

Real Food Calculator Final Report Fall 2015

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I. Executive Summary

The Real Food Calculator (RFC) Internship is characterized by a desire to achieve an accurate result for the real food content purchased and sold by Carolina's two dining halls: Lenoir and Rams. Together, these dining halls are encompassed by Carolina Dining Service, or CDS. Focusing on the month of September for 2015, our group worked to determine the Real Food Percentage, a metric of sustainable food purchasing, distributed by CDS.

- The internship's definition for real food must meet any one of the criteria defined by RFC under the categories labeled local & community based, ecologically sound, humane, or fair. Foods that qualify must also have zero categories fall within the disqualifier criteria.
- For September 2015, the real food percentage was determined to be 28 percent. Real food A (item meets two criteria) reached a total of 10 percent and Real Food B (item meets one criterion) counted for an additional 18 percent. Compared to the audit during fall semester of 2014, this semester's real food percentage is a 7% overall increase.

RFC Difficulties:

Our team experienced a series of serious issues related to the RFC program. These issues are listed below and expanded upon in our sources of error section:

- **Real Food Qualifiers:** This semester, we noticed better qualifiers outside of the real food qualifiers that would more effectively certify the food purchased by CDS as real. Re-evaluating new standards that are more tailored to the North Carolina food system will increase local purchasing as well as the overall real food percentage.
- **Inputting Data & Timing:** We incurred difficulties when our final results of total food purchases did not align with those of the CDS accounting department. Overall, the internship was not paced as smoothly and efficiently as it could have been. Results would be collected more orderly and effectively if we redistribute responsibilities to more appropriately time the internship.
- Getting Results & Cross-Campus Comparisons: The online calculator needs to be organized to allow month by month analysis. Currently, because it automatically compiles data based on yearlong results, it forces the spring interns to waste time extracting data.
- **Preapproval of Real Food Calculator:** The pre-approval process proved tedious, as we had to coordinate with CDS staff, RFC staff, and the intern team. The pre-approval necessary to use the calculator impeded results finalization.

Marketing Actions:

- RFC interns hosted a "Green Theme Meal" at the Top of Lenoir to promote the Real Food Challenge as an organization and create awareness about the internship and CDS' efforts to check its sustainability. This involved collaboration with CDS Marketing, basic research, and the creation of a collaborative game to get students passing by involved.
- Our team furthered the marketing efforts put into effect last semester and in semesters prior by participating in social media accounts created in past years and connecting with other RFC interns from other schools.

Recommendations:

- **Maintain current purchasing strategy:** 28% Real Food is a 7% increase compared to the same month the previous year. Maintaining this purchasing capacity will significantly benefit the market for sustainable food options.
- Vendor Plurality: We recommend that CDS continue introducing new sustainable vendors of products that already qualify as real, such as more vendors of sustainable meat and seafood.
- Vendor transparency: A commitment to the local vendors by maintaining a long term business relationship will not only foster the local vendor competition but will help our marketing with a "buy-in" mentality of the cultures and values of Real Food.
- **Re-evaluating real food standards:** We recommend re-evaluating seafood standards and purchasing more North Carolina based, fair wage seafood from local fishermen. We also would like to advocate promoting more fair food in the dining halls by potentially creating a "fair food day" and expanding fair food purchases outside of the realm of coffee and tea.
- **AASHE comparisons across institutions:** It is important to utilize other sustainability tools and compare these scores across similar public institutions to improve vendor purchasing.
- Fair Food Days: Seeing as fair food compromises the smallest amount of real food purchased by the dining hall, it is imperative that the dining hall continue to look for fair food options. These options are often more expensive, and for this reason we recommend making the change a slow one. Starting with fair food days maybe once a semester would be a great start to increasing the real food percentage as well as raising awareness about the mistreatment of workers in the agricultural industry among students.

Our recommendations for the internship in general echo the recommendations of the previous year in order to emphasize a more efficient way to structure the internship.

• **Expand depth of training about Real Food qualifiers:** We recommend better training/orientation from the start of the internship so that interns better understand critical terms and the website functionality.

Our recommendations for the Internship and future Interns proposes new adjustments to structure and future steps.

- **Internship Structure and Mentorship:** We recommend continuing to have an official RFC mentor on campus who can help guide current interns with any questions that may arise. We also recommend the creation of a calendar with event dates and deadlines for research and individual projects. Individual projects should be assigned and due before the second half of the semester to foster a more efficient process.
- Marketing Duties: The marketing side of the Real Food Internship should be taken over by a separate internship through CDS. By creating an internship through the marketing department the Real Food Interns can focus on the audit and work alongside someone who focuses on just this aspect.

- **Collaboration:** We cannot emphasize enough the importance of communication between the intern team and the CDS team, and in moving forward we recommend expanding the conversation to include on campus food groups, such as FLO and The Sonder Market. This would more efficiently transition new interns, as well as share any information regarding vendors or qualification questions.
- Working with RFC: RFC has proven not to be the most efficient tool in monitoring food sustainability. We recommend expanding our criteria and the accountability materials CDS uses to determine what should or should not count as real food. This can partly be done with previous interns' recommendations and tools such as AASHE to create a more holistic approach to real food and sustainability analysis.

II. Fall 2015 Research Focus

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 September 2015.

"Real food" is defined as food that meets any of the following criteria: local and community based, humanely raised, ecologically sound, and/or fairly traded.

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 September is to continue tracking and encouraging improvements in both dining hall sustainability and the quality of food available to students with meal plans.

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.

III. Monitoring Food Purchases: The Founding Purpose and Emerging Issues

The purpose of the Real Food Calculator Internship is largely to instill a strong central goal for promoting the importance behind real food, which encompasses a concern for producers, consumers, communities, and the earth. Goals for the promotion of campus outreach on food systems education, incorporation of a youth basis in promoting change, the cross-campus comparison and collaboration, among overall connections between food systems are all central to the RFC's aims as an organization. The real food calculator as a tool is supposed to allow institutions to track their own purchases and determine trends in real food content categories for how to produce better results and increase real food content for the future.

By utilizing the Real Food Calculator, UNC has been able to use a baseline tool for measuring real food percentages under standard ranges of measurements. This system of measurement allows for cross campus comparison as a means for tracking and improving real food content year by year. The standardized method has allowed CDS to compare and rank among top other universities in sustainability of institutional purchases for determining means to progress and future improvements.

Campus outreach methods to promote the goals of the RFC included hosting a Green Theme Meals event to encourage awareness among students about the importance of real food and updating and promoting social media avenues for semester outreach. We worked on marketing techniques that were aimed to help us in communication with CDS, RFC, and oncampus food communities.

IV. Calculator Methodology

Our assessment covered a four-week period from the end of August to September of 2015. 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 week's worth. Our two largest food distributors - Sysco and Freshpoint - switched to velocity reports in the past year. We input each line item into the Calculator by hand, except the velocity report-included items of Freshpoint and Sysco. 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 change significantly quickened the pace of working through Sysco and Freshpoint invoices. 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.

The calculator program for UNC-CH displayed an entire section devoted to the Fall 2015 audit. 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." 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.

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. The data we collected for Sysco as well as many small vendors was largely found through online research along with phone calls. We then attempted to provide recommendations for CDS within the limitations of an institutionalized food system.

V. Results

Table 1: Food Percentages for CDS Fall 2015

Real Food versus Conventional	Percentage of Total Food Purchased
Conventional Food	72%
Real Food	28%

Table 2: Real Food A and B Percentages for CDS Fall 2015

Real Food Breakdown Percentages	Percentage of Total Real Food Purchased			
Real Food A	10%			
Real Food B	18%			

Table 3: Comparison of Real Food by Food Category for CDS Fall 2014 and Fall 2015

Category	Real F	Food A	Real I	Food B		Food otal	RF % Change	Conv	entional	Total Cate	egory Cost	Percen To	0
Baked Goods	0%	0%	1%	0%	1%	0%	-1%	99%	100%	\$64,233	\$51,858	6%	6%
Meat	28%	22%	0%	0%	28%	22%	-6%	72%	78%	\$217,896	\$145,053	16%	17%
Poultry	0%	0%	28%	55%	28%	55%	+27%	72%	45%	\$94,417	\$57,961	8%	7%
Dairy	39%	42%	15%	9%	55%	51%	-4%	45%	49%	\$113,791	\$90,844	9%	11%
Eggs	0%	0%	77%	50%	77%	50%	-27%	23%	50%	\$33,697	\$35,109	4%	4%
Fish	13%	13%	43%	74%	56%	87%	+31%	44%	13%	\$54,856	\$51,677	8%	6%
Coffee & Tea	0%	0%	42%	64%	42%	64%	+22%	58%	36%	\$10,678	\$12,483	3%	1%
Beverages	0%	0%	0%	0%	0%	0%	0%	0%	100%	\$48,907	\$33,646	3%	4%

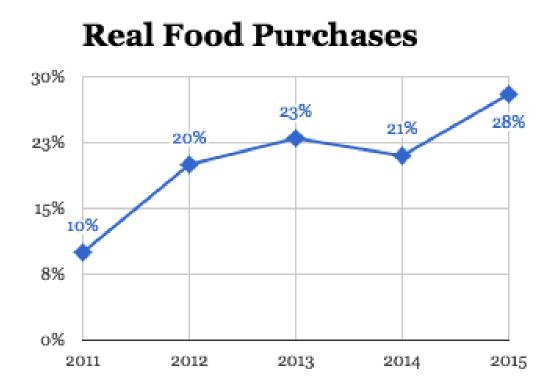
Produce	0%	4%	25%	16%	25%	20%	-5%	75%	74%	\$221,804	\$186,984	22%	22%
Grocery	0%	0%	3%	10%	3%	10%	+7%	97%	90%	\$209,988	\$179,002	20%	21%
Total	9%	10%	12%	18%	21%	28%	+7%	79%	72%	\$1,070,267	\$845,630		

Fall 2014	Fall 2015
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<u>Table 4</u>: Progress of CDS Real Food Percentages by Semester From Fall 2010 to Fall 2015

Semester	Real Food Percentage
Fall 2010	13%
Fall 2011	10%
Fall 2012	20%
Fall 2013	23%
Spring 2014	26%
Fall 2014	21%
Spring 2015	29%
Fall 2015	28%

Figure A: Real Food Percentage Progress by Semester



VI. Analysis

Part 1: Graphs and Charts

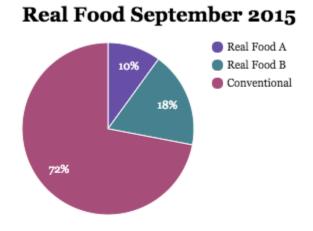
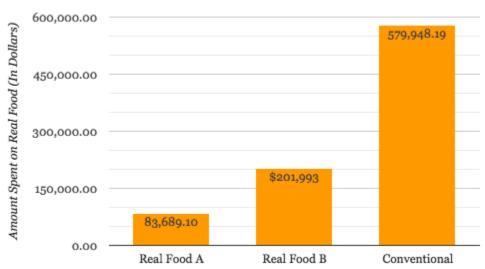


Figure 1: Percentage of Real Food for CDS Spring 2015. This chart shows the real food and conventional percentages during this audit period. The percentage of total real food is 28%, which is a 1% decrease compared to the February 2015 percentages, but an 8% increase compared to fall 2014.



Amount Spent on Real Food- Fall 2015

Figure 2: Amount Spent on Real Food for CDS Fall 2015. This chart shows the monetary amount spent on real food and conventional during this audit period.

Figures 3-6: Breakdown of Real Food By Category for CDS Fall 2015. The following charts display the categories and corresponding food percentages for each real food criteria for Fall 2015 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 3: Composition of Total Local CDS Purchases

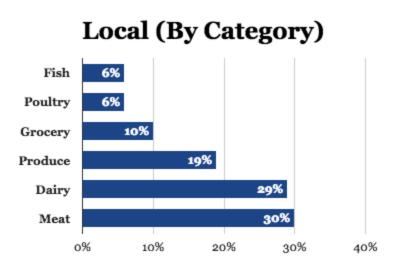


Figure 5: Composition of Total Ecologically Sound CDS Purchases

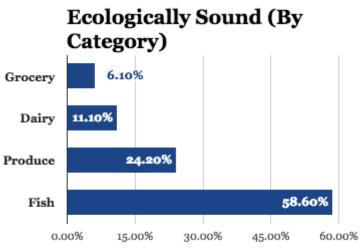


Figure 6: Composition of Total Humane CDS Purchases

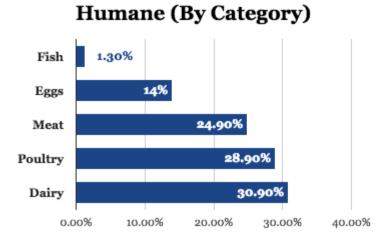
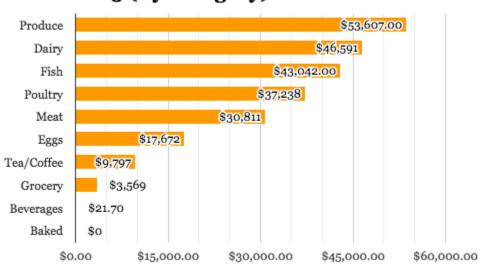


Figure 7: Total Real Food Purchased for CDS Fall 2015. This chart shows the breakdown of real food purchases by food category.



Amount Spent on Real Food in Fall 2015 (By Category)

Figures 8-11: Breakdown of Real Food Percentages By Criteria for CDS Fall 2015. The following charts display the real food percentages compared to conventional percentages for each real food criteria for Fall 2015 CDS purchases.

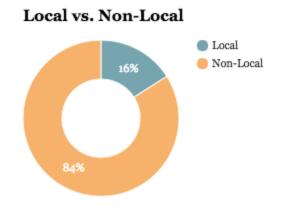


Figure 8: Composition of Local and Non-Local Food

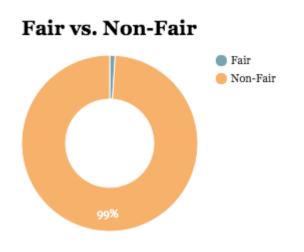


Figure 9: Composition of Fair and Non-Fair Food

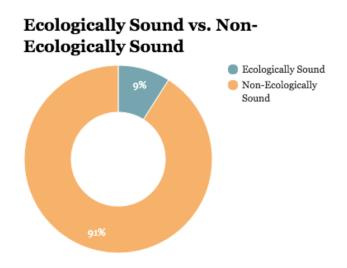


Figure 10: Composition of Ecologically Sound and Non-Ecologically Sound Food

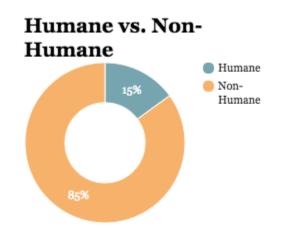


Figure 11: Composition of Humane and Non-Humane Food

Figures 12-15: Breakdown of Real Food Purchases By Criteria for CDS Fall 2015. The following charts display the amount spent on real food compared to conventional for each real food criteria for Fall 2015 CDS purchases.



Figure 12: Comparison of Amount Spent on Local and Non-Local Food



Figure 13: Comparison of Amount Spent on Fair and Non-Fair Food

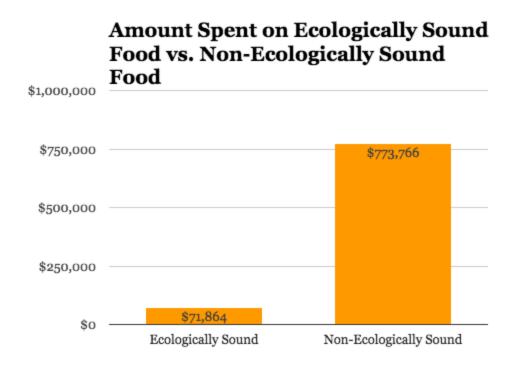


Figure 14: Comparison of Amount Spent on Ecologically Sound and Non-Ecologically Sound Food

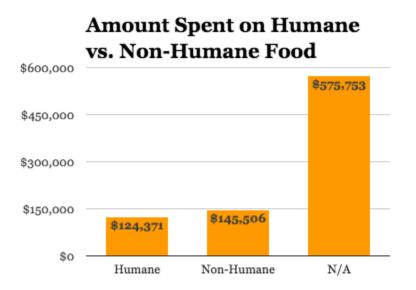


Figure 15: Comparison of Amount Spent on Humane and Non-Humane Food (N/A was kept as a separate category)

Part 2: Detailed Analysis by Category

Eggs: Real food content contributed by eggs for September 2014 to 2015 decreased from 77 to 50 percent. The category was comprised entirely by Real Food B, local and community oriented. The eggs category can be improved by ensuring that only cage-free eggs from Sysco are being purchased. National Pasteurized Eggs (NPE), the company who produces Wholesome Farms® Pasteurized Shell Eggs, is Sysco's egg provider.

Dairy: Dairy purchases displayed a 4% decrease in real food, shifting from 55% for September 2014's audit to 51% for September 2015. This reduction can be attributed to incomplete data input for Maola Milk and Ice Cream (see Sources of Error for further information). However, the percentage can be further increased in future months by expanding purchases from Stoneyfield Yogurt and Maola Milk and Ice Cream.

Meat: There was -6% change in the real food percentage of meat since last September from 28% to 22% this September.. In order to increase this number, we recommend purchasing more from Grayson's Natural Farms, whose products are local and ecologically sound, and Firsthand Foods, whose products are local and humane. As Firsthand Foods increases in scale, we expect this number to rise as well.

Poultry: We found a 27% increase in real food percentage of poultry since last September, from 28% to 55%. Most of the poultry purchases came from Inland Seafood, which provides Certified Humane chicken. Other purchases came from Sysco, CDS's main distributor, which has a minimal number of real food items. Sysco has added Springer Mountain Farms to their list of vendors, which has contributed to greatly increasing this percentage.

Fish: There was a 31% increase in the total real food of fish compared to last September. The percentage rose from 56 to 87 percent. It was comprised of both real food A and real food B. All of the change was experienced in real food B, which increased by 31%; there was no change in real food A. This was seen because of a boost in purchases from Inland Seafood, which qualifies as ecologically sound and local. Additionally, CDS began purchasing from Sea2Table, which qualifies as ecologically sound. This percentage can be improved by continued purchasing from Inland Seafood and increased buying from Sea2Table.

Produce: There was a 5% decrease in total real food from 25 to 20 percent. The real food B percentage for produce decreased 9% this year from 25% to 16% real food. However, there was a 4% increase in real food A from 0 to 4%. Each semester this percentage has been improving until this school year. 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.

Coffee/Tea: The coffee and tea real food percentage is characterized solely by real food B. For the month of September 2015, coffee and tea witnessed a 22% increase in contribution of real

food content, as it increased from 42% in September 2014 to 64% in September 2015. Although coffee and tea only accounted for 1% of total purchases this audit period, it was the fourth largest category for amount spent on real food. It is also the only product that qualifies as fair. Next semester we are switching vendors to Larry's Beans from Starbucks; although what we bought from Starbucks was considered fair, we now have a vendor that will be fair and local, which is real food A.

VII. 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.

• Real Food Qualifiers:

Much of the guidelines sent from the Real Food Calculator seemed to be short on being fully comprehensible, with an understanding of why these particular certifications were designated and chosen to be used to mark foods with the qualifications of local and community based, fair, humane, and ecologically sound. During the research process, there was very little guidance or direction given in terms of understanding which items met Real Food qualifications and which did not. Although we were in contact with the Real Food staff through email, it was difficult to rely on them for sound and coherent instructions on how to go about researching and understanding the implications of the calculator and why these particular qualifications most effectively mark real foods.

We hope in the future that the research teams from different regions nationally can have more of an input and direct connection to the RFC staff to communicate our own observations about what the qualifications implicate for our region and how they apply uniquely to our own food system.

• Inputting Data Effectively & Timing:

One of the largest hurdles that we faced was finding mismatching results between our audits of the invoices with CDS' official totalling of the invoices. Understanding how and backtracking to check the accuracy of our data input alongside of the original purchasing numbers produced from CDS'. After calculating our total invoice total, we were thousands of dollars off compared to the invoice total that was calculated from the CDS accounting team. Before proceeding with the Real Food Calculators, the invoice calculation error stalled our process and coordinating a time to go over the numbers total with the accounting team wasted valuable time towards the end of the internship. The CDS accounting team was incredibly helpful and accommodating with working with our team and helping us recalculate the total but the internship overall would be more efficient with a new method to separating the food purchases from the CDS invoices.

Another issue we incurred was the overall timeline of the calculator that affected our research results. Although the internship duration was over the course of the entire semester, the only effective use of this duration occurred over the course of the later half of the internship. Since the internship began in September, we had to wait until all of the invoices had been submitted by CDS in order to begin the audit process, which was able to pick up speed in mid-October. With this in mind, there was only the rest of October, and November to complete the entirety of the audit, research the new products and their real food qualifications, gett the Real Food Calculator to process and approve our result, and produce the final report to present. Thus, at the time of the presentation for CDS, our Real Food percentage for the month of September had not yet been officially confirmed. The inefficiency in the internship timeline could have more effectively used the beginning of the semester in order to spread out the work more evenly.

• Getting Results & Cross-Campus Comparisons:

Since our internship happened to occur in the fall semester, we were fortunate enough to only have to collect, input, and analyze our data from the September audit. However, we would like to recognize the incredible amount of inefficiencies that lie within the Real Food Calculator during the spring semester. During this semester, the interns are forced to use year-long data when the internship is setup to only analyze and collect data from September and February. Thus, the calculator should be reorganized to allow month to month comparisons rather than forcing intern teams to extract their own monthly data from the system before analysis.

Throughout the internship process, we as interns from UNC Chapel Hill felt isolated from other college campuses participating in the Real Food Challenge. The program itself does not enable different intern teams to collaborate and compare their Real Food percentage total. However, we feel that if this were the case we would be better equipped to understand how our own dining services prioritizes Real Food in comparison.

• Pre-approval with Real Food Calculator

One of the most prominent confusions and inconveniences working with the Real Food Challenge involved the pre-approval process to work with the online calculator. When the interns were individually registering as "Researchers" under the calculator, half of the interns were approved for "Researcher" status because they were more connected with the RFC staff. The other interns had to jump through a different set of hoops in order to get in contact with the RFC staff to understand the process to attain "Researcher" status, a necessity for the calculator. Overall, we had to each individual take different assessments in order to have full access to the necessary functions of the calculator. We understand the motivations to informs and instruct interns on how to effectively use the calculator but overall, it seemed like an extraneous obstacle that sparked confusion and more wait time before diving into the real content of the Calculator. A more streamlined and locally managed training for the calculator would be a more effective training method.

VIII. Recommendations

Recommendations to Carolina Dining Services

- Maintain current purchasing strategy: This semester's real food percentage marks the second highest proportion of real food buying in the internships history and highest proportion of real food buying for any fall semester, and is a product of Aramark and CDS implementing the recommendations of past internships. The money shifted into the sustainable food systems market will serve to build more options for real food purchasing, and as such we recommend continuing to patronize such vendors as Springer Mountain Farms, Firsthand Foods, Sea to Table, and Albert's Organics to create demand.
- Vendor Plurality: Adding Sea to Table as a vendor provides important plurality to our other real seafood vendor, Inland. We recommend continuing to add analogous vendors to ensure the best price is met, which would conceivably allow more real food to be bought in other areas. Some other farms like Grayson Natural Farms could be added as a potential beef vendor, while Pearce Family Farms (about 74 miles away) could be added as a potential egg vendor. While continuing to add vendors to its list, CDS may also want to create a basic mapping system indicating where each vendor is located on a map to make this easily available to Carolina students. This map could contain basic information about each farm and which products it provides CDS.
- **Promoting Fair Food in the Dining Hall:** The amount of fair food that the dining hall purchases is shockingly low compared to the other 3 categories. This has been the case over the past few years as well. One suggestion that could be helpful in this regard would be to possibly having a "Fair Food Day" at the dining hall each semester. This day could be used to inform the student body about the importance of fair trade foods as well as informing them about the poor conditions many agricultural laborers are facing today. Specifically, focusing on fair trade tomatoes could be used as a marketing technique because of the prominence of the Coalition of Immolakee Workers in the fair trade food world. Even just having one day a year where you purchase fair trade produce would be exceptionally beneficial to the real food numbers. There are a number of vendors that can be found through organizations such as the Fair Food Standards Council Website as well as Fair Trade USA certified.
- Institutional transparency: It is important for farmers and local vendors to be able to know their future sales. This is especially applicable to produce where the farmers need to know how much to grow to sell. For CDS, a commitment to the local vendors by maintaining a long term business relationship will not only foster the local vendor competition but will help our marketing with a "buy-in" mentality of the cultures and values of Real Food. Secondly and even more importantly, this transparency method will ensure CDS funding the local community channeling circulation of money into our institution and community.
- AASHE STARS comparisons: While a completely separate tool from RFC, continuing to analyze AASHE STARS across institutions similar to UNC in the South East region will be very helpful in finding ways to improve CDS purchases and approaches in terms of sustainability. Understanding how other public institutions like Virginia Tech are able

to score higher than UNC under the category "Dining Services" and more specifically "Food and Beverage Purchasing" can offer insight into better purchasing strategies in the future. Institutions using AASHE ratings that are in close proximity to UNC like Virginia Tech also offer information on their local, sustainable vendors that would count as real food, offering more opportunity for vendor plurality.

- Organic flours for in-house bread: Currently, any bread that is made in-house does not count as real food because the majority of its ingredients are not real; to increase the percentage of real food in the baked goods category, utilizing organic flour, such as from Arrowhead Mills (from past interns recommendations) would provide a Real Food A percentage (local and ecological).
- **Re-evaluate real food standards for seafood:** The Real Food Challenge qualifications for seafood, Monterey Bay Aquarium Seafood Watch, does not adequately adjust and apply the North Carolina seafood industry and fisheries system. For CDS, rather than just buying seafood to meet RFC qualifications, buying from Walking Fish Community Supported Fishery, communities of local fishermen that are paid fair wages for local fish, would be the beginning of exploring sustainability outside of just RFC standards. Additionally, using the local producers and their background would be a great addition to a marketing campaign to bring transparency of food sources of dining hall patrons.
- Continue practice of open communication between interns, CDS/Aramark, RFC and on-campus food groups: Finally, it has been a goal of this intern team to promote as much communication as possible between all invested parties, including CDS, Aramark, and RFC. We believe that moving forward, maintaining as much transparency as possible about everyone's goals, abilities and conflicts surrounding real food purchasing is the only way to progress efficiently. The future of this internship relies on everyone's ability to communicate effectively and understand each other's viewpoints, in order to reach a mutually beneficial compromise.

Recommendations to Real Food Calculator

- Expand depth of training about Real Food qualifiers: It is critical for interns to be fully informed about RFC's standards for real food. We suggest that RFC's preliminary training should include an in-depth explanation of each of the certifications and/or qualifiers considered to meet Real Food standards (within each category; local, humane, fair, ecologically sound). We received little information and detail about each Real Food qualifier, yet we were expected to fully understand the implications of each, based on our own research. It would be useful if RFC could provide more information about their qualifiers for Real Food during intern training, in order to ensure continuity of understanding between interns and the Real Food Calculator organization.
- Expanding Criteria Beyond Categories: RFC sets very strict criteria to what it considers "real" food, when there are other ways to determine the sustainability of vendors. There were various times when current members found vendors to be sustainable, but because they hadn't bought specific certifications, could not be

considered as such. We recommend that RFC include other criteria to expand its definition of "real" food.

Recommendations about the RFC Internship and to Future Interns:

- **Mentorship:** To maintain continuity and momentum between semesters, collaboration with previous interns in the form of "RFC mentors" proved to be incredibly helpful and necessary in understanding the research process and navigating CDS most effectively. "RFC mentors" should continue organizing communication between appropriate parties and share information with the new interns as to how to complete their duties. This should be considered a subset of the internship and mentors should be given some sort of official credit for their work.
- **Structure:** Current RFC interns found it frustrating that the RFC research process wasn't able to officially begin until mid-semester, feeling a large time constraint throughout the second half. One recommendation would be to shift gears by auditing spring invoices in the following fall and fall invoices in the following spring to allow interns to quickly begin the research process at the beginning of the semester. We understand this would be a slower process. Another recommendation would be to assign individual projects in the first half to be completed before research begins. This independent project should have much more specific guidelines from the start and the entire internship should have specific deadlines. The lack of guidance in these areas made the internship more challenging and should be clearly stated in the beginning of each semester.
- Marketing Duties: Marketing duties could be improved throughout the semester. The benefits of having an extensive marketing campaign to represent the internship and efforts on the part of CDS are numerous, and as such we recommend a possible collaboration with CDS marketing interns, if possible, to best promote the internship and work being done. The Green Theme meal was successful, but a calendar of marketing events in the beginning of the semester would have been helpful in being able to plan effectively ahead of time.
- Use of Calculator Tool: It is essential that interns understand or learn how to analyze and create graphs to visually represent data independently so that they will be able to produce results if the Real Food Calculator cannot.
- Working with RFC: RFC has proven not to be the most efficient tool in monitoring food sustainability. We recommend expanding our criteria and the accountability materials CDS uses to determine what should or should not count as real food. This can partly be done with previous interns' recommendations and tools such as AASHE to create a more holistic approach to real food and sustainability analysis.

Moving forward, it is clear that the only way to impact change beyond what is currently being accomplished is to further collaboration with the food-focused community both on UNC's campus and in the greater North Carolina area. Beyond advising on how to make Real Food purchases, it is clear the internship will need to further collaborate with past interns, on-campus food groups, in-state schools, local businesses, and other tools for measuring sustainability to shift capacity for change in a larger sense.

X. Appendices

Appendix A: 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.)

Appendix B: Real Food Guide

Real Food Guide

version 1.0

Local & Community-Based	Fair	Ecologically Sound	Humane
connunty Duscu	Green Light: best represents st	andard and counts as real food	
 Producer¹ must be a privately-traded or cooperatively- owned business that grosses less than 1% of the industry leader. 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. 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 	Green Light: best represents st Products with the following certifications: • Ecocert Fair Trade Certified • Fair Food Standards Council Fair Food Program (Coalition of Immokalee Workers tomatoes) • Fair Trade Certified by Fair Labeling Organization (FLO) • Fair Trade Certified by Fair Labeling Organization (FLO) • Fair Trade Certified by Fair Labeling Organization (FLO) • Fair Trade Certified by Agricultural Justice Project Single Source product that can confirm in writing the following for ALL employees: • 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	andard and counts as real food Products with the following certifications or claims: • Biodynamic Certified by Demeter • Food Alliance Certified* • USDA Organic** • Protected Harvest Certification • Rainforest Alliance Certified** Fish Only: • Marine Stewardship Council • Monterey Bay Aquarium Seafood Watch Guide "Best Choices" (Regional Guide or Buyer's Guide) Coffee Only: • Bird Friendly by Smithsonian Migratory Bird Center Produce grown in a farm or garden at the institution, in which the researcher can confirm the use of organic practices	Products with the following certifications or claims: • Animal Welfare Approved by Animal Welfare Institute • Biodynamic Certified by Demeter • Global Animal Partnership Steps 4-5+ • Certified Humane by Humane Farm Animal Farm Care ^{2,3}

	Yellow Light: counts as real foo	d, but not as strict as Green Light	
 Producer must be a privately-traded or cooperatively owned business that grosses less than 1% of the industry leader. Independently owned 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. Products from cooperatively owned businesses must have been produced, processed, and distributed within 250 miles of the institution. For multi-source or multi-ingredient products, producer and 50% of the ingredients⁴ must meet all of the above criteria. 	 50% of the ingredients in the product meet the above standards. Products with the following certification: Fair Trade Certified ingredient by Fair Trade USA 	Products with the following certifications or claims: • Fair Trade USA* • Monterey Bay Aquarium Seafood Watch Guide "Good Alternatives" (Regional Guide or Buyer's Guide) • Salmon Safe • Transitional Organic by OIA For multi-source or multi-ingredient products, producer and 50% of the ingredients ⁴ must meet all of the above criteria.	All Species: Certified Organic by USDA-AMS**** Food Alliance Certified* Global Animal Partnership Step 3 Ruminants Only: AGA Grassfed "Process Verified Grassfed"** by USDA-AMS and either "Never Ever 3 by USDA-FSIS" or "Naturally Raised" by USDA-AMS Hogs Only: Certified Humane by Humane Farm Animal Care Egg-Layers Only** American Humane Certified (no enriched cage eggs) "Cage-Free" by USDA- AMS

Disqualifications: Product containing disqualifying characteristics cannot count as real food in any category.

- · Producer is known to be found guilty of criminal charges of slave labor or indentured servitude within the previous 10 years; producer is known to have been found guilty of, been cited, or settled a case relating to an OSHA, FSLA, or NLRB violation within the last 3 years.
- Producer is known to be a Concentrated Animal Feeding Operation (CAFO)
- Product is likely to contain GMOs (e.g. non-organic high fructose corn syrup, soy, beet sugar)
- Product contains any of the following: Acesulfame-Potassium, Butylated Hydroxyanisole (BHA), Caramel Coloring, Olestra (Olean), Partially Hydrogenated Oil (trans-fats), Propyl Gallate, rGBH/rBST, Saccharine, sodium nitrate added, sodium nitrite added; Dyes: Red #3, Yellow #5, Yellow #6, Blue #3

Legend

Italics = There is strong, third-party verification of the claim through a certification "Text with Quotes" = Industry claim * = Certification/claim occurs in more than one column

- ** = Needs verification that it is not from a Concentrated Animal Feeding Operation (CAFO)
- ¹ Producer is defined as the entity that produces the product. Thus, it could be a farmer, rancher, bakery, corporation, etc.
- ² For poultry, verify "Free Range" standards are followed
- ³ Does not include hogs (*Certified Humane* hogs fall under Yellow Light)
- ⁴ Ingredients are defined as raw ingredients. Ingredients must meet a given criterion at the first step of the
- supply chain to qualify as Real Food.

		enough to count as real food. criteria in other categories.	
Producer is independently or cooperatively owned but does not meet the above criteria.	 Products with the following certifications: 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 "Raised without Antibiotics" "No Antibiotics Administered" "Never Ever 3" "Naturally Raised" by USDA-FSIS <i>GAP Certified</i> (Good Agricultural Practices) by USDA	Products with the following claims or certifications: 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)
		rily have substance, not real food.	
	Product can meet real food	criteria in other categories. Products with the following claims: • "Natural" • "GM Free" • "GMO Free"	Products with the following certification: <i>GAP Certified</i> (Good Agricultural Practices) by USDA
		a y, not real food. I 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: • Monterey Bay Aquarium Seafood Watch Guide "Avoid" (regional guide) Confinement or Battery Cages	Confinement or Battery cages, enriched cages, gestation crates, veal crates

*provided by the Real Food Calculator website

XI. Citations & Additional links:

Coalition of Immokalee Workers. "Anti-Slavery Campaign." *Coalition of Immokalee Workers.* n.p. n.d. Web. 13 Nov. 2015.

Conan, Neal and Allison Aubrey. "What We Know, And Don't Know, About Organic Food Podcast". *NPR.org.* National Public Radio: 5 September. 2012. Web. 13 Nov. 2015.

Desjardin, Lisa. "5 Things the Farm Bill Will Mean For You."*CNN Report.* CNN, 4 Feb. 2014. Web. 13 Nov. 2015.

Martinez, Stephen et al. "Local Food Systems: Concepts, Impacts, and Issues."*USDA Economic Research Report* 87 (2010): Web. 13 Nov. 2015. <<u>http://www.ers.usda.gov/publications/err-economic-research-</u> report/err97.aspx#.U1wybfldWSo>.

Spivek, Marla et al. "The Plight of the Bees." *Environmental Science and Technology* 45 (2011): 34-38. Web. 13 Nov. 2015.

Equal Exchange. "Banana Farmers." *Equal Exchange Fairly Traded*. N.d. Web. 26 Apr. 2014.

<<u>http://www.beyondthepeel.com/index.html</u>>.

Food and Agriculture Organization of the United Nations. "What Is Happening to Agrobiodiveristy." *FAO Corporate Document Repository*. FAO, 2000. Web. 13 Nov. 2015. <<u>http://www.fao.org/docrep/007/y5609e/y5609e02.htm</u>>.

Green America. "Bananas." *Green America*. N.d Web. 30 Apr. 2014. <<u>http://www.green</u> america.org/programs/fairtrade/products/bananas.cfm>.

Monterey Bay Aquarium Seafood Watch Guide. "What is Seafood Watch?." *Monterey Bay Aquarium Seafood Watch*. Monterey Bay Aquarium, n.d. Web. 13 Nov. 2015. <<u>http://www.seafoodwatch.org/-/m/sfw/pdf/guides/mba-seafoodwatch-southeast-guide.pdf?la=en</u>>.

"Our Work with Unilever." *Rainforest Alliance*. Unilever, May 2013. Web. 13 Nov. 2015. <<u>http://www.rainforest-alliance.org/about/approach/company-commitments/unilever</u>>.

Real Food Challenge. Real Food Challenge, Web. 13 Nov.

2015.<<u>http://www.realfoodchallenge.</u>

org/sites/g/files/g809971/f/201403/Real%20Food%20Guide%20Version%201.0%20Marc h%202014_0.pdf>. United States Department of Agriculture. "National Organic Program."*Agricultural Marketing Service*. USDA, 4 2013. Web. 13 Nov. 2015. <<u>http://www.ams.usda.gov/AMSv1.0/NOP Organic Standards</u>