lb		French Vanilla Almond	3.49	
Fred Meyer's A	Snacks/Misc.	Granola (Vanilla)	N	N	5.29	12 oz	Bear Naked	Vanilla Almond Crunch	7.05	National
Fred Meyer's A	Snacks/Misc.	Granola (Vanilla)	N	Y	3.99	13 oz	Cascade Farm		4.91	
Fred Meyer's A	Snacks/Misc.	Semi-Sweet Chocolate chips	Y	Y	7.99	1 lb			7.99	
Fred Meyer's A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	2.79	12 oz	Private Selection		3.72	Generic
Fred Meyer's A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.45	12 oz	Ghiradelli		4.60	National
Fred Meyer's A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	1.59	12 oz	Kroger Value		2.12	Generic
Fred Meyer's A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.19	12 oz	Nestle		4.25	National
Fred Meyer's A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	1.99	12 oz	Fred Meyer's	Tollhouse	2.65	Generic
Fred Meyer's A	Spices	Basil (whole, cut, aka Sweet Basil)	Y	N	10.99	1 lb			10.99	
Fred Meyer's A	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	6.19	0.5 oz	Spice Island		198.08	National
Fred Meyer's A	Spices	Basil (whole, cut, aka Sweet Basil)	N	Y	6.49	0.5 oz	Spice Island	organic	207.68	National
Fred Meyer's A	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	5.79	0.4 oz	Morton & Bassett		231.60	National
Fred Meyer's A	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	4.29	0.44 oz	Private Selection		156.00	Generic
Fred Meyer's A	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	1.69	0.43 oz	Kroger		62.88	Generic
Fred Meyer's A	Spices	Black Peppercorns (whole)	Y	N	9.99	1 lb			9.99	
Fred Meyer's A	Spices	Black Peppercorns (whole)	N	Y	6.69	2.2 oz	Spice Island		48.65	National
Fred Meyer's A	Spices	Black Peppercorns (whole)	N	N	3.99	1.87 oz	Private Selection		34.14	Generic
Fred Meyer's A	Spices	Black Peppercorns (whole)	N	N	6.19	2.4 oz	Spice Island		41.27	National
Fred Meyer's A	Spices	Black Peppercorns (whole)	N	N	6.39	2.1 oz	Morton & Bassett		48.69	National
Fred Meyer's A	Spices	Black Peppercorns (whole)	N	N	0.59	0.625 oz	El Guapo		15.10	
Fred Meyer's A	Spices	Cinnamon (ground)	Y	Y	6.99	1 lb			6.99	
Fred Meyer's A	Spices	Cinnamon (ground)	N	N	7.19	2.7 oz	Morton & Bassett		42.61	National
Fred Meyer's A	Spices	Cinnamon (ground)	N	N	1.00	2.25 oz	Kroger Value		7.11	Generic
Fred Meyer's A	Spices	Cinnamon (ground)	N	N	2.99	1.75 oz	Kroger		27.34	Generic
Fred Meyer's A	Spices	Cinnamon (ground)	N	N	6.19	1.9 oz	Spice Island		52.13	National
Fred Meyer's A	Spices	Cinnamon (ground)	N	N	3.99	1.62 oz	Private Selection		39.41	Generic
Fred Meyer's A	Spices	Cinnamon (ground)	N	Y	6.49	1.5 oz	Spice Island	organic	69.23	National
Fred Meyer's A	Spices	Cloves (ground)	Y	Y	21.99	1 lb			21.99	
Fred Meyer's A	Spices	Cloves (ground)	N	N	12.39	1.9 oz	Spice Island		104.34	National
Fred Meyer's A	Spices	Cloves (ground)	N	N	13.19	1.8 oz	Kroger		117.24	Generic
Fred Meyer's A	Spices	Garlic Powder	Y	N	7.99	1 lb			7.99	
Fred Meyer's A	Spices	Garlic Powder	N	N	0.59	1 oz	El Guapo		9.44	
Fred Meyer's A	Spices	Garlic Powder	N	N	1.00	2 oz	Kroger Value		8.00	Generic

Appendix 1: Raw Data Collected

Fred Meyer's A	Spices	Garlic Powder	N	N	3.59	2.12 oz	Kroger		27.09	Generic
Fred Meyer's A	Spices	Garlic Powder	N	N	7.99	9.25 oz	Kroger		13.82	Generic
Fred Meyer's A	Spices	Nutmeg (ground)	Y	N	21.99	1 lb			21.99	
Fred Meyer's A	Spices	Nutmeg (ground)	N	N	10.99	2.1 oz	Spice Island		83.73	National
Fred Meyer's A	Spices	Nutmeg (ground)	N	N	4.89	1.625 oz	Kroger		48.15	Generic
Fred Meyer's A	Spices	Nutmeg (ground)	N	N	5.69	1.72 oz	Private Selection		52.93	Generic
Fred Meyer's A	Spices	Onion Powder	Y	N	11.99	1 lb			11.99	
Fred Meyer's A	Spices	Onion Powder	N	N	0.59	0.75 oz	El Guapo		12.59	
Fred Meyer's A	Spices	Onion Powder	N	N	1.00	1.75 oz	Kroger Value		9.14	Generic
Fred Meyer's A	Spices	Onion Powder	N	N	3.59	2.12 oz	Kroger		27.09	Generic
Fred Meyer's A	Spices	Paprika (ground)	Y	N	11.49	1 lb			11.49	
Fred Meyer's A	Spices	Paprika (ground)	N	N	0.59	1 oz	El Guapo		9.44	
Fred Meyer's A	Spices	Paprika (ground)	N	N	7.19	2.1 oz	Spice Island		54.78	National
Fred Meyer's A	Spices	Paprika (ground)	N	N	4.79	1.67 oz	Private Selection		45.89	Generic
Fred Meyer's A	Spices	Paprika (ground)	N	N	6.19	2 oz	Morton & Bassett		49.52	National
Fred Meyer's A	Spices	Paprika (ground)	N	N	3.09	1.38 oz	Kroger		35.83	Generic
Fred Meyer's A	Spices	Red Pepper (crushed, chili flakes)	Y	N	24.99	1 lb			24.99	
Fred Meyer's A	Spices	Red Pepper (crushed, chili flakes)	N	N	5.79	1.4 oz	Spice Island		66.17	National
Fred Meyer's A	Spices	Red Pepper (crushed, chili flakes)	N	N	6.49	1.3 oz	Morton & Bassett		79.88	National
Fred Meyer's A	Spices	Red Pepper (crushed, chili flakes)	N	N	5.79	4.25 oz	Kroger		21.80	Generic
Fred Meyer's A	Spices	Red Pepper (crushed, chili flakes)	N	N	0.59	0.75 oz	El Guapo		12.59	
Fred Meyer's A	Spices	Sugar (white)	N	N	3.19	4 lbs	C&H		0.80	National
Fred Meyer's A	Spices	Sugar (white)	N	N	2.29	4 lbs	Kroger Value		0.57	Generic
Fred Meyer's A	Spices	Sugar (white)	N	N	3.29	5 lbs	Fred Meyer's		0.66	Generic
Fred Meyer's A	Spices	Sugar (white)	N	N	7.89	10 lbs	C&H		0.79	National
Fred Meyer's A	Spices	Sugar (white)	N	N	5.99	10 lbs	Fred Meyer's		0.60	Generic
Fred Meyer's A	Spices	Sugar (white)	N	N	1.43	1 lb	C&H		1.43	National
Fred Meyer's B	Beans	Black	Y	Y	1.39	1 lb		turtle	1.39	
Fred Meyer's B	Beans	Black	N	N	3.69	32 oz	Fiesta		1.85	
Fred Meyer's B	Beans	Black	N	N	1.39	16 oz	Fred Meyer's		1.39	Generic
Fred Meyer's B	Beans	Pinto	Y	Y	1.49	1 lb			1.49	
Fred Meyer's B	Beans	Pinto	N	N	3.29	32 oz	Fiesta		1.65	
Fred Meyer's B	Beans	Pinto	N	N	4.19	4 lbs	Fred Meyer's		1.05	Generic
Fred Meyer's B	Beans	Pinto	N	N	2.17	2 lbs	Fred Meyer's		1.09	Generic
Fred Meyer's B	Beans	Pinto	N	N	0.79	1 lb	Fred Meyer's		0.79	Generic
Fred Meyer's B	Beans	Red (kidney)	N	N	3.15	2 lbs	Fred Meyer's		1.58	Generic
Fred Meyer's B	Beans	Split Peas	Y	N	1.29	1 lb			1.29	
Fred Meyer's B	Beans	Split Peas	N	N	2.17	2 lbs	Fred Meyer's		1.09	Generic
Fred Meyer's B	Beans	Split Peas	N	N	1.15	1 lb	Fred Meyer's		1.15	Generic
Fred Meyer's B	Coffee & Tea	Decaf	Y	Y	8.49	1 lb	Javatopia		8.49	

Appendix 1: Raw Data Collected

Fred Meyer's B	Coffee & Tea	Decaf	Y	Y	7.49	1 lb	Green Mountain		7.49	
Fred Meyer's B	Coffee & Tea	Decaf	Y	N	9.99	1 lb	Portland Roasting Coffee		9.99	
Fred Meyer's B	Coffee & Tea	Decaf	Y	N	8.99	1 lb	Tully's		8.99	
Fred Meyer's B	Coffee & Tea	Decaf	Y	N	9.99	1 lb	Millstone		9.99	
Fred Meyer's B	Coffee & Tea	Decaf	Y	N	7.99	1 lb	Kivu		7.99	
Fred Meyer's B	Coffee & Tea	Earl Grey	Y	Y	26.99	1 lb			26.99	
Fred Meyer's B	Coffee & Tea	Earl Grey	N	N	3.39	1.3 oz	Stash	20 ct	41.72	
Fred Meyer's B	Coffee & Tea	Earl Grey	N	N	2.69	1.41 oz	Private Selection	20 ct	30.52	Generic
Fred Meyer's B	Coffee & Tea	Earl Grey	N	N	3.59	1.18 oz	Bigelow	20 ct	48.68	National
Fred Meyer's B	Coffee & Tea	Earl Grey	N	N	3.89	1.7 oz	Tazo	20 ct	36.61	National
Fred Meyer's B	Coffee & Tea	Earl Grey	N	N	4.09	1.41 oz	Twinings	20 ct	46.41	National
Fred Meyer's B	Coffee & Tea	French	Y	Y	8.49	1 lb	Javatopia		8.49	
Fred Meyer's B	Coffee & Tea	French	Y	Y	7.49	1 lb	Green Mountain		7.49	
Fred Meyer's B	Coffee & Tea	French	Y	N	9.99	1 lb	Portland Roasting Coffee		9.99	
Fred Meyer's B	Coffee & Tea	French	Y	N	8.99	1 lb	Tully's		8.99	
Fred Meyer's B	Coffee & Tea	French	Y	N	9.99	1 lb	Millstone		9.99	
Fred Meyer's B	Coffee & Tea	French	Y	N	7.99	1 lb	Kivu		7.99	
Fred Meyer's B	Coffee & Tea	French	N	N	12.99	12 oz	Peet's		17.32	
Fred Meyer's B	Coffee & Tea	French	N	N	10.99	12 oz	Starbucks		14.65	National
Fred Meyer's B	Coffee & Tea	French	N	N	7.99	12 oz	Tully's		10.65	National
Fred Meyer's B	Confectionaries	Chocolate Covered Almonds	Y	N	7.99	1 lb	Natural Choices	dark chocolate	7.99	
Fred Meyer's B	Confectionaries	Chocolate Covered Almonds	Y	N	1.87	4 oz	Jelly Belly	bulk candy section	7.48	National
Fred Meyer's B	Confectionaries	Chocolate Covered Almonds	N	N	4.39	8 oz	SunRidge Farms	dark chocolate, all natural	8.78	
Fred Meyer's B	Confectionaries	Yogurt Pretzels	Y	N	6.69	1 lb	Natural Choices		6.69	
Fred Meyer's B	Confectionaries	Yogurt Pretzels	N	N	2.99	5 oz	Naturally Preferred	all natural	9.57	
Fred Meyer's B	Confectionaries	Yogurt Pretzels	N	N	3.49	16 oz	American Importing		3.49	
Fred Meyer's B	Dried Fruit	Coconut (shredded)	N	N	2.29	14 oz	Kroger	Flake	2.62	Generic
Fred Meyer's B	Dried Fruit	Coconut (shredded)	N	N	2.79	14 oz	Baker's	Flake	3.19	National
Fred Meyer's B	Dried Fruit	Coconut (shredded)	N	N	1.49	5 oz	Kroger	Shaved	4.77	Generic
Fred Meyer's B	Dried Fruit	Dried Cranberries	Y	N	5.99	1 lb			5.99	
Fred Meyer's B	Dried Fruit	Dried Cranberries	N	N	5.49	12 oz	Ocean Spray		7.32	National
Fred Meyer's B	Dried Fruit	Dried Cranberries	N	N	3.19	6 oz	Ocean Spray		8.51	National
Fred Meyer's B	Dried Fruit	Dried Cranberries	N	N	3.79	4 oz	Newman's Own		15.16	National
Fred Meyer's B	Dried Fruit	Dried Cranberries	N	N	4.99	12 oz	Mariani		6.65	
Fred Meyer's B	Dried Fruit	Dried Cranberries	N	N	4.29	9 oz	Mariani	6 ct	7.63	
Fred Meyer's B	Dried Fruit	Raisins	Y	Y	3.19	1 lb			3.19	
Fred Meyer's B	Dried Fruit	Raisins	N	N	5.69	24 oz	Private Selection		3.79	Generic
Fred Meyer's B	Dried Fruit	Raisins	N	N	3.69	12 oz	Private Selection		4.92	Generic
Fred Meyer's B	Dried Fruit	Raisins	N	N	6.29	32 oz	Sun Maid		3.15	National
Fred Meyer's B	Dried Fruit	Raisins	N	N	5.19	24 oz	Sun Maid		3.46	National

Appendix 1: Raw Data Collected

Fred Meyer's B	Dried Fruit	Raisins	N	N	2.69	12 oz	Fred Meyer's		3.59	Generic
Fred Meyer's B	Dried Fruit	Raisins	N	N	3.19	12 oz	Sun Maid		4.25	National
Fred Meyer's B	Dried Fruit	Raisins	N	N	2.89	9 oz	Sun Maid	6 ct	5.14	National
Fred Meyer's B	Flour & Grains	Brown Rice (long grain)	Y	N	1.29	1 lb			1.29	
Fred Meyer's B	Flour & Grains	Brown Rice (long grain)	N	N	8.19	5 lbs	Tsuru Mai		1.64	
Fred Meyer's B	Flour & Grains	Brown Rice (long grain)	N	N	1.79	1 lb	Tsuru Mai		1.79	
Fred Meyer's B	Flour & Grains	Brown Rice (long grain)	N	N	2.39	2 lbs	Fred Meyer's		1.20	Generic
Fred Meyer's B	Flour & Grains	Brown Rice (long grain)	N	N	1.29	1 lb	Fred Meyer's		1.29	Generic
Fred Meyer's B	Flour & Grains	Brown Rice (long grain)	N	N	4.27	2 lbs	Uncle Ben's		2.14	National
Fred Meyer's B	Flour & Grains	Popcorn (yellow)	Y	N	1.29	1 lb			1.29	
Fred Meyer's B	Flour & Grains	Popcorn (yellow)	N	Y	2.39	20 oz	Jolly Time		1.91	National
Fred Meyer's B	Flour & Grains	Popcorn (yellow)	N	N	2.23	32 oz	Jolly Time		1.12	National
Fred Meyer's B	Flour & Grains	Popcorn (yellow)	N	N	1.49	32 oz	Kroger		0.75	Generic
Fred Meyer's B	Flour & Grains	Popcorn (yellow)	N	N	2.89	64 oz	Kroger		0.72	Generic
Fred Meyer's B	Flour & Grains	Popcorn (yellow)	N	N	5.79	30 oz	Pop Secret		3.09	National
Fred Meyer's B	Flour & Grains	Popcorn (yellow)	N	N	4.79	30 oz	Orville Redenbacher's		2.55	National
Fred Meyer's B	Flour & Grains	Popcorn (yellow)	N	N	2.89	6.2 oz	Orville Redenbacher's	4 ct, natural	7.46	National
Fred Meyer's B	Flour & Grains	Popcorn (yellow)	N	N	5.33	19.2 oz	Pop Secret	6 ct, 3.2 oz/ ct	4.44	National
Fred Meyer's B	Flour & Grains	Rolled Oats (instant)	Y	N	0.89	1 lb			0.89	
Fred Meyer's B	Flour & Grains	Rolled Oats (instant)	N	N	4.53	42 oz	Quaker		1.73	National
Fred Meyer's B	Flour & Grains	Rolled Oats (instant)	N	N	3.45	18 oz	Quaker		3.07	National
Fred Meyer's B	Flour & Grains	Rolled Oats (instant)	N	N	2.99	12 oz	Private Selection	12 ct	3.99	Generic
Fred Meyer's B	Flour & Grains	Rolled Oats (instant)	N	N	3.29	42 oz	Fred Meyer's		1.25	Generic
Fred Meyer's B	Flour & Grains	White Flour Bleached	Y	N	0.69	1 lb		unbleached	0.69	
Fred Meyer's B	Flour & Grains	White Flour Bleached	N	N	3.99	5 lbs	Bob's Red Mill		0.80	
Fred Meyer's B	Flour & Grains	White Flour Bleached	N	N	13.69	25 lbs	Gold Medal		0.55	National
Fred Meyer's B	Flour & Grains	White Flour Bleached	N	N	5.49	10 lbs	Gold Medal		0.55	National
Fred Meyer's B	Flour & Grains	White Flour Bleached	N	N	2.99	5 lbs	Pillsbury		0.60	National
Fred Meyer's B	Flour & Grains	White Flour Bleached	N	N	5.99	5 lbs	Gold Medal		1.20	National
Fred Meyer's B	Flour & Grains	White Flour Bleached	N	N	4.83	5 lbs	King Arthur		0.97	
Fred Meyer's B	Flour & Grains	White Flour Bleached	N	N	3.39	10 lbs	Fred Meyer's		0.34	Generic
Fred Meyer's B	Flour & Grains	White Rice (long grain)	Y	N	2.59	1 lb			2.59	
Fred Meyer's B	Flour & Grains	White Rice (long grain)	N	N	4.99	32 oz	Fred Meyer's		2.50	Generic
Fred Meyer's B	Flour & Grains	Whole Wheat Flour	Y	N	0.69	1 lb			0.69	
Fred Meyer's B	Flour & Grains	Whole Wheat Flour	N	N	3.99	5 lbs	Bob's Red Mill		0.80	
Fred Meyer's B	Flour & Grains	Whole Wheat Flour	N	Y	4.99	5 lbs	Bob's Red Mill		1.00	
Fred Meyer's B	Flour & Grains	Whole Wheat Flour	N	N	4.83	5 lbs	King Arthur		0.97	
Fred Meyer's B	Flour & Grains	Whole Wheat Flour	N	N	4.23	5 lbs	Stone-Buhr		0.85	
Fred Meyer's B	Nut Butters	Almond Butter	Y	N	5.99	1 lb			5.99	
Fred Meyer's B	Nut Butters	Almond Butter	N	N	5.99	11 oz	Kettle		8.71	National

Appendix 1: Raw Data Collected

Fred Meyer's B	Nut Butters	Almond Butter	N	N	9.99	16 oz	MaraNatha		9.99	
Fred Meyer's B	Nut Butters	Almond Butter	N	N	5.49	12 oz	MaraNatha		7.32	
Fred Meyer's B	Nut Butters	Peanut Butter	Y	N	2.49	1 lb			2.49	
Fred Meyer's B	Nut Butters	Peanut Butter	N	Y	3.99	11.5 oz	Kettle		5.55	National
Fred Meyer's B	Nut Butters	Peanut Butter	N	Y	5.79	16 oz	MaraNatha		5.79	
Fred Meyer's B	Nut Butters	Peanut Butter	N	N	3.93	16 oz	Adam's		3.93	National
Fred Meyer's B	Nut Butters	Peanut Butter	N	N	2.16	16 oz	Fred Meyer's	natural	2.16	Generic
Fred Meyer's B	Nut Butters	Peanut Butter	N	N	5.99	26 oz	Adam's		3.69	National
Fred Meyer's B	Nuts & Seeds	Almonds Whole Roasted (shelled)	Y	N	4.99	1 lb			4.99	
Fred Meyer's B	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	4.45	11 oz	Emerald		6.47	National
Fred Meyer's B	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	3.29	6 oz	Blue Diamond		8.77	National
Fred Meyer's B	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	4.65	8 oz	Blue Diamond		9.30	National
Fred Meyer's B	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	3.89	8 oz	Fred Meyer's		7.78	Generic
Fred Meyer's B	Nuts & Seeds	Cashews Whole Roasted (shelled)	Y	N	7.99	1 lb			7.99	
Fred Meyer's B	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	16.99	32 oz	Fred Meyer's		8.50	Generic
Fred Meyer's B	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	4.45	10 oz	Emerald		7.12	National
Fred Meyer's B	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	4.39	8.5 oz	Fred Meyer's		8.26	Generic
Fred Meyer's B	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	8.99	8 oz	Private Selection		17.98	Generic
Fred Meyer's B	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	6.48	8.5 oz	Planters		12.20	National
Fred Meyer's B	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	Y	N	2.49	1 lb		dry roasted	2.49	
Fred Meyer's B	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	Y	N	3.49	1 lb		salted, roasted	3.49	
Fred Meyer's B	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	6.99	34.5 oz	Planters		3.24	National
Fred Meyer's B	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	4.25	16 oz	Planters		4.25	National
Fred Meyer's B	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	2.57	16 oz	Fred Meyer's		2.57	Generic
Fred Meyer's B	Nuts & Seeds	Pistachios Salted (in shell)	Y	N	9.49	1 lb			9.49	
Fred Meyer's B	Nuts & Seeds	Pistachios Salted (in shell)	N	N	3.49	4.75 oz	Planters		11.76	National
Fred Meyer's B	Nuts & Seeds	Pistachios Salted (in shell)	N	N	14.99	2 lbs	Nichols Farms		7.50	
Fred Meyer's B	Nuts & Seeds	Pistachios Salted (in shell)	N	N	7.99	1 lb	Nichols Farms		7.99	
Fred Meyer's B	Pasta	Penne	Y	Y	2.49	1 lb			2.49	
Fred Meyer's B	Pasta	Penne	N	Y	1.79	1 lb	Private Selection		1.79	Generic
Fred Meyer's B	Pasta	Penne	N	N	1.16	12 oz	Fred Meyer's		1.55	Generic
Fred Meyer's B	Pasta	Penne	N	N	2.79	16 oz	Ronzoni		2.79	National
Fred Meyer's B	Pasta	Penne	N	N	2.49	13.25 oz	Dream Fields		3.01	
Fred Meyer's B	Snacks/Misc.	Granola (Vanilla)	Y	Y	2.79	1 lb			2.79	
Fred Meyer's B	Snacks/Misc.	Semi-Sweet Chocolate chips	Y	Y	7.99	1 lb			7.99	
Fred Meyer's B	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.19	12 oz	Nestle		4.25	National
Fred Meyer's B	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	5.69	24 oz	Nestle		3.79	National
Fred Meyer's B	Snacks/Misc.	Semi-Sweet Chocolate chips	N	Y	2.89	10 oz	Private Selection		4.62	Generic
Fred Meyer's B	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	2.79	12 oz	Private Selection		3.72	Generic
Fred Meyer's B	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.45	12 oz	Ghiradelli		4.60	National

Appendix 1: Raw Data Collected

Fred Meyer's B	Spices	Basil (whole, cut, aka Sweet Basil)	Y	N	10.99	1 lb			10.99	
Fred Meyer's B	Spices	Basil (whole, cut, aka Sweet Basil)	N	Y	4.49	0.54 oz	Simply Organic		133.04	
Fred Meyer's B	Spices	Basil (whole, cut, aka Sweet Basil)	N	Y	6.49	0.5 oz	Spice Island		207.68	National
Fred Meyer's B	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	4.29	0.44 oz	Private Selection		156.00	Generic
Fred Meyer's B	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	5.79	0.4 oz	Morton & Bassett		231.60	National
Fred Meyer's B	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	4.99	0.33 oz	Spice Hunter		241.94	National
Fred Meyer's B	Spices	Black Peppercorns (whole)	Y	N	9.99	1 lb			9.99	
Fred Meyer's B	Spices	Black Peppercorns (whole)	N	Y	5.29	2.65 oz	Simply Organic		31.94	
Fred Meyer's B	Spices	Black Peppercorns (whole)	N	N	6.59	2.1 oz	Morton & Bassett		50.21	National
Fred Meyer's B	Spices	Black Peppercorns (whole)	N	N	16.99	18.8 oz	Kroger		14.46	Generic
Fred Meyer's B	Spices	Black Peppercorns (whole)	N	Y	6.69	2.2 oz	Spice Island		48.65	National
Fred Meyer's B	Spices	Black Peppercorns (whole)	N	N	6.19	2.4 oz	Spice Island		41.27	National
Fred Meyer's B	Spices	Cinnamon (ground)	Y	Y	6.99	1 lb			6.99	
Fred Meyer's B	Spices	Cinnamon (ground)	N	Y	4.99	0.9 oz	Simply Organic		88.71	
Fred Meyer's B	Spices	Cinnamon (ground)	N	Y	6.49	1.5 oz	Spice Island		69.23	National
Fred Meyer's B	Spices	Cinnamon (ground)	N	N	6.19	1.5 oz	Spice Island		66.03	National
Fred Meyer's B	Spices	Cinnamon (ground)	N	N	7.19	2.2 oz	Morton & Bassett		52.29	National
Fred Meyer's B	Spices	Cinnamon (ground)	N	N	5.99	1.5 oz	Spice Hunter		63.89	National
Fred Meyer's B	Spices	Cloves (ground)	Y	Y	21.99	1 lb			21.99	
Fred Meyer's B	Spices	Cloves (ground)	N	N	11.99	2 oz	Morton & Bassett		95.92	National
Fred Meyer's B	Spices	Cloves (ground)	N	N	7.19	1.55 oz	Private Selection		74.22	Generic
Fred Meyer's B	Spices	Cloves (ground)	N	Y	13.19	1.8 oz	Spice Island		117.24	National
Fred Meyer's B	Spices	Cloves (ground)	N	N	12.39	1.9 oz	Spice Island		104.34	National
Fred Meyer's B	Spices	Garlic Powder	Y	N	7.99	1 lb			7.99	
Fred Meyer's B	Spices	Garlic Powder	N	Y	5.49	3.64 oz	Simply Organic		24.13	
Fred Meyer's B	Spices	Garlic Powder	N	N	5.29	5.5 oz	Kroger		15.39	Generic
Fred Meyer's B	Spices	Garlic Powder	N	N	7.99	9.25 oz	Kroger		13.82	Generic
Fred Meyer's B	Spices	Garlic Powder	N	N	3.59	2.5 oz	Kroger		22.98	Generic
Fred Meyer's B	Spices	Nutmeg (ground)	Y	N	21.99	1 lb			21.99	
Fred Meyer's B	Spices	Nutmeg (ground)	N	N	10.19	2.1 oz	Spice Island		77.64	National
Fred Meyer's B	Spices	Nutmeg (ground)	N	N	9.79	2.3 oz	Morton & Bassett		68.10	National
Fred Meyer's B	Spices	Nutmeg (ground)	N	N	7.89	1.8 oz	Spice Hunter		70.13	National
Fred Meyer's B	Spices	Nutmeg (ground)	N	N	4.89	1.62 oz	Kroger		48.30	Generic
Fred Meyer's B	Spices	Onion Powder	Y	N	7.99	1 lb			7.99	
Fred Meyer's B	Spices	Onion Powder	N	N	5.59	1.8 oz	Spice Island		49.69	National
Fred Meyer's B	Spices	Onion Powder	N	N	3.59	2.12 oz	Kroger		27.09	Generic
Fred Meyer's B	Spices	Paprika (ground)	Y	Y	15.49	1 lb			15.49	
Fred Meyer's B	Spices	Paprika (ground)	N	N	6.19	2 oz	Morton & Bassett		49.52	National
Fred Meyer's B	Spices	Paprika (ground)	N	N	4.79	1.67 oz	Private Selection		45.89	Generic
Fred Meyer's B	Spices	Paprika (ground)	N	N	7.19	2.1 oz	Spice Island		54.78	National

Appendix 1: Raw Data Collected

Fred Meyer's B	Spices	Paprika (ground)	N	N	3.09	1.75 oz	Kroger		28.25	Generic
Fred Meyer's B	Spices	Red Pepper (crushed, chili flakes)	Y	N	24.99	1 lb			24.99	
Fred Meyer's B	Spices	Red Pepper (crushed, chili flakes)	N	N	6.49	1.3 oz	Morton & Bassett		79.88	National
Fred Meyer's B	Spices	Red Pepper (crushed, chili flakes)	N	N	4.99	1.3 oz	Spice Hunter		61.42	National
Fred Meyer's B	Spices	Red Pepper (crushed, chili flakes)	N	N	5.79	4.25 oz	Kroger		21.80	Generic
Fred Meyer's B	Spices	Sugar (white)	Y	N	2.29	1 lb			2.29	
Fred Meyer's B	Spices	Sugar (white)	Y	Y	1.69	1 lb			1.69	
Fred Meyer's B	Spices	Sugar (white)	N	Y	4.99	24 oz	Hain		3.33	
Fred Meyer's B	Spices	Sugar (white)	N	Y	5.99	2 lbs	Wholesome Sweetener		3.00	
Fred Meyer's B	Spices	Sugar (white)	N	N	6.49	10 lbs	Fred Meyer's		0.65	Generic
Fred Meyer's B	Spices	Sugar (white)	N	N	7.85	10 lbs	C&H		0.79	National
New Season's	Confectionaries	Chocolate Covered Almonds	Y	Y	15.99	1 lb		dark chocolate	15.99	
New Season's	Confectionaries	Chocolate Covered Almonds	N	Y	9.39	7 oz	Woodstock Farms	dark chocolate	21.46	
New Season's	Confectionaries	Chocolate Covered Almonds	N	N	7.49	8 oz	SunRidge Farms	dark chocolate, all natural	14.98	
New Season's	Confectionaries	Yogurt Pretzels	Y	N	7.99	1 lb			7.99	
New Season's	Confectionaries	Yogurt Pretzels	N	N	5.99	8 oz	Woodstock Farms		11.98	
QFC A	Beans	Black	N	N	2.39	16 oz	Kroger		2.39	Generic
QFC A	Beans	Pinto	N	N	0.93	16 oz	Kroger		0.93	Generic
QFC A	Beans	Red (kidney)	N	N	0.93	16 oz	Kroger		0.93	Generic
QFC A	Beans	Split Peas	N	N	1.19	16 oz	Kroger		1.19	Generic
QFC A	Coffee & Tea	Decaf	Y	N	13.69	1 lb	Millstone	decaf French roast	13.69	
QFC A	Coffee & Tea	Decaf	Y	N	9.99	1 lb	Kivu	Colombian	9.99	
QFC A	Coffee & Tea	Decaf	N	N	11.49	12 oz	Seattle's Best		15.32	
QFC A	Coffee & Tea	Earl Grey	N	N	5.99	2.37 oz	Bigelow	40 count	40.44	National
QFC A	Coffee & Tea	Earl Grey	N	N	4.19	1.18 oz	Bigelow	20 count	56.81	National
QFC A	Coffee & Tea	Earl Grey	N	N	2.99	2.1 oz	Big Mac's	30 count	22.78	
QFC A	Coffee & Tea	Earl Grey	N	N	4.99	1.7 oz	Tazo	20 count	46.96	National
QFC A	Coffee & Tea	Earl Grey	N	Y	5.49	1.1 oz	Choice	16 count	79.85	
QFC A	Coffee & Tea	French	Y	N	10.39	1 lb	Tully's		10.39	
QFC A	Coffee & Tea	French	Y	N	9.99	1 lb	Kivu		9.99	
QFC A	Coffee & Tea	French	Y	N	11.99	1 lb	Coffee Bean & Tea Leaf		11.99	
QFC A	Coffee & Tea	French	Y	N	13.69	1 lb	Millstone		13.69	
QFC A	Coffee & Tea	French	N	N	10.99	12 oz	Starbucks		14.65	National
QFC A	Coffee & Tea	French	N	N	11.49	12 oz	Seattle's Best		15.32	
QFC A	Dried Fruit	Coconut (shredded)	N	N	3.99	14 oz	Mounds	flakes	4.56	
QFC A	Dried Fruit	Coconut (shredded)	N	N	3.19	14 oz	Kroger	flakes	3.65	Generic
QFC A	Dried Fruit	Coconut (shredded)	N	N	7.99	24 oz	Bob's Red Mill	unsweetened, shredded	5.33	
QFC A	Dried Fruit	Dried Cranberries	N	N	5.49	12 oz	Ocean Spray		7.32	National
QFC A	Dried Fruit	Dried Cranberries	N	N	3.29	6 oz	Ocean Spray		8.77	National
QFC A	Dried Fruit	Dried Cranberries	N	N	3.99	6 oz	Ocean Spray	6 ct	10.64	National

Appendix 1: Raw Data Collected

QFC A	Dried Fruit	Dried Cranberries	N	N	3.99	6 oz	Sun Maid		10.64	National
QFC A	Dried Fruit	Dried Cranberries	N	N	3.99	6 oz	Sun Maid	6 count	10.64	National
QFC A	Dried Fruit	Raisins	N	N	2.19	7 oz	Kroger	14 count	5.01	Generic
QFC A	Dried Fruit	Raisins	N	N	4.99	24 oz	Kroger		3.33	Generic
QFC A	Dried Fruit	Raisins	N	N	6.49	24 oz	Private Selection		4.33	Generic
QFC A	Dried Fruit	Raisins	N	N	3.49	12 oz	Dole		4.65	National
QFC A	Dried Fruit	Raisins	N	N	5.49	24 oz	Sun Maid		3.66	National
QFC A	Dried Fruit	Raisins	N	N	3.49	9 oz	Sun Maid	6 count	6.20	National
QFC A	Dried Fruit	Raisins	N	N	6.49	32 oz	Sun Maid		3.25	National
QFC A	Flour & Grains	Popcorn (yellow)	N	N	3.19	2 lbs	Jolly Time		1.60	National
QFC A	Flour & Grains	Popcorn (yellow)	N	N	2.39	2 lbs	Kroger		1.20	Generic
QFC A	Flour & Grains	Popcorn (yellow)	N	N	4.29	20 oz	Jolly Time		3.43	National
QFC A	Flour & Grains	Popcorn (yellow)	N	N	6.79	30 oz	Orville Redenbacher's		3.62	National
QFC A	Flour & Grains	Popcorn (yellow)	N	N	3.49	10.5 oz	Newman's Own	3 count	5.32	National
QFC A	Flour & Grains	Popcorn (yellow)	N	N	3.79	10.5 oz	Pop Secret	3 count	5.78	National
QFC A	Flour & Grains	Rolled Oats (instant)	N	N	5.19	32 oz	Bob's Red Mill		2.60	
QFC A	Flour & Grains	Rolled Oats (instant)	N	N	3.19	12 oz	Kroger	12 count	4.25	Generic
QFC A	Flour & Grains	Rolled Oats (instant)	N	N	3.79	11.8 oz	Quaker	12 count	5.14	National
QFC A	Flour & Grains	Rolled Oats (instant)	N	N	5.99	42 oz	Quaker		2.28	National
QFC A	Flour & Grains	Rolled Oats (instant)	N	N	5.49	2 lbs	Kroger		2.75	Generic
QFC A	Flour & Grains	Rolled Oats (instant)	N	N	3.29	18 oz	Kroger		2.92	Generic
QFC A	Flour & Grains	Rolled Oats (instant)	N	N	4.59	18 oz	Quaker		4.08	National
QFC A	Flour & Grains	White Flour Bleached	N	N	6.89	10 lbs	Gold Medal		0.69	National
QFC A	Flour & Grains	White Flour Bleached	N	N	8.19	10 lbs	Stone-Buhr		0.82	
QFC A	Flour & Grains	White Flour Bleached	N	N	4.69	10 lbs	Kroger		0.47	Generic
QFC A	Flour & Grains	White Flour Bleached	N	N	8.59	10 lbs	Pillsbury		0.86	National
QFC A	Flour & Grains	White Flour Bleached	N	N	5.49	5 lbs	King Arthur		1.10	
QFC A	Flour & Grains	White Flour Bleached	N	N	6.59	5 lbs	Gold Medal		1.32	National
QFC A	Flour & Grains	White Flour Bleached	N	N	2.15	80 oz	Kroger		0.43	Generic
QFC A	Flour & Grains	White Rice (long grain)	N	N	17.39	5 lbs	Himalayan Pride	basmati; sack	3.48	
QFC A	Flour & Grains	White Rice (long grain)	N	N	3.69	32 oz	Kroger		1.85	Generic
QFC A	Flour & Grains	White Rice (long grain)	N	N	5.99	32 oz	Della		3.00	
QFC A	Flour & Grains	White Rice (long grain)	N	N	9.99	32 oz	Royal		5.00	
QFC A	Flour & Grains	Whole Wheat Flour	N	N	5.49	5 lbs	King Arthur		1.10	
QFC A	Flour & Grains	Whole Wheat Flour	N	N	8.19	10 lbs	Stone-Buhr		0.82	
QFC A	Flour & Grains	Whole Wheat Flour	N	N	3.89	5 lbs	Kroger		0.78	Generic
QFC A	Flour & Grains	Whole Wheat Flour	N	N	5.29	5 lbs	Stone-Buhr		1.06	
QFC A	Flour & Grains	Whole Wheat Flour	N	N	7.29	5 lbs	Bob's Red Mill		1.46	
QFC A	Nut Butters	Almond Butter	N	N	10.99	16 oz	Justin's	maple	10.99	
QFC A	Nut Butters	Almond Butter	N	N	11.29	16 oz	MaraNatha	roasted	11.29	

Appendix 1: Raw Data Collected

QFC A	Nut Butters	Almond Butter	N	N	14.99	16 oz	MaraNatha	crunchy, roasted	14.99	
QFC A	Nut Butters	Peanut Butter	N	N	6.59	36 oz	Adam's		2.93	National
QFC A	Nut Butters	Peanut Butter	N	Y	5.99	16 oz	Adam's		5.99	National
QFC A	Nut Butters	Peanut Butter	N	N	3.69	16 oz	Adam's		3.69	National
QFC A	Nut Butters	Peanut Butter	N	Y	6.19	16 oz	Santa Cruz Organics		6.19	
QFC A	Nut Butters	Peanut Butter	N	Y	6.29	16 oz	MaraNatha		6.29	
QFC A	Nut Butters	Peanut Butter	N	Y	7.59	16 oz	Woodstock Farms		7.59	
QFC A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	5.59	11 oz	Emerald		8.13	National
QFC A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	3.99	6 oz	Blue Diamond	roasted, salted	10.64	National
QFC A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	Y	10.89	8 oz	Woodstock Farms	not roasted	21.78	
QFC A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	6.79	8 oz	Naturally Preferred		13.58	
QFC A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	5.59	10 oz	Emerald		8.94	National
QFC A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	7.59	8.5 oz	Planters		14.29	National
QFC A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	3.99	4 oz	Powers		15.96	
QFC A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	4.29	16 oz	Kroger		4.29	Generic
QFC A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	5.99	16 oz	Planters		5.99	National
QFC A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	6.79	24 oz	Planters		4.53	National
QFC A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	8.59	12 oz	The Peanut Shop		11.45	
QFC A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	3.69	12 oz	Kroger		4.92	Generic
QFC A	Nuts & Seeds	Pistachios Salted (in shell)	N	N	4.99	1 lb	Wonderful		4.99	
QFC A	Nuts & Seeds	Pistachios Salted (in shell)	N	N	4.49	7 oz	Everybody's Nuts!		10.26	National
QFC A	Nuts & Seeds	Pistachios Salted (in shell)	N	N	3.99	4.5 oz	Powers		14.19	
QFC A	Pasta	Penne	N	N	2.29	16 oz	Da Vinci		2.29	National
QFC A	Pasta	Penne	N	Y	3.29	16 oz	BioNaturae		3.29	
QFC A	Pasta	Penne	N	N	2.89	16 oz	Private Selection		2.89	Generic
QFC A	Pasta	Penne	N	N	1.59	16 oz	Kroger		1.59	Generic
QFC A	Pasta	Penne	N	N	1.69	16 oz	Barilla		1.69	National
QFC A	Snacks/Misc.	Granola (Vanilla)	N	N	5.99	20.5 oz	Sweet Home Farm		4.68	
QFC A	Snacks/Misc.	Granola (Vanilla)	N	N	5.29	12 oz	Bear Naked		7.05	National
QFC A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.79	12 oz	Nestle		5.05	National
QFC A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	2.69	12 oz	Kroger		3.59	Generic
QFC A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.49	10 oz	Private Selection		5.58	Generic
QFC A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.29	12 oz	Private Selection		4.39	Generic
QFC A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.99	12 oz	Ghiradelli		5.32	National
QFC A	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	4.99	0.44 oz	Private Selection		181.45	Generic
QFC A	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	7.19	0.5 oz	Spice Island		230.08	National
QFC A	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	4.49	0.62 oz	McCormick		115.87	National
QFC A	Spices	Basil (whole, cut, aka Sweet Basil)	N	Y	5.59	0.54 oz	Simply Organic		165.63	
QFC A	Spices	Black Peppercorns (whole)	N	N	5.69	2.37 oz	McCormick		38.41	National
QFC A	Spices	Black Peppercorns (whole)	N	N	3.59	1.75 oz	Kroger		32.82	Generic

Appendix 1: Raw Data Collected

QFC A	Spices	Black Peppercorns (whole)	N	Y	6.69	2.65 oz	Simply Organic		40.39	
QFC A	Spices	Black Peppercorns (whole)	N	N	7.49	2.1 oz	Morton & Bassett		57.07	National
QFC A	Spices	Cinnamon (ground)	N	N	4.49	1.62 oz	Private Selection		44.35	Generic
QFC A	Spices	Cinnamon (ground)	N	N	7.29	1.9 oz	Spice Island		61.39	National
QFC A	Spices	Cinnamon (ground)	N	Y	5.89	2.45 oz	Simply Organic		38.47	
QFC A	Spices	Cinnamon (ground)	N	N	7.99	4.12 oz	McCormick		31.03	National
QFC A	Spices	Cinnamon (ground)	N	N	3.39	4 oz	Kroger		13.56	Generic
QFC A	Spices	Cloves (ground)	N	N	13.99	1.9 oz	Spice Island		117.81	National
QFC A	Spices	Cloves (ground)	N	N	9.99	1.55 oz	Private Selection		103.12	Generic
QFC A	Spices	Cloves (ground)	N	N	8.79	0.9 oz	McCormick		156.27	National
QFC A	Spices	Cloves (ground)	N	N	7.29	1.5 oz	Kroger		77.76	Generic
QFC A	Spices	Garlic Powder	N	N	9.39	2.25 oz	Spice Island		66.77	National
QFC A	Spices	Garlic Powder	N	Y	7.49	3.64 oz	Simply Organic		32.92	
QFC A	Spices	Garlic Powder	N	N	9.99	5.37 oz	McCormick		29.77	National
QFC A	Spices	Garlic Powder	N	N	4.99	9.25 oz	Kroger		8.63	Generic
QFC A	Spices	Nutmeg (ground)	N	N	3.79	1.625 oz	Kroger		37.32	Generic
QFC A	Spices	Nutmeg (ground)	N	N	11.19	2.1 oz	Spice Island		85.26	National
QFC A	Spices	Onion Powder	N	N	4.39	2.12 oz	Kroger		33.13	Generic
QFC A	Spices	Onion Powder	N	N	6.49	6.62 oz	McCormick		15.69	National
QFC A	Spices	Onion Powder	N	N	6.59	2.2 oz	Spice Island		47.93	National
QFC A	Spices	Paprika (ground)	N	N	5.79	1.67 oz	Private Selection		55.47	Generic
QFC A	Spices	Paprika (ground)	N	N	5.69	1.75 oz	Kroger		52.02	Generic
QFC A	Spices	Paprika (ground)	N	N	6.69	2.12 oz	McCormick		50.49	National
QFC A	Spices	Paprika (ground)	N	N	3.79	1 oz	McCormick		60.64	National
QFC A	Spices	Paprika (ground)	N	N	7.49	2 oz	Morton & Bassett		59.92	National
QFC A	Spices	Red Pepper (crushed, chili flakes)	N	N	5.39	2.62 oz	McCormick		32.92	National
QFC A	Spices	Red Pepper (crushed, chili flakes)	N	N	8.39	4.25 oz	Kroger		31.59	Generic
QFC A	Spices	Red Pepper (crushed, chili flakes)	N	N	6.79	1.4 oz	Spice Island		77.60	National
QFC A	Spices	Sugar (white)	N	N	3.59	4 lbs	C&H		0.90	National
QFC A	Spices	Sugar (white)	N	N	5.69	10 lbs	Kroger		0.57	Generic
QFC A	Spices	Sugar (white)	N	Y	2.39	1.5 lbs	Private Selection		1.59	Generic
QFC A	Spices	Sugar (white)	N	N	1.99	1 lb	C&H		1.99	National
QFC A	Spices	Sugar (white)	N	N	2.99	5 lbs	Kroger		0.60	Generic
Safeway A	Beans	Black	N	N	1.99	1 lb	Safeway		1.99	Generic
Safeway A	Beans	Pinto	N	N	2.69	32 oz	Safeway		1.35	Generic
Safeway A	Beans	Pinto	N	N	5.69	4 lbs	Safeway		1.42	Generic
Safeway A	Beans	Pinto	N	N	12.49	10 lbs	Safeway		1.25	Generic
Safeway A	Beans	Red (kidney)	N	N	1.99	1 lb	Safeway		1.99	Generic
Safeway A	Beans	Split Peas	y	y	2.79	1 lb			2.79	
Safeway A	Beans	Split Peas	y	N	1.79	1 lb			1.79	

Appendix 1: Raw Data Collected

Safeway A	Beans	Split Peas	N	N	1.99	1 lb	Safeway		1.99	Generic
Safeway A	Coffee & Tea	Decaf	y	N	8.99	1 lb			8.99	
Safeway A	Coffee & Tea	Decaf	N	N	10.99	12 oz	Peet's	ground	14.65	
Safeway A	Coffee & Tea	Decaf	N	N	9.99	12 oz	Starbucks	ground	13.32	National
Safeway A	Coffee & Tea	Earl Grey	N	N	5.99	3.5 oz	Twinings	50 ct	27.38	National
Safeway A	Coffee & Tea	Earl Grey	N	N	3.59	1.18 oz	Bigelow	20 ct	48.68	National
Safeway A	Coffee & Tea	Earl Grey	N	N	2.99	1.3 oz	Stash	20 ct	36.80	
Safeway A	Coffee & Tea	Earl Grey	N	N	5.99	1.27 oz	Numi	18 ct	75.46	
Safeway A	Coffee & Tea	Earl Grey	N	Y	2.99	1.4 oz	O Organics	20 ct	34.17	Generic
Safeway A	Coffee & Tea	French	y	N	8.99	1 lb			8.99	
Safeway A	Coffee & Tea	French	N	N	10.99	12 oz	Peet's		14.65	
Safeway A	Coffee & Tea	French	N	N	9.99	12 oz	Starbucks		13.32	National
Safeway A	Coffee & Tea	French	N	N	10.99	12 oz	Tully's		14.65	National
Safeway A	Confectionaries	Chocolate Covered Almonds	Y	N	15.79	1 lb	Fruitsource		15.79	
Safeway A	Confectionaries	Chocolate Covered Almonds	Y	N	10.49	1 lb		dark chocolate	10.49	
Safeway A	Confectionaries	Chocolate Covered Almonds	N	N	7.99	14 oz	Safeway Select	dark chocolate	9.13	Generic
Safeway A	Confectionaries	Chocolate Covered Almonds	N	N	7.99	14 oz	Safeway Select	milk chocolate	9.13	Generic
Safeway A	Confectionaries	Yogurt Pretzels	Y	N	6.99	1 lb			6.99	
Safeway A	Confectionaries	Yogurt Pretzels	N	N	3.99	1 lb	Safeway		3.99	Generic
Safeway A	Confectionaries	Yogurt Pretzels	N	N	3.99	10 oz	Flipz		6.38	National
Safeway A	Dried Fruit	Coconut (shredded)	N	N	3.29	14 oz	Baker's	flake	3.76	National
Safeway A	Dried Fruit	Coconut (shredded)	N	N	2.95	14 oz	Safeway	shredded	3.37	Generic
Safeway A	Dried Fruit	Dried Cranberries	N	N	4.49	12 oz	Safeway		5.99	Generic
Safeway A	Dried Fruit	Dried Cranberries	N	N	3.99	6 oz	Sun Maid		10.64	National
Safeway A	Dried Fruit	Dried Cranberries	N	N	2.99	6 oz	Safeway		7.97	Generic
Safeway A	Dried Fruit	Dried Cranberries	N	N	3.49	6 oz	Ocean Spray	6 ct	9.31	National
Safeway A	Dried Fruit	Dried Cranberries	N	N	3.89	4 oz	Safeway		15.56	Generic
Safeway A	Dried Fruit	Dried Cranberries	N	N	3.99	6 oz	Sun Maid		10.64	National
Safeway A	Dried Fruit	Raisins	N	N	4.99	32 oz	Safeway		2.50	Generic
Safeway A	Dried Fruit	Raisins	N	N	4.99	24 oz	Sun Maid		3.33	National
Safeway A	Dried Fruit	Raisins	N	N	4.49	24 oz	Safeway		2.99	Generic
Safeway A	Dried Fruit	Raisins	N	N	3.79	15 oz	O Organics		4.04	Generic
Safeway A	Dried Fruit	Raisins	N	N	3.79	15 oz	Sun Maid		4.04	National
Safeway A	Dried Fruit	Raisins	N	N	2.99	9 oz	Sun Maid	6 ct	5.32	National
Safeway A	Flour & Grains	Brown Rice (long grain)	y	y	1.99	1 lb			1.99	
Safeway A	Flour & Grains	Brown Rice (long grain)	N	N	1.79	1 lb	Safeway		1.79	Generic
Safeway A	Flour & Grains	Brown Rice (long grain)	N	N	6.69	5 lbs	Safeway		1.34	Generic
Safeway A	Flour & Grains	Brown Rice (long grain)	N	N	3.99	32 oz	Lundberg		2.00	
Safeway A	Flour & Grains	Brown Rice (long grain)	N	N	2.99	32 oz	Mahatma		1.50	
Safeway A	Flour & Grains	Popcorn (yellow)	y	N	1.59	1 lb			1.59	

Appendix 1: Raw Data Collected

Safeway A	Flour & Grains	Popcorn (yellow)	N	N	3.99	30 oz	Safeway		2.13	Generic
Safeway A	Flour & Grains	Popcorn (yellow)	N	y	3.39	10.5 oz	O Organics	3 ct	5.17	Generic
Safeway A	Flour & Grains	Popcorn (yellow)	N	N	3.19	6.2 oz	Orville Redenbacher's	4 ct	8.23	National
Safeway A	Flour & Grains	Popcorn (yellow)	N	N	3.19	9.6 oz	Pop Secret	3 ct	5.32	National
Safeway A	Flour & Grains	Popcorn (yellow)	N	y	3.79	8.4 oz	Newman's Own	3 ct	7.22	National
Safeway A	Flour & Grains	Rolled Oats (instant)	y	N	1.79	1 lb			1.79	
Safeway A	Flour & Grains	Rolled Oats (instant)	N	N	3.19	11.8 oz	Safeway	12 ct	4.33	Generic
Safeway A	Flour & Grains	Rolled Oats (instant)	N	N	3.59	18 oz	Quaker		3.19	National
Safeway A	Flour & Grains	Rolled Oats (instant)	N	N	4.69	42 oz	Quaker		1.79	National
Safeway A	Flour & Grains	Rolled Oats (instant)	N	N	2.49	18 oz	Safeway		2.21	Generic
Safeway A	Flour & Grains	Rolled Oats (instant)	N	N	3.49	42 oz	Safeway		1.33	Generic
Safeway A	Flour & Grains	Rolled Oats (instant)	N	N	3.79	11.8 oz	Quaker	12 ct	5.14	National
Safeway A	Flour & Grains	White Flour Bleached	N	N	2.15	5 lbs	Safeway		0.43	Generic
Safeway A	Flour & Grains	White Flour Bleached	N	N	3.15	5 lbs	Gold Medal		0.63	National
Safeway A	Flour & Grains	White Flour Bleached	N	N	4.99	5 lbs	King Arthur		1.00	
Safeway A	Flour & Grains	White Flour Bleached	N	N	4.20	10 lbs	Safeway		0.42	Generic
Safeway A	Flour & Grains	White Flour Bleached	N	N	5.99	10 lbs	Gold Medal		0.60	National
Safeway A	Flour & Grains	White Rice (long grain)	y	y	3.19	1 lb			3.19	
Safeway A	Flour & Grains	White Rice (long grain)	y	N	1.89	1 lb			1.89	
Safeway A	Flour & Grains	White Rice (long grain)	N	N	17.99	10 lbs	Royal		1.80	
Safeway A	Flour & Grains	White Rice (long grain)	N	N	6.99	5 lbs	Mahatma		1.40	
Safeway A	Flour & Grains	White Rice (long grain)	N	N	2.99	16 oz	Village Harvest		2.99	
Safeway A	Flour & Grains	Whole Wheat Flour	N	N	4.99	5 lbs	King Arthur		1.00	
Safeway A	Flour & Grains	Whole Wheat Flour	N	N	3.99	5 lbs	Stone-Buhr		0.80	
Safeway A	Flour & Grains	Whole Wheat Flour	N	N	3.59	5 lbs	Gold Medal		0.72	National
Safeway A	Nut Butters	Almond Butter	N	N	10.99	16 oz	MaraNatha	Roasted	10.99	
Safeway A	Nut Butters	Peanut Butter	N	N	3.69	16 oz	Open Nature		3.69	
Safeway A	Nut Butters	Peanut Butter	N	N	4.49	16 oz	Adam's		4.49	National
Safeway A	Nut Butters	Peanut Butter	N	N	8.39	36 oz	Adam's		3.73	National
Safeway A	Nut Butters	Peanut Butter	N	N	6.49	26 oz	Adam's		3.99	National
Safeway A	Nuts & Seeds	Almonds Whole Roasted (shelled)	y	N	6.99	1 lb			6.99	
Safeway A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	6.49	11 oz	Emerald		9.44	National
Safeway A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	4.39	9 oz	Safeway		7.80	Generic
Safeway A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	3.59	6 oz	Blue Diamond		9.57	National
Safeway A	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	7.99	14.5 oz	Safeway Select		8.82	Generic
Safeway A	Nuts & Seeds	Cashews Whole Roasted (shelled)	y	N	7.99	1 lb			7.99	
Safeway A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	12.69	9.5 oz	Safeway		21.37	Generic
Safeway A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	11.99	18.25 oz	Planters		10.51	National
Safeway A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	7.59	8.5 oz	Planters		14.29	National
Safeway A	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	7.99	13.5 oz	Safeway Select		9.47	Generic

Appendix 1: Raw Data Collected

Safeway A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	6.79	32 oz	Safeway		3.40	Generic
Safeway A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	8.99	34.5 oz	Planters		4.17	National
Safeway A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	4.99	16 oz	Emerald		4.99	National
Safeway A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	4.19	16 oz	Safeway		4.19	Generic
Safeway A	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	4.99	16 oz	Planters		4.99	National
Safeway A	Nuts & Seeds	Pistachios Salted (in shell)	N	N	3.99	4.75 oz	Planters		13.44	National
Safeway A	Nuts & Seeds	Pistachios Salted (in shell)	N	N	8.99	20 oz	Wonderful		7.19	
Safeway A	Pasta	Penne	y	y	3.65	1 lb			3.65	
Safeway A	Pasta	Penne	N	N	1.19	1 lb	Safeway		1.19	Generic
Safeway A	Pasta	Penne	N	N	1.69	1 lb	Barilla		1.69	National
Safeway A	Pasta	Penne	N	N	2.99	1 lb	De Cecco		2.99	National
Safeway A	Snacks/Misc.	Granola (Vanilla)	y	N	4.39	1 lb			4.39	
Safeway A	Snacks/Misc.	Granola (Vanilla)	N	N	5.19	12 oz	Bear Naked		6.92	National
Safeway A	Snacks/Misc.	Semi-Sweet Chocolate chips	y	y	10.49	1 lb			10.49	
Safeway A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.79	10 oz	Nestle		6.06	National
Safeway A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	4.04	12 oz	Ghiradelli		5.39	National
Safeway A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	6.59	24 oz	Nestle		4.39	National
Safeway A	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.85	12 oz	Guittard		5.13	
Safeway A	Spices	Basil (whole, cut, aka Sweet Basil)	y	N	7.49	1 lb			7.49	
Safeway A	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	2.99	0.62 oz	McCormick		77.16	National
Safeway A	Spices	Basil (whole, cut, aka Sweet Basil)	N	y	8.99	0.5 oz	O Organics		287.68	Generic
Safeway A	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	6.99	0.5 oz	Spice Island		223.68	National
Safeway A	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	2.99	0.62 oz	Safeway		77.16	Generic
Safeway A	Spices	Black Peppercorns (whole)	y	N	12.59	1 lb			12.59	
Safeway A	Spices	Black Peppercorns (whole)	N	N	7.29	2.1 oz	Morton & Bassett		55.54	National
Safeway A	Spices	Black Peppercorns (whole)	N	N	6.05	4.25 oz	McCormick		22.78	National
Safeway A	Spices	Black Peppercorns (whole)	N	N	4.89	4.25 oz	Safeway		18.41	Generic
Safeway A	Spices	Cinnamon (ground)	y	N	7.29	1 lb			7.29	
Safeway A	Spices	Cinnamon (ground)	N	N	6.65	2.2 oz	Morton & Bassett		48.36	National
Safeway A	Spices	Cinnamon (ground)	N	Y	5.69	1.5 oz	O Organics		60.69	Generic
Safeway A	Spices	Cinnamon (ground)	N	N	6.59	1.9 oz	Spice Island		55.49	National
Safeway A	Spices	Cinnamon (ground)	N	N	4.19	4.12 oz	Safeway		16.27	Generic
Safeway A	Spices	Cinnamon (ground)	N	N	4.89	4.89 oz	McCormick		16.00	National
Safeway A	Spices	Cloves (ground)	y	N	18.99	1 lb			18.99	
Safeway A	Spices	Cloves (ground)	N	N	8.69	0.9 oz	McCormick		154.49	National
Safeway A	Spices	Cloves (ground)	N	N	6.19	2 oz	Safeway		49.52	Generic
Safeway A	Spices	Cloves (ground)	N	N	10.89	2 oz	Morton & Bassett		87.12	National
Safeway A	Spices	Cloves (ground)	N	N	14.99	1.9 oz	Spice Island		126.23	National
Safeway A	Spices	Garlic Powder	N	Y	7.59	2 oz	O Organics		60.72	Generic
Safeway A	Spices	Garlic Powder	N	N	8.99	2.25 oz	Spice Island		63.93	National

Appendix 1: Raw Data Collected

Safeway A	Spices	Garlic Powder	N	N	7.59	2.25 oz	McCormick Gourmet		53.97	National
Safeway A	Spices	Garlic Powder	N	N	8.69	12.25 oz	McCormick		11.35	National
Safeway A	Spices	Garlic Powder	N	N	8.69	9 oz	Safeway		15.45	Generic
Safeway A	Spices	Nutmeg (ground)	y	N	28.75	1 lb			28.75	
Safeway A	Spices	Nutmeg (ground)	N	N	1.49	2.3 oz	Morton & Bassett		10.37	National
Safeway A	Spices	Nutmeg (ground)	N	Y	9.59	1.8 oz	O Organics		85.24	Generic
Safeway A	Spices	Nutmeg (ground)	N	N	7.69	1.1 oz	McCormick		111.85	National
Safeway A	Spices	Nutmeg (ground)	N	N	5.19	2.12 oz	Safeway		39.17	Generic
Safeway A	Spices	Nutmeg (ground)	N	N	10.39	1.81 oz	McCormick Gourmet		91.85	National
Safeway A	Spices	Onion Powder	y	N	6.59	1 lb			6.59	
Safeway A	Spices	Onion Powder	N	Y	4.49	1.8 oz	O Organics		39.91	Generic
Safeway A	Spices	Onion Powder	N	N	6.69	2.2 oz	Spice Island		48.65	National
Safeway A	Spices	Onion Powder	N	N	4.49	2 oz	McCormick		35.92	National
Safeway A	Spices	Paprika (ground)	N	N	3.29	2.12 oz	Safeway		24.83	Generic
Safeway A	Spices	Paprika (ground)	N	N	2.99	1 oz	McCormick		47.84	National
Safeway A	Spices	Paprika (ground)	N	Y	7.19	1.6 oz	O Organics		71.90	Generic
Safeway A	Spices	Paprika (ground)	N	N	7.79	1.62 oz	McCormick Gourmet		76.94	National
Safeway A	Spices	Paprika (ground)	N	N	7.15	2 oz	Morton & Bassett		57.20	National
Safeway A	Spices	Red Pepper (crushed, chili flakes)	N	N	3.19	1.5 oz	McCormick		34.03	National
Safeway A	Spices	Red Pepper (crushed, chili flakes)	N	N	7.19	1.3 oz	Morton & Bassett		88.49	National
Safeway A	Spices	Red Pepper (crushed, chili flakes)	N	N	7.19	1.4 oz	McCormick Gourmet		82.17	National
Safeway A	Spices	Red Pepper (crushed, chili flakes)	N	Y	5.69	1.12 oz	O Organics		81.29	Generic
Safeway A	Spices	Sugar (white)	N	N	6.99	10 lbs	Safeway		0.70	Generic
Safeway A	Spices	Sugar (white)	N	N	8.19	10 lbs	C&H		0.82	National
Safeway A	Spices	Sugar (white)	N	Y	4.29	2 lbs	O Organics		2.15	Generic
Safeway A	Spices	Sugar (white)	N	N	3.49	24 lbs	C&H		0.15	National
Safeway A	Spices	Sugar (white)	N	N	2.99	4 lbs	Safeway		0.75	Generic
Safeway B	Beans	Black	Y	N	2.05	1 lb			2.05	
Safeway B	Beans	Black	N	N	1.99	16 oz	Safeway Select		1.99	Generic
Safeway B	Beans	Pinto	N	N	1.49	16 oz	Safeway		1.49	Generic
Safeway B	Beans	Pinto	N	N	2.69	32 oz	Safeway		1.35	Generic
Safeway B	Beans	Red (kidney)	N	N	1.99	16 oz	Safeway		1.99	Generic
Safeway B	Beans	Split Peas	N	N	1.99	16 oz	Safeway		1.99	Generic
Safeway B	Coffee & Tea	Decaf	N	N	7.19	11.3 oz	Folgers		10.18	National
Safeway B	Coffee & Tea	Decaf	N	N	5.79	11 oz	Safeway		8.42	Generic
Safeway B	Coffee & Tea	Decaf	N	N	6.99	12 oz	Yuban		9.32	National
Safeway B	Coffee & Tea	Decaf	N	N	14.49	12.3 oz	Kicking Horse		18.85	
Safeway B	Coffee & Tea	Earl Grey	N	N	5.29	3.53 oz	Twinnings	Loose	23.98	National
Safeway B	Coffee & Tea	Earl Grey	N	N	3.09	1.18 oz	Bigelow	20 bags	41.90	National
Safeway B	Coffee & Tea	Earl Grey	N	N	6.85	1.27 oz	Numi	18 bags	86.30	

Appendix 1: Raw Data Collected

Safeway B	Coffee & Tea	Earl Grey	N	N	2.99	1.13 oz	Stash	18 bags	42.34	
Safeway B	Coffee & Tea	French	Y	N	8.99	1 lb	Safeway Select		8.99	
Safeway B	Coffee & Tea	French	N	N	11.99	12 oz	Peet's		15.99	
Safeway B	Coffee & Tea	French	N	N	10.99	12 oz	Tully's		14.65	National
Safeway B	Coffee & Tea	French	N	N	9.99	12 oz	Seattle's Best		13.32	
Safeway B	Coffee & Tea	French	N	N	10.99	12 oz	Starbucks		14.65	National
Safeway B	Coffee & Tea	French	N	N	8.99	12 oz	Safeway Select		11.99	Generic
Safeway B	Coffee & Tea	French	N	N	10.99	12 oz	Dunkin' Donuts		14.65	National
Safeway B	Confectionaries	Chocolate Covered Almonds	Y	N	10.49	1 lb		milk chocolate	10.49	
Safeway B	Confectionaries	Chocolate Covered Almonds	N	N	7.99	14 oz	Orchard Valley Harvest	milk chocolate	9.13	
Safeway B	Confectionaries	Yogurt Pretzels	Y	N	6.99	1 lb			6.99	
Safeway B	Dried Fruit	Coconut (shredded)	N	N	3.17	14 oz	Baker's		3.62	National
Safeway B	Dried Fruit	Coconut (shredded)	N	N	2.79	14 oz	Safeway		3.19	Generic
Safeway B	Dried Fruit	Dried Cranberries	Y	N	8.99	1 lb			8.99	
Safeway B	Dried Fruit	Dried Cranberries	N	N	4.49	12 oz	Safeway		5.99	Generic
Safeway B	Dried Fruit	Dried Cranberries	N	N	2.99	6 oz	Safeway		7.97	Generic
Safeway B	Dried Fruit	Dried Cranberries	N	N	3.89	4 oz	O Organics		15.56	Generic
Safeway B	Dried Fruit	Dried Cranberries	N	N	2.99	6 oz	Ocean Spray		7.97	National
Safeway B	Dried Fruit	Dried Cranberries	N	N	6.99	7 oz	NW Delights		15.98	
Safeway B	Dried Fruit	Raisins	N	N	2.99	9 oz	Sun Maid		5.32	National
Safeway B	Dried Fruit	Raisins	N	N	3.79	15 oz	Sun Maid		4.04	National
Safeway B	Dried Fruit	Raisins	N	N	4.99	24 oz	Sun Maid		3.33	National
Safeway B	Dried Fruit	Raisins	N	N	2.49	9 oz	Safeway		4.43	Generic
Safeway B	Dried Fruit	Raisins	N	N	2.99	15 oz	Safeway		3.19	Generic
Safeway B	Dried Fruit	Raisins	N	N	4.49	24 oz	Safeway		2.99	Generic
Safeway B	Flour & Grains	Brown Rice (long grain)	Y	Y	2.49	1 lb			2.49	
Safeway B	Flour & Grains	Brown Rice (long grain)	N	N	1.79	16 oz	Safeway		1.79	Generic
Safeway B	Flour & Grains	Brown Rice (long grain)	N	N	2.59	32 oz	Safeway		1.30	Generic
Safeway B	Flour & Grains	Brown Rice (long grain)	N	N	2.99	32 oz	Mahatma		1.50	
Safeway B	Flour & Grains	Brown Rice (long grain)	N	Y	4.29	30 oz	O Organics		2.29	Generic
Safeway B	Flour & Grains	Popcorn (yellow)	Y	N	1.59	1 lb			1.59	
Safeway B	Flour & Grains	Popcorn (yellow)	N	N	3.99	30 oz	Safeway		2.13	Generic
Safeway B	Flour & Grains	Popcorn (yellow)	N	Y	3.39	9 oz	O Organics		6.03	Generic
Safeway B	Flour & Grains	Rolled Oats (instant)	Y	N	1.79	1 lb			1.79	
Safeway B	Flour & Grains	Rolled Oats (instant)	N	N	6.19	52 oz	Snoqualmie Falls		1.90	
Safeway B	Flour & Grains	Rolled Oats (instant)	N	N	4.79	80 oz	Grain Millers		0.96	
Safeway B	Flour & Grains	Rolled Oats (instant)	N	N	3.79	11.8 oz	Quaker		5.14	National
Safeway B	Flour & Grains	Rolled Oats (instant)	N	N	3.59	18 oz	Quaker		3.19	National
Safeway B	Flour & Grains	Rolled Oats (instant)	N	N	4.69	42 oz	Quaker		1.79	National
Safeway B	Flour & Grains	Rolled Oats (instant)	N	Y	2.50	7.4 oz	Better Oats		5.41	

Appendix 1: Raw Data Collected

Safeway B	Flour & Grains	Rolled Oats (instant)	N	N	3.19	11.8 oz	Safeway		4.33	Generic
Safeway B	Flour & Grains	Rolled Oats (instant)	N	N	2.49	18 oz	Safeway		2.21	Generic
Safeway B	Flour & Grains	Rolled Oats (instant)	N	N	3.49	42 oz	Safeway		1.33	Generic
Safeway B	Flour & Grains	White Flour Bleached	N	N	2.15	5 lbs	Safeway		0.43	Generic
Safeway B	Flour & Grains	White Flour Bleached	N	N	3.15	5 lbs	Gold Medal		0.63	National
Safeway B	Flour & Grains	White Flour Bleached	N	Y	5.29	5 lbs	O Organics		1.06	Generic
Safeway B	Flour & Grains	White Flour Bleached	N	N	4.99	5 lbs	King Arthur		1.00	
Safeway B	Flour & Grains	White Flour Bleached	N	N	4.69	5 lbs	Bob's Red Mill		0.94	
Safeway B	Flour & Grains	White Rice (long grain)	Y	Y	3.19	1 lb			3.19	
Safeway B	Flour & Grains	White Rice (long grain)	N	N	4.49	3 lbs	Mahatma		1.50	
Safeway B	Flour & Grains	White Rice (long grain)	N	N	3.49	3 lbs	Safeway		1.16	Generic
Safeway B	Flour & Grains	White Rice (long grain)	N	N	1.99	32 oz	Safeway		1.00	Generic
Safeway B	Flour & Grains	White Rice (long grain)	N	N	2.99	2 lbs	Mahatma		1.50	
Safeway B	Flour & Grains	White Rice (long grain)	N	N	9.39	5 lbs	Uncle Ben's		1.88	National
Safeway B	Flour & Grains	Whole Wheat Flour	N	N	4.59	32 oz	Arrowhead Mills		2.30	
Safeway B	Flour & Grains	Whole Wheat Flour	N	N	3.59	5 lbs	Gold Medal		0.72	National
Safeway B	Flour & Grains	Whole Wheat Flour	N	N	3.99	5 lbs	Stone-Buhr		0.80	
Safeway B	Flour & Grains	Whole Wheat Flour	N	N	4.99	5 lbs	King Arthur		1.00	
Safeway B	Nut Butters	Peanut Butter	N	N	4.39	16 oz	Adam's		4.39	National
Safeway B	Nut Butters	Peanut Butter	N	Y	5.19	18 oz	O Organics		4.61	Generic
Safeway B	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	8.99	14.5 oz	Safeway Select		9.92	Generic
Safeway B	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	6.49	11 oz	Emerald		9.44	National
Safeway B	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	3.59	6 oz	Blue Diamond		9.57	National
Safeway B	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	4.39	9 oz	Safeway		7.80	Generic
Safeway B	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	7.79	16 oz	Blue Diamond		7.79	National
Safeway B	Nuts & Seeds	Cashews Whole Roasted (shelled)	Y	N	7.99	1 lb			7.99	
Safeway B	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	8.99	13.5 oz	Safeway Select		10.65	Generic
Safeway B	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	11.99	21 oz	Planters Deluxe		9.14	National
Safeway B	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	6.19	8 oz	Planters Deluxe		12.38	National
Safeway B	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	6.39	9.5 oz	Safeway Select		10.76	Generic
Safeway B	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	4.99	16 oz	Emerald		4.99	National
Safeway B	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	4.99	16 oz	Planters		4.99	National
Safeway B	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	4.19	16 oz	Safeway		4.19	Generic
Safeway B	Nuts & Seeds	Pistachios Salted (in shell)	N	N	5.99	7 oz	Everybody's Nuts!		13.69	National
Safeway B	Nuts & Seeds	Pistachios Salted (in shell)	N	N	5.99	7 oz	Wonderful		13.69	
Safeway B	Nuts & Seeds	Pistachios Salted (in shell)	N	N	9.99	20 oz	Wonderful		7.99	
Safeway B	Nuts & Seeds	Pistachios Salted (in shell)	N	N	3.99	4.75 oz	Planters		13.44	National
Safeway B	Pasta	Penne	N	N	1.69	16 oz	Barilla		1.69	National
Safeway B	Pasta	Penne	N	N	1.99	16 oz	Safeway Select		1.99	Generic
Safeway B	Pasta	Penne	N	N	1.19	16 oz	Safeway		1.19	Generic

Appendix 1: Raw Data Collected

Safeway B	Pasta	Penne	N	N	3.79	16 oz	De Cecco		3.79	National
Safeway B	Snacks/Misc.	Granola (Vanilla)	Y	N	4.39	1 lb			4.39	
Safeway B	Snacks/Misc.	Granola (Vanilla)	N	N	5.19	12 oz	Bear Naked		6.92	National
Safeway B	Snacks/Misc.	Granola (Vanilla)	N	N	4.99	12 oz	Galaxy		6.65	
Safeway B	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.79	12 oz	Nestle		5.05	National
Safeway B	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.69	12 oz	Ghiradelli		4.92	National
Safeway B	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	3.69	12 oz	Guittard		4.92	
Safeway B	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	2.69	12 oz	Safeway		3.59	Generic
Safeway B	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	1.49	0.5 oz	El Guapo		47.68	
Safeway B	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	3.99	0.62 oz	McCormick		102.97	National
Safeway B	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	2.99	0.62 oz	Safeway		77.16	Generic
Safeway B	Spices	Basil (whole, cut, aka Sweet Basil)	N	Y	8.69	0.5 oz	O Organics		278.08	Generic
Safeway B	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	6.99	0.5 oz	Spice Island		223.68	National
Safeway B	Spices	Black Peppercorns (whole)	N	N	1.49	0.625 oz	El Guapo		38.14	
Safeway B	Spices	Cinnamon (ground)	N	N	1.29	1.125 oz	El Guapo		18.35	
Safeway B	Spices	Cinnamon (ground)	N	N	4.79	2.37 oz	McCormick		32.34	National
Safeway B	Spices	Cinnamon (ground)	N	N	4.19	2.37 oz	Safeway		28.29	Generic
Safeway B	Spices	Cinnamon (ground)	N	N	7.39	2.2 oz	Morton & Bassett		53.75	National
Safeway B	Spices	Cinnamon (ground)	N	Y	5.69	1.5 oz	O Organics		60.69	Generic
Safeway B	Spices	Cinnamon (ground)	N	N	6.59	1.9 oz	Spice Island		55.49	National
Safeway B	Spices	Cinnamon (ground)	N	N	6.35	1.87 oz	McCormick Gourmet		54.33	National
Safeway B	Spices	Cloves (ground)	N	N	8.69	2 oz	McCormick		69.52	National
Safeway B	Spices	Cloves (ground)	N	N	10.89	2 oz	Morton & Bassett		87.12	National
Safeway B	Spices	Cloves (ground)	N	N	12.99	1.9 oz	Spice Island		109.39	National
Safeway B	Spices	Cloves (ground)	N	N	10.49	1.75 oz	McCormick Gourmet		95.91	National
Safeway B	Spices	Cloves (ground)	N	N	6.19	2 oz	Safeway		49.52	Generic
Safeway B	Spices	Nutmeg (ground)	N	N	1.49	0.75 oz	El Guapo		31.79	
Safeway B	Spices	Nutmeg (ground)	N	Y	7.59	2 oz	O Organics		60.72	Generic
Safeway B	Spices	Nutmeg (ground)	N	N	8.49	2.25 oz	Spice Island		60.37	National
Safeway B	Spices	Nutmeg (ground)	N	N	7.59	2.25 oz	McCormick Gourmet		53.97	National
Safeway B	Spices	Nutmeg (ground)	N	N	4.39	3.22 oz	Safeway		21.81	Generic
Safeway B	Spices	Nutmeg (ground)	N	N	7.49	1.1 oz	McCormick		108.95	National
Safeway B	Spices	Nutmeg (ground)	N	N	5.19	2.12 oz	Safeway		39.17	Generic
Safeway B	Spices	Nutmeg (ground)	N	N	10.49	2.3 oz	Morton & Bassett		72.97	National
Safeway B	Spices	Nutmeg (ground)	N	Y	9.59	1.8 oz	O Organics		85.24	Generic
Safeway B	Spices	Nutmeg (ground)	N	N	9.99	2.1 oz	Spice Island		76.11	National
Safeway B	Spices	Nutmeg (ground)	N	N	10.39	1.81 oz	McCormick Gourmet		91.85	National
Safeway B	Spices	Onion Powder	N	N	1.49	1 oz	El Guapo		23.84	
Safeway B	Spices	Onion Powder	N	N	4.19	2.62 oz	Safeway		25.59	Generic
Safeway B	Spices	Onion Powder	N	N	5.59	2.62 oz	McCormick		34.14	National

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Safeway B	Spices	Onion Powder	N	Y	4.49	1.8 oz	O Organics	39.91	Generic
Safeway B	Spices	Onion Powder					Spice Island	45.02	
Safeway B	Spices	Onion Powder							

Appendix 1: Raw Data Collected

Whole Foods	Coffee & Tea	Earl Grey	N	Y	7.99	1.27 oz	Numi	18 ct	100.66	
Whole Foods	Coffee & Tea	French	Y	Y	12.99	1 lb	Allegro		12.99	
Whole Foods	Coffee & Tea	French	Y	N	12.99	1 lb	Allegro	Extra dark	12.99	
Whole Foods	Coffee & Tea	French	N	N	14.99	24 oz	Whole Foods 365		9.99	Generic
Whole Foods	Coffee & Tea	French	N	N	12.99	12 oz	Allegro	Extra dark	17.32	
Whole Foods	Coffee & Tea	French	N	N	12.99	12 oz	Nossa Familia		17.32	
Whole Foods	Coffee & Tea	French	N	N	13.99	12 oz	Stumptown		18.65	
Whole Foods	Confectionaries	Chocolate Covered Almonds	Y	N	12.99	1 lb		dark chocolate	12.99	
Whole Foods	Confectionaries	Chocolate Covered Almonds	N	N	8.99	17 oz	Whole Foods	dark choclate	8.46	Generic
Whole Foods	Confectionaries	Yogurt Pretzels	Y	N	7.69	1 lb			7.69	
Whole Foods	Dried Fruit	Coconut (shredded)	Y	Y	4.69	1 lb			4.69	
Whole Foods	Dried Fruit	Coconut (shredded)	N	Y	3.69	8.8 oz	Let's Do...Organic		6.71	
Whole Foods	Dried Fruit	Coconut (shredded)	N	Y	3.69	7 oz	Let's Do...Organic	flakes	8.43	
Whole Foods	Dried Fruit	Coconut (shredded)	N	N	3.69	12 oz	Bob's Red Mill	flakes	4.92	
Whole Foods	Dried Fruit	Dried Cranberries	Y	Y	6.99	1 lb			6.99	
Whole Foods	Dried Fruit	Dried Cranberries	N	N	2.99	8 oz	Whole Foods 365		5.98	Generic
Whole Foods	Dried Fruit	Dried Cranberries	N	Y	4.69	4 oz	Made in Nature		18.76	
Whole Foods	Dried Fruit	Dried Cranberries	N	Y	4.69	8 oz	Whole Foods 365		9.38	Generic
Whole Foods	Dried Fruit	Raisins	Y	Y	3.39	1 lb		Flame	3.39	
Whole Foods	Dried Fruit	Raisins	Y	Y	2.99	1 lb		Thompson	2.99	
Whole Foods	Dried Fruit	Raisins	N	Y	3.99	15 oz	Whole Foods 365		4.26	Generic
Whole Foods	Dried Fruit	Raisins	N	Y	2.99	9 oz	Whole Foods 365	6 ct	5.32	Generic
Whole Foods	Dried Fruit	Raisins	N	N	2.29	8 oz	Whole Foods 365	Thompson	4.58	Generic
Whole Foods	Dried Fruit	Raisins	N	Y	1.99	8 oz	Whole Foods 365		3.98	Generic
Whole Foods	Dried Fruit	Raisins	N	Y	4.99	15 oz	Newman's Own		5.32	National
Whole Foods	Dried Fruit	Raisins	N	Y	3.39	9 oz	Newman's Own	6 ct	6.03	National
Whole Foods	Flour & Grains	Popcorn (yellow)	Y	Y	1.69	1 lb			1.69	
Whole Foods	Flour & Grains	Popcorn (yellow)	N	N	3.29	27 oz	Bob's Red Mill		1.95	
Whole Foods	Flour & Grains	Popcorn (yellow)	N	Y	3.99	2 lbs	Natural Value		2.00	
Whole Foods	Flour & Grains	Popcorn (yellow)	N	N	3.29	28 oz	Arrowhead Mills		1.88	
Whole Foods	Flour & Grains	Popcorn (yellow)	N	Y	3.49	8.4 oz	Newman's Own	3 ct	6.65	National
Whole Foods	Flour & Grains	Popcorn (yellow)	N	Y	2.99	9 oz	Whole Foods 365	3 ct	5.32	Generic
Whole Foods	Flour & Grains	Rolled Oats (instant)	Y	Y	1.19	1 lb			1.19	
Whole Foods	Flour & Grains	Rolled Oats (instant)	N	Y	3.39	11.3 oz	Whole Foods 365	8 ct	4.80	Generic
Whole Foods	Flour & Grains	Rolled Oats (instant)	N	Y	2.69	18 oz	Whole Foods 365		2.39	Generic
Whole Foods	Flour & Grains	Rolled Oats (instant)	N	Y	4.69	32 oz	Bob's Red Mill		2.35	
Whole Foods	Flour & Grains	White Flour Bleached	Y	Y	1.39	1 lb		unbleached	1.39	
Whole Foods	Flour & Grains	White Flour Bleached	N	Y	4.99	80 oz	Whole Foods 365	AP	1.00	Generic
Whole Foods	Flour & Grains	White Flour Bleached	N	N	2.99	80 oz	Whole Foods 365		0.60	Generic
Whole Foods	Flour & Grains	White Flour Bleached	N	Y	8.99	5 lbs	King Arthur		1.80	

Appendix 1: Raw Data Collected

Whole Foods	Flour & Grains	White Flour Bleached	N	N	6.49	5 lbs	King Arthur	AP	1.30	
Whole Foods	Flour & Grains	White Flour Bleached	N	Y	3.99	5 lbs	Bob's Red Mill	unbleached	0.80	
Whole Foods	Flour & Grains	White Flour Bleached	N	N	5.99	5 lbs	Bob's Red Mill	AP	1.20	
Whole Foods	Flour & Grains	White Rice (long grain)	Y	Y	1.99	1 lb			1.99	
Whole Foods	Flour & Grains	White Rice (long grain)	N	N	3.99	2 lbs	Whole Foods 365	Indian	2.00	Generic
Whole Foods	Flour & Grains	White Rice (long grain)	N	N	3.99	2 lbs	Whole Foods 365		2.00	Generic
Whole Foods	Flour & Grains	Whole Wheat Flour	Y	Y	1.39	1 lb			1.39	
Whole Foods	Flour & Grains	Whole Wheat Flour	N	Y	5.99	5 lbs	Bob's Red Mill		1.20	
Whole Foods	Flour & Grains	Whole Wheat Flour	N	N	3.99	5 lbs	Bob's Red Mill		0.80	
Whole Foods	Flour & Grains	Whole Wheat Flour	N	Y	4.99	5 lbs	Whole Foods 365		1.00	Generic
Whole Foods	Flour & Grains	Whole Wheat Flour	N	N	2.99	5 lbs	Whole Foods 365		0.60	Generic
Whole Foods	Flour & Grains	Whole Wheat Flour	N	Y	6.99	5 lbs	Arrowhead Mills		1.40	
Whole Foods	Nut Butters	Almond Butter	Y	N	6.99	1 lb			6.99	
Whole Foods	Nut Butters	Almond Butter	N	Y	22.99	1 lb	MaraNatha	Roasted	22.99	
Whole Foods	Nut Butters	Almond Butter	N	Y	6.69	11 oz	Kettle		9.73	National
Whole Foods	Nut Butters	Almond Butter	N	N	6.99	12 oz	Blue Diamond		9.32	National
Whole Foods	Nut Butters	Almond Butter	N	Y	15.99	16 oz	Whole Foods 365		15.99	Generic
Whole Foods	Nut Butters	Almond Butter	N	N	4.99	16 oz	Whole Foods 365		4.99	Generic
Whole Foods	Nut Butters	Peanut Butter	Y	N	4.69	1 lb			4.69	
Whole Foods	Nut Butters	Peanut Butter	N	Y	8.69	26 oz	MaraNatha		5.35	
Whole Foods	Nut Butters	Peanut Butter	N	Y	4.99	16 oz	Santa Cruz Organics		4.99	
Whole Foods	Nut Butters	Peanut Butter	N	Y	4.99	11.5 oz	Kettle		6.94	National
Whole Foods	Nut Butters	Peanut Butter	N	Y	5.99	16 oz	MaraNatha		5.99	
Whole Foods	Nuts & Seeds	Almonds Whole Roasted (shelled)	Y	Y	9.99	1 lb			9.99	
Whole Foods	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	Y	5.99	12 oz	Whole Foods 365		7.99	Generic
Whole Foods	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	4.69	16 oz	Whole Foods 365		4.69	Generic
Whole Foods	Nuts & Seeds	Cashews Whole Roasted (shelled)	Y	Y	18.99	1 lb			18.99	
Whole Foods	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	Y	7.99	12 oz	Whole Foods 365		10.65	Generic
Whole Foods	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	5.49	16 oz	Whole Foods 365		5.49	Generic
Whole Foods	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	4.99	5 oz	Yum Nuts		15.97	
Whole Foods	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	Y	N	6.99	1 lb			6.99	
Whole Foods	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	Y	2.99	12 oz	Whole Foods 365		3.99	Generic
Whole Foods	Nuts & Seeds	Pistachios Salted (in shell)	Y	Y	8.99	1 lb			8.99	
Whole Foods	Nuts & Seeds	Pistachios Salted (in shell)	N	N	5.99	1 lb	Whole Foods 365		5.99	Generic
Whole Foods	Pasta	Penne	N	Y	1.99	1 lb	Whole Foods 365		1.99	Generic
Whole Foods	Pasta	Penne	N	N	0.99	1 lb	Whole Foods 365		0.99	Generic
Whole Foods	Pasta	Penne	N	N	2.49	1 lb	De Cecco		2.49	National
Whole Foods	Pasta	Penne	N	Y	3.99	1 lb	Montebello		3.99	
Whole Foods	Snacks/Misc.	Granola (Vanilla)	Y	N	3.37	1 lb			3.37	
Whole Foods	Snacks/Misc.	Granola (Vanilla)	Y	Y	4.29	1 lb			4.29	

Appendix 1: Raw Data Collected

Whole Foods	Snacks/Misc.	Granola (Vanilla)	N	Y	5.69	12 oz	Bear Naked		7.59	National
Whole Foods	Snacks/Misc.	Granola (Vanilla)	N	N	5.49	12 oz	Galaxy		7.32	
Whole Foods	Snacks/Misc.	Semi-Sweet Chocolate chips	Y	N	7.99	1 lb			7.99	
Whole Foods	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	2.29	12 oz	Whole Foods 365		3.05	Generic
Whole Foods	Snacks/Misc.	Semi-Sweet Chocolate chips	N	Y	4.29	12 oz	Whole Foods 365		5.72	Generic
Whole Foods	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	4.39	12 oz	Ghiradelli		5.85	National
Whole Foods	Spices	Basil (whole, cut, aka Sweet Basil)	Y	Y	1.49	1 oz			23.84	
Whole Foods	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	3.99	0.24 oz	Whole Pantry		266.00	Generic
Whole Foods	Spices	Basil (whole, cut, aka Sweet Basil)	N	Y	2.29	0.56 oz	Whole Foods 365		65.43	Generic
Whole Foods	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	4.69	0.4 oz	Morton & Bassett		187.60	National
Whole Foods	Spices	Basil (whole, cut, aka Sweet Basil)	N	Y	4.29	0.54 oz	Simply Organic		127.11	
Whole Foods	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	3.99	0.48 oz	Frontier		133.00	
Whole Foods	Spices	Black Peppercorns (whole)	Y	Y	1.15	1 oz			18.40	
Whole Foods	Spices	Black Peppercorns (whole)	N	Y	6.99	1.8 oz	Frontier		62.13	
Whole Foods	Spices	Black Peppercorns (whole)	N	Y	2.99	2.12 oz	Whole Foods 365		22.57	Generic
Whole Foods	Spices	Black Peppercorns (whole)	N	Y	4.99	1.5 oz	Whole Pantry		53.23	Generic
Whole Foods	Spices	Cinnamon (ground)	Y	Y	0.59	1 oz			9.44	
Whole Foods	Spices	Cinnamon (ground)	N	N	3.99	1.2 oz	Whole Pantry		53.20	Generic
Whole Foods	Spices	Cinnamon (ground)	N	Y	5.69	1.76 oz	Frontier		51.73	
Whole Foods	Spices	Cinnamon (ground)	N	Y	1.99	0.67 oz	Simply Organic		47.52	
Whole Foods	Spices	Cinnamon (ground)	N	Y	5.99	2.2 oz	Morton & Bassett		43.56	National
Whole Foods	Spices	Cloves (ground)	Y	Y	1.59	1 oz			25.44	
Whole Foods	Spices	Cloves (ground)	N	N	9.97	2 oz	Morton & Bassett		79.76	National
Whole Foods	Spices	Cloves (ground)	N	N	4.99	1.93 oz	Frontier		41.37	
Whole Foods	Spices	Cloves (ground)	N	Y	4.99	2.8 oz	Simply Organic		28.51	
Whole Foods	Spices	Garlic Powder	Y	Y	0.99	1 oz			15.84	
Whole Foods	Spices	Garlic Powder	N	N	1.99	0.92 oz	Simply Organic		34.61	
Whole Foods	Spices	Garlic Powder	N	Y	5.69	2.33 oz	Frontier		39.07	
Whole Foods	Spices	Nutmeg (ground)	Y	Y	2.35	1 oz			37.60	
Whole Foods	Spices	Nutmeg (ground)	N	N	3.99	1.25 oz	Whole Pantry		51.07	Generic
Whole Foods	Spices	Nutmeg (ground)	N	N	2.19	1.92 oz	Whole Foods 365		18.25	Generic
Whole Foods	Spices	Nutmeg (ground)	N	N	7.69	2.3 oz	Morton & Bassett		53.50	National
Whole Foods	Spices	Nutmeg (ground)	N	N	5.99	1.92 oz	Frontier		49.92	
Whole Foods	Spices	Nutmeg (ground)	N	N	5.99	2.3 oz	Simply Organic		41.67	
Whole Foods	Spices	Onion Powder	Y	Y	0.95	1 oz			15.20	
Whole Foods	Spices	Onion Powder	N	Y	1.99	0.74 oz	Simply Organic		43.03	
Whole Foods	Spices	Paprika (ground)	Y	Y	1.15	1 oz			18.40	
Whole Foods	Spices	Paprika (ground)	N	N	2.69	1.41 oz	Whole Foods 365		30.52	Generic
Whole Foods	Spices	Paprika (ground)	N	Y	3.99	1.68 oz	Whole Pantry		38.00	Generic
Whole Foods	Spices	Paprika (ground)	N	Y	5.69	2 oz	Morton & Bassett		45.52	National

Appendix 1: Raw Data Collected

Whole Foods	Spices	Paprika (ground)	N	Y	4.99	2.96 oz	Simply Organic		26.97	
Whole Foods	Spices	Paprika (ground)	N	N	4.99	1.69 oz	Frontier		47.24	
Whole Foods	Spices	Red Pepper (crushed, chili flakes)	Y	Y	1.49	1 oz			23.84	
Whole Foods	Spices	Red Pepper (crushed, chili flakes)	N	N	3.99	1.2 oz	Frontier		53.20	
Whole Foods	Spices	Red Pepper (crushed, chili flakes)	N	N	5.99	1.59 oz	Simply Organic		60.28	
Whole Foods	Spices	Red Pepper (crushed, chili flakes)	N	N	1.99	0.42 oz	Simply Organic		75.81	
Whole Foods	Spices	Red Pepper (crushed, chili flakes)	N	N	4.99	1.3 oz	Morton & Bassett		61.42	National
Whole Foods	Spices	Red Pepper (crushed, chili flakes)	N	N	2.19	1.2 oz	Whole Foods 365		29.20	Generic
Whole Foods	Spices	Sugar (white)	Y	N	1.99	1 lb			1.99	
Whole Foods	Spices	Sugar (white)	N	Y	2.99	32 oz	Whole Foods 365		1.50	Generic
Whole Foods	Spices	Sugar (white)	N	Y	4.99	64 oz	Whole Foods 365		1.25	Generic
Whole Foods	Spices	Sugar (white)	N	Y	4.49	35.2 oz	Native		2.04	
WinCo	Beans	Black	Y	N	1.02	1 lb		black turtle beans	1.02	
WinCo	Beans	Black	N	N	24.24	25 lbs	Columbia Bean & Produce		0.97	
WinCo	Beans	Black	N	N	1.16	16 oz	Hy-Top		1.16	Generic
WinCo	Beans	Pinto	Y	N	0.86	1 lb			0.86	
WinCo	Beans	Pinto	N	N	20.44	25 lbs	Columbia Bean & Produce		0.82	
WinCo	Beans	Pinto	N	N	8.47	8 lbs	Hy-Top		1.06	Generic
WinCo	Beans	Pinto	N	N	4.02	4 lbs	Better Value		1.01	
WinCo	Beans	Pinto	N	N	1.03	16 oz	Hy-Top		1.03	Generic
WinCo	Beans	Red (kidney)	Y	N	1.09	1 lb			1.09	
WinCo	Beans	Red (kidney)	N	N	2.40	32 oz	Hy-Top		1.20	Generic
WinCo	Beans	Split Peas	Y	N	1.09	1 lb			1.09	
WinCo	Beans	Split Peas	N	N	1.52	32 oz	Hy-Top		0.76	Generic
WinCo	Beans	Split Peas	N	N	0.74	16 oz	Hy-Top		0.74	Generic
WinCo	Coffee & Tea	Decaf	Y	N	7.88	1 lb	Cascade Pride	Non-bulk was ground only.	7.88	
WinCo	Coffee & Tea	Earl Grey	N	N	2.18	1.18 oz	Bigelow	20 count	29.56	National
WinCo	Coffee & Tea	Earl Grey	N	N	2.30	1.3 oz	Stash	20 count	28.31	
WinCo	Coffee & Tea	French	Y	N	7.88	1 lb	Cascade Pride	Non-bulk was ground only.	7.88	
WinCo	Dried Fruit	Coconut (shredded)	Y	N	2.36	1 lb		coconut flake	2.36	
WinCo	Dried Fruit	Coconut (shredded)	N	N	2.51	14 oz	Hy-Top	coconut flake	2.87	Generic
WinCo	Dried Fruit	Coconut (shredded)	N	N	2.57	14 oz	Baker's	coconut flake	2.94	National
WinCo	Dried Fruit	Coconut (shredded)	N	N	2.60	14 oz	Mounds	coconut flake	2.97	
WinCo	Dried Fruit	Dried Cranberries	Y	N	3.67	1 lb			3.67	
WinCo	Dried Fruit	Dried Cranberries	N	N	4.00	12 oz	Ocean Spray		5.33	National
WinCo	Dried Fruit	Dried Cranberries	N	N	2.47	12 oz	Mariani		3.29	
WinCo	Dried Fruit	Dried Cranberries	N	N	3.05	6 oz	Sun Maid	6 count	8.13	National
WinCo	Dried Fruit	Raisins	Y	N	1.78	1 lb			1.78	
WinCo	Dried Fruit	Raisins	N	N	3.52	18 oz	Dole		3.13	National
WinCo	Dried Fruit	Raisins	N	N	3.16	24 oz	Hy-Top		2.11	Generic

Appendix 1: Raw Data Collected

WinCo	Dried Fruit	Raisins	N	N	3.81	24 oz	Sun Maid		2.54	National
WinCo	Dried Fruit	Raisins	N	N	1.58	12 oz	Hy-Top		2.11	Generic
WinCo	Dried Fruit	Raisins	N	N	2.65	15 oz	Sun Maid		2.83	National
WinCo	Dried Fruit	Raisins	N	N	3.33	32 oz	Sun Maid		1.67	National
WinCo	Flour & Grains	Brown Rice (long grain)	Y	N	0.55	1 lb			0.55	
WinCo	Flour & Grains	Brown Rice (long grain)	Y	Y	1.76	1 lb			1.76	
WinCo	Flour & Grains	Brown Rice (long grain)	N	N	13.08	25 lbs	Columbia Bean & Produce		0.52	
WinCo	Flour & Grains	Brown Rice (long grain)	N	N	5.86	5 lbs	Tsuru Mai		1.17	
WinCo	Flour & Grains	Popcorn (yellow)	Y	N	0.69	1 lb			0.69	
WinCo	Flour & Grains	Popcorn (yellow)	N	N	2.72	64 oz	Hy-Top		0.68	Generic
WinCo	Flour & Grains	Popcorn (yellow)	N	N	3.95	64 oz	Jolly Time		0.99	National
WinCo	Flour & Grains	Popcorn (yellow)	N	N	1.57	32 oz	Hy-Top		0.79	Generic
WinCo	Flour & Grains	Popcorn (yellow)	N	N	4.77	32 oz	Orville Redenbacher's		2.39	National
WinCo	Flour & Grains	Popcorn (yellow)	N	N	1.99	32 oz	Jolly Time		1.00	National
WinCo	Flour & Grains	Popcorn (yellow)	N	N	2.11	9.9 oz	Orville Redenbacher's	3 ct; natural	3.41	National
WinCo	Flour & Grains	Popcorn (yellow)	N	N	5.48	3.21 lbs	Pop Weaver	24 count; light butter	1.71	
WinCo	Flour & Grains	Rolled Oats (instant)	Y	N	0.60	1 lb			0.60	
WinCo	Flour & Grains	Rolled Oats (instant)	N	N	2.52	42 oz	Hy-Top		0.96	Generic
WinCo	Flour & Grains	Rolled Oats (instant)	N	N	4.09	42 oz	Quaker		1.56	National
WinCo	Flour & Grains	Rolled Oats (instant)	N	N	1.19	16 oz	Mom's Best Naturals		1.19	
WinCo	Flour & Grains	Rolled Oats (instant)	N	N	2.48	11.8 oz	Quaker	12 count	3.36	National
WinCo	Flour & Grains	Rolled Oats (instant)	N	N	1.48	11.8 oz	Hy-Top		2.01	Generic
WinCo	Flour & Grains	White Flour Bleached	Y	N	0.32	1 lb			0.32	
WinCo	Flour & Grains	White Flour Bleached	N	N	8.22	25 lbs	Hy-Top		0.33	Generic
WinCo	Flour & Grains	White Flour Bleached	N	N	13.42	25 lbs	Gold Medal	all purpose	0.54	National
WinCo	Flour & Grains	White Flour Bleached	N	N	5.38	10 lbs	Gold Medal	unbleached	0.54	National
WinCo	Flour & Grains	White Flour Bleached	N	N	2.62	5 lbs	Gold Medal	unbleached	0.52	National
WinCo	Flour & Grains	White Flour Bleached	N	N	3.43	5 lbs	King Arthur	all purpose	0.69	
WinCo	Flour & Grains	White Flour Bleached	N	N	1.98	5 lbs	Pillsbury		0.40	National
WinCo	Flour & Grains	White Rice (long grain)	Y	N	1.66	1 lb		basmati	1.66	
WinCo	Flour & Grains	White Rice (long grain)	N	N	15.77	10 lbs	Royal	basmati; sack	1.58	
WinCo	Flour & Grains	White Rice (long grain)	N	N	3.96	32 oz	Lundberg	basmati	1.98	
WinCo	Flour & Grains	Whole Wheat Flour	Y	N	0.49	1 lb			0.49	
WinCo	Flour & Grains	Whole Wheat Flour	N	N	4.22	5 lbs	Stone-Buhr		0.84	
WinCo	Flour & Grains	Whole Wheat Flour	N	N	3.02	5 lbs	Gold Medal		0.60	National
WinCo	Flour & Grains	Whole Wheat Flour	N	N	2.47	5 lbs	Bob's Red Mill		0.49	
WinCo	Nut Butters	Almond Butter	Y	N	4.53	1 lb			4.53	
WinCo	Nut Butters	Peanut Butter	Y	N	2.58	1 lb			2.58	
WinCo	Nut Butters	Peanut Butter	N	N	5.28	36 oz	Adam's		2.35	National
WinCo	Nut Butters	Peanut Butter	N	N	4.14	26 oz	Adam's		2.55	National

Appendix 1: Raw Data Collected

WinCo	Nut Butters	Peanut Butter	N	N	2.60	16 oz	Adam's		2.60	National
WinCo	Nuts & Seeds	Almonds Whole Roasted (shelled)	Y	N	3.86	1 lb			3.86	
WinCo	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	3.00	12 oz	Blue Diamond		4.00	National
WinCo	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	4.69	11 oz	Emerald		6.82	National
WinCo	Nuts & Seeds	Cashews Whole Roasted (shelled)	Y	N	8.19	1 lb			8.19	
WinCo	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	Y	N	2.68	1 lb			2.68	
WinCo	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	Y	Y	6.46	1 lb			6.46	
WinCo	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	4.06	16 oz	Planters		4.06	National
WinCo	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	3.06	16 oz	Hy-Top		3.06	Generic
WinCo	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	2.05	12 oz	Hy-Top		2.73	Generic
WinCo	Nuts & Seeds	Pistachios Salted (in shell)	Y	N	6.46	1 lb			6.46	
WinCo	Pasta	Penne	Y	N	1.18	1 lb			1.18	
WinCo	Pasta	Penne	N	N	1.04	16 oz	Barilla		1.04	National
WinCo	Pasta	Penne	N	N	1.58	16 oz	American Beauty		1.58	
WinCo	Pasta	Penne	N	N	1.53	16 oz	Ronzoni		1.53	National
WinCo	Pasta	Penne	N	N	1.13	16 oz	Hy-Top		1.13	Generic
WinCo	Snacks/Misc.	Granola (Vanilla)	Y	N	1.62	1 lb			1.62	
WinCo	Snacks/Misc.	Granola (Vanilla)	Y	Y	2.4	1 lb		75% organic	2.40	
WinCo	Snacks/Misc.	Granola (Vanilla)	N	N	2.78	20.5 oz	Sweet Home Farm		2.17	
WinCo	Snacks/Misc.	Semi-Sweet Chocolate chips	Y	N	2.59	1 lb			2.59	
WinCo	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	1.98	12 oz	Guittard		2.64	
WinCo	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	1.95	12 oz	Hy-Top		2.60	Generic
WinCo	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	4.48	24 oz	Nestle		2.99	National
WinCo	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	2.28	12 oz	Nestle		3.04	National
WinCo	Spices	Basil (whole, cut, aka Sweet Basil)	Y	N	2.93	1 lb			2.93	
WinCo	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	1.98	0.37 oz	McCormick Gourmet		85.62	National
WinCo	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	2.48	1.25 oz	McCormick		31.74	National
WinCo	Spices	Black Peppercorns (whole)	Y	N	6.58	1 lb			6.58	
WinCo	Spices	Black Peppercorns (whole)	N	N	4.85	4.25 oz	McCormick		18.26	National
WinCo	Spices	Cinnamon (ground)	Y	N	2.22	1 lb			2.22	
WinCo	Spices	Cinnamon (ground)	N	N	2.78	4.12 oz	McCormick		10.80	National
WinCo	Spices	Cinnamon (ground)	N	N	1.38	2.37 oz	McCormick		9.32	National
WinCo	Spices	Cinnamon (ground)	N	N	2.08	1.87 oz	McCormick Gourmet		17.80	National
WinCo	Spices	Cinnamon (ground)	N	N	0.50	2.37 oz	Spice Pantry		3.38	
WinCo	Spices	Cinnamon (ground)	N	N	5.98	8.75 oz	McCormick		10.93	National
WinCo	Spices	Cloves (ground)	Y	N	6.98	1 lb		whole	6.98	
WinCo	Spices	Cloves (ground)	N	N	3.98	1.87 oz	McCormick Gourmet		34.05	National
WinCo	Spices	Cloves (ground)	N	N	3.28	0.9 oz	McCormick		58.31	National
WinCo	Spices	Garlic Powder	Y	N	3.35	1 lb			3.35	
WinCo	Spices	Garlic Powder	N	N	1.00	2.5 oz	Spice Pantry		6.40	

Appendix 1: Raw Data Collected

WinCo	Spices	Garlic Powder	N	N	6.98	12.25 oz	McCormick		9.12	National
WinCo	Spices	Garlic Powder	N	N	0.95	2 oz	Hy-Top		7.60	Generic
WinCo	Spices	Nutmeg (ground)	Y	N	12.38	1 lb			12.38	
WinCo	Spices	Nutmeg (ground)	N	N	3.28	1.81 oz	McCormick Gourmet		28.99	National
WinCo	Spices	Nutmeg (ground)	N	N	2.78	1.1 oz	McCormick		40.44	National
WinCo	Spices	Onion Powder	Y	N	2.76	1 lb			2.76	
WinCo	Spices	Onion Powder	N	N	3.81	4.5 oz	McCormick		13.55	National
WinCo	Spices	Onion Powder	N	N	2.58	2.62 oz	McCormick		15.76	National
WinCo	Spices	Onion Powder	N	N	0.50	2.75 oz	Spice Pantry		2.91	
WinCo	Spices	Paprika (ground)	Y	N	4.35	1 lb			4.35	
WinCo	Spices	Paprika (ground)	N	N	2.48	1.62 oz	McCormick Gourmet		24.49	National
WinCo	Spices	Paprika (ground)	N	N	2.48	2.12 oz	McCormick		18.72	National
WinCo	Spices	Red Pepper (crushed, chili flakes)	Y	N	2.96	1 lb			2.96	
WinCo	Spices	Red Pepper (crushed, chili flakes)	N	N	2.04	1.5 oz	McCormick		21.76	National
WinCo	Spices	Red Pepper (crushed, chili flakes)	N	N	1.98	1.12 oz	McCormick Gourmet		28.29	National
WinCo	Spices	Sugar (white)	Y	N	0.57	1 lb			0.57	
WinCo	Spices	Sugar (white)	N	N	14.77	25 lbs	Hy-Top		0.59	Generic
WinCo	Spices	Sugar (white)	N	N	2.27	4 lbs	Hy-Top		0.57	Generic
WinCo	Spices	Sugar (white)	N	N	7.73	10 lbs	C&H		0.77	National
WinCo	Spices	Sugar (white)	N	N	2.76	4 lbs	C&H		0.69	National
Zupan's	Beans	Black	Y	Y	1.69	1 lb			1.69	
Zupan's	Beans	Black	N	Y	2.09	16 oz	Natural Directions		2.09	
Zupan's	Beans	Pinto	Y	Y	2.99	1 lb			2.99	
Zupan's	Beans	Pinto	N	Y	2.09	16 oz	Natural Directions		2.09	
Zupan's	Beans	Red (kidney)	Y	Y	1.99	1 lb		light red	1.99	
Zupan's	Beans	Red (kidney)	N	Y	1.99	16 oz	Western Family		1.99	
Zupan's	Beans	Split Peas	Y	Y	1.79	1 lb			1.79	
Zupan's	Beans	Split Peas	N	Y	1.49	16 oz	Natural Directions		1.49	
Zupan's	Beans	Split Peas	N	N	4.69	29 oz	Bob's Red Mill		2.59	
Zupan's	Coffee & Tea	Decaf	Y	N	10.99	1 lb			10.99	
Zupan's	Coffee & Tea	Decaf	N	N	12.99	12 oz	Peet's		17.32	
Zupan's	Coffee & Tea	Decaf	N	N	9.99	12 oz	Buckmaster Coffee		13.32	
Zupan's	Coffee & Tea	Decaf	N	Y	9.99	12 oz	Café Equitas		13.32	
Zupan's	Coffee & Tea	Decaf	N	N	12.49	12 oz	Café Umbria		16.65	
Zupan's	Coffee & Tea	Decaf	N	N	12.99	12 oz	Stumptown		17.32	
Zupan's	Coffee & Tea	Decaf	N	N	6.99	12 oz	Yuban		9.32	National
Zupan's	Coffee & Tea	Earl Grey	N	N	6.99	2.5 oz	Peet's	25 ct	44.74	
Zupan's	Coffee & Tea	Earl Grey	N	N	4.29	1.41 oz	Twinnings	21ct	48.68	National
Zupan's	Coffee & Tea	Earl Grey	N	N	7.99	28 g	Petit Tea	12 Sticks	129.44	
Zupan's	Coffee & Tea	Earl Grey	N	N	3.50	1.1 oz	Stash	18ct	50.91	

Appendix 1: Raw Data Collected

Zupan's	Coffee & Tea	Earl Grey	N	N	4.29	1.7 oz	Tazo	20ct	40.38	National
Zupan's	Coffee & Tea	Earl Grey	N	Y	1.50	20 g	Ahmad Tea	10ct	34.02	
Zupan's	Coffee & Tea	Earl Grey	N	N	7.49	3.5 oz	Tazo	loose	34.24	National
Zupan's	Coffee & Tea	French	Y	N	10.99	1 lb			10.99	
Zupan's	Coffee & Tea	French	N	N	12.99	12 oz	Peet's		17.32	
Zupan's	Coffee & Tea	French	N	N	9.99	12 oz	Buckmaster Coffee		13.32	
Zupan's	Coffee & Tea	French	N	Y	9.99	12 oz	Café Equitas		13.32	
Zupan's	Coffee & Tea	French	N	N	12.99	12 oz	Stumptown		17.32	
Zupan's	Coffee & Tea	French	N	Y	10.49	12 oz	Portland Roasting Coffee		13.99	
Zupan's	Coffee & Tea	French	N	Y	9.99	12 oz	Café Organica		13.32	
Zupan's	Confectionaries	Chocolate Covered Almonds	Y	Y	19.99	1 lb		dark chocolate	19.99	
Zupan's	Confectionaries	Chocolate Covered Almonds	N	N	6.99	14 oz	Zupan's Market	milk chocolate	7.99	Generic
Zupan's	Confectionaries	Yogurt Pretzels	Y	Y	9.99	1 lb			9.99	
Zupan's	Confectionaries	Yogurt Pretzels	Y	N	5.99	1 lb		Raspberry flavor	5.99	
Zupan's	Dried Fruit	Coconut (shredded)	Y	Y	4.99	1 lb			4.99	
Zupan's	Dried Fruit	Coconut (shredded)	N	N	3.39	14 oz	Baker's		3.87	National
Zupan's	Dried Fruit	Coconut (shredded)	N	N	4.29	12 oz	Bob's Red Mill		5.72	
Zupan's	Dried Fruit	Coconut (shredded)	N	N	3.99	12 oz	Trikona		5.32	
Zupan's	Dried Fruit	Dried Cranberries	Y	N	8.99	1 lb			8.99	
Zupan's	Dried Fruit	Dried Cranberries	N	Y	4.29	4 oz	Newman's Organics		17.16	National
Zupan's	Dried Fruit	Dried Cranberries	N	N	3.29	6 oz	Ocean Spray		8.77	National
Zupan's	Dried Fruit	Dried Cranberries	N	N	7.99	12 oz	Vincent Family		10.65	
Zupan's	Dried Fruit	Raisins	Y	Y	3.49	1 lb			3.49	
Zupan's	Dried Fruit	Raisins	Y	N	3.49	1 lb			3.49	
Zupan's	Dried Fruit	Raisins	N	N	4.99	24 oz	Sun Maid		3.33	National
Zupan's	Dried Fruit	Raisins	N	N	3.59	15 oz	Sun Maid		3.83	National
Zupan's	Dried Fruit	Raisins	N	N	3.99	32 oz	Sun Maid		2.00	National
Zupan's	Dried Fruit	Raisins	N	N	9.99	9 oz	Sun Maid	6ct 4.5oz	17.76	National
Zupan's	Dried Fruit	Raisins	N	N	3.99	15 oz	Newman's Own		4.26	National
Zupan's	Dried Fruit	Raisins	N	N	3.69	9 oz	Newman's Own	6ct 4.5oz	6.56	National
Zupan's	Dried Fruit	Raisins	N	Y	5.49	24 oz	Natural Directions		3.66	
Zupan's	Flour & Grains	Brown Rice (long grain)	Y	Y	3.49	1 lb			3.49	
Zupan's	Flour & Grains	Brown Rice (long grain)	N	N	8.49	36 oz	Rice Select		3.77	
Zupan's	Flour & Grains	Brown Rice (long grain)	N	Y	4.29	32 oz	Natural Directions		2.15	
Zupan's	Flour & Grains	Brown Rice (long grain)	N	N	4.39	32 oz	Lundberg		2.20	
Zupan's	Flour & Grains	Popcorn (yellow)	Y	Y	1.99	1 lb			1.99	
Zupan's	Flour & Grains	Popcorn (yellow)	N	N	6.29	30 oz	Orville Redenbacher's		3.35	National
Zupan's	Flour & Grains	Popcorn (yellow)	N	N	3.69	27 oz	Bob's Red Mill		2.19	
Zupan's	Flour & Grains	Popcorn (yellow)	N	N	1.99	32 oz	Jolly Time		1.00	National
Zupan's	Flour & Grains	Popcorn (yellow)	N	N	5.99	16 oz	India Tree Gourmet Spices		5.99	

Appendix 1: Raw Data Collected

Zupan's	Flour & Grains	Popcorn (yellow)	N	Y	4.29	8.4 oz	Bearitos	3ct	8.17	
Zupan's	Flour & Grains	Popcorn (yellow)	N	Y	3.59	8.4 oz	Newman's Organics	3ct	6.84	National
Zupan's	Flour & Grains	Rolled Oats (instant)	Y	Y	1.79	1 lb			1.79	
Zupan's	Flour & Grains	Rolled Oats (instant)	Y	N	1.19	1 lb			1.19	
Zupan's	Flour & Grains	Rolled Oats (instant)	N	Y	3.99	11.4 oz	Nature's Path	8ct	5.60	
Zupan's	Flour & Grains	Rolled Oats (instant)	N	Y	1.99	7.4 oz	Better Oats	5ct	4.30	
Zupan's	Flour & Grains	Rolled Oats (instant)	N	N	3.49	18 oz	Quaker		3.10	National
Zupan's	Flour & Grains	Rolled Oats (instant)	N	N	4.99	42 oz	Quaker		1.90	National
Zupan's	Flour & Grains	Rolled Oats (instant)	N	N	3.99	11.8 oz	Quaker	12ct	5.41	National
Zupan's	Flour & Grains	Rolled Oats (instant)	N	N	3.69	32 oz	Bob's Red Mill		1.85	
Zupan's	Flour & Grains	White Flour Bleached	Y	Y	1.29	1 lb			1.29	
Zupan's	Flour & Grains	White Flour Bleached	N	N	4.99	5 lbs	King Arthur		1.00	
Zupan's	Flour & Grains	White Flour Bleached	N	Y	6.49	5 lbs	Gold Medal		1.30	National
Zupan's	Flour & Grains	White Flour Bleached	N	N	3.29	5 lbs	Gold Medal		0.66	National
Zupan's	Flour & Grains	White Flour Bleached	N	N	3.99	5 lbs	Bob's Red Mill		0.80	
Zupan's	Flour & Grains	White Rice (long grain)	Y	Y	3.99	1 lb			3.99	
Zupan's	Flour & Grains	White Rice (long grain)	N	Y	9.99	36 oz	Rice Select		4.44	
Zupan's	Flour & Grains	White Rice (long grain)	N	N	2.89	32 oz	Western Family		1.45	
Zupan's	Flour & Grains	White Rice (long grain)	N	Y	4.29	32 oz	Natural Directions		2.15	
Zupan's	Flour & Grains	White Rice (long grain)	N	N	4.69	32 oz	Lundberg		2.35	
Zupan's	Flour & Grains	Whole Wheat Flour	N	N	4.99	5 lbs	King Arthur		1.00	
Zupan's	Flour & Grains	Whole Wheat Flour	N	N	3.99	5 lbs	Bob's Red Mill		0.80	
Zupan's	Nut Butters	Almond Butter	Y	N	7.99	1 lb			7.99	
Zupan's	Nut Butters	Almond Butter	N	N	9.99	16 oz	Justin's		9.99	
Zupan's	Nut Butters	Almond Butter	N	N	5.99	11 oz	Kettle		8.71	National
Zupan's	Nut Butters	Peanut Butter	Y	Y	4.99	1 lb			4.99	
Zupan's	Nut Butters	Peanut Butter	Y	N	2.99	1 lb			2.99	
Zupan's	Nut Butters	Peanut Butter	N	Y	4.39	11.5 oz	Kettle		6.11	National
Zupan's	Nut Butters	Peanut Butter	N	Y	6.99	16 oz	Justin's		6.99	
Zupan's	Nut Butters	Peanut Butter	N	Y	4.99	16 oz	MaraNatha		4.99	
Zupan's	Nut Butters	Peanut Butter	N	N	3.19	16 oz	Adam's		3.19	National
Zupan's	Nuts & Seeds	Almonds Whole Roasted (shelled)	Y	N	7.99	1 lb			7.99	
Zupan's	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	3.99	6 oz	Blue Diamond		10.64	National
Zupan's	Nuts & Seeds	Almonds Whole Roasted (shelled)	N	N	7.99	11 oz	Emerald		11.62	National
Zupan's	Nuts & Seeds	Cashews Whole Roasted (shelled)	Y	N	10.99	1 lb			10.99	
Zupan's	Nuts & Seeds	Cashews Whole Roasted (shelled)	N	N	8.99	10 oz	Emerald		14.38	National
Zupan's	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	Y	N	3.29	1 lb			3.29	
Zupan's	Nuts & Seeds	Peanuts Roasted Conventional(shelled)	N	N	3.49	16 oz	Planters		3.49	National
Zupan's	Pasta	Penne	Y	N	2.99	1 lb			2.99	
Zupan's	Pasta	Penne	N	N	5.99	17.5 oz	Rustichella D'Abruzzo		5.48	

Appendix 1: Raw Data Collected

Zupan's	Pasta	Penne	N	Y	5.99	17.63 oz	A.G. Ferrari		5.44
Zupan's	Pasta	Penne	N	N	3.99	17.63 oz	A.G. Ferrari		3.62
Zupan's	Snacks/Misc.	Granola (Vanilla)	Y	N	3.99	1 lb			3.99
Zupan's	Snacks/Misc.	Granola (Vanilla)	N	N	3.99	12 oz	Bear Naked		5.32 National
Zupan's	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	4.79	12 oz	Nestle		6.39 National
Zupan's	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	5.99	6 oz	Scharffen Berger		15.97
Zupan's	Snacks/Misc.	Semi-Sweet Chocolate chips	N	N	4.29	12 oz	Ghiradelli		5.72 National
Zupan's	Spices	Basil (whole, cut, aka Sweet Basil)	Y	N	4.99	1 lb			4.99
Zupan's	Spices	Basil (whole, cut, aka Sweet Basil)	N	Y	5.99	0.3 oz	Spice Hunter		319.47 National
Zupan's	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	4.99	0.3 oz	Spice Hunter		266.13 National
Zupan's	Spices	Basil (whole, cut, aka Sweet Basil)	N	Y	6.49	0.4 oz	Morton & Bassett		259.60 National
Zupan's	Spices	Basil (whole, cut, aka Sweet Basil)	N	N	4.99	1.25 oz	Dean & DeLuca		63.87 National
Zupan's	Spices	Black Peppercorns (whole)	Y	N	12.99	1 lb			12.99
Zupan's	Spices	Black Peppercorns (whole)	N	Y	6.99	2 oz	Morton & Bassett		55.92 National
Zupan's	Spices	Black Peppercorns (whole)	N	N	6.49	2.1 oz	Morton & Bassett		49.45 National
Zupan's	Spices	Cinnamon (ground)	Y	N	5.99	1 lb			5.99
Zupan's	Spices	Cinnamon (ground)	N	N	5.99	1.5 oz	Spice Hunter		63.89 National
Zupan's	Spices	Cinnamon (ground)	N	Y	7.99	2.3 oz	Morton & Bassett		55.58 National
Zupan's	Spices	Cinnamon (ground)	N	N	6.99	2.7 oz	Morton & Bassett		41.42 National
Zupan's	Spices	Cinnamon (ground)	N	N	4.29	1.75 oz	Dean & DeLuca		39.22 National
Zupan's	Spices	Cloves (ground)	Y	N	19.99	1 lb			19.99
Zupan's	Spices	Cloves (ground)	N	N	11.99	2.4 oz	Morton & Bassett		79.93 National
Zupan's	Spices	Cloves (ground)	N	N	4.99	1.7 oz	Dean & DeLuca		46.96 National
Zupan's	Spices	Cloves (ground)	N	Y					

Appendix 1: Raw Data Collected

Zupan's	Spices	Sugar (white)	Y	N	1.69	1 lb			1.69	
Zupan's	Spices	Sugar (white)	N	N	2.49	2 lbs	C&H		1.25	National
Zupan's	Spices	Sugar (white)	N	N	3.19	4 lbs	C&H		0.80	National
Zupan's	Spices	Sugar (white)	N	N	3.29	5 lbs	Western Family		0.66	
Zupan's	Spices	Sugar (white)	N	Y	2.69	4 lbs	C&H		0.67	National
Zupan's	Spices	Sugar (white)	N	Y	4.99	32 oz	Florida Crystals		2.50	