

Real Food Calculator Final Report

Spring 2014

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Executive Summary

The objective for the UNC Real Food Calculator internship this Spring 2014 semester encompassed increasing the proportion of “real food” served in the campus’ dining halls, creating an outreach program with the UNC community, and placing our work within the larger context of the

other schools in the nation. “Real food” refers to any food that meets the following criteria: local and community-based, ecologically sound, fair, and humane.

- This program has made annual September (Fall) reports at UNC for the last four years, and this semester marks the first time two audits were completed in a single year- one in September for the Fall and one in February for the Spring.
- The Spring 2014 report covers the 4-week fiscal month of February and the results project the real food percentages for the entire semester. This year, the total real food percentage reached 26%, the percentage of foods meeting one real food criteria (Real Food B) reached 17%, and the percentage meeting two or more criteria (Real Food A) reached 9%.
- This semester, our recommendations emphasize the importance of increasing ecologically sound produce product purchases as compared to humane dairy and meat products because produce ultimately results in less environmental damage and healthier student diets.
- We suggest for CDS to look into real food options for the food categories they serve that consist of almost no “real” items; these primarily include the beverage, grocery, and baked good categories. We recommend the following purchasing changes:
 - Switch to or continue ordering vendor electronic velocity reports whenever possible, particularly from Sysco, Freshpoint, and Pepsi.
 - Continue transitioning from conventional foods to products from Firsthand Foods, Albert’s Organics, Stonyfield, Delight Soy, Maola, and Inland Seafoods whenever applicable.
 - Begin making “real” beverage purchases, possibly with Trader Joe’s Hot Chocolate and Oogave Sodas, which both qualify as organic.
 - Begin purchasing “real” baked goods such as Rudi’s Organic Bread and organic Alpine Valley Bread items.
 - Build momentum for the grocery category real food percentage by changing pasta purchases to organic pastas, possibly from Bionaturae or DeBoles. Also make dining hall desserts more “real” by purchasing organic cake mixes and flours from Arrowhead Mills. Lastly, influence the grocery category and contribute to the fair criterion by purchasing sugar from Wholesome Sweeteners.
 - With particular consideration to condiments, buying Annie’s Organic dressings and Organic Heinz Ketchup could improve the dining halls’ real food grocery percentages.
 - Purchase fair-trade bananas and possibly other products from Equal Exchange.
 - Look into purchasing Ben and Jerry’s ice cream that will contain fair-trade ingredients or Maple View Farm’s local ice cream in the near future; these could debut only at Green Themed Meals if necessary.
- We were pleased to discover that not only did UNC have the second highest total real food percentage amongst RFC schools that have completed the calculator program, but as a larger institution, our progress stands alone as a model for other schools across the country. However, we are concerned about the accuracy of these figures, as they only portray 13 institutions who

have completed the calculator out of 142 signed on to the Real Food Challenge contract out of thousands of Universities in the United States.

- The most problematic area for our audit centered on electronically uploading the velocity report from our largest vendor, Sysco. The upload hastened our progress, but required us to manually fix every entry to not include the additional “.0” characters added at the end of their product codes when uploaded. Also, the Sysco upload included non-food items, resulting in our deletion of them and manual adjustment of the total budget. All of these discrepancies around the final budget left room for the inaccuracy of the total amount.
- Before the velocity reports and invoices were available at the beginning of the semester, we utilized the extra time to add a marketing component to the internship. In creating and upkeeping social media pages for the calculator, participating in a Real Food Challenge Green Themed Meal, and interviewing for a feature in the Daily Tar Heel Newspaper, we facilitated campus-wide awareness for the calculator data and furthered the transparency of UNC dining.
- For future interns, we want to emphasize the importance of continuing to expand upon this internship as more than an audit and research period. We would like to see continued efforts to reach out to other schools, and the campus through social media and publicity events such as Green Themed Meals, newspaper interviews, and involvement in Food Day.

Moving forward, we hope to create a larger presence within UNC’s campus by reaching out to Chancellor Folt and earning her support of the project. We would also like to create a more fluid dialogue with other RFC schools across the nation, particularly those in North Carolina.

● **Research Overview**

The research our group performed this semester covered the gathering and analysis of information on the “real food” purchased by Carolina Dining Services (CDS) during the fiscal month of February 2014, falling between > January 22 and February 18. “Real food” is defined as food that meets any of the following criteria: local and community based, humane, ecologically sound, and/or fair. Through the product invoices and expertise provided by CDS along with the Real Food Calculator (RFC) online tool provided by an organization called Real Food Challenge, we collected the percentages of food items purchased by the Top of Lenoir and Ram’s Head dining halls that met criteria for real food, as defined by the calculator program. Our goal in assessing the amount of real food the CDS bought in February is to continue tracking and encouraging improvements in both dining hall sustainability and the quality of food available to students with meal plans. In the past, the RFC program allowed students from the Fall semesters of 2010 through 2013 to track product purchases from the fiscal month of September so as to speculate the sustainability of UNC dining hall foods for the respective seasons of those academic years. Our research represents an extension on previous semesters analysis as the first spring semester assessment ever conducted by RFC at UNC, and will not only begin to provide a picture of real food percentages during the spring, but also year-round. With the help of the data collected from the four-week period of study this semester, we can make appropriate recommendations to increase the seasonal and year-round supply of real food offered by CDS in the future. Further extending on previous internships work we prioritized creating a larger outreach and marketing program, creating a voice on campus for the work being done within the internship, and provide more comparative analysis between other college and university campuses in the nation.

Monitoring Food Purchases: The Founding Purpose and Emerging Issues

The Real Food Calculator Internship exists to restructure food systems through institutional criteria, monitor growth as a mechanism of change, provide campus outreach on the movement, and allow cross-campus comparison with other university and colleges within the nation. The Real Food Calculator is an important tool to utilize because it allows Carolina Dining Services, as well as other Universities and Colleges in the country to quantify their current sustainability in food purchasing. With 140 institutions using this system, this movement is clearly not just a trend, but rather, is driven by the desires of students and schools alike to develop a more sustainable food system (Real Food Challenge). (For more on the Importance of Real Food refer to appendix A).

The use of a standardized system of measurement, such as the Real Food criteria, makes institutions accountable to their claims of ‘sustainability’ and allow for the tracking of progress. Furthermore, this standardized system of noting the amount of “real food” allows for cross comparison between universities/colleges as all the definitions are uniform. This regulated criteria allowed for us to compare our progress to that of the other 12 universities/colleges whose data we were provided access to. Due to the fact that the real food percentages were all obtained through this established criteria we were able to form a more objective understanding of where UNC stands within these other schools within the nation.

Despite the obvious advantage of the standardized measurements, we must also acknowledge the need to constantly question the current system in place and seek improvements. In comparison to last semester in the issues faced with the time invested in inputting data we pioneered the use of the velocity report with the support of CDS. This allowed the input of a months worth of purchases for an individual product instead of weekly invoices. We had velocity reports for Sysco and Freshpoint, which provided a majority of the purchases that CDS makes. Beyond this we worked to provide higher accountability between individuals through the use of the time log and increasing communication through the use of hourly check-ins on everyone's status to prevent data overlap that was seen in last semesters internship. Further on in this report, we discuss future alterations that we would like the RFC system to utilize.

To further promote the education of the campus on this movement and provide transparency we worked to create a larger presences within campus through campus outreach that included the creation of a blog, and Facebook page, as well as tabling at a Real Food Challenge theme meal, an article in the Daily Tar Heel, and our participation in the Southeast Retreat for the Real Food Challenge. This work focuses on creating wider support for this movement as well as connecting the work on our campus to the larger work being developed across the nation. Through outreach, we were able to create a larger acknowledgment of the progress and movement within our own campus and then place it in the larger context of the country.

The Definition of “Real Food”

The Real Food Challenge's online calculator program defines real food as meeting at least one of four criteria - ecologically sound, fair, humane, and local and community-based. Under each category, RFC specifies certain qualifications that allow food to fall under any one of the criteria. For example, a product that qualifies as Rainforest Alliance Certified would be considered ecologically sound by RFC's standards. The calculator also recognizes the extent to which foods meet their qualifications, and labels them as either “green light”, “yellow light”, or “red light.” Foods that count as green light are considered legitimate real food and meet their qualifications without question. Yellow light foods have some questionability as to how well they meet their qualifications, but are nonetheless considered “real.” An example of a yellow light standard versus a green light standard would be a food that is entirely produced and distributed within 250 miles of the destination as opposed to only 150 miles, and this would still count as local and community-based. Red light foods fail to meet their qualifications to an acceptable standard and do not receive recognition as real foods. Additionally, the products considered by RFC undergo review for any characteristics that may disqualify them from being considered “real.” If a product met a qualification such as being local, but still contained caramel coloring, this would disqualify the product from real food status. When looking over all food items purchased by CDS that do not violate real food standards through disqualifications, any that meet one real food criterion are labeled “real food B,” and any that meet two or more criteria are labeled “real food A.” By sub-categorizing CDS food purchases this way, we gain a clearer understanding of what aspects make their food real and the level to which their products meet this standard (Real Food Challenge). (Refer to Appendix B for more information on the Real Food Criteria.)

Calculator Methodology

Our assessment covered the four-week fiscal month of February, which is from > January 22 – February 18. CDS staff provided us with the invoices of every purchase made throughout the month. Standard invoices from our smaller food providers showed the product code and cost of food items ordered from the vendor for a single week, for four weeks worth. One major difference between this semester and previous ones was the transition to velocity reports for our large food distributors - Sysco and Freshpoint. Velocity reports display the agglomerated prices and quantities of all food items purchased from a specific vendor within that month instead of the prices and quantities individually ordered week-by-week. This essentially quickened the pace of working through Sysco and Freshpoint invoices by fourfold. Additionally, we managed to electronically upload the Sysco invoice onto the calculator website, which also hastened our progress with the largest velocity report that we worked with. However, the upload did not enter in all of the information from each item, and this required us to return to return to the items and add the needed information.

The calculator program for UNC-CH displayed an entire section devoted to the Spring semester. Under this tab, the setup contained an area where we could enter in new line items. The information we entered included the food distributor/vendor, the product code, the cost of the quantity ordered, the product name, the brand name, the facility purchasing, the type of food, and the real food criteria and disqualifiers met by the product. Under each real food category we could check “yes” or “no” to described whether or not the item qualified, and we had the option to check “N/A” for the humane criterion when a product had no relevance to livestock. When checking “yes” for any criterion, including disqualifiers, the calculator required us to choose from a list of qualifications that would allow the item to be considered “real.” This semester in the “Notes” section for each item we added the initials of the intern inputting the product and the date on which it was entered; the Fall 2013 interns recommended this as a means of keeping track of how and when items were added in case of error. After entering all needed information for any single item, we saved them, and they were added to the list of completed or partially completed products that could be edited at any time.

At the start of our audit, we only worked on entering the data provided by the invoices and reports. Products already added by interns from the fall of 2013 were recognized on the calculator website, allowing us to move much more quickly through those items, however it took us two months to complete data inputs. Once we began to reach the end of the invoices and velocity reports, we started a research process to find the unknown information for products, mostly the real food criteria that they did or did not meet. A new vendor for this semester, Bimbo Bakeries, USA, additionally required us to receive aid from our dining hall chefs on what products were listed on their invoices, as their names were not inherently clear. The data we collected for Sysco as well as many small vendors was largely found through online research. However, at many points throughout the process, especially when looking at smaller vendors, we called the companies and asked for the information needed; sometimes this led to helpful results, and at other times, dead ends. When companies never returned our calls about products, or their food items ultimately lacked transparency when researched, we dismissed those items from qualifying as “real” because RFC advocates for consumer accessibility to crucial information

about food products. We then attempted to provide recommendations for CDS with the limitations of an institutionalized food system. (For more on Problems in Providing Institutional Purchasing Recommendations at UNC refer to Appendix C.)

Results

Table 1 Food Percentages for CDS Spring 2014

Real Food versus Conventional Food	Percentage of Total Food Purchased, Spring 2014
Conventional Food	74%
Real Food	26%

Table 2 Real Food Percentages for CDS Fall 2010-2013 and Spring 2014

Real Food Percentages, Fall 2010-2013 and Spring 2014	
Year	Percentage
Fall 2010	12.70%
Fall 2011	9.90%
Fall 2012	20.10%
Fall 2013	23.10%
Spring 2014	26%

Table 3 Real Food A and B Percentages for CDS Spring 2014

Real Food Breakdown Percentages	Percentage of Total Real Food Purchased, Spring 2014
Real Food A	9%
Real Food B	17%

Table 4 Comparison of Real Food A and B by Food Category for CDS Spring 2014

Total Spent		Percentage of Total		Category	RF A		RF B		Conventional	
\$50,330	\$36,104	6%	6%	Baked Goods	0%	0%	0%	0%	100%	7%
\$139,985	\$104,039	17%	16%	Meat	22%	24%	0%	0%	78%	76%
\$68,813	\$64,283	9%	10%	Poultry	0%	0%	53%	42%	47%	58%
\$85,003	\$74,066	11%	11%	Dairy	0%	45%	56%	14%	44%	41%
\$22,391	\$18,485	3%	2.90%	Eggs	0%	0%	75%	81%	25%	19%
\$27,981	\$33,052	3%	5%	Fish/Seafood	26%	1%	33%	37%	42%	62%
\$6,831	\$8,447	1%	1.30%	Coffee and Tea	0%	0%	0%	38%	100%	62%
\$47,195	\$24,156	6%	4%	Beverages	0%	0%	1%	0%	99%	100%
\$174,021	\$144,427	22%	22%	Produce	0%	0%	19%	22%	81%	78%
\$178,437	\$137,564	22%	21%	Grocery	0%	0%	2%	2%	98%	98%
\$800,896	\$644,612			Total	5%	9%	18%	16%	77%	74%

Values from Fall 2013

Values from Spring 2014

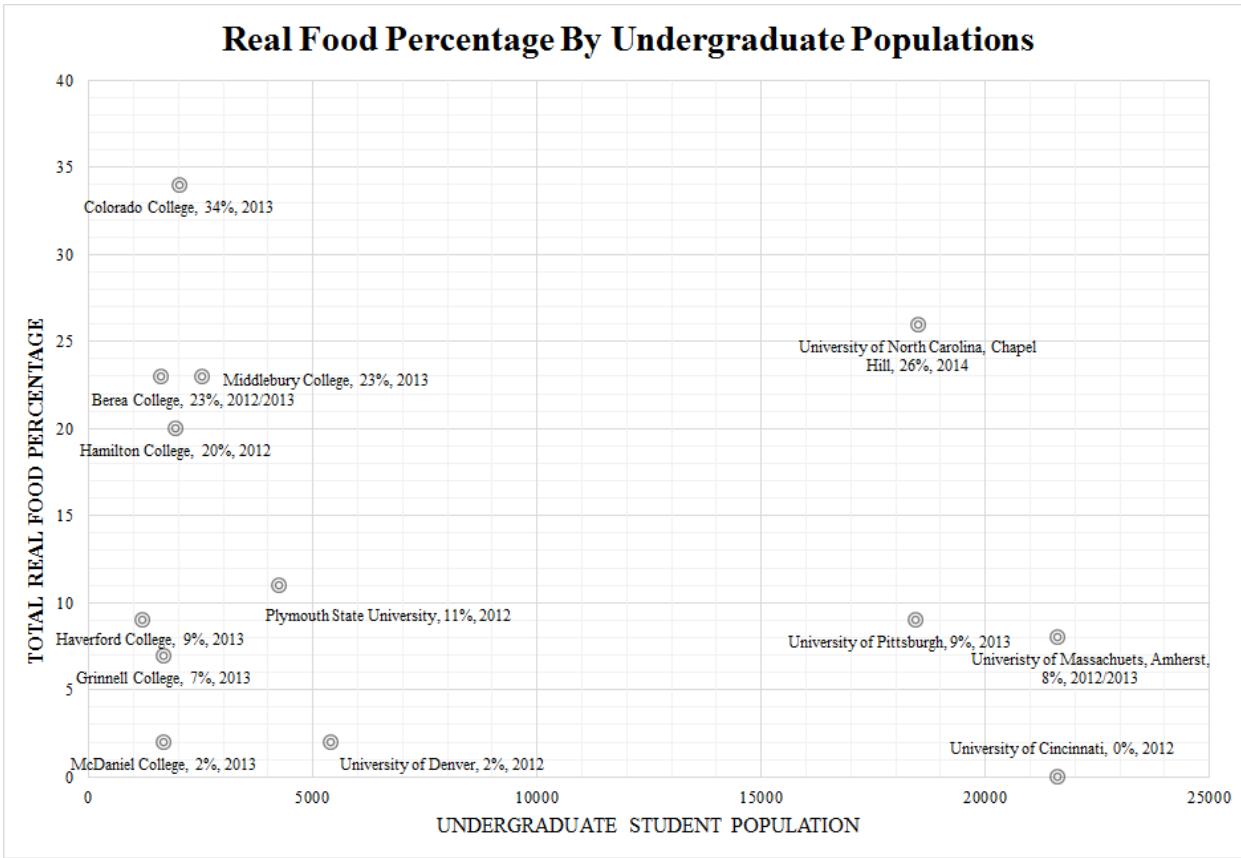


Figure 1. Comparison of Real Food Percentage And Undergraduate Populations of Schools That Have Completed the Real Food Calculator (Feb 2014). This chart compares the size of universities completing the Real Food Calculator to the schools’ real food percentage. This chart only includes the 13 schools that have fully completed the Real Food Calculator and are reported on the Real Food Challenge website for public access. The audits often took place during different years and does not include what months/seasons were audited. Therefore, the variation between the schools in years and season make comparison difficult but can be used as an indicator of progress thus far, but should not be utilized for clear comparison between schools without further information.

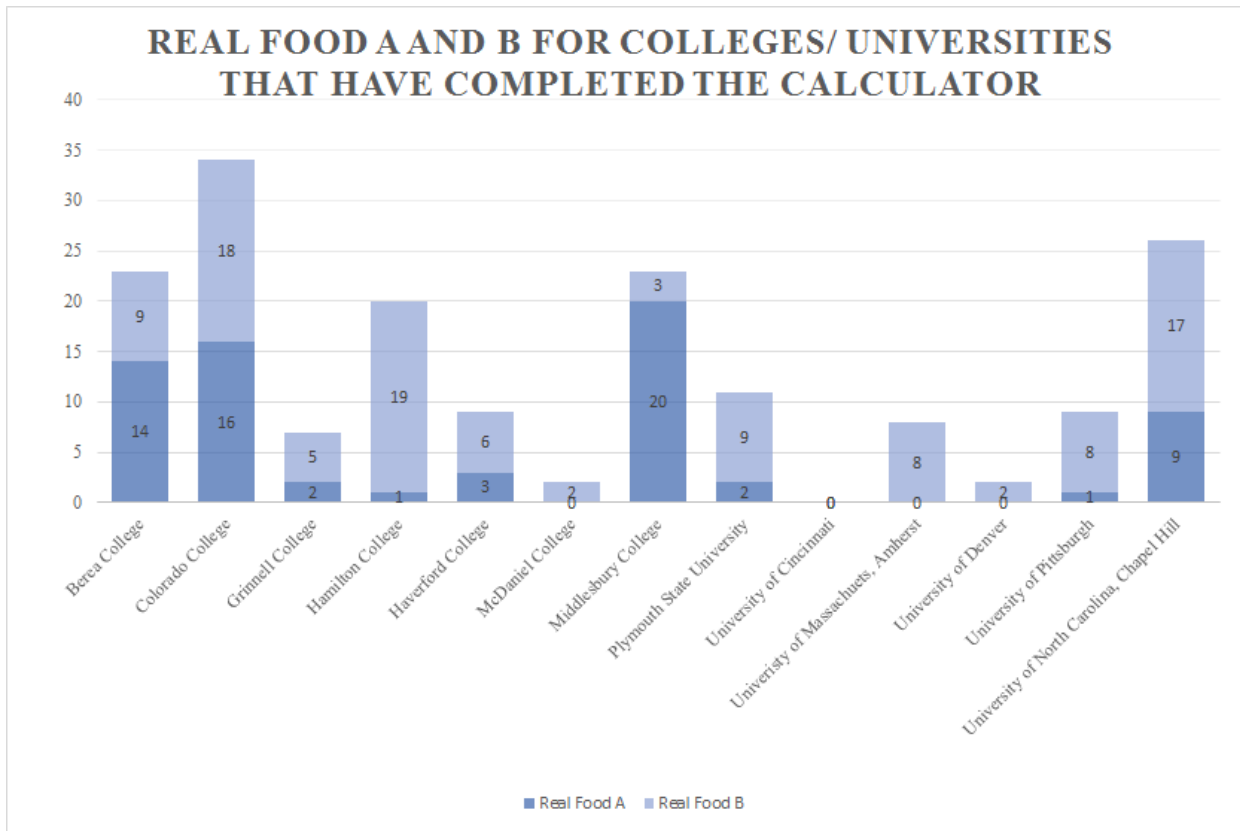


Figure 2. Comparison Between Universities Who Have Completed the Real Food Calculator and Their Real Food Percentage

(Feb. 2014) This chart compares the Real food A and B percentages for different schools that completed the Real Food Calculator. As mentioned in Figure 1, this is the only 13 schools who had audit information available on the RFC website and these audits took place during various years during unknown seasons.

Analysis

At the beginning of this semester, we felt uncertain about what the real food percentage would be for this particular assessment period because February is a non-harvest month and during it, seasonal vegetables are not as available. We expected the real food percentage to drop below that of the fall semester, however, the real food percentage calculated was 26%. As Table 2 shows, this percentage is about 3% higher than last semester's percentage and has doubled from the Fall 2010 and 2011 percentages. For this audit, 9% of the food purchased was Real Food A and 17% was Real Food B. The Real Food A percent is almost equivalent to the total real food percentage for Fall 2011. This was a significant increase to achieve in only four years, especially considering how much money 26% represents in such a large school; \$167,600 have been shifted to real food purchases (calculated using this audit's budget).

Figures 1 and 2 provide comparisons of the real food percentage for UNC and other schools that have completed the Real Food Calculator. Generally, it is more feasible for smaller schools to increase their real food percentages due to the corresponding increased ability of local farms to provide a high enough volume of food for these schools; overall, these institutions have a greater chance of being located near an appropriate supply of farmland to sustain themselves, and having the capacity to grow their own food. Despite these size disadvantages, UNC - with a student population of almost 20,000 students - has the second highest total real food percentage compared to the other universities with accessible data on their use of the Real Food Calculator, as presented in Figure 1. Colorado College, with a population of almost 2,500 students, has the highest percentage at 34%. To provide another perspective, of those schools, UNC has the third highest student population size. When analyzing this data further and comparing Real Food A and B percentages, UNC again has the second highest Real Food B percentage (17%), slightly behind Colorado College (18%), and the fourth highest Real Food A percentage (9%).

Carolina Dining Services has helped make UNC one of the most “real” schools using the RFC, despite the its larger population size. UNC dining made great strides in increasing the real food percentage within the past four years thanks to the support of CDS and their desire to achieve RFC’s standards of sustainability. We applaud CDS for the UNC’s progress and for their steadfast investment in the issue of accessibility to real food.

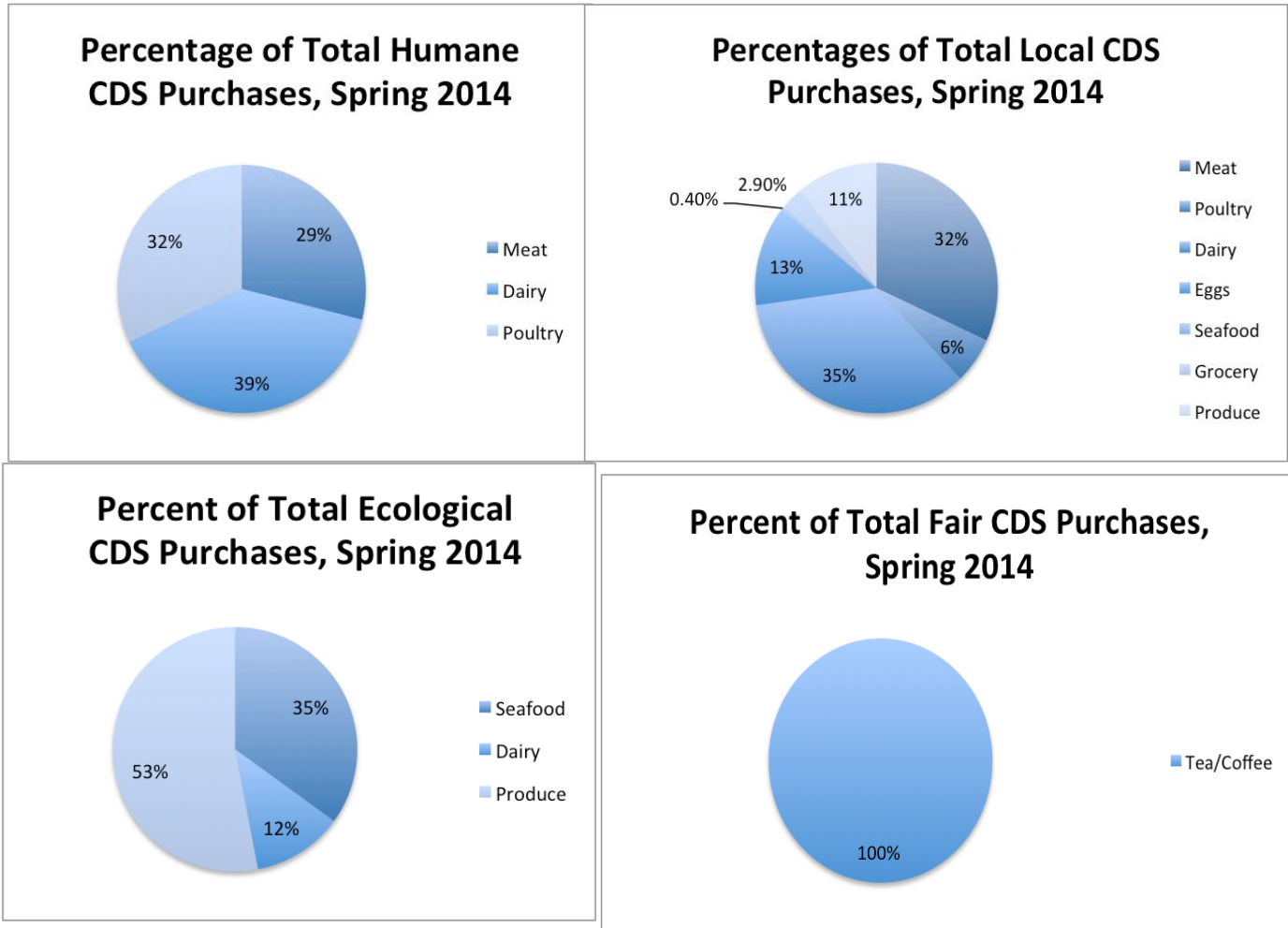
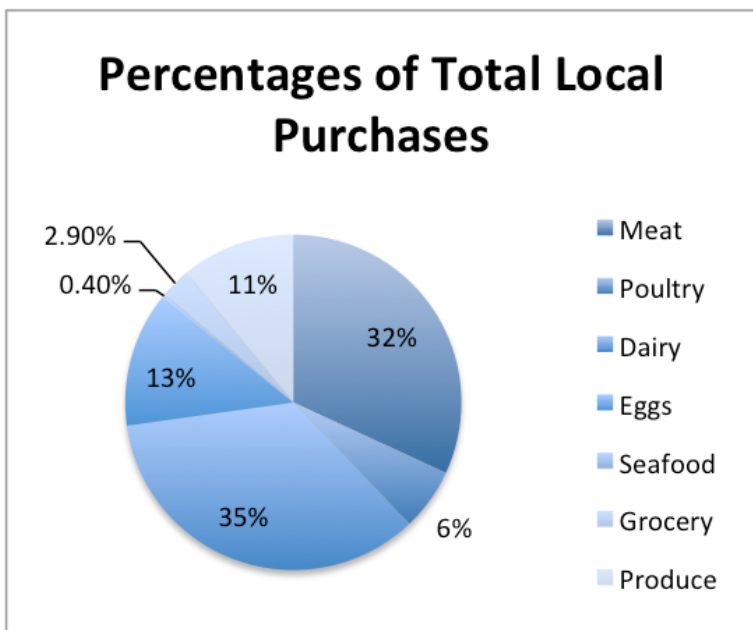


Figure 3. *Breakdown of Real Food By Category for CDS Spring 2014.* These pie charts display the categories and corresponding food percentages for each real food criteria for Spring 2014 CDS purchases. As shown there is a diverse array of local vendors CDS purchases from, while there is a lack of variety of food categories within the other criteria. A greater focus should be placed on diversifying humane, ecological, and fair purchases.

Although we have made great progress there is always room for improvement.



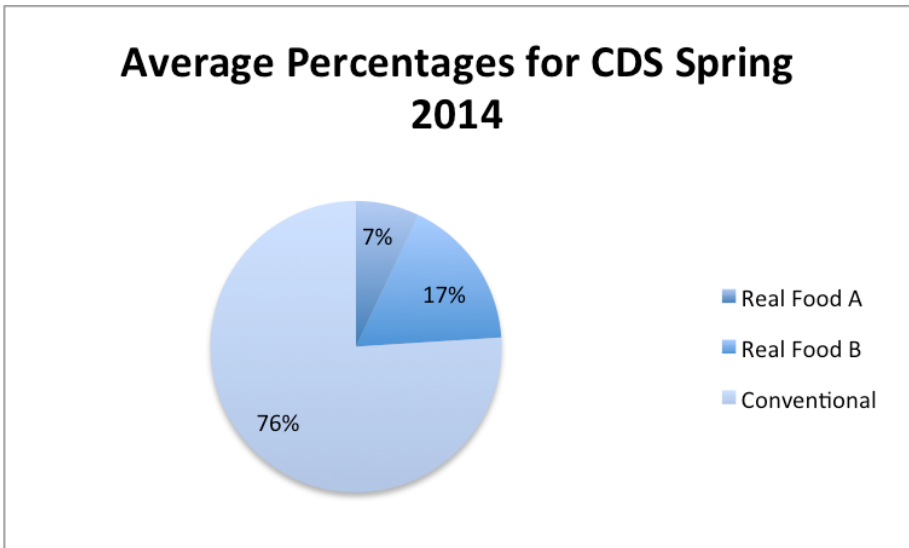


Figure 4. *Average Percentage of Real Food for CDS Spring 2014* This chart shows the average real food and conventional percentages for Fall 2013 and Spring 2014 audit periods combined. The total real food is 24% for this combined period, which is still a significant number. Although we have no other number to compare it to, it remains relatively high in comparison to past semester percentages and to other schools.

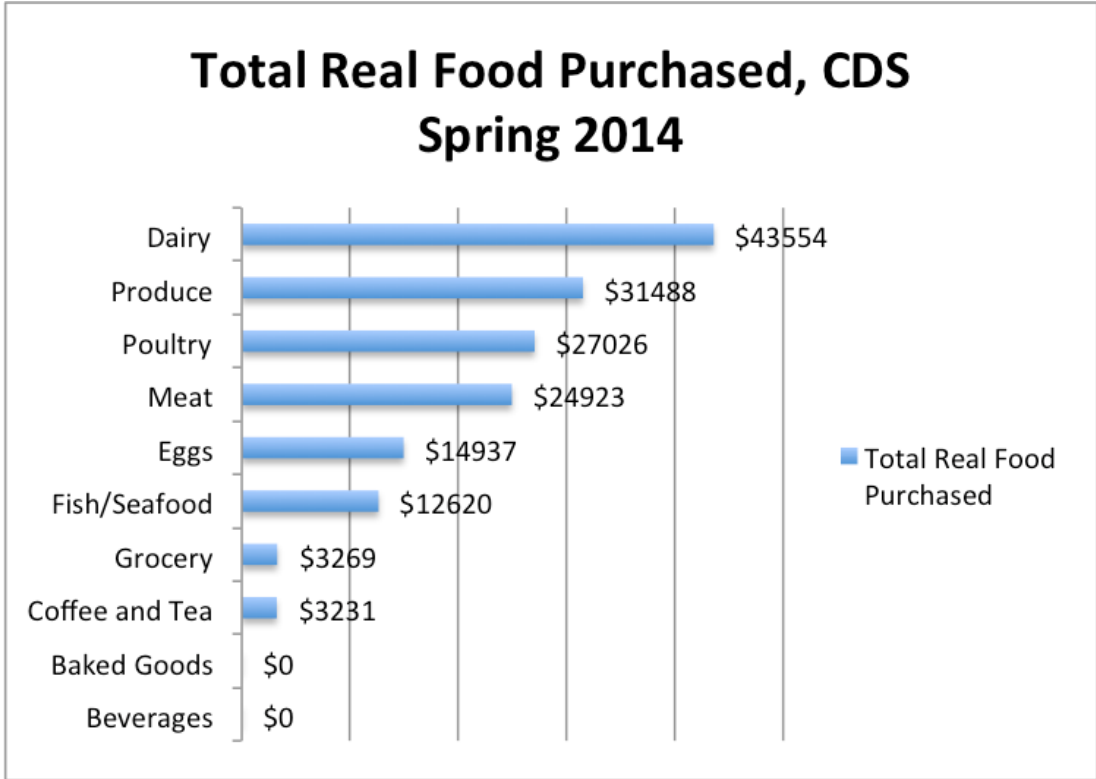


Figure 4. *Total Real Food Purchased in CDS for Spring 2014*. This chart shows the amount spent on the different food categories counted as real food.

Dairy

The top real food purchases for this audit period were dairy, produce, poultry, and meat products, respectively, as shown in Figure 4. Meat was 42% of CDS's Real Food A (RF A) percentage and Dairy was 57%. Last semester, 56% of Real Food B (RF B) was dairy, comprising mainly of Maola purchases, which counted as local. However, since last semester, Maola has received the Animal Welfare Approved certification, and thus now meets two real food criteria - local and humane - and qualifies as Real Food A. In addition, during this audit period CDS shifted to only purchasing Stonyfield organic yogurt. These dairy purchases explain the 45% increase in RF A for dairy since last semester.

Meat

There was a 2% increase in RF A for meat since last semester. This amount rose due to a return in purchasing from Grayson's Natural Farms like in the past, whose products are local and ecologically sound, and continuing purchases from Firsthand Foods, whose products are local and humane, as recommended in last semester interns report.

Produce

The RF B percentage for produce increased 3% this semester. This was slightly surprising since we had predicted produce to be difficult to serve in February given the seasonality, and thus expected a lower real food percentage. However, this percentage possibly increased due to a return to purchasing from Albert's Organics, whose products are USDA organic certified and thus ecologically sound. This is a notable switch that we hope continues in the coming year along with seasonal purchases during growing seasons from local vendors. CDS's choice to purchase organic produce during non-growing seasons exhibits the flexibility of purchases that can be used to promote real food purchases year-round.

Poultry

Another interesting observation made was an 11% decrease in RF B poultry from last fall. Some of the poultry purchases came from Sysco, CDS's main distributor, which has a minimal number of real food items, while some came from Inland Seafood from Springer Mountain Farms, which provides Certified Humane chicken. It is possible there was a decrease in real food percentages for poultry this semester if less was sourced from Inland Seafood than in the spring. It was difficult for us to quantify this difference, but such a change would explain the decrease in RF B.

In comparison, the Fall 2012 audit period had 30.58% of CDS's poultry purchases as Real Food A. While this real food percentage is lower than the past two audit percentages, it meets more real food criteria because the products were sourced from Albert's Organics, which qualify as organic and

Certified Humane. As a result, there was an increase in “real” poultry this semester compared to 2012, and it could be increased further with a movement back towards purchasing Albert’s Organics RF A poultry. We need to remember that while raising the total real food percentage is an vital goal of RFC’s, it is also important to achieve the highest RF A percentage possible.

Coffee/Tea

The RF B coffee and tea percentage increased from 0% to 38% since last semester because of a shift in purchasing to Starbucks Fair Trade coffee. This product is normally purchased by CDS, but September was an exception due to miscommunication during the purchasing period. However, CDS corrected the mistake and the RF B percentage has increased again.

Other purchasing changes made by CDS have led to a higher real food percentage. Some examples include purchasing local soy nuggets from Delight Soy in Morrisville NC, and buying more products from Inland Seafood listed as “Good Alternatives” by the Monterey Bay Aquarium Watch Guide.

Recommendations

Carolina Dining Services

Since we were unable to look at the prices CDS currently spends on purchased items, we are uncertain whether the costs of the following recommendations are comparable. However, we aimed to keep prices in mind when researching alternatives.

- We would like to commend CDS on allowing us to use velocity reports for Sysco and Freshpoint this semester. We believe to further decrease the time spent on inputting data and allow more time for research on products, recommendations, and community building, it may be helpful to have Sysco, Freshpoint, and Pepsi available as electronic velocity reports. This will greatly decrease time spent on the basic inputting step.
- We would also like to take this time to support CDS on their choice to continually purchase from Firsthand Foods and encourage them to increase purchases from this vendor. Perhaps including bacon and/or sausage in coming months as Firsthand Foods offers both meat selections.
- Also, we commend CDS for purchases from Albert’s Organics, Firsthand Foods, Stonyfield, Delight Soy, Maola, and Inland. In addition, we encourage RFC to continue purchasing Lipton tea since they plan to make 100% of their tea bags Rainforest Alliance Certified by 2015; allowing this product to count as Real Food B next spring.
- We also suggest returning to purchasing poultry from Albert’s Organics, as was done in 2012. This would increase the Real Food A percentage of poultry because the product is organic and Certified Humane. The Real Food B poultry percentage decreased from this audit period compared to last semester’s September audit period. In addition, as mentioned earlier, the Fall 2012 audit period had 0% Real Food B poultry, but 30.58% Real Food A where the majority of

their purchases were from Albert's Organics. Thus returning to Albert's for poultry purchases will increase the Real Food A percentage.

- To increase the produce percentage, we suggest purchasing local, organic vegetables from Crane Creek Valley Farm. We believe CDS purchased produce from this vendor in the past, and suggest returning purchases here to increase the Real Food A percentage. We also echo the suggestion that the Fall 2013 interns made to consider adding Foster Caviness as another vendor. Their produce is local and they are Good Agricultural Practices (GAP) Certified; their products would qualify as Real Food B.
- As shown in Figure 3, the real foods CDS purchases commonly fall in the Local criterion, with seven different food categories purchased from local vendors; however, not as many food categories qualify as humane, ecological, or fair. Therefore, we recommend focusing on expanding the supply of foods that meet these criteria in the upcoming semester. Local food is definitely an important criterion, but the others should not be discounted either and thus should be improved.

Fair

- The present fair trade percentage remains entirely dominated by Starbucks coffee. Diversifying this category will help to increase its growth and prevent the loss of an entire category through the lack of one purchase as it did last semester. With this in mind, we would like to increase the amount of real food in the grocery category by purchasing from Wholesome Sweeteners. These products can be purchased in bulk and many are certified through Fair Trade International, including Fair Trade Organic sugar packets, 1000 for \$38.93, or 50 lbs of Natural Sucanat for \$103.94, or a case of six 64 oz bags of Organic and Fair Sugar for \$56.37. These items could help to diversify both the fair trade category as well as the grocery category.
- Bananas are not only highly popular in the dining halls, but are also a fruit with a great deal of history in unfair labor treatment and wages (Equal Exchange, Green America). With this and the diversification of our fair food supply in mind, we recommend purchasing Fair Trade certified bananas through Equal Exchange. They have systems to connect large businesses and restaurants with fair trade bananas through their sales representatives, and can provide more accurate pricing. Equal Exchange also offers coffee, teas, and chocolate that in many cases are certified organic.
- In the same spirit as the previous recommendation, we would also like to state that Ben and Jerry's is transitioning almost all of their ingredients to fair trade ingredients throughout 2014 and could perhaps be showcased for select meals. Beyond Ben and Jerry's popularity with students, it would also increase Real Food B percentages for the fair category.

Beverages

- For the past four Real Food Calculation audit periods, 0% of Beverages purchased have been real food. Therefore, we believe this is one important food type for CDS to focus on.
- A beverage alternative to increase this percentage is Oogave Soda, which is certified as USDA Organic. This could be an alternative to the other sodas offered in our dining halls. Furthermore,

Oogave provides fountain soda machines with organic soda syrup, unique from most Pepsi beverages which are disqualified for containing high fructose corn syrup. With eight varied flavors, there is a wide variety of options available that will most likely please students. Perhaps having a themed meal focused on soda, or featuring the Oogave soda brand would spark interest in the student body. Several Oogave flavors are: Watermelon cream, Cola, Strawberry Rhubarb, Root beer, Vanilla Cream, and Mandarin Key Lime.

- Another possible purchase is Trader Joes Organic Instant Hot Chocolate. Since this product is organic, it would count as Ecologically Sound and thus Real Food B. A 10 oz pack of 10 packets costs \$3.29 while an equivalent pack of Swiss Miss costs around \$1.30. Trader Joes may be able to sell this item in bulk and thus at a reduced cost.

Baked Goods

- Another category in which UNC's real food percentage continues to be 0% is baked goods. Students really enjoy these items and we consider it important to provide them more "real" options.
- Rudi's Organic Bread is a great alternative bread choice to serve in the dining halls. There are a number of different varieties all certified USDA organic, ranging from Whole Wheat loaves, to sandwich flats, buns, and bagels. Also, a number of their organic breads that are organic and vegan. Beyond those considerations, Rudi's offers gluten free breads (though these breads are not considered organic). With these products already being sold in Whole Foods and Weaver Street Market in the area it should be possible to utilize them as a source for many "real" baked goods.
- An additional or alternative bread purchase, that can be made includes Alpine Valley Bread, which is USDA certified organic. Many organic products are made through this company, including 12 Grain with Omega 3 bread, Honey Whole Wheat, Country White, Dinner Rolls, and Hotdog and Hamburger buns. All of the 18 oz loaves can be purchased by boxes of 12 for about \$102.00 and could be a feature of certain meals, or perhaps purchased in bulk amounts at lower prices.

Grocery

- The grocery category consistently fails to meet real food criteria at only 2% Real Food B and 0% Real Food A within our dining halls. One of the most common grocery items that CDS purchases is pasta. We feel that a shift to organic pasta brands would be an ideal start for making our grocery percentages more "real." A particular brand we found during our research - Bionaturae - sells USDA organic pastas that meet Kosher dietary laws, and these pastas include a gluten-free version that also meets those standards. This private Italian company has their pasta brands sold all over the United States in stores such as Whole Foods, so they are accessible and would count as Real Food B. For USDA Organic pastas made by United States producers, we found the New York-based brand DeBoles; their gluten-free rice pasta is not organic however.

- To further enhance the amount of groceries that are real food, we support a shift in purchasing to a line of Arrowhead Mills organic products. They offer organic vanilla cake mix, organic chocolate cake mix, organic gluten free cake mix, organic gluten free white rice flour, and organic enriched unbleached white flour, all certified by the USDA. With the popularity of desserts in the dining halls, we believe that making these items more “real” could greatly benefit the dining halls. The flour comes in small bags, so they may not be able to completely replace the current flour purchases; however, splitting purchases between two or more brands may be highly beneficial in increasing the real food percentage.
- Furthering grocery real food percentages are condiments such as Annie’s Organic dressings which are \$4.49 for 8 oz including Sesame Ginger Vinaigrette, Roasted Garlic Vinaigrette, Pomegranate Vinaigrette Dressing, and Chile Lime Vinaigrette. By offering a wide variety of options, these dressings could become very popular with students in the dining halls.
- Still looking at condiments, we wish to reiterate a recommendation from the 2012 interns on Organic Heinz Ketchup, which is available in a Vol-Pak for bulk purchases.

Dairy

- One possible dairy avenue includes serving Maple View ice cream at the dining hall, since this item is local and would be Real Food B. Maple View caters and provides products for some grocery stores such as Harris Teeter and Kroger, so we believe the store has the capacity to serve our dining halls. Considering the price and capacity of Maple View Farms, this item would likely be served only occasionally by CDS. One possibility is serving this item at a Green Themed Meal or possibly once a month.

Real Food Challenge

- We are highly supportive of the movement that the Real Food Challenge is trying to create by getting large numbers of Universities and colleges to shift product purchases to more real food. However, we crave more interactions between these schools. We feel that the present lack of communication and connection between institutions creates a lack of perspective for the scope of this project. Not only would creating more open dialogue between schools create a national community, but it could also foster playful competition, which is highly effective in motivating schools to increase their real food percentages. As members of a school that is a part of one of the nation’s largest rivalries, UNC vs. Duke, there is no underplaying the energy and passion that is created between rivalries. That being said, there are often a number of collaborations between our Universities, and by touching on students’ passions for their schools, those collaborations often earn more support. By creating a community of schools that can ‘compete’ for success to energize students on the cause, we could create a more national movement instead of small movements isolated to individual campuses. Furthermore, understanding what occurs on other campuses allows students to apply these ideas to their own campuses instead of attempting to continually ‘reinvent the wheel’ at each school.

- While it is great that the Real Food Calculator provides criteria for quantifying “real food”, and the concept of “realness” can be vague, we do not agree with all of the criteria. One flaw with this system is that increasing real food meat purchases is far simpler than increasing the real food purchases of produce, as the humane criterion only exists for meat, poultry, and dairy. Therefore, produce has only three possible categories it can satisfy to be considered real food. In reality, shifting to a more vegetarian menu is more sustainable since it reduces the amount of land, food, and water required to produce the food. We make this argument because meat consumption is currently one of the most detrimental food consumption habits in the United States, and the current criterion fails to encourage a movement away from these habits altogether. We would like the RFC criteria to reflect a sustainable food system, which we feel would support product shifts towards more produce and plant-based diets and away from heavy meat consumption.
- Once we inputted a large quantity of items into the calculator, we found it difficult to look back through the purchases we made. It would be much simpler if we were able to have all of the inputted data already loaded upon opening the calculator. Furthermore, a search and categorization feature would be highly beneficial for the similar reason that large amounts of data are hard to look through all at once. By being able to isolate and look-up select products we would save a great deal of time that was instead used to manually scroll through all of the data.
- One notion about the Real Food Calculator that we had during our analysis was the need to display which specific vendors and brands did or did not meet certain criteria so that we could have a better visual of which businesses to buy more or less food from. As the calculator expands, we would like to see the development of pie charts that could show the percentages of real food criteria met by individual brands or vendors. We recognize that the calculator online software is still rather new, and we have the hope that in the coming years it can make major progress as a helpful system for assessing real food purchases. With this in mind, we do not expect that the calculator will be able to take this suggestion soon, but desire that RFC will aim towards this goal in the future.

Sources of Error

While we tried to minimize as much error as possible during our use of the Real Food Calculator, there were still sources of error present in our calculations and in the Real Food Calculator process itself.

First, we had a concern of accuracy because the real food percentage only covered the month of February, but was extrapolated as a projection for the entire spring semester. There may have been variations in food availability and weather from one month to another, which possibly affected the purchases made for the dining hall and thus the real food percentage as a whole. Also, there could have been different Green Themed Meals - monthly dining hall dinners that highlight sustainable aspects of food - that involve purchases of grass-fed beef, local products, or other “real” foods that if done outside the auditing period were not represented in the real food percentage. Therefore, the accuracy of our calculations may not indicate precision. Another concern, which we did not witness with CDS but may

be present in other schools, was that schools plan more real food purchases and events during the auditing period than the remaining part of the school year. This would skew the percentage calculation and misrepresent the true sustainability of the dining halls.

This semester, we uploaded a velocity report from Sysco into the Real Food Calculator, which contained an aggregate amount of purchases made from Sysco during the audit period. Unfortunately, detailed information provided in the velocity report, such as the brand, was not included in the data when uploaded onto the Real Food Calculator. Also, a “.0” was added to the end of each product code for the RFC data and thus not recognized by the Real Food Calculator. Thus we had to go through all the Sysco inputs and delete the zeros. Although the velocity report streamlined the process, this did make it less efficient. In addition, the velocity report included non-edible purchases such as cleaning supplies and aluminum foil in the data uploaded to the RFC website. We addressed this issue by working through the document and deleting non-food purchases from the calculator so as not to include them in the overall real food percentage. Additionally, we manually adjusted the total budget spent for the audit period; due to the possibility of human error and inaccuracy, the edited budget potentially contained a higher monetary amount of purchases than actual amount of food purchased. Another explanation for why the total budget was higher than actual amount could be that in the beginning we had to individually locate and type up the invoice number for Pepsi and Maola items that we did not have invoices for. Its possible we accidentally listed an invoice number multiple times and inputted duplicates of invoices without realizing it.

During our entry process, we noticed the amount of food purchases entered into the calculator for each food category were comparatively higher than the actual amount purchased. Once we finished inputting items into the system, the calculator a percentage higher than 100% for the budget entered. We attributed this occurrence to human error, despite the care we took in adding each item into the system, and in manually altering of the budget when removing non-applicable Sysco purchases.

Media Outreach

As previously mentioned, we are the fifth set of interns to work on this project. The work and time that earlier interns invested in the calculator allowed this venture to develop into a far greater endeavor than it was originally. Each year, interns streamlined the system by focusing less on the tedious inputting of invoices and more on the analyzation of the purchases themselves and making recommendations for the future. We drastically reduced the time spent inputting items this semester through the use of velocity reports provided to us by CDS for both Sysco purchases and Freshpoint purchases; we also had access to electronic Sysco velocity reports. These new features quickened the entry process and demonstrated the continual growth of efficiency within the internship.

During the month of February, we focused our energy into developing a larger awareness within our campus community about the calculator program while also connecting to other college communities working on this project. Two of our most successful methods of connection with the community were facilitated through social media, specifically the development of a Facebook page and a blog. These forms of communication improved the accessibility of UNC Real Food Calculator information, as we prioritize the transparency of CDS in this program.

Our first social media presence, formed on Facebook, can be found as “UNC Real Food Calculator.” We used this page to promote events, our findings, and our blog. Over the course of the semester we received 61 ‘likes’ (and counting) meaning that our statuses appear on those 61 individuals’ homepages. In addition, our Facebook page allows greater insights into the activity and traffic that our page receives. Our first post on Facebook reached 35 individuals and our most popular post, about the RFC Green Theme Meal, reached 105 individuals. Therefore, 105 individuals saw mention of this post about our project, in large part due to other individuals sharing this post, or posted additionally on their page to their followers. The next post that reached individuals - a post about the transfer from Pet Milk to Moala - reached 85 individuals. This post was shared by Carolina Dining Services, which allowed for this larger increase in view. These important trends aid us in understanding what types of posts are most effective within this social media outlet and how future interns can use the UNC-RFC Facebook page to reach the most people. Posts concerning direct events or applicable information (such as a transfer of purchases that one can see when they enter the dining hall) seem to create the most traffic; we expect this, as direct events are easier to conceptualize and connect directly to the individual as opposed to abstract numbers. Furthermore, patterns in post-sharing provided useful insights into behaviors, and how to reach a larger volume of people. Creating and maintaining connections that support this sharing of information is crucial in creating a wider social change. Also, because Facebook is a significant source for college students to receive news and information about events, this is an effective tool to reach the vast UNC study body.

The next social media site we developed was a blog created within the FLO website. We used this forum to elaborate on information because Facebook is not an ideal location to post paragraphs, but rather quick updates. Our blog allowed us to thoroughly discuss various aspects of the internship from what real food is, to what has happened in past semesters, to product shifts, to our events. This space gave us the opportunity to provide a greater reservoir of information, which we believe is truly important in providing transparency for the data collected thus far through this internship. We strive to connect to the individuals truly affected by this work - the students - and to educate them about the foods they consume.

In a further step to connect to the student body, we worked with CDS to create a Green Themed Meal focused on the Real Food Challenge. This event took place from 4:30 PM- 8:00 PM in the Top of Lenoir on March 24th. For this event, we set up a table in the dining hall with large flyers containing basic information about the Real Food Challenge and the steps UNC has taken with the calculator. We also provided small handouts with our Facebook and blog URL’s. Additionally, at the table we used a projector to display statistics from previous semesters’ results as well as facts about the Real Food Challenge. Carolina Dining Services spotlighted several dishes that day: Sustainable catfish, local collard greens, sweet potatoes, soy nuggets from Delight Soy, eggs, and hoop cheese (used to make macaroni and cheese), and local and grass-fed burgers. All of these items had a sticker on the glass over them explaining the product and the real food qualifications they met. We showed information regarding the Real Food Challenge on tables and large boards in the center of the dining hall. Several students approached the table and asked us to share project information and flyers with them. We interacted with a vaster audience of students by handing out small flyers as students were exiting the

dining hall. This event gave us an opportunity to thoroughly engage with the community which had been largely absent in previous semesters. Many of the students we spoke with were very receptive and interested in our work, and many voiced a complete unawareness of this project before the event. From March 23rd - March 24th (the day of the event) we gained 12 'likes' on Facebook, growing over 25 % within one day.

This Green Theme Meal particularly sparked the interest of one writer for the Daily Tar Heel which led to an article, "Campus Dining Gets More Sustainable," published on April 21st in print. . This means of communication was highly effective in getting the news out on our project and the work that we accomplished within the dining halls and we felt very encouraged by the writer's interest. We would like to comment that we feel this article downplayed the growth that Carolina Dining Services and the past interns have created, taking out of context the significance of 26%, especially when considering where other Universities currently are. There is certainly room for improvement, but we would like to stress all of the success that has already been created over the past four years.

Finally, our last large community building event that occurred this semester took place outside of Chapel Hill. Jill and Ali, along with a past intern, Marisa, went to the University of South Carolina for the Real Food Challenge Southeast Retreat where we interacted with students from University of South Carolina, UNC- Asheville, Warren Wilson, University of Georgia, Georgia College, University of Alabama and Auburn University. This constructive event created connections between students on various colleges that were all striving to develop a more sustainable food system on their campuses. This event reinforced the work being done on UNC's campus to become a part of a larger movement. While UNC is farther along with both our percentage and support than any of the schools represented at the Southeast retreat (with the exception of Warren Wilson), it is important for us to focus on the larger movement supported through this program. Students across the regions are working together to change the food system and the strength of these connections and collection of voices cannot be overemphasized.

Future

Looking forward, there exist a number of areas for growth and development beyond the recommendations made to Carolina Dining Services and the Real Food Challenge that apply directly to this internship. We completed the evaluations for two different months that represent a harvest and non-harvest month in North Carolina. The data provided from the calculator during these two months, September and February, provide a more accurate representation of the amount of real food being purchased through Carolina Dining Services. While many conclusions can be drawn by analyzing these months, we cannot project these representations across a whole year of purchasing at CDS. The most effective way to assess a year of purchasing at CDS would be to analyze an entire years worth of purchases. While this task sounds daunting, the process has grown simpler over the past four years. If future interns are able to effectively upload velocity reports from Sysco, Freshpoint, and Pepsi, the item entering process would be hastened further. Additionally, this task would split between both of the semesters, each with an increasing amount of interns. The calculator program will progressively make research simpler as each food purchase is 'remembered' by the program through its product code; the

continuity of month to month and year to year purchases will greatly reduce time spent inputting every field and researching each item.

A great deal of positive growth and development has occurred at UNC thus far and we would like to create larger acknowledgment of this. Beginning this next semester we would like to bring past semester interns together to discuss this work with Chancellor Folt and establish this work as essential to UNC. As a junction of a student movement, UNC corporation, and academic field, we feel that we are a notable example of the work and progress being done on campus. By creating more widespread support and acknowledgement of the progress that has been made we can more readily establish ourselves within the greater context of the nation. We look forward to this great next step!

Furthermore, we want to stress the need to remain connected with other universities and colleges working on this project, both those that have completed the calculator and those in the process of completing it. As mentioned before, focusing on increasing CDS's real food percentage is crucial to our institution's progress, but this should not completely overshadow the larger work of RFC in colleges across the country. A popular saying of the local food movement "Think Global, Act Local" speaks to the purpose of the calculator project. While our work focuses on one college campus within the entire country we are part of a larger movement of students who desire more sustainable food systems. After speaking with several other schools in the Southeast, we learned that UNC serves as a model of success for the calculator program. This institutional status should not be taken with complacency and we must build a stronger desire to improve while advising other schools in the process. A constant line of communication between RFC schools could unify this movement. (For more specific focus points for the future of the internship refer to Appendix D.)

Once again, we would like to commend Carolina Dining Services on all of their work which allowed for the growth thus far. We also challenge them to continue on the rapid growth pattern being established each semester with a goal of closer to 30% in the coming semesters. We are optimistic that Carolina Dining Services will meet and surpass this goal!

Appendices:

Appendix A: The Importance of “Real Food”

Over the course of the food movement, the phrases fair, local, ecologically sound, and humane, have entered into the vocabulary of many with varying degrees of positivity. There has been an increase in pushback to the movement and many merely see it as a fad that remains inaccessible to many people. We feel that this project exemplifies the strength, importance, acceptability, and overall effectiveness of the movement.

The RFC criteria indicate important sustainable practices that are increasingly interrelated to one another and need to be treated as such to create a truly sustainable food system. By focusing on these criteria, we support food that fosters community, maintains healthy ecosystems, and can therefore be sustained over time. As the USDA economic research report from 2010, “Local Food Systems: Concepts, Impacts, and Issues” states, “Empirical research has found that expanding local food systems in a community can increase employment and income in that community” (Martinez et al.). This research reinforces the claims that communities can be developed and preserved through increased local purchases, and that community support is crucial in developing a system that can be maintained for many years. Beyond fostering community growth, local food can sustain genetic diversity, as long as the produce being grown is local to the area. The Food and Agriculture Organization of the United Nations wrote in “What is Happening to AgroBiodiversity” that “the main cause of genetic erosion of crops- as reported by almost all countries- is the replacement of local varieties by improved exotic varieties and species.” Local purchases help to develop a sustainable system in multiple ways, and this interplay is true for all indicators previously identified as criteria for a sustainable system.

The ecologically sound criterion encourages environmental processes that uphold ecological integrity. The Real Food Challenge allows for several different qualifications to classify as ecologically sound, such as Salmon Safe, Food Alliance Certified, Fair Trade Certified, and more. The products purchased by CDS fell dominantly into USDA organic and Monterey Bay Aquarium Regional Seafood Watch Guide “Best Choices” or “Good Alternatives.” These qualifications support practices that allow for the continual use of a healthy biosphere. “The USDA organic seal verifies that irradiation, sewage sludge, synthetic fertilizers, prohibited pesticides, and genetically modified organisms were not used” (Organic Standards). This means that organic practices result in no use of GMOs and practices that prevent most pesticide and synthetic fertilizers, as opposed to natural manure. These practices result in land that is often more productive year to year as well as decreased runoff into streams from chemicals (Conan). Beyond these obvious benefits, less apparent side-effects remain hidden within our current agricultural system and have yet to be researched. “The Plight of the Bees,” an article in Environmental Science and Technology, analyzes the cause of the colony collapses and points to the increased use of pesticides as a possible cause (Spivak). With much uncertainty, it is important to support practices that are known to create more sustainable systems such as organic farming methods and purchasing fish that are not “fished to capacity, or overfished” (Monterey Bay Aquarium Seafood Watch).

Along with these ecologically sound methods are humane practices which apply to the treatment of live animals within food systems. Ranging from Animal Welfare Approved to Grassfed, humane certifications signify the use of ecologically sound practices applied at a natural pace. These practices ensure that meat is made at a sustainable rate as opposed to the unsustainable rate that meat is normally produced at in the United States with the use of corn subsidized by the Farm Bill (Desjardins). The subsidies of the corn bill allows for greatly reduced prices in meat that do not accurately reflect the input costs. By using sustainable methods, the cost is more reflective of the materials required to produce the meat. Additionally, meat and dairy production is more often sustainable when kept within local communities; when people no longer detach themselves from the production of their foods, this can foster humane treatment between beings. Ultimately, the results are a community-based food system and environmental integrity.

The final criterion for a sustainable system in our research project is fair. This criterion indicates the fair treatment of workers who take part in the growth and collection of food products. The Coalition of Immokalee Workers (CIW) is an activist group of farm and community workers who strive for better treatment of food company employees. The CIW have “uncovered, investigated, and assisted in the prosecution of numerous multi-state, multi-worker farm slavery operations across the Southeastern U.S., helping liberate over 1,200 workers held against their will” (Coalition of Immokalee Workers). These blatant human rights abuses occur frequently in the United States food industry and across the world. Therefore, by supporting fair food, the established economic system calls for the fair treatment of every individual involved. This ideology is essential in any industry that hopes to sustain itself.

By advising Carolina Dining Services to utilize these criteria as a means of supporting a sustainable food system, we are shifting thousands of dollars to a more sustainable future. This global movement requires cooperation from every facet of the food system, from consumers to corporate food. Through the use of the Real Food Calculator, we are able to aid CDS in understanding their current standings and potential for growth within this movement.

Real Food Guide

version 1.0

Local & Community-Based	Fair	Ecologically Sound	Humane
Green Light: best represents standard and counts as real food			
<p>Producer¹ must be a privately-traded or cooperatively- owned business that grosses less than 1% of the industry leader.</p> <ul style="list-style-type: none"> Independently owned businesses must have full autonomy and decision-making power about business processing & distribution practices. All production, processing, & distribution facilities controlled by the producer, its parent or family companies, and contract farmers must be within 150 miles of the institution. <p>Products from cooperatively owned businesses must have been produced, processed, and distributed within 150 miles of the institution. Must be a true co-op rather than contractors to a larger corporation</p>	<p>Products with the following certifications:</p> <ul style="list-style-type: none"> <i>Ecocert Fair Trade Certified</i> Fair Food Standards Council Fair Food Program (Coalition of Immokalee Workers tomatoes) <i>Fair for Life Certified</i> by IMO <i>Fair Trade Certified</i> by Fair Labeling Organization (FLO) <i>Fair Trade Certified</i> by Fair Trade USA* <i>Food Justice Certified</i> by Agricultural Justice Project <p>Single Source product that can confirm in writing the following for ALL employees:</p> <ul style="list-style-type: none"> Living wage Right to benefits Day of rest and and overtime Seniority Equal pay for equal or equivalent work Right to return to seasonal position Right to freedom of association 	<p>Products with the following certifications or claims:</p> <ul style="list-style-type: none"> <i>Biodynamic Certified</i> by Demeter <i>Food Alliance Certified*</i> <i>USDA Organic**</i> <i>Protected Harvest Certification</i> <i>Rainforest Alliance Certified**</i> <p>Fish Only:</p> <ul style="list-style-type: none"> <i>Marine Stewardship Council</i> Monterey Bay Aquarium Seafood Watch Guide "Best Choices" (Regional Guide or Buyer's Guide) <p>Coffee Only:</p> <ul style="list-style-type: none"> <i>Bird Friendly</i> by Smithsonian Migratory Bird Center <p>Produce grown in a farm or garden at the institution, in which the researcher can confirm the use of organic practices</p>	<p>Products with the following certifications or claims:</p> <ul style="list-style-type: none"> <i>Animal Welfare Approved</i> by Animal Welfare Institute <i>Biodynamic Certified</i> by Demeter <i>Global Animal Partnership</i> Steps 4-5+ <i>Certified Humane</i> by Humane Farm Animal Care^{2,3}

Yellow Light: counts as real food, but not as strict as Green Light			
<p>Producer must be a privately-traded or cooperatively owned business that grosses less than 1% of the industry leader.</p> <ul style="list-style-type: none"> Independently owned businesses must have full autonomy and decision-making power about business, processing, & distribution practices. All production, processing, & distribution facilities controlled by the producer, its parent or family companies, and contract farmers must be within 250 miles of the institution. Products from cooperatively owned businesses must have been produced, processed, and distributed within 250 miles of the institution. Must be a true co-op rather than a contractor to a larger corporation <p>For multi-source or multi-ingredient products, producer and 50% of the ingredients⁴ must meet all of the above criteria.</p>	<p>50% of the ingredients in the product meet the above standards.</p> <p>Products with the following certification:</p> <ul style="list-style-type: none"> <i>Fair Trade Certified Ingredient</i> by Fair Trade USA 	<p>Products with the following certifications or claims:</p> <ul style="list-style-type: none"> <i>Fair Trade Certified</i> by Fair Trade USA* Monterey Bay Aquarium Seafood Watch Guide "Good Alternatives" (Regional Guide or Buyer's Guide) <i>Salmon Safe</i> <i>Transitional Organic</i> by OIA <p>For multi-source or multi-ingredient products, producer and 50% of the ingredients⁴ must meet all of the above criteria.</p>	<p>All Species:</p> <ul style="list-style-type: none"> <i>Certified Organic</i> by USDA-AMS^{5,6,7} <i>Food Alliance Certified*</i> <i>Global Animal Partnership</i> Step 3 <p>Ruminants Only:</p> <ul style="list-style-type: none"> <i>AGA Grassfed</i> "Process Verified Grassfed^{8,9}" by USDA-AMS and either "Never Ever 3 by USDA-FSIS" or "Naturally Raised" by USDA-AMS <p>Hogs Only:</p> <ul style="list-style-type: none"> <i>Certified Humane</i> by Humane Farm Animal Care <p>Egg-Layers Only¹⁰</p> <ul style="list-style-type: none"> <i>American Humane Certified</i> (no enriched cage eggs) <p>"Cage-Free" by USDA-AMS</p>

Red Light: good start but not enough to count as real food. Product can meet real food criteria in other categories.			
Producer is independently or cooperatively owned but does not meet the above criteria.	Products with the following certifications: <ul style="list-style-type: none"> Rainforest Alliance Certified* by Rainforest Alliance Food Alliance Certified* Products that have been processed or shipped by companies with fair labor conditions comprised of ingredients with unconfirmed labor standards.	Products with the following claims or certifications <ul style="list-style-type: none"> "Raised without Antibiotics" "No Antibiotics Administered" "Never Ever 3" "Naturally Raised" by USDA-FSIS GAP Certified (Good Agricultural Practices) by USDA 	Products with the following claims or certifications: <ul style="list-style-type: none"> Global Animal Partnership Steps 1 & 2 "Grass fed" by USDA-FSIS (Ruminants) "Gestation Crate Free" (Hogs) "Free range" by USDA-FSIS (poultry) "Free roaming" by USDA-FSIS (poultry) "rBGH-free/rBST-free" by FDA (dairy)
Red Light: claim does not necessarily have substance, not real food. Product can meet real food criteria in other categories.			
		Products with the following claims: <ul style="list-style-type: none"> "Natural" "GM Free" "GMO Free" 	Products with the following certification: GAP Certified (Good Agricultural Practices) by USDA
Red Light: no way, not real food. Product can meet real food criteria in other categories.			
Producer does not meet any of the above criteria.	Multi-source, highly processed products with no certification.	Products with the following claims: <ul style="list-style-type: none"> Monterey Bay Aquarium Seafood Watch Guide "Avoid" (regional guide) Confinement or Battery Cages	Confinement or Battery cages, enriched cages, gestation crates, veal crates

- Producer is known to be found guilty of, been found guilty of, or
- Producer is known to be a Concealed Producer
- Product is likely to contain GMOs
- Product contains any of the following: Hydrogenated Oil (trans-fats), Pr Blue #3

Legend

Italics = There is strong, third-party verification
 "Text with Quotes" = Industry claim
 * = Certification/claim occurs in more than one category
 ** = Needs verification that it is not from a factory
¹ Producer is defined as the entity that produces the product, not a corporation, etc.
² For poultry, verify "Free Range" standards
³ Does not include hogs (*Certified Humanely Raised*)
⁴ Ingredients are defined as raw ingredients from the supply chain to qualify as Real Food.

*provided by the Real Food Calculator website

Appendix C: Problems in Recommendations for Institutional Purchasing at University of North Carolina

Purchasing for large institutions such as the University of North Carolina involve some of the following issues:

- Carolina Dining Services will not execute a product shift unless the new purchase will create a 1% increase in the total Real Food Percentage. This creates the need to target large purchases and alternatives instead of examining multiple smaller purchase shifts such as only lettuce, instead looking for sources that can provide multiple types of produce.
- An extension of the first point, sourcing from small vendors is very difficult within the corporate food model. Where there may be a great local vendor, depending on their size and ability to purchase the lofty insurance and certifications required by CDS, we may not be able to purchase from them. This issue is precisely why cooperatives such as Firsthand Foods that sources from many small local farms and then sells to larger institutions are so important and helpful.
- Carolina Dining Services serves a high volume of students and faculty daily and therefore their purchases must be made from companies that can support this large

population. This greatly limits purchases from companies that are starting up and smaller local farms/companies who are instituting sustainable practices but are unable to provide for such a large population.

- Due to recent changes in Armark policy that went into effect Fall 2013 semester the interns are not able to see individual prices for products purchased by CDS but instead only large purchase totals. This hinders our ability to provide recommendations in similar price brackets to current purchases.
- It can also be difficult to find products recommendations that are produced for bulk sale instead of individually wrapped product, since for example CDS will be more likely to buy bulk ranch dressing instead of individual 8 oz containers given its lower price and greater efficiency.
- Buying from one vendor that involves one order for many different types of food is far more appealing for CDS, such as Sysco, than purchasing from many vendors for each type of product. Suggestions made outside current vendors that cannot provide a variety of products are far less appealing.

Appendix D: Focus/Recommendations for Future Interns

	Audit	Marketing and Outreach	Cross-Campus Connections
Real Food Challenge	<ul style="list-style-type: none"> • Work to ensure streamlined process for inputting data from electronic velocity reports into calculator • Discuss concerns with current criteria- the strong emphasis on real food in meat, dairy, and poultry, and the limitations of produce to be considered “real food” 	<ul style="list-style-type: none"> • Recommend Real Food Challenge provide links within each institution profile that are more related to that schools work within the Real Food Challenge. As opposed to the UNC institution page being linked to UNC.com, it should instead be linked to the UNC RFC blog • We strongly recommend at least one intern participating in the Real 	<ul style="list-style-type: none"> • Work to further foster relationships with students working on the Real Food Calculator at other schools. There was much discussion of calculator working groups that would connect schools, and while we voiced our support and desire to be a part of this process we never saw any results from it. • Analyze the current number of schools with data available on the RFC website and explore the question of why 140 institutions are currently using calculator but

		<p>Food Challenge retreat</p> <ul style="list-style-type: none"> • Create a more fluid dialogue with RFC that allows for the discussion of how to connect universities/ colleges and means to foster that community 	<p>only 13 schools have information on their assessment available to the public.</p> <ul style="list-style-type: none"> • Support the development of friendly competition between schools using the calculator to become the most “real” to promote student involvement. • Beyond that question we have a number of other questions to look further into: <ul style="list-style-type: none"> ○ Where is the data from schools who have signed on to the Real Food Challenge? ○ With many schools on the west coast signed on to the challenge, particularly California public schools, why is there not data available for California institutions? ○ What is occurring at other Aramark schools? ○ How can UNC promote change and growth at other Universities in the country? ○ If Duke has completed an audit why is no data available for them? ○ What is preventing schools from completing their audits? ○ What percentage of each category of product and real food is part of other schools real food percentage? ○ What seasons were analyzed at other Universities/ colleges?
<p>Carolina Dining Services</p>	<ul style="list-style-type: none"> • Focus on obtaining electronic velocity reports from Sysco, Freshpoint, Pepsi to streamline inputting process • Discuss with CDS their feelings on the current criteria and if they feel the produce/ meat definition creates more emphasis on one than the other in their opinion and where they feel emphasis on purchasing is currently(on increasing Real Food A, on diversifying categories, on increasing grocery, on 	<ul style="list-style-type: none"> • Continue work with Kaitlyn and RJ on connecting outreach for UNC RFC internship with that of CDS; they are very supportive of fostering this relationship. • Utilize this relationship and encourage another Green Theme Meal with the table in a more prominent location. This was a very successful event last semester. • Promote labeling of real food items, making it very OBVIOUS, this can really 	<ul style="list-style-type: none"> • Support CDS in developing dialogue with other schools, both schools that are doing things that may be very helpful to UNC, and those that UNC may help to do better things in the future.

	<p>reaching 30% real food, etc) so as to make appropriate recommendations and goals for CDS</p>	<p>promote awareness of our cause</p> <ul style="list-style-type: none"> Consider a media campaign together including a tweet @CDSatUNC about Real Food Calculator, or a voting system on the RFC blog that will result in a prize for promoting traffic to both sites. Facebook can also be a source to utilize 	
<p>Outside Sources/ Individual Research</p>	<ul style="list-style-type: none"> USE THE GOOGLE DRIVE- all of the information that we could collect from past internships is located in this drive as well as all of the work done this semester. It is a great archive and allows for strong collaboration. Spend a significant amount of time compiling recommendations for product transfers specifically focusing on beverages, baked goods, and grocery items. Acknowledge in researching individual products that if the information is not readily available then the product is not transparent and therefore not “real food” 	<ul style="list-style-type: none"> Consider the creation of an UNC RFC twitter Continue to utilize both the blog and Facebook and don’t allow them to lose momentum Continue collaboration with FLO, they are a student organization HIGHLY interested in your cause Utilize Food Day- it is a great space to promote conversation We are hoping to widen the breadth of the outreach of UNC RFC in the coming semesters reaching out to Chancellor Folt to create acknowledgement and support of all the work that has been done within this internship thus far. We desire to create a movement and awareness of the work being done on the campus and would love your support and voices in this process. 	<ul style="list-style-type: none"> Work to foster relationships with other Universities outside of the context of RFC
<p>Methodology</p>	<ul style="list-style-type: none"> Maintain an extensive time-log to keep everyone accountable for their work Keep up heavy communication during audit periods so as not to have data inputted twice, too many people working within the calculator can create more issues than benefits often Type up questions that arise as you move along so 	<ul style="list-style-type: none"> Attempt to put up Facebook statuses 3-4 times a week and blog weekly Coordinate posts with CDS 	<ul style="list-style-type: none"> Attend the RFC retreat in the Fall semester

	<p>that you are not stuck at the end of the semester attempting to remember</p> <ul style="list-style-type: none"> ● Issue with inputting Firsthand was the use of farm numbers instead of products numbers so multiple products have the same number, therefore we used product name abbreviations within the product code to differentiate ● We never heard back from Bimbo Bakeries- if purchases there continue next semester really try to develop a dialogue with that company 		
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Beyond the above mentioned recommendations and areas of focus, future reports will be formatted in a more academic format. We hope work accomplished within this internship will be more fluid between semester and years, and that the internship establishes its place within the larger context of the work in this field.

Additional links:

The Real Food Calculator Blog: <http://flofood.weebly.com/real-food-calculator.html>

The Real Food Calculator Facebook: <https://www.facebook.com/uncrealfoodcalculator>

Daily Tar Heel Article on Real Food Calculator interns at UNC:

<http://www.dailytarheel.com/article/2014/04/campus-dining-gets-more-sustainable>

Citations