

Real Food



Calculator Final Report

Spring 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 February 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, ecologically sound, humane, or fair. Foods that qualify must also have zero categories fall within the disqualifier criteria.
- By following RFC's rigorous standards, CDS has had increasing success through each semester's monthly auditing process in terms of enhancing real food content. For February 2015, the real food percentage was determined to be 29 percent with real food A (item meets two criteria) reaching a total of 8 percent and Real Food B (item meets one criterion) counting for an additional 21 percent.

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
- Inputting Data
- Generating Graphs, Relevant Data, and Cross-Campus Comparisons
- Exit Interview

Marketing Actions:

- Our team furthered the marketing efforts put into effect last semester and in semesters prior by maintaining the social media accounts created in past years. These duties include updating the facebook page and posting on the instagram account.
- The Real Food Interns reached out to other schools who participate in the Real Food Challenge to better understand their relationship with their food service provider. We looked for new ideas and innovative additions other schools have added to try and enhance our own. Through this we found that the majority of schools have very similar programs to UNC. We also found that UNC is one of the nations leaders for real food internships.

Recommendations:

Our recommendations for CDS this semester are different than past internships, in that there are few easy shifts to be made that can drastically or efficiently increase the real food

percentage. The details of our current recommendations are expanded upon in the Recommendations section, but can be summarized as follows:

- Maintain current purchasing strategy: 29% Real Food is the highest purchasing percentage in the internship to date. Maintaining this purchasing capacity will significantly benefit the market for sustainable food options.
- Vendor Plurality: We recommend that CDS introduce new sustainable vendors of products that already qualify as real, such as more vendors of sustainable meat and seafood.
- Coordination of Demand with other Aramark Schools: Difficulties finding poultry vendors that meet Real Food criteria require industry-level change. We recommend coordination with other Aramark schools to both share their success and to create a solid demand base to which the sustainable poultry industry can adapt.

Our Recommendations for the internship in general are also different than past years as we feel there is 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.
- Inefficiency of Calculator Tool: The online platform used to enter the line items is incredibly inefficient and could be updated by allowing users to search for specific items, remember identical line items so all the information does not need to be written multiple times, and adding a date entered function.
- Quality Control: We were disappointed to find that there was little quality in responses or other actions taken by Real Food. Our interactions with Real Food staff were inconsistent. The majority of our conversations lacked certainty and left us with many questions. We recommend RFC do a better job training their staff so they are on the same page.
- Provision of Results by RFC: The calculator can not produce monthly results. The left us to produce percentages and create all graphs. We recommend that the calculator have the functionality to do this.

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

- Internship Structure: We recommend having an official RFC mentor on campus who can help guide current interns with any questions that may arise.
- 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, to more efficiently transition new interns, as well as share any information regarding vendors or qualification questions. We found our on-campus resources to be the most reliable and helpful, and therefore recommend cultivating this network and community.
- **Use of Calculator Tool:** This semester the RFC interns have had to rely on themselves to sort, analyze, and display the data collected throughout the course of the months audit. It is essential moving forward that interns understand how to do this independently so that they will be able to produce results if the Real Food Calculator staff cannot.
- **Working with RFC:** The original purpose of working with RFC was the organization's promise to fact check the qualifications of the line items, produce graphs and charts of the inputted data, and allow cross-campus comparisons of the real food percentages of participating schools. Given that RFC has not done these things, we recommend thinking critically about maintaining this working relationship.

II. Spring 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 February 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 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. The first spring semester audit was conducted in February of 2014. Our research represents an extension on previous semesters analysis as the first spring semester assessment ever conducted by RFC at UNC, and provides an expanded image of real food purchasing by CDS bot year round and from a spring to spring viewpoint.

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, 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 on-campus food communities.

IV. Calculator Methodology

Our assessment covered a four-week period from the end of January to February 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 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.

The calculator program for UNC-CH displayed an entire section devoted to the Spring 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. We then attempted to provide recommendations for CDS within the limitations of an institutionalized food system.

V. Results

Table 1: Food Percentages for CDS Spring 2015

Real Food versus Conventional	Percentage of Total Food Purchased
Conventional Food	71.3%
Real Food	28.7%

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

Real Food Breakdown Percentages	Percentage of Total Real Food Purchased
Real Food A	7.9%
Real Food B	20.8%

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

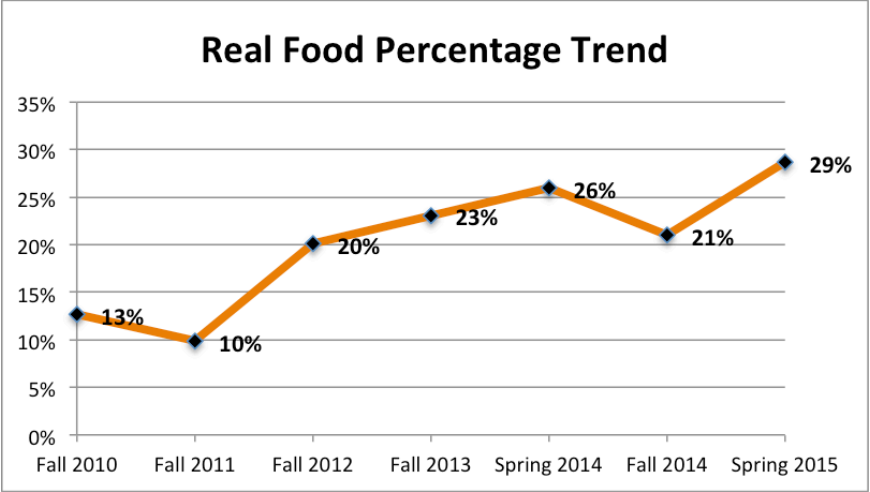
Category	Real Food A		Real Food B		Real Food Total		RF % Change	Conventional		Total Category Cost		Percentage of Total	
Baked Goods	0%	0%	0%	0%	0%	0%	0%	100%	100%	\$36,104	\$38,304	6%	6%
Meat	24%	24%	0%	0%	24%	24%	0%	76%	76%	\$104,039	\$110,654	16%	16%
Poultry	0%	0%	42%	23%	42%	23%	-19%	58%	77%	\$64,283	\$53,464	10%	8%
Dairy	45%	33%	14%	12%	59%	45%	-14%	41%	55%	\$74,066	\$61,416	11%	9%
Eggs	0%	0%	81%	86%	81%	86%	+5%	19%	14%	\$18,485	\$27,153	3%	4%
Fish	1%	12%	37%	57%	38%	69%	+31%	62%	31%	\$33,052	\$54,641	5%	8%
Coffee & Tea	0%	0%	38%	78%	38%	78%	+40%	62%	22%	\$8,447	\$23,450	1%	3%
Beverages	0%	0%	0%	0%	0%	0%	0%	100%	100%	\$24,156	\$21,637	4%	3%
Produce	0%	0%	22%	26%	22%	26%	+4%	78%	74%	\$144,427	\$145,961	22%	22%
Grocery	0%	0%	2%	7%	2%	7%	+5%	98%	93%	\$137,564	\$138,291	21%	20%
Total	9%	10%	17%	%	26%	29%	+3%	74%	71%	\$644,612	\$674,976		

Spring 2014	Spring 2015
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Table 4: Progress of CDS Real Food Percentages by Semester From Fall 2010 to Spring 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%

Figure A: Real Food Percentage Progress by Semester



VI. Analysis

Part 1: Graphs and Charts

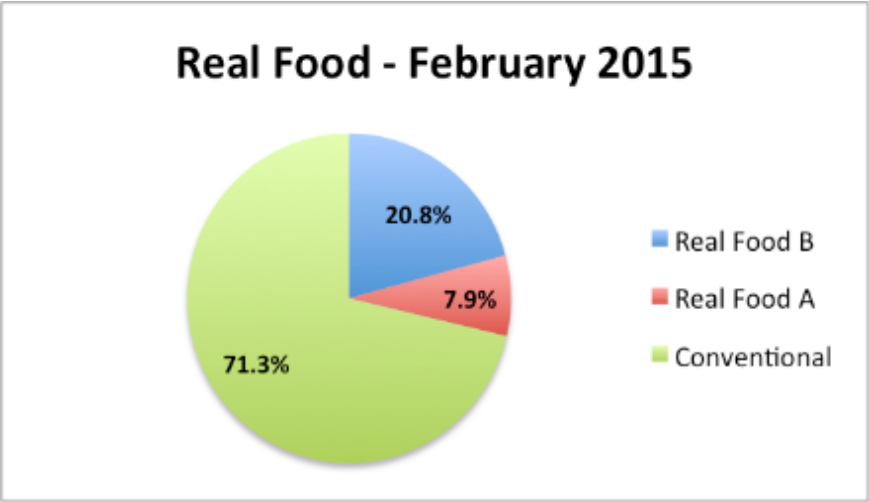


Figure 1: Percentage of Real Food for CDS Spring 2015. This chart shows the real food and conventional percentages during this audit period. The percentage of total real food is 28.7%, which is a significant number compared to last spring’s number of 26%.

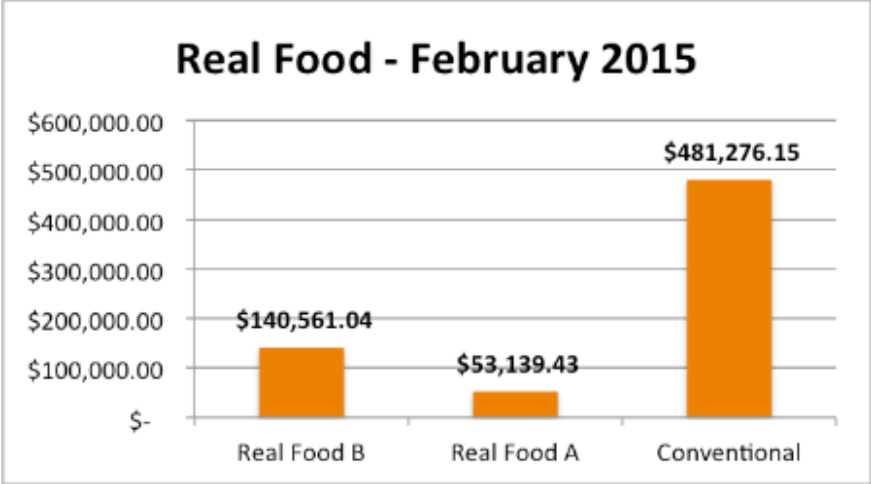


Figure 2: Amount Spent on Real Food for CDS Spring 2015. This chart shows the monetary amount spent on real food and conventional during this audit period. The total amount spent on real food is \$193,700, which is higher than last spring’s amount of \$161,048.

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

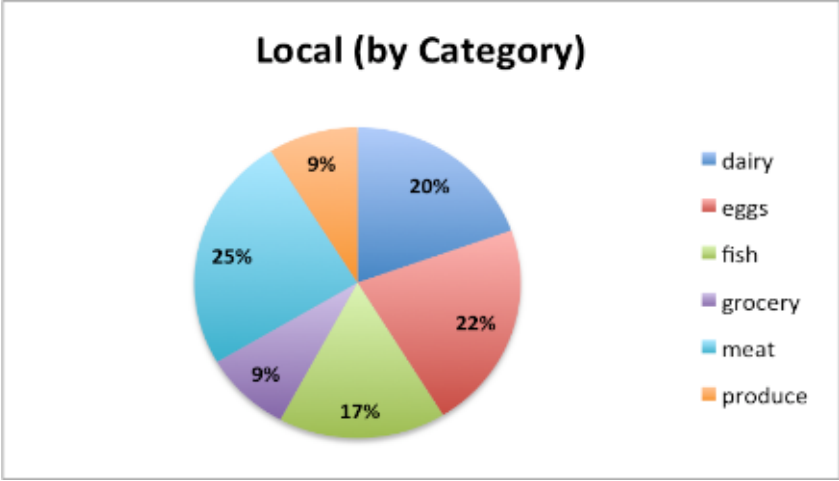


Figure 3: Composition of Total Local CDS Purchases

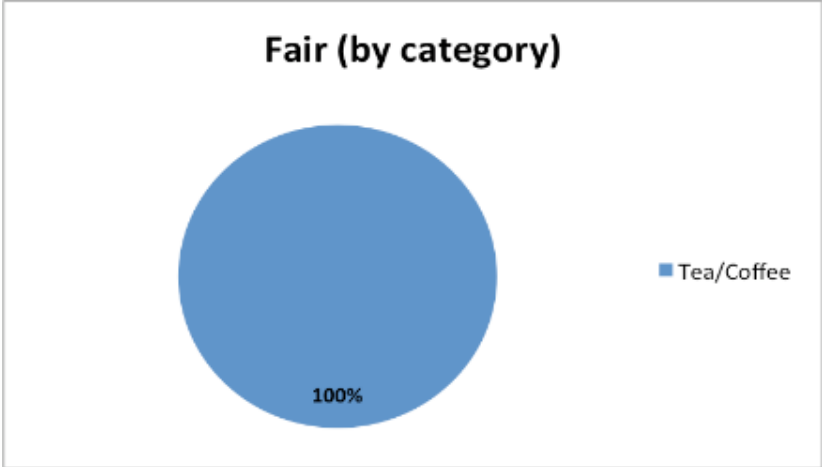


Figure 4: Composition of Total Fair CDS Purchases

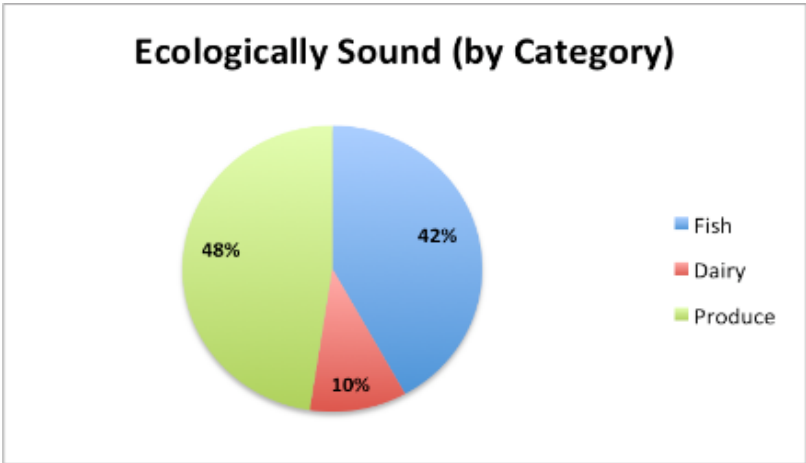


Figure 5: Composition of Total Ecologically Sound CDS Purchases

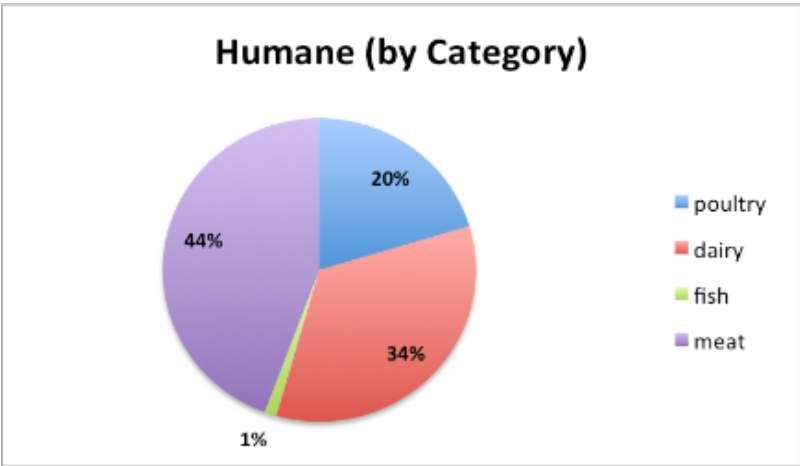


Figure 6: Composition of Total Humane CDS Purchases

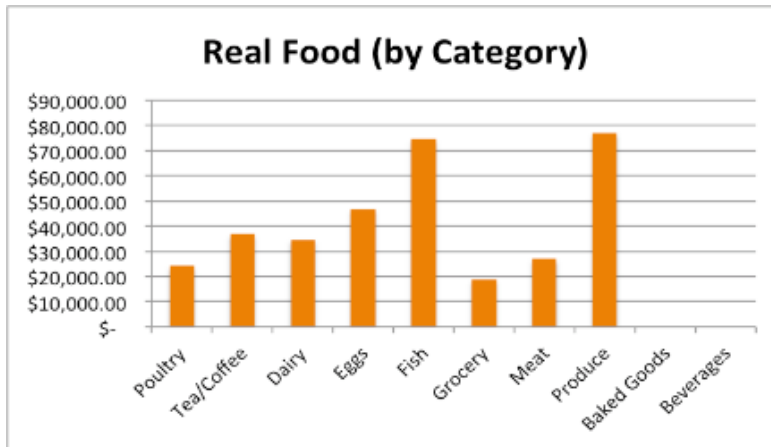


Figure 7: Total Real Food Purchased for CDS Spring 2015. This chart shows the breakdown of real food purchases by food category.

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

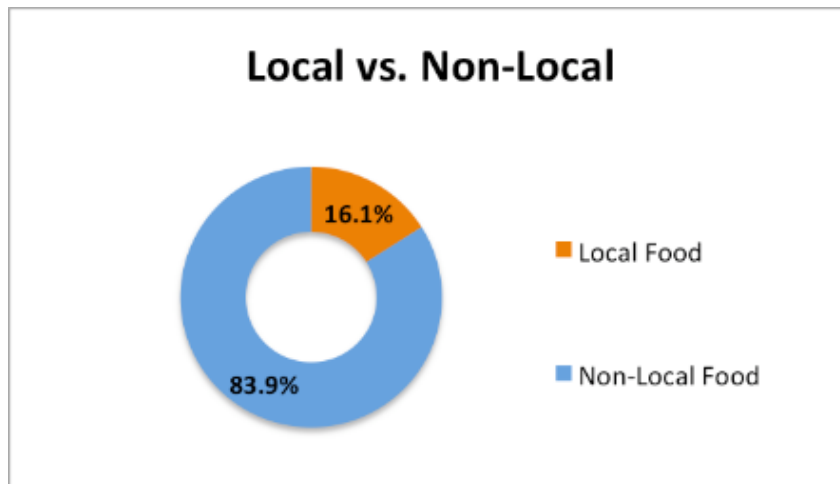


Figure 8: Composition of Local and Non-Local Food

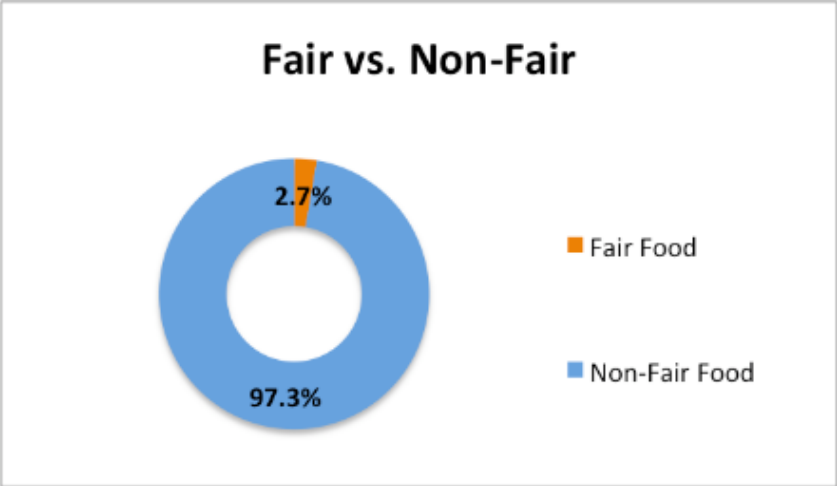


Figure 9: Composition of Fair and Non-Fair Food

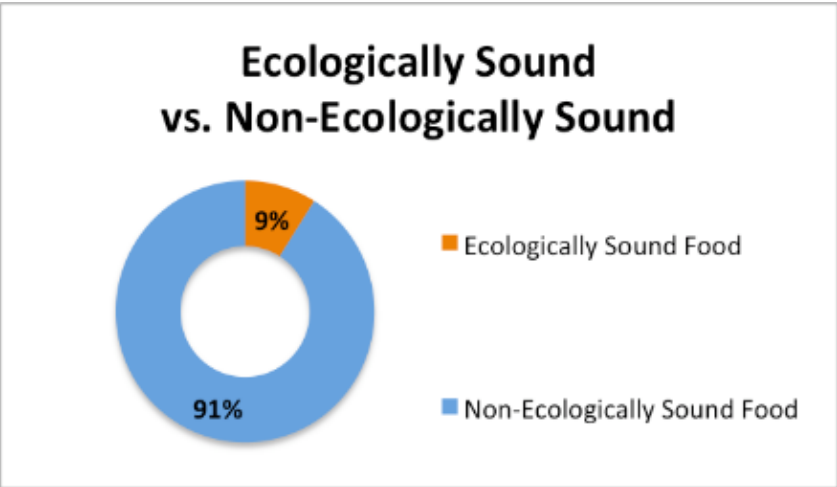


Figure 10: Composition of Ecologically Sound and Non-Ecologically Sound Food

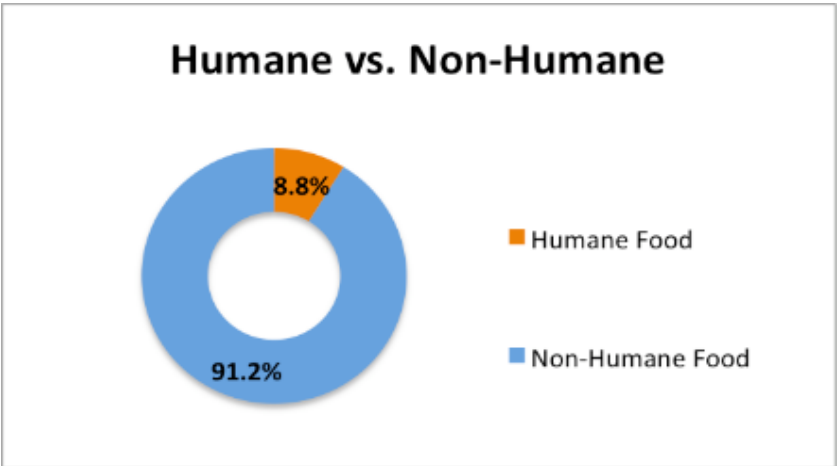


Figure 11: Composition of Humane and Non-Humane Food

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

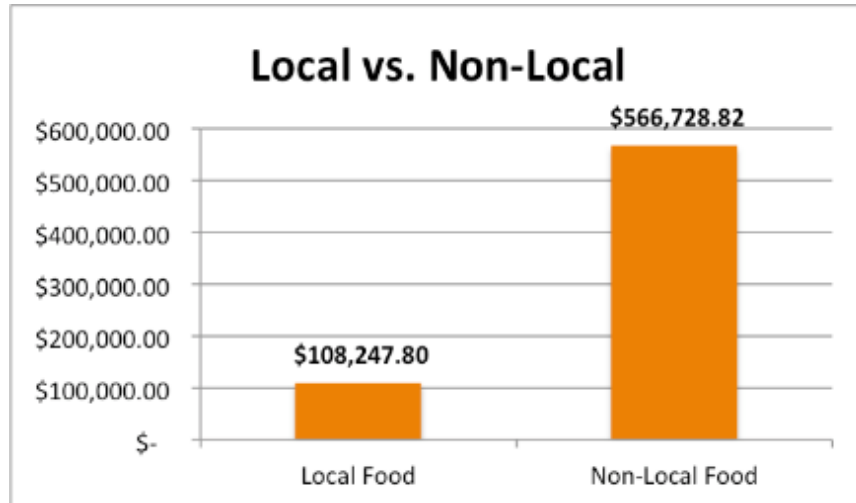


Figure 12: Comparison of Amount Spent on Local and Non-Local Food

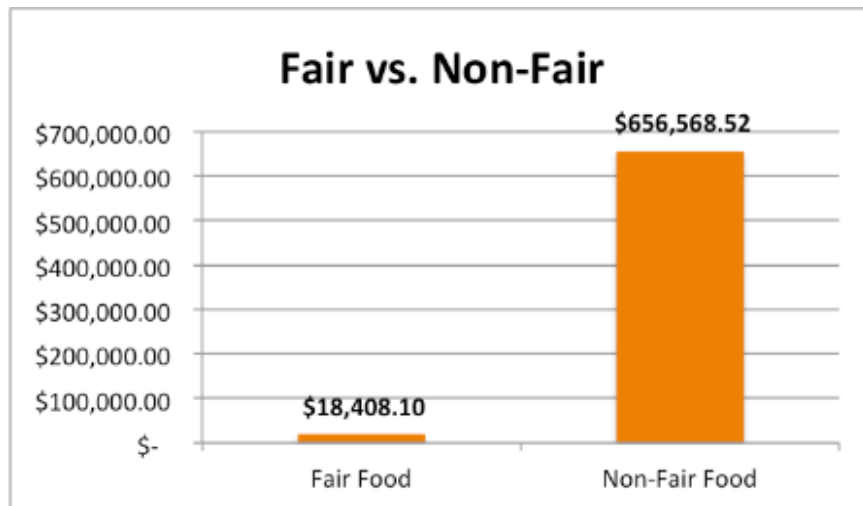


Figure 13: Comparison of Amount Spent on Fair and Non-Fair Food

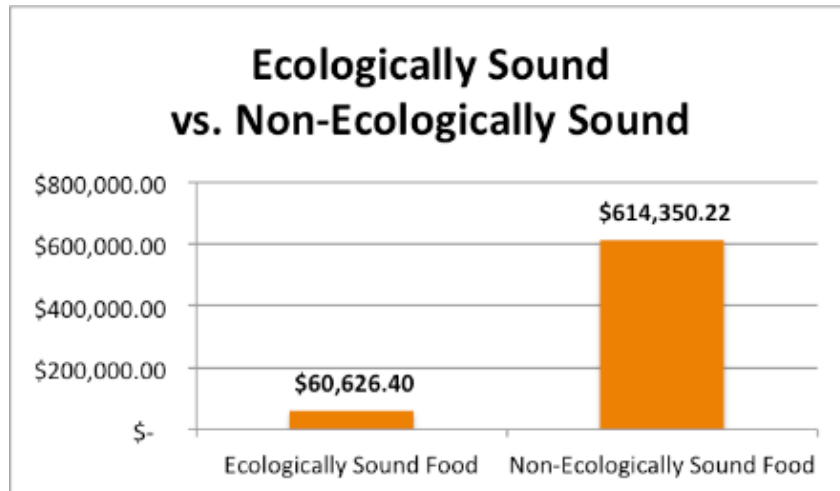


Figure 14: Comparison of Amount Spent on Ecologically Sound and Non-Ecologically Sound Food

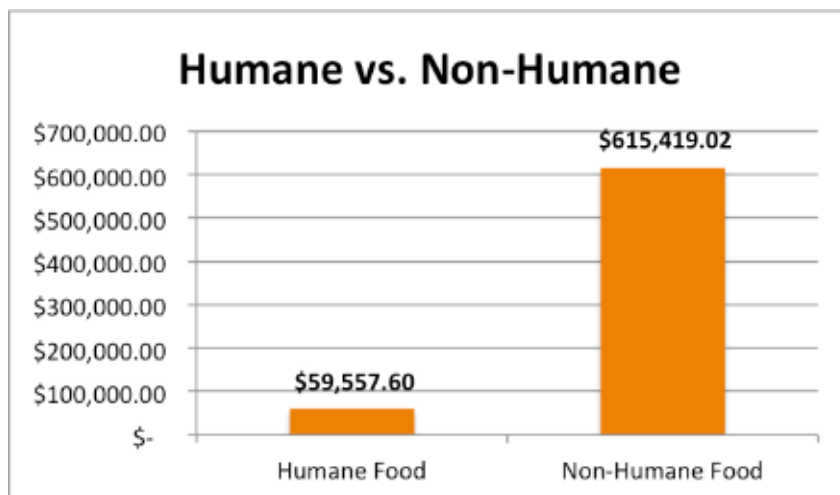


Figure 15: Comparison of Amount Spent on Humane and Non-Humane Food

Part 2: Detailed Analysis by Category

Eggs: Real food content contributed by eggs for February 2014 to 2015 increased from 81 to 86 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 14% decrease in real food, shifting from 59% for February 2014's audit to 45% for February 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 no change in the real food percentage of meat since last February. Both months reported 24% of real food in the meat category. 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 19% decrease in real food percentage of poultry since last February, from 42% to 23%. Most of the poultry purchases came from Sysco, CDS's main distributor, which has a minimal number of real food items. Other poultry purchases came from Inland Seafood from Springer Mountain Farms, which provides Certified Humane chicken. If CDS shifted their poultry purchases from Sysco to Inland Seafood, the real food percentage become even higher.

Fish: There was a 31% increase in the total real food of fish compared to last February. The percentage rose from 38 to 69 percent. It was comprised of both real food A and real food B. Real food A increased by 11% and real food B increased by 20%. 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: The real food B percentage for produce increased 4% this semester from 22% to 26% real food. Each semester this percentage has been improving. This percentage possibly increased due to increased purchasing from Albert's Organics and FreshPoint, whose products are USDA organic certified and ecologically sound. We hope this 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. Also, Seal the Seasons is a local vendor that provides frozen produce (See Frozen Produce in the Recommendations section).

Coffee/Tea: The coffee and tea real food percentage is characterized solely by real food B. For the month of February 2015, coffee and tea witnessed a 40% increase in contribution of real food content, as it increased from 38% in February 2014 to 78%. Although coffee and tea only accounted for 3% 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. We encourage CDS to continue buying coffee from Starbucks in order to maintain this high percentage.

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:**

Aside from short lists of qualifying certifications under each category on the inputting page, the calculator provided no further resources about why these qualifications were, in fact, qualifiers that met the real food standards. Furthermore, we felt that the Real Food staff had limited knowledge about how each of our items met the qualifications of local and community based, fair, humane, and ecologically sound. We felt that the Real Food staff was heavily relying on interns, such as ourselves, to be the sole researching force behind which items met Real Food qualifications and which did not. This is important because at times, we felt that the Real Food staff we were in contact with could not provide us with the most reliable updates or confirmations about our progress as a research team.

As the qualifications for particular categories are constantly changing it's especially important for RFC staff to understand the reasons why these changes happen. We felt as though many changes to qualifiers had no explanation from the RFC staff side. The CDS team worked very hard to find new producers and distributors that would meet the qualifications but as qualifications changed we could not provide them with any answers.

- **Inputting Data:**

The calculator was extremely inefficient to use to input line items. No individual items (some of which ended up being entered multiple times, due to weekly purchases) were not remembered by the system, and this resulted in significantly more time spent inputting data. Additionally, it was very hard to go back and check items already entered. Interns had to load the entire list of line items and then search through the list manually. It was extremely hard to fix any inputs because of the uncertainty. It would have been nice to at least have had a date of entry for us to reference with our timeline. Furthermore, past reports were still editable which tripped us up in the beginning. The Real Food Calculator and Staff should close past data for any entry. This system was incredibly inefficient; these concerns are echoing concerns from past interns as well. We are concerned that the calculator has not addressed these issues, which could vastly improve the quality of their information system, if changed.

Our biggest issue came from trying to resolve an issues with our total purchasing numbers not adding up. We were able to figure this out by calculating the total number of purchases based on the invoices numbers and comparing that amount to the total amount we had already entered as data. The only invoices we had trouble with were the Maola dairy purchases. A week and a half of the purchases weren't entered. This number didn't impact our Real Food percentage as there was an error on the accounting side. The same percentage of organic fruit was not calculated on the administrative side that totalled to be the We identified the issues present and fixed any issues.

- **Generating Graphs & Relevant Data:**

Perhaps this issue was the most frustrating and problematic experience we had with the calculator. The calculator program cannot produce results by month, meaning we were left with the task of generating all of the February 2015 graphs ourselves. Moreover, the calculator failed to provide other relevant data except for various basic graphs that displayed the compiled results from the months of September and February.

- **Getting Results & Cross-Campus Comparisons:**

Another source of error was our inability to collect our data through the Real Food Challenge. The organization now has prevented us from gathering month to month numbers. They now only allow year long data. It is nearly impossible for the Real Food interns at UNC to collect and input data from the entire year. We are only able to do the months of September and February. We should be able to compare February to February but the Real Food Challenge will not let us do that.

There was no indication of how these results compared to other college campuses involved in the RFC program, which would have been not only helpful, but extremely illustrative of how UNC Chapel Hill is performing compared to other schools across the country.

- **Exit Interview:**

The exit interview that we had over the phone was not what we expected. We did not feel that our interviewer was prepared to and/or capable of thoroughly going through our data and results, checking for mistakes in our qualifiers and input information. The interview was disappointing because we didn't feel that our ties with the Real Food organization were strong, and we felt let down by the extremely limited feedback they were able to provide us with about our results.

VIII. Recommendations

Recommendations to *Carolina Dining Services*

- **Maintain current purchasing strategy:** This semester's real food percentage marks the highest proportion of real food buying in the internships history, 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, 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. Firsthand Foods could be complemented with Harris Robinette Beef, a local and humane beef farm that provides to restaurants such as Top of the Hill, and universities such as Savannah College of Art and Design.

- **Frozen Produce:** Any frozen produce options purchased from Sysco or Freshpoint could be shifted to the local company Seal the Seasons, which sources produce from local farms and freezes it for storage. This vendor is a good option for real produce with a longer shelf life, and was started by current UNC students.
- **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).
- **Reach out to Aramark schools to find appropriate poultry vendors:** It has proven to be incredibly difficult to find affordable poultry that qualifies as real food, and this is mostly because of the nature of the industry itself. There is no vendor recommendation we can make to solve this dilemma, so instead we recommend reaching out to other campuses, particularly Aramark campuses, that have either found a reliable and affordable vendor, or are also looking for such a vendor, to collaborate. We also recommend communicating with local companies such as Weaver Street Market, which has also had a difficult time sourcing poultry that meets its standards, for any industry developments. Moreover, we recommend collaborating with such entities to establish a solid demand base on which the sustainable poultry farming industry can rely to adapt and grow.
- **Continue practice of open communication between interns, CDS/Aramark, RFC and on-campus food groups:** Finally, it has been the personal goal of this intern team to promote as much communication as possible between all invested parties, including CDS and Aramark, RFC, and the on-campus food groups, including (but not limited to) FLO and the Sonder Market. 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 incredibly helpful 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.

- **Inefficiency of Calculator Tool:** The Real Food Calculator program operates on a line item by line item input basis. It does not remember identical line items, nor does it allow the inputted data to be searched in an effective manner. It also lacks a date entered function. As long as the calculator program lacks these basic functionalities, we recommend inputting all line items into Microsoft Excel, and if necessary uploading the items back into the calculator afterwards.
- **Quality Control:** We were disappointed by the quality of our exit interview with an RFC staff member, and the lack of familiarity they seemed to have with our progress and results. We were not confident in our interviewer's ability to confirm our results, and felt that they were unable to devote enough time to review our findings. We recommend that RFC staff members should be more informed about the interns' results prior to the exit interview. We also recommend that these interviews should be carried out in a more time efficient and professional manner. We were expecting a follow-up email with additional questions from our interviewer, and never received it.
- **Provision of Results by RFC:** The real food calculator tool cannot produce results by individual month, and only generates graphs that show the compiled data from two months (one from the fall, and one from the spring). This meant that we had to create graphs that displayed February 2015 results ourselves, which was extremely time consuming and unnecessarily complicated. The real food calculator program was also unable to provide any information regarding the results of other campuses, which we believe is one of the most important parts of completing the internship. We recommend that the real food calculator tool should be updated and significantly reworked, in order to produce relevant data effectively and efficiently.

Recommendations about the *RFC Internship and to Future Interns:*

- **Internship Structure:** As the focus of the internship expands, it became clear to us that to maintain continuity and momentum between semesters, more collaboration with previous interns is necessary. To incentivise this collaboration, it may be necessary to offer a position of "RFC mentor" to those interns that have already completed the internship, whose duty would be to continue marketing efforts, organize communication between appropriate parties, share information with the new interns as to how to complete their duties; all of which could count as a class, or have some other academic payoff at the discretion of the faculty advisor and mentor.
- **Marketing Duties:** Marketing duties could be an entirely separate internship based on how in-depth of a marketing campaign the interns want to pursue. 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 utilize
- **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, to more efficiently transition new interns, as well as share any information regarding vendors or qualification questions. We found our on-campus resources to be the most reliable and helpful, and therefore recommend cultivating this network and community.

- **Use of Calculator Tool:** This semester the RFC interns have had to rely on themselves to sort, analyze, and display the data collected throughout the course of the months audit. It is essential moving forward that interns understand how to do this independently so that they will be able to produce results if the Real Food Calculator staff cannot.
- **Working with RFC:** The original purpose of working with RFC was the organization's promise to fact check the qualifications of the line items, produce graphs and charts of the inputted data, and allow cross-campus comparisons of the real food percentages of participating schools. Given that RFC has not done these things, we recommend thinking critically about maintaining this working relationship.

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 collaboration with past interns, on-campus food groups, in-state schools and local businesses 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
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 Steps 4-5+</i> <i>Certified Humane</i> by Humane Farm Animal Care^{3,3}

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 ingredients* 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 ingredients* 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* ** <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***" 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 Only**</p> <ul style="list-style-type: none"> <i>American Humane Certified</i> (no enriched cage eggs) <p>"Cage-Free" by USDA-AMS</p>

Disqualifications: Product containing disqualifying characteristics cannot count as real food in any category.
<ul style="list-style-type: none"> 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, FLSA, 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
<p><i>Italics</i> = There is strong, third-party verification of the claim through a certification</p> <p>"Text with Quotes" = Industry claim</p> <p>* = Certification/claim occurs in more than one column</p> <p>** = Needs verification that it is not from a Concentrated Animal Feeding Operation (CAFO)</p> <p>¹ Producer is defined as the entity that produces the product. Thus, it could be a farmer, rancher, bakery, corporation, etc.</p> <p>² For poultry, verify "Free Range" standards are followed</p> <p>³ Does not include hogs (<i>Certified Humane</i> hogs fall under Yellow Light)</p> <p>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.</p>

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

*provided by the Real Food Calculator website

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