



Real Food Calculator Final Report

Fall 2016

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I. Executive Summary

The Real Food Calculator (RFC) Internship is defined by the interest in achieving accurate results for the real food content purchased and sold by UNC's two dining halls: Lenoir and Rams Head. Together, these dining halls are encompassed by Carolina Dining Services, or CDS. Focusing on the month of February 2016, 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 unless the foods qualify as fair under the Fair Food Program or Milk with Dignity.
- For February 2016, the real food percentage was determined to be 24.2%. Real food A (item meets two criteria) reached a total of 5.7% and Real Food B (item meets one criterion) counted for an additional 18.5% percent. Compared to the audit during fall semester of 2015, we witnessed a 3.8% decrease.

RFC Difficulties:

Our team experienced significant hindrances to the process due to inefficiencies in RFC as a whole. These issues are listed below and we expand upon them later:

- **Real Food Standards Change:** The draft of the new standards for real food were released in the first week of October, with the final new standards released in the middle of October. The interns were unable to begin the actual auditing until after the release of these standards and the training session about them. This created a major unforeseen setback in the schedule, and also created confusion about which standards to hold the dining hall to given that purchases we were analyzing came from before the new standards were released.
- **Inputting Data & Timing:** Inputting data was hindered by the release of the new real food standards. We suggest future interns meet with a prior intern to sit down and fully go through the actual process of auditing. Had we prepared for the change in the real food standards, we could have started additional projects sooner. The training session from RFC that we expected to help us with this only discussed the new standards, giving us no grounding on which to begin the calculator.
- **Getting Results & Cross-Campus Comparisons:** Switching to a semester delay allowed us immediate access to the invoices but then created difficulties in finding vendor information from months ago. Unfortunately due to strain of time, we were unable to do a cross-campus comparison. This is an important role of the Real Food Calculator and should not be neglected in future years. See suggestion below.

Marketing Actions:

- We were unclear on the goals for our presence on social media, given that both a UNC Real Food Challenge and Real Food Calculator Facebook page exist. Recommendations

for the coming semester involve updating our social media presence and better connecting UNC's Real Food Challenge to the Real Food Calculator through having people working on the calculator involved in the Real Food Working Group. These should all be requirements of the calculator team with accountability through RFC.

- Our team participated in the Real Food Summit at UGA and networked with other RFC interns and organizations, we really came to appreciate the relationship we have with Aramark on campus when learning about other school's relationship with their food service providers. We were asked about our dining hall relationship while there and also after the summit.

Recommendations:

- **Maintain current purchasing strategy:** 24.2% real food is a 4.8 percentage point decrease compared to the same month the previous year. The decrease could have come from multiple sources, from difficulties in finding specific vendor data, as well as possible sales decreases. February also is a shorter month, with a large bulk of purchases coming previously in January. Still, reaching 24% maintains our commitment to above 20% real food and is an exciting number as we move forward.
- **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. We believe building these relationships should be part of the Real Food Calculator, however our cohort had difficulty balancing more than just the audit. To better organize for future cohorts, it will be important to designate students within the internship to be in charge of vendor relation while others could have other independent projects. That being said, being able to start the audit without the delays by the new standards, keeping the semester offset, and with Chip Mullins's fantastic focus on providing velocity reports, next semester's interns will be able to have the main audit finished in short time, leaving much more of the semester to focus on searching for new vendors and working with CDS to create better sustainable programs.
- **Vendor transparency:** A commitment to our current vendors by maintaining a long term business relationship will not only foster vendor economic success but also help CDS marketing. Another part of audit that we were unable to finish was completing research on vendor relations in terms of which vendors were dropped and for what reason. It is recommended for future intern groups that whoever is designated to work in building vendor relations will also be in charge of going over different semesters' data to ensure continuity of vendors and to explore the reasons for change in vendors.
- **Expanding sustainable practices:** A lot of the changes in the Real Food Guide have expanded certain types of products that can qualify as real food. Another standard we suggest incorporating into our sustainable practices at UNC is that of UBU, or, "unusual/ugly but usable" produce that can be utilized by repurposing the food into another product. The size or shape of produce does not matter when the products are

being cooked, but they are often rejected when they are distributed to be sold in their original form. Many of the farms utilized by Freshpoint provide UBU produce which should be recognized by CDS, and potentially RFC as a whole, as a standard of ecological sustainability as it is a good way to reduce food waste.

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:** It would be helpful to set up a Sakai page, on which past interns can stay on the page and be available for consultation if needed. The Sakai page would contain all the previous information in an easily accessible and understandable format. We also recommend considering designating a graduate student focusing their studies on food security take on a mentorship role within the real food calculator. Such a graduate student would have specific knowledge on the North Carolina food system and be able to give us tips and advice throughout the semester. They could be designated through the official RFC organization who has specific training through RFC to serve as a guide throughout the experience.
- **Marketing Duties:** The marketing side of the Real Food Internship could be handled by a specific intern or shared with the Real Food Challenge group on campus in order that students and other community members understand the joint effort between the different RFC roles. RFC is typically confusing due to its multifaceted existence on campus, so any form of unification online could greatly increase support.
- **Collaboration:** Communication between the intern team, CDS team, and mentors is an essential part of this project. There are also many different food groups on campus that we could communicate more with to inform them of our findings and the good work already being done by CDS.
- **Working with RFC:** We suggest future interns make sure to keep an open dialogue on their end with the Real Food Challenge national organization. Particularly we suggest seeking out experiences like regional and national summits to meet with fellow students and RFC staff and to take part in cohort webinar meetings throughout the semester. Despite the barriers to communication with a national organization such as RFC, the benefits from a broader support base can be very helpful.
- **Maintaining Organization:** While it is hard to manage a self-organized group, many recommendations outlined later in the report show how a few simple changes could greatly increase the efficiency and productivity of the calculator team. These include a

Sakai page, a timeslot during course registration on ConnectCarolina, a well-kept database, and contact continuity. All of these could be implemented easily for the long-term benefit of the internship.

II. Fall 2016 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 2016.

“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.

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. Internship Purpose

The Real Food Calculator Internship currently exists in order to verify the existing auditing conducted by Carolina Dining Services. With the signing of the Real Food Commitment in the spring, CDS now has committed to completing their own real food audit for every month of the year. As interns, we exist to double check the work conducted by CDS and to catch any products that may have been missed if their qualifications are harder to track down. We also serve to coordinate and communicate between the national Real Food Challenge organization and our specific campus. By undergoing trainings as interns and working to understand the standards, we are the voice for what counts as real food and why.

Real Food Challenge as a whole works to bring greater sustainable and equitable food practices into university systems and through that work to change the nature of the broader food system. UNC has been able to conduct the calculator since 2010 and we have now grown to be a standout university in our ability to source such a large percentage of real food, particularly when compared to other universities of similar size.

IV. Calculator Methodology

Our assessment covered a four-week period from the end of January to the end of February of 2016. CDS staff provided us with the invoices of every purchase made throughout the month and in many cases had already uploaded the online for us. Standard invoices from our smaller food providers showed the product code and cost of food items ordered from the vendor for either the entire span of purchasing or split up by order date. Some vendors had separate invoices for Lenoir and Rams Dining Hall. Our two largest food distributors - Sysco and Freshpoint - provided us velocity reports. Chip Mullins with Aramark worked to get us these velocity reports and attempted to get us a velocity report for Pepsi as well but to no success. For our other vendors we input each line item individually into the Calculator. Velocity reports display the specific price and quantity of all food items purchased from a specific vendor within that month instead of the prices and quantities individually ordered week-by-week. These velocity reports are also already digitized. This change significantly quickened the pace of working through Sysco and Freshpoint invoices.

We began inputting item information in October to our excel spreadsheets. Once we began to reach the end inputting the data from the invoices and individual vendor sheets, we started a research process to find out whether items qualified as real food. The data we collected for Sysco as well as many small vendors was largely found through online research, with emails and phone calls comprising a large portion of the contact strategy for Freshpoint and other real food vendors. Once we determined the qualification for each item we constructed our final data spreadsheet. Separated into columns, for each item we specified whether the item fit that category, “yes”, or did not, “no”. Under humane if the product was not related to livestock then we also could put “n/a”. The next column over we wrote in what certification of category of qualification the item fit into. If the item was not that real food category then the column was left blank. The spreadsheet also contained the product name, the product code, the total monetary amount spent on the item, the distributor/vendor name, the brand name if we knew it, and the type of food. Once this spreadsheet was complete with all vendor information we uploaded it to the calculator website, at which point we fixed some of the data that was formatted incorrectly.

Once uploading the data, we analyzed it by looking at it through various divisions of categories. Real Food A was calculated by determining the amount of food answering “yes” to two or more categories with a “no” for disqualifiers while Real Food B was calculated by those meeting only one category. Once finding out the monetary value of both classifications we could figure out that percentage of the total. We continued with this type of analysis for many different divisions of information.

V. Results

Table 1: Food Percentages for CDS Spring 2016

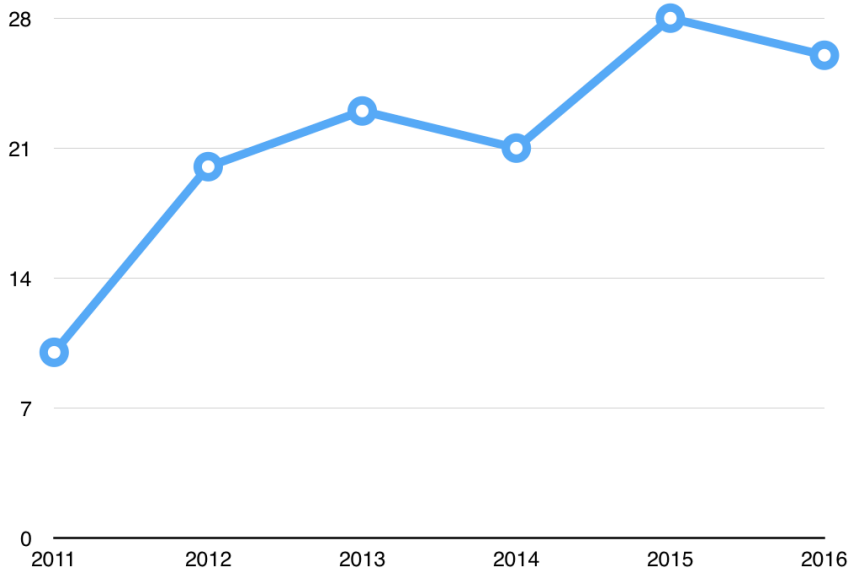
Real Food versus Conventional	Percentage of Total Food Purchased
Conventional Food	75.8%
Real Food	24.2%

Table 2: Progress of CDS Real Food Percentages by Semester From Fall 2010 to Spring 2016

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%
Spring 2016	24.2%

Figure A: Real Food Percentage Progress by Semester

REAL FOOD PURCHASES OVER TIME

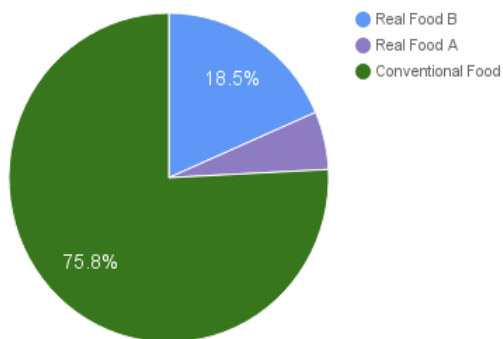


VI. Analysis

Part 1: Graphs and Charts

Figure 1: Percentage of Real Food for CDS Spring 2016. This chart shows the real food and conventional percentages during this audit period. The percentage of total real food is 24.2%, which is a 3.8% decrease compared to the September 2015 percentages, but a 3.2% increase compared to Fall 2014.

**Real Food A and B Percentages for CDS
Spring 2016**



* real food A is 5.7%

Figure 2: Amount Spent on Real Food for CDS February 2016. This chart shows the monetary amount spent on real food and conventional during this audit period.

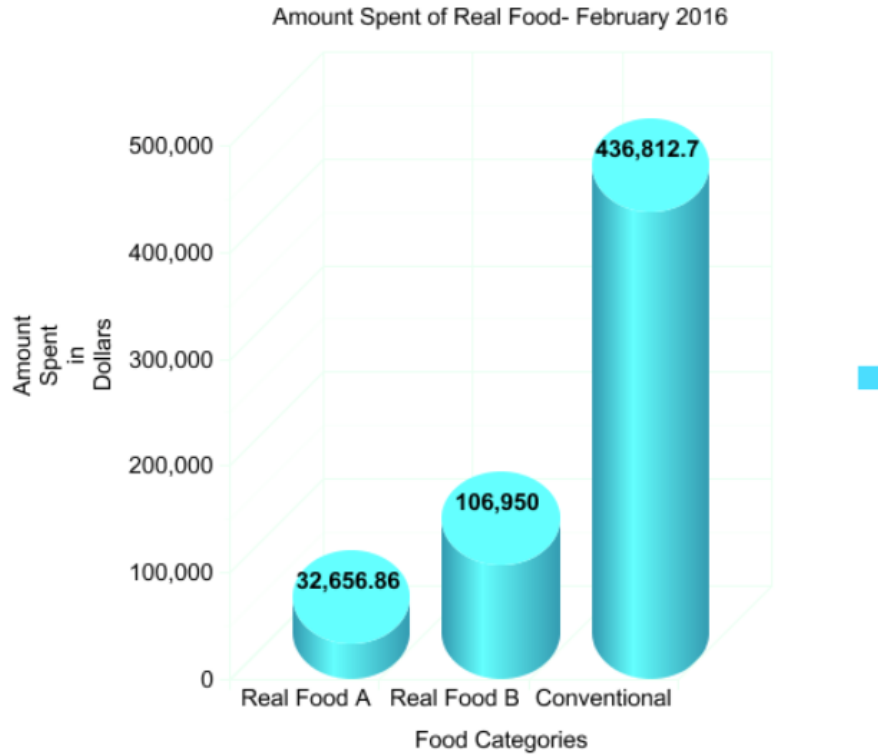
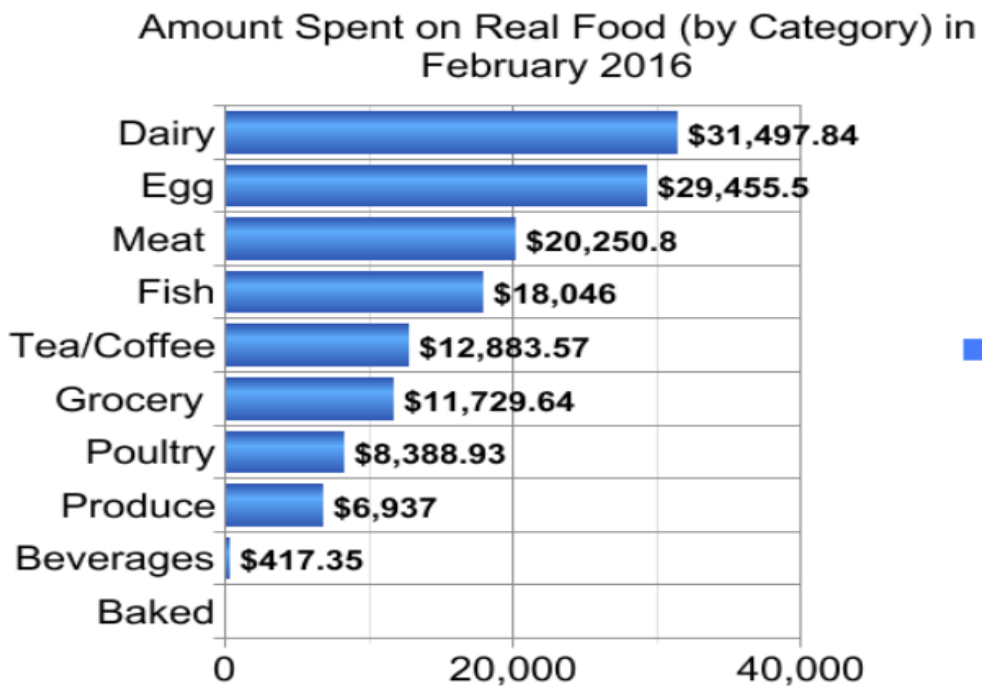


Figure 3: Total Real Food Purchased for CDS Spring 2016. This chart shows the breakdown of real food purchases by food category.



Figures 4-7: Breakdown of Real Food Percentages By Criteria for CDS Spring 2016. The following charts display the real food percentages compared to conventional percentages for each real food criteria for Spring 2016 CDS purchases.

	Local	Fair	Ecological	Humane
Purchases	\$53,736.67	\$18,683.27	\$41,748.97	\$58,095.30
Total Contribution	9.32%	3.24%	7.24%	10.08%
Relative Contribution	38.49%	13.38%	29.90%	41.61%

Local vs. Non-Local

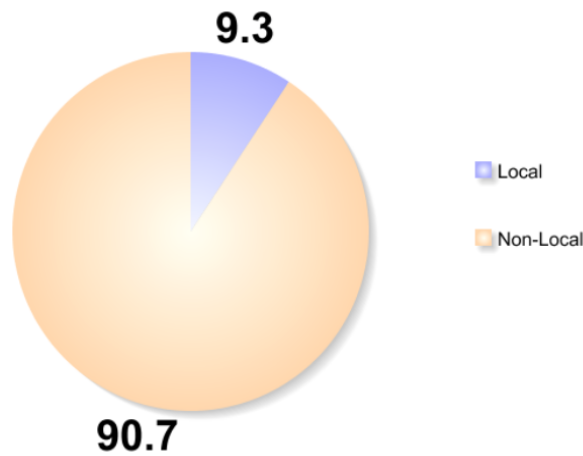


Figure 4: Composition of Local and Non-Local Food

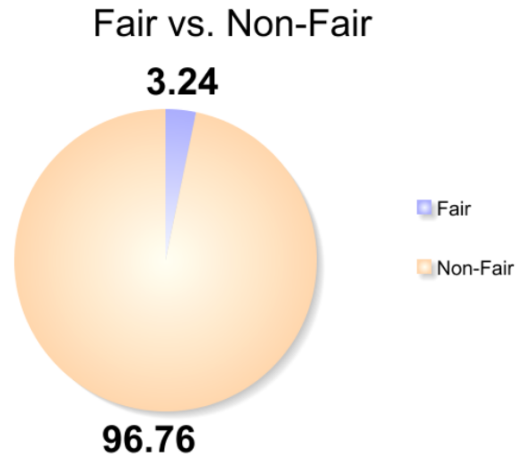


Figure 5: Composition of Fair and Non-Fair Food

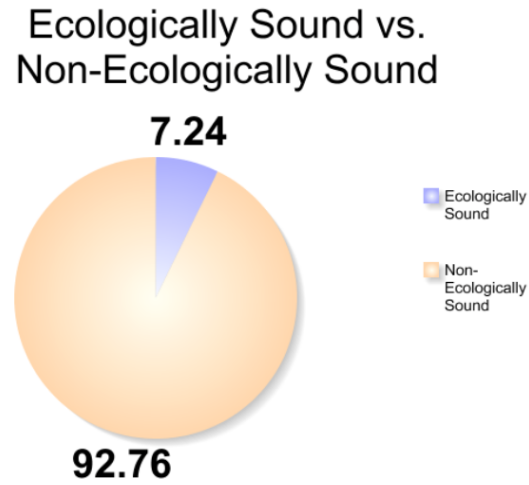


Figure 6: Composition of Ecologically Sound and Non-Ecologically Sound Food

Humane vs. Non-Humane

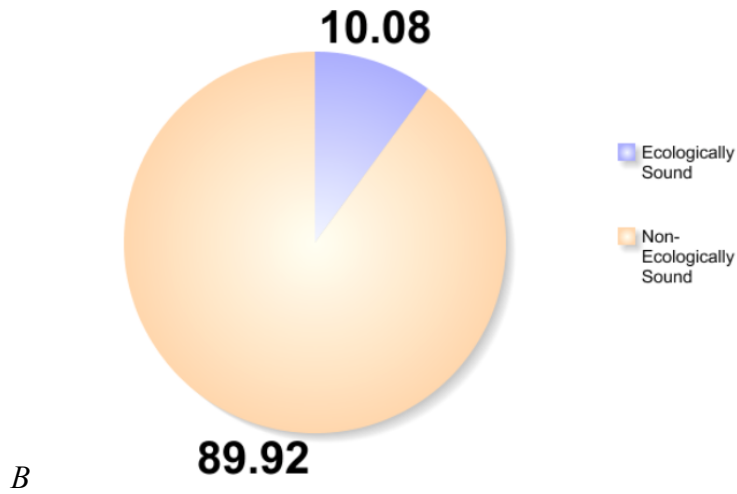


Figure 7: Composition of Humane and Non-Humane Food

Part 2: Detailed Analysis by Category

	Total Cost	RF Cost	RF Contribution to Category	Category Ratio of Total Cost	Ratio RF to Total Cost
Eggs	\$33,126.55	\$29,455.50	88.9%	5.75%	5.11%
Bakery	\$15,628.19	\$-	0.0%	2.71%	0.00%
Dairy	\$65,014.04	\$31,497.84	48.4%	11.28%	5.46%
Meat	\$89,373.99	\$20,250.87	22.7%	15.51%	3.51%
Poultry	\$39,529.62	\$8,388.93	21.2%	6.86%	1.46%
Fish	\$23,712.65	\$18,046.63	76.1%	4.11%	3.13%
Produce	\$115,751.15	\$6,937.02	6.0%	20.08%	1.20%
Tea/Coffee	\$12,966.04	\$12,883.57	99.4%	2.25%	2.24%

Grocery	\$158,783.54	\$11,729.64	7.4%	27.55%	2.03%
Beverages	\$22,534.29	\$417.35	1.9%	3.91%	0.07%
Totals	\$576,420.06	\$139,607.35			24.22%

Eggs: Real food contribution due to eggs increased from 50% to 88.9% of total egg purchases from last year. The category was fulfilled by only one item from Abbotsfield Farms through vendor Sysco. The eggs were counted only as humane due to their humane certification and therefore are only counted as Real Food B. That being said, the one purchase made up 88.9% of egg purchases, so it would be difficult to make any feasible recommendations.

Dairy: Real food made up 48.4% of the dairy orders by CDS. This is primarily due to the Maola Milk company counting as real, but the continued buying of Stonyfield Yogurt also made great contribution. Working to replace even more of the Dannon yogurt and other non-real food yogurts with products like Stonyfield would be easy ways of increasing the real food purchases.

Meat: There was no net change in the real food purchases specifically on meat. 22% of the meat ordered last February and this February was real. In order to increase this number, we recommend purchasing using the new rule for local beef, allowing up to 500 miles for the possible radius.

Poultry: We found very little change in poultry purchases, going from 23% to 21.2% of the real food contribution from last year to now. This only applies with the disclaimer that we continued to allow Springer Mountain to be considered real food despite knowing well that it is not. We only did that because former interns had approved Springer Mountain for CDS incorrectly, and we did not want to fault CDS for a mistake of former interns. With the switch to Joyce Farm, a certified real food provider, this error will cause no problem for future calculators. The only shift will be in the amount of humane, since Springer had counted previously as humane while Joyce will count as local under the standards.

Fish: We witnessed a 7% increase in real seafood, thanks mostly to Inland Seafood's ecological certifications and added local benefits. This brings our seafood relative contribution to the real food total to 76.1%. Though this only accounts for a little over 3% of the overall purchases of CDS, it is important to realize the implications on the general population. This makes it possible for people to eat seafood in the dining halls knowing that it is likely from a sustainable provider. The peace of mind with minimal effort on the consumer end is a notable benefit of making one whole category almost entirely real food. Instead of an even spread, it may be more beneficial to try and get a few categories to nearly 100%, leading to easy knowledge accessibility for anyone eating at the dining halls.

Produce: There was a major decrease in the produce category of real food, with only 6% coming in as real, contributing to 1.2% of the total CDS purchases. Last February, this was listed at 20%. The discrepancy may come from Freshpoint's vague rules on its own definition of "local." Freshpoint categorizes farms that are within a 500 mile radius to be local. However, the Real Food Standards require produce to be within 250 miles to be considered local. None of the farms that are contracted by Freshpoint are considered 'fair' by real food standards, and only two of the farms were considered 'ecologically sound'. Albert's Organics products all were considered 'ecologically sound' since they are USDA Organic Certified and the products from the brand Wholesum Family Farms also qualified as 'fair'.

Coffee/Tea: This audit period was our first semester sourcing coffee and tea from Larry's Beans Coffee. While this coffee is locally roasted, under the Real Food Guide it cannot qualify as local if the product cannot be grown locally. Despite this, all of our Larry's sourcing qualifies as real food A due to being both fair and ecologically sound. Larry's products are Fair Trade Certified by Fair Trade USA and are USDA Certified Organic. Larry's also is shade grown, another ecologically sound related characteristic. This brought the coffee/tea purchases to 99.4% real, contributing 2.2% to the total number. As explained above in the fish category, this is a lovely addition to the CDS brand.

Soy Products: Most of the soy products used at the dining hall are provided by Delight Soy. They are a processor of soybeans that are grown locally in North Carolina. They claim that the soy they use is from organic farms, but there is no traceable evidence of this.

VII. Sources of Error:

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

- **Real Food Qualifiers:**

We faced some difficulties, similar to previous interns, with communication with the Real Food Challenge staff in receiving clarification on our questions related to certain qualifications. With the release of the new standards, there are some significant, and some lesser changes that confused us. Specifically for local and community-based, the specifications have shifted to being based on revenue instead of a comparable percentage measure. Such a shift we now must implement in using the calculator but it does take certain vendors, particularly produce, outside of the realm of qualification. Additionally, we faced differences in local definitions between the Real Food Guide and individual vendor definitions for local. In the past, interns may have used vendor definitions for some determinations of local if unable to determine mileage. Other practices by farms and vendors may be fair, ecologically sound, or humane but because of the size or low

revenue of the supplier they may not have sought out actual certifications so for the purposes of the calculator would not count. A few of the farms that are subcontracted by Freshpoint, for example, are quite small-scale family operations that employ less than ten people. While these farms likely treat their employees quite fairly, they have not secured one of the ‘fair’ qualifications. An additional issue with a specific Freshpoint contractor is the method of hydroponics. While we use one of these farms for leaf vegetables there is no special consideration for their ecological soundness because they are not organic.

- **Getting Data from Specific Vendors**

Freshpoint: While as a vendor very responsive to our questions, our results for totals of real food may not have been completely reliable because we didn’t not receive information about all of the purchasing. The data we did receive was for Freshpoint purchases for us for the year, this meant that depending on what the season is, different farmers they contract with would be used. Because the purchases we received from them came from the whole year, it is impossible to know which specific purchases were made in the month we were calculating. Additionally, we were not given the majority of produce supplied by Freshpoint because their non-local food come from different national farms depending multiple factors – weather, prices, truck routes, and other pickups at various farms. They can’t guarantee the farm that a single product comes from because that may change each week. They buy the label, and the company contracts with many product-specific farms in California so when one farm is low on product, another farm will have product to fill the orders.

- **Inputting Data Effectively & Timing:**

Another issue that was particularly difficult in tracking Freshpoint purchases, were the multiple vendors that they subcontracted to. While we were auditing purchases from a single month, Freshpoint could only provide the sales from the year in which our month was located. Since the contract to different farms for single products, it was impossible to know which farms in particular were used during our month. This is challenging because some of these farms are considered real and others are not. We addressed this by dividing up costs spent on a product based on the amount of that product bought from that farm in total for the year. Other vendors also had this difficulty, since they subcontracted to many vendors it was hard to determine the exact farm sourcing for many products.

Another issue we incurred was the overall timeline of the calculator that affected our research results. Since the new Real Food Standards were not released until October, there was a major hold up with beginning the audit. 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, get the Real Food Calculator to process and

approve our result, and produce the final report to present. Also, since we were auditing for February, we faced difficulties auditing that far back. Many vendors were unable to tell us exactly where a product from that long ago would have come from, particularly for time sensitive products of produce and fresh seafood. More products may have qualified as real food if we had had more specific information for these.

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

Attending the national summit allowed us to meet students from many different schools and to hear anecdotally about the status of real food at their respective schools. The conference certainly helped in getting to know some of the successes and difficulties of other schools, but there was no systems set up or continuity in terms of keeping us connected throughout our calculating. We hope that in the future there can be a database created for all the schools that take part in the calculator so that we can easily see if schools share vendors and whether they qualify as real food. We had hoped to do more cross-campus comparisons this semester but unfortunately were unable to make much progress. In the future, these comparisons may take place in the form of research by other students.

VIII. Recommendations

Recommendations to *Carolina Dining Services*

- **Maintain current purchasing strategy:** This semester's real food percentage marks the first decline of real food buying in the internship's last three years. That said, the university is still above the 20% goal and has reached the 20% real food for the entire school year level that is desirable under the Real Food Commitment. 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 sustainable vendors including Larry's Beans, Inland Seafood, Harris Robinette, Sea to Table, and Albert's Organics to create demand. While there are a few farms that supply Freshpoint with Real Food, there seems to be a lot of space for improvement as well as miscommunication with what is considered local produce.
- **Vendor Plurality:** We had also hoped to do more work on vendor continuity this semester. Maintaining our commitments with our vendors, particularly those who scale up to provide to our large institution, is of utmost importance. While CDS should look into other vendors that can provide more real food, the vendors that we have now that depend on our sourcing should not be dropped lightly.
- **Promoting Fair Food in the Dining Hall:** Of the four categories of real food, CDS sources the least percent of fair food at only 3.24%. This category has consistently had the lowest percent compared to local, ecologically sound, and humane. Past interns have suggested that CDS should incorporate an emphasis on fair trade in their marketing strategies so that consumers can become more informed on the topic. Recently, we have

noticed more labels and signs throughout the dining hall advertising the certifications of products including Larry's Beans coffee and tea being fair trade. Aramark signed on to the Fair Food Program in 2010, agreeing to only source Florida tomatoes from farms that fit the Code of Conduct set by the Coalition of Immokalee Workers and as part of this agreement Fair Food Program partners agree to pay the Fair Food Premium on top of any price they pay for tomatoes (Fair Food Program, 2016). With the Real Food Guide 2.0, any products that qualify under the Fair Food Program count as real food, even if they have other factors that would disqualify them. In expanding fair food sourcing, CDS could consider looking into the Milk with Dignity program that also is a fair qualifying certification and trumps disqualifications.

- **Institutional transparency:** A commitment to our current vendors by maintaining a long term business relationship will not only foster vendor economic success but also help CDS marketing. Another part of audit that we were unable to finish was completing research on vendor relations in terms of which vendors were dropped and for what reason. It is recommended for future intern groups that whoever is designated to work in building vendor relations will also be in charge of going over different semesters' data to ensure continuity of vendors and to explore the reasons for change in vendors.
- **Continue practice of open communication between interns, CDS/Aramark, RFC and on-campus food groups:** A key realization we had while at the national Real Food Challenge summit and afterwards was the valuable relationship we as interns have with Carolina Dining Services and Aramark. CDS/Aramark employees were always very helpful throughout the semester and are willing to work with the interns much more than their counterparts at other schools. We suggest going forward that the dialogue between all parties remains open and collaborative so as to continue making progressive change in our dining hall food system.
- **Switching to Joyce Farms:** We as interns this semester also served in an advising role on whether or not to switch all of our chicken purchasing to Joyce Farms from Springer Mountain Farms. After analyzing both vendors, we realized Springer Mountain Farms had been counting as a humane purchase for our dining hall due to its American Humane Certification but that this certification under the Real Food Guide, both 1.1 and 2.0, allows for American Humane Certification for egg-layers only, not broiler chickens. After working through the different jargon which we had not understood, we realized that Springer Mountain had qualified for previous semesters inaccurately. In order to not retroactively apply this newfound knowledge, we did count Springer Mountain as humane for the purposes of this audit, as discussed in the results section. Going forward, we have worked with Scott Weir to determine if Joyce Farms is a better option. While Joyce Farms does source from a number of different farms, all of their processing and farm locations are within the required 250 miles of campus so Joyce can count as local and thus as real food. Joyce Farms impressed us with their familiarity with their workers at the processing site attached to their offices in Winston-Salem, NC. Joyce Farms does

not qualify as a CAFO based on the standards from the EPA and barn raises all of their chicken with the USDA Organic standard of 1 square foot per bird or greater. Some of the specific farms Joyce sources from meet the Global Animal Partnership Step 2 requirements and they are working to move all of their products to this certification. This is a valuable humane certification but does not yet qualify as real food, but GAP Steps 3+ do. Based on these considerations, we supported Scott Weir in his desire to switch purchasing and support more local efforts, since Springer Mountain Farms is based in Georgia. We do realize the difficulty caused here with maintaining vendors long-term so suggest working with vendors in the future to explain how they can become more real food before dropping them.

Recommendations to *Real Food Calculator*

- **Expand depth of training about Real Food qualifiers:** With the shift in the Real Food standards this semester, we received some training on the new standards and RFC released a standards package with explanations on the derivations for each category. This standards package helps explain some of reasoning for the shift but in the future interns would benefit from an annotated Real Food Guide that briefly explains the choice behind each certification and what each certification entails. The cohort webinars this semester did not allow for as much in depth training as would have been ideal for us to fully understand the procedures we were carrying out.
- **Recognizing Valuable Practices Beyond Categories:** The new RFC standards create a shift toward an even greater valuation of certain certifications, with the reduction in the sorts of criteria that can be met without a third-party qualifier. This can make it harder for smaller vendors to qualify as real food. We suggest a consideration in how vendor qualification may have shifted from Real Food Guide 1.1 to 2.0.

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

- **Information Collaboration:** In response to some of the frustrations and confusion we faced while undergoing this process, we hope to provide some semblance of an improved strategy going forward. We have suggested to Dr. Cooke and Dr. Colloredo-Mansfeld that a Sakai page be set up for the interns. All students understand and use Sakai often enough for their classes and so the format will not be confusing, rather intuitive and useful for communication and document sharing. While some of the past RFC information can be found in a Google Drive, Google Drive does not provide a platform for the level of organization that would be ideal. Old interns could stay on through the Sakai page as available for consultation if needed, as this is an automatic feature of Sakai. While the Sakai page would allow for easier communication between interns and advisors, an even better addition to the RFC workflow for communication would be a scheduled timeslot during course registration through ConnectCarolina. While this timeslot may not be needed for every class meeting block, it would be essential in the

early and late parts of the semester for trying to gather together a group of busy people with constantly conflicting schedules. Though this may require seemingly excess organization, we believe it could drastically increase productivity and eliminate unnecessary stress.

Additionally, we are working to put together a list of the people we contacted at each respective vendor so that interns have a concrete list of names and email addresses that they can start out with. This should allow much of the audit to simply involve contacting the former helpful contact to double check that the certifications are still valid for said products and to track down locations if necessary.

- **Structure:** While we believe the semester delay is a good idea to get the ball rolling at the beginning of the semester, we faced some challenges contacting vendors about products from several months ago. While some vendors sourcing patterns do not vary too much seasonally, some vendors struggled to know about the specific product from that long ago. The semester delay is now here to stay for the immediate future, so we suggest that for products that might be more difficult to track down to be sure to contact those vendors as soon as you start auditing. Interns should be able to now get started on understanding the process and completing the audit as soon as the semester starts. Additionally, if any extra projects besides the audit are incorporated into the semester goals, these projects should begin as soon as possible at the beginning of the semester when interns are still waiting on the go ahead from the Real Food Challenge national organization.
- **Marketing Duties:** Now that we have signed the Real Food Commitment, the role of the internship for marketing faces an overlapping role with the Real Food Challenge on campus. Ali Huber and Alexandra Wilcox currently run the Real Food Challenge Facebook page and when we discussed marketing with them we all decided to maintain the Real Food Challenge page and stop using the Real Food Calculator page. The ability for the interns and other students to come together over real food as a whole is crucial going forward and allows for broader work on goals. Work by Fair, Local, and Organic (FLO) in having sustainable meals should be supported and could be enhanced through interns working on spreading the word and helping run events at these meals. More signs up during such meals to explain the sourcing of our products if students are interested could bring more knowledge to the campus body of the great work being done by CDS.
- **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. Additionally, we suggest employing a form of simple database software as a way of simplifying and aggregating past analyses to accelerate the audit process. This would also increase the efficiency and adaptability of the real food vendor dataset. The database could eventually be expanded nationally across RFC to work together to reduce redundancies in research. The 2016 interns are happy to work with RFC, CDS, and next semester's interns to create this system.

- **Working with RFC:** We suggest future interns make sure to keep an open dialogue on their end with the Real Food Challenge national organization. Particularly we suggest seeking out experiences like regional and national summits to meet with fellow students and RFC staff and to take part in cohort webinar meetings throughout the semester. Despite the barriers to communication with a national organization such as RFC, the benefits from a broader support base can be very helpful.


Moving forward, we suggest CDS continue to make shifts to real food, keeping track of the vendors used and building up relationships with them. Our university is a role model for many other universities considering how to make such a shift and what a campus that has signed on to the Real Food Commitment looks like.

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 disqualified. 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”. While “green light” food, or Real Food A must meet at least 2 real food requirements, “yellow light” or real food B must meet one. Additionally, the products considered by RFC undergo review for any characteristics that may disqualify them from being considered “real”. Disqualifiers will remove the A or B status of a product if it breaches certain regulation. This includes egregious human rights violations, labor violations, Genetically Modified Organisms, if they are ultra processed or are a Concentrated Animal Feeding Operation (CAFO). For example, if a product met a qualification such as being local, but still contained caramel coloring, this would disqualify the product from real food status. However, a farm may be exempt from these disqualifiers if they have a worker driven social responsibility program. 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 and where there is room for improvement (Real Food Challenge). (Refer to Appendix B for more information on the Real Food Criteria.)

Appendix B: Real Food Guide 2.0

The Real Food Guide 			
Local & Community Based	Fair	Ecologically Sound	Humane
<p><i>These foods can be traced to nearby farms, ranches, boats and businesses that are locally-owned and operated. Supporting small and mid-size food businesses challenges trends towards consolidation in the food industry and supports local economies.</i></p>	<p><i>Individuals involved in food production work in safe and fair conditions, receive fair compensation, are ensured the right to organize and the right to a grievance process, and have equal opportunity for employment.</i></p>	<p><i>Farms, ranches, boats, and other operations involved with food production practice environmental stewardship that conserves biodiversity and ecosystem resilience and preserves natural resources, including energy, wildlife, water, air, and soil. Production practices should minimize toxic substances, direct and indirect greenhouse gas emissions, natural resource depletion, and environmental degradation.</i></p>	<p><i>Animals can express natural behavior in a low-stress environment and are raised with no added hormones or non-therapeutic antibiotics.</i></p>
Green Light: Products meeting these criteria or certifications qualify as Real Food and best represent the standard			
<p>Single-ingredient Products:</p> <p>A product must meet ALL the following criteria:</p> <p>A. Ownership: Producer must be a privately or cooperatively owned enterprise. <i>Wild-caught Seafood must come from owner-operated boats</i></p> <p>B. Size:</p> <ul style="list-style-type: none"> • Produce: Individual farms must gross \$5 million/year or less • Meat, Poultry, Eggs, Dairy, Seafood, Grocery: Company must gross \$50 million/year or less <p>C. Distance: All production, processing, and distribution facilities must be within a 250 mile radius of the institution. <i>This radius is extended to 500 miles for Meat</i></p> <p>Single-ingredient Products (Aggregated): 100% of the products must meet the criteria for Ownership, Size and Distance</p>	<p>A product must be certified by ONE of the following approved certifications:</p> <p>International Products:</p> <ul style="list-style-type: none"> • Ecocert Fair Trade Certified • Fairtrade America • Fair Trade Certified by Fair Trade USA • Fairtrade International Certified by Fair Labeling Organization (FLO) • Fair For Life Certified by Institute for Marketecology (IMO) • FairWild • Hand in Hand <p>Domestic Products:</p> <ul style="list-style-type: none"> • Equitable Food Initiative (EFI) • Food Justice Certified by Agricultural Justice Project <p>Worker Driven Social Responsibility Programs*:</p> <ul style="list-style-type: none"> • Milk with Dignity by Migrant Justice • Fair Food Program by the Coalition of Immokalee Workers 	<p>A product must be certified by ONE of the following approved certifications:</p> <p>All Products:</p> <ul style="list-style-type: none"> • ANS/LEO-4000 the American National Standard for Sustainable Agriculture by Leonardo Academy • Biodynamic Certified by Demeter • FairWild • Food Alliance Certified • Rainforest Alliance Certified • Salmon Safe • USDA Organic Standard and approved certifiers <p>Coffee Only:</p> <ul style="list-style-type: none"> • Bird Friendly by Smithsonian <p>Produce Only: Produce grown in a farm or garden at the institution, in which the researcher can confirm the use of organic practices</p>	<p>A product must be certified by ONE of the following approved certifications:</p> <p>All Products:</p> <ul style="list-style-type: none"> • Animal Welfare Approved/Certified AWA by A Greener World • Biodynamic Certified by Demeter • Certified Humane by Humane Farm Animal Care (all species except swine) • AWA Grassfed by A Greener World • Global Animal Partnership steps 4-5+ • Pennsylvania Certified Organic 100% Grassfed by USDA • American Humane Certified [Free Range] (Egg-layers only)

Yellow Light: Products meeting these criteria or certifications qualify as Real Food but do not represent the *fullest* expression of the standards

<p>Multi-ingredient Products: (e.g. Baked Goods)</p> <p>Company must meet ALL the following criteria:</p> <p>A. Ownership: Company must be a privately or cooperatively owned enterprise.</p> <p>B. Size: Company must gross \$50 million/year or less</p> <p>C. Distance: All processing and distribution facilities must be within a 250 mile radius of the institution.</p> <p>-AND-</p> <p>At least half (50%) of the ingredients must come from farms meeting ALL the following criteria:</p> <p>A. Ownership: Company must be a privately or cooperatively owned enterprise.</p> <p>B. Size:</p> <ul style="list-style-type: none"> • Produce: Individual farms must gross \$5 million/year or less • All other ingredients: Company must gross \$50 million/year or less <p>C. Distance: All production facilities must be within a 250 mile radius of the institution</p> <p>Single-ingredient Products (Aggregated): At least three-quarters (75%) of the product (by volume) must meet <i>Green Light</i> criteria for Ownership, Size, and Distance</p>	<p>A product must meet ONE of the following criteria:</p> <p>For multi-ingredient products:</p> <ul style="list-style-type: none"> • Producer and at least half (50%) of the ingredients meet the <i>Green Light</i> criteria • <i>Fair Trade Certified Ingredient</i> by Fair Trade USA 	<p>A product must meet ONE of the following criteria:</p> <p>Single-ingredient Products Be certified by one of the following approved certifications:</p> <ul style="list-style-type: none"> • <i>Certified Sustainably Grown</i> • <i>Fair Trade USA Certified</i> • <i>LEAF (Linking Environment and Farming)</i> • <i>Protected Harvest Certified</i> • <i>USDA Transitional Organic Standard</i> <p>Multi-ingredient products:</p> <ul style="list-style-type: none"> • At least half (50%) of the ingredients meet the <i>Green Light</i> criteria <p>Seafood (wild-caught only):</p> <ul style="list-style-type: none"> • <i>Marine Stewardship Council (MSC) Blue Eco Label</i> paired with the <i>MSC Chain of Custody Certification</i> • <i>Monterey Bay Aquarium Seafood Watch Guide "Best Choices"</i> (Regional Guide or Buyer's Guide) 	<p>A product must be certified by ONE of the following approved certifications:</p> <ul style="list-style-type: none"> • <i>AGA Grassfed</i> by American Grassfed Association (ruminants only) • <i>Certified Humane</i> by Humane Farm Animal Care (swine only) • <i>Food Alliance Certified</i> • <i>Global Animal Partnership Step 3</i> • <i>American Humane Certified (Cage Free and Enriched Colony)</i> (Egg-layers only)
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DISQUALIFICATIONS: Products containing disqualifying characteristics cannot count as Real Food in any category.

- **Egregious Human Rights Violations:** Producers have been found guilty of criminal charges of forced labor within the previous 10 years.
 - **Labor Violations:** Producer is known to have been found guilty of or has been cited for a case relating to a serious, repeat or willful Occupational Safety and Health Administration (OSHA), National Labor Relations Board (NLRB), or Fair Labor Standards Act (FLSA) violation within the last 3 years. They will be disqualified unless the producer has addressed these violations by: 1) Making the workers whole, 2) Paying any fines, and 3) Developing written policy preventing future violations. In the case of wage theft and/or worker fatality, a producer is disqualified for 3 years regardless of any steps they have taken to address the violation.
 - **Concentrated Animal Feeding Operations (CAFOs):** Producer is a Concentrated Animal Feeding Operation (CAFO)
| *Except for dairy that has been aggregated from multiple farms IF the average farm size is less than 200 cows*
 - **Genetically Modified Organisms (GMOs):** Products made with genetically engineered ingredients (including corn, soy, rapeseed, beet sugar, papayas and summer squash) and their derivatives
| *Unless these ingredients are used in trace amounts or the product carries a certification that precludes the presence of GMOs (Non-GMO Project Verified or any of the certifications that qualify as Ecologically Sound)*
 - **Ultra-Processed Foods:** Products made with the following ingredients: Aspartame; Butylated hydroxyanisole (BHA); Butylated hydroxytoluene (BHT); Caramel coloring; Partially hydrogenated oil (trans-fats); Potassium bromate; Propyl gallate; rBGH/rBST; Saccharin; Sodium nitrate added, Sodium nitrite added; Dyes: Red #3, Red #40, Yellow #5, Yellow #6
- *Worker-Driven Social Responsibility Programs are exempt from Disqualifiers, and can count as Real Food even if they have a disqualifying characteristic*

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.

*provided by the Real Food Calculator website

XI. Citations & Additional links:

Fair Food Program. "About the Fair Food Program." 2016. Web. 10 Dec. 2016.
<http://www.fairfoodprogram.org/about-the-fair-food-program/>

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<http://realfoodchallenge.org/sites/default/files/RealFoodGuide2.0.pdf>