

# **UNC-Chapel Hill Real Food Calculator Final Report:**

Carolina Dining Services 2022 September Purchasing Period

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## I. Executive Summary

The final report aims to summarize the findings of the spring 2023 group of Real Food Challenge interns. It will cover information on what the Real Food Challenge is, what the 1.1 and 3.0 standards define as "Real," and the research and comparison process. Also outlined are the challenges faced over the course of the internships along with future steps that the University of North Carolina at Chapel Hill might take, given unusual circumstances regarding the Real Food Challenge and uncertainty and concerns about the organization as a whole.

## II. Real Food Challenge (RFC) and Internship Overview

The Real Food Challenge (RFC) is a non-profit organization, founded in 2006, by student activists and sustainability professionals. They have a history of tracking around 300 universities in their food spending, and first became involved with the University of North Carolina at Chapel Hill when student organizations on campus advocated for more sustainable food in UNC's dining halls. By administering their Real Food Calculator, they aim for universities around the nation to have at least 20% "Real" food make up their food budgets.

The first official audit that RFC did on UNC's food spending took place in 2010. Later, after more persistent student advocacy, UNC's previous Chancellor Carol Folt signed a contract RFC in 2016. This contract outlined that UNC would use RFC's 1.1 standards to evaluate their food spending.

Since 2016, RFC has updated their standards from 1.1 to 2.1 in the fall of 2018, and then again to 3.0 this spring of 2023. Carolina Dining Services still uses the 1.1 standards as their

baseline, per the contract agreement, but student interns evaluating the food spending use 1.1 standards along with the most updated RFC standards over the years; this spring, interns used 1.1 and 3.0 standards.

Each semester the Real Food Challenge interns audit UNC's food purchases from one month from the previous semester (always either September or February). This spring, the interns examined Carolina Dining Services invoices from September of 2022. After inputting all of the invoice data into an Excel spreadsheet, the interns researched the products and their vendors to determine what did or did not qualify as "Real." We did so using both 1.1 standards and 3.0 standards. From there, we cleaned and analyzed all of the data gathered and calculated the percentage of "Real" food making up UNC's food budget based on both sets of standards. After completing our research process, we presented our work to sustainability professionals of UNC.

#### III. Calculator Methodology

Food is considered "Real" if it qualifies for at least one of the four RFC categories, namely Local, Fair, Ecologically Sound, or Humane for 1.1 and Community-Based Economies, Valued Workforce, Environmentally Sustainable, or Animal Welfare for 3.0. Also to note, the 1.1 standards included a disqualifiers section that could automatically remove certain vendors or food items from being "Real" even if they qualified under one of the four categories.

#### A. Calculator Methodology – 1.1 Standards

The first category, 1.1's Local, aims to encourage universities to purchase food locally.

1.1's Fair has the goal of supporting vendors with good labor values. Then, 1.1's Ecologically Sound is a certification-centered category, like 3.0's corresponding Environmentally Sound, that supports investment in environmentally conscious vendors. Lastly, 1.1's Humane category encourages fair animal treatment.

1.1's Local includes facilities and farms within 250 miles of the university. 1.1's Fair includes certain domestic and international certification and also has the option for companies to provide a single-source product defining fair practices for all employees. Next, 1.1's Ecologically Sound includes certain food-based certifications and includes some certifications that 3.0 does not keep, like Monterey Bay Aquarium Seafood Watch. Lastly, 1.1's Humane includes certain certifications and claims and includes cage-free as a qualifier, whereas 3.0 does not.

#### B. Calculator Methodology – 3.0 Standards

For the first category, 3.0's Community-Based Economies, does the same as 1.1, while encouraging in-state food and contributing to smaller businesses. 3.0's Valued Workforce has the same goals as 1.1's corresponding Fair category, but includes broader serving worker-benefitting qualifiers. 3.0's Environmental Sound category has the same goal as 1.1's Ecologically Sound category, to be environmentally conscious, but is notably stricter with its qualifications, and includes a more detailed breakdown of certifications. Lastly, like 1.1's Humane, 3.0's Animal Welfare supports vendors practicing fair animal treatment, but compared to 1.1, is far more comprehensive.

3.0's Community-Based Economies includes the same as 1.1's Local did, with additional company requirements and lists meat, poultry, and seafood to be within 500 miles. In contrast to 1.1's Fair, 3.0's Valued Workforce includes contracts, cooperatives, or other worker-benefitting programs, and shows changes from 1.1, like Fair Trade International only being included for coffee, cocoa, and sugar. However, 3.0's Environmentally Sustainable includes many of 1.1's listed certifications along with several additions and changes in the rankings of certifications.

3.0's Animal Welfare also has most of 1.1's certifications with additions especially pertaining to different kinds of organic and food-based certifications.

#### **IV.** Final Results

Due to the introduction of RFC's 3.0 standards this year, as well as the pre-established contract signed by UNC onto RFC's 1.1 standards, the internship this year focused on auditing Carolina Dining Service (CDS)'s food sustainability through the lens of both the 1.1 and 3.0 standards.

CDS purchased a total of \$1,028,177 worth of food products for both the Lenoir and Chase dining hall locations on campus during September of 2022. Following is a breakdown of total Real Food purchasing, through the 1.1 and 3.0 standards, within this purchasing period.

### A. <u>Final Results – 1.1 Standards Results</u>

During the September 2022 food purchasing period, 27.83% of all CDS food purchases for Lenoir and Chase dining halls were considered "Real" under RFC's 1.1 standards; this amounts to \$286,149.53 of Real Food purchasing under these standards. **Figure 4.1** details a

breakdown of this total Real Food purchasing by Real Food category. As can be seen, a majority (~56%) of Real Food purchasing was qualified under the "Local and Community-Based" category. The "Humane" category contributed to roughly a third of Real Food spend (~33%), the "Ecologically Sound" category accounted for ~9% of Real Food purchasing, and the "Fair" category only for a little over 1% (**Figure 4.1**). Next, a more in depth breakdown of Real Food spend in each of these categories.

Local and Community Based (LCBE) Spending

Under RFC's 1.1 standards, 19.03% of all purchasing qualified under the "Local and Community Based Category" (LCBE) of Real Food. Within this ~19% of food purchasing, the distribution of qualified food types under the LCBE category showed that ~30% of LCBE spend was seafood, ~23% was beef, ~32% was pork, and ~12% was produce, with prepared meals, poultry, and snacks/condiments contributing a small amount as well (<2% each). (**Figure 4.2**)

The top brands contributing to LCBE spend were Mr. Big Seafood (25.7% of 1.1 LCBE spend), Cheshire Pork (24.52% of 1.1 LCBE spend), Firsthand Foods (22.81% of 1.1 LCBE spend), and Freshpoint produce (~11% of 1.1 LCBE spend) All of these brands qualified due to their close proximity (<250 mi) to the institution, and their structure as a privately traded or cooperatively owned business grossing less than 1% of the industry leader, as dictated by RFC's 1.1 standards (**Figure 2.1**).

Ecologically Sound (ES) Spending

3.08% of all food purchased by CDS in September of 2022 was considered to be "Real" under RFC's 1.1 "Ecologically Sound" (ES) spending category. Within this ~3%

of total food spend, a majority (~62%) of ES spending was seafood, with dairy accounting for 12.46% of ES spend, beverages with 7.35%, and eggs with 5.77%. Breads and grains, prepared meals, snacks & condiments, beef, and poultry each contributed to <5% of ES spending under 1.1. (**Figure 4.3**).

The top brands contributing to "Ecologically Sound" spend under 1.1 were North Coast Seafoods (24.35% of 1.1 ES spend), Java Fishery (17.86% of 1.1 ES Spend), and Portico Seafood (14.5% of 1.1 ES spend). North Coast Seafoods, and Portico Seafood both qualified under *MSC Certified Sustainable Seafood*, while Java Fishery qualified under *Monterey Bay Aquarium Seafood Watch Guide "Best Choices"*, as dictated by RFC's 1.1 standards (**Figure 2.1**).

## Fair Spending

0.42% of food purchasing for the examined purchasing period was considered "Real" under 1.1's "Fair" category of spending. 100% of qualified foods under this category were dairy. (**Figure 4.4**)

The only brand contributing to 1.1's "Fair" category of spending was Chobani, accounting for 100% of Fair spend, and qualified under *Fair Trade Certified*, as dictated by RFC's 1.1 standards (**Figure 2.1**)

### Humane Spending

26.9% of animal-based food products (eggs, dairy, meat) purchased during

September of 2022 were considered "Real" through 1.1's "Humane" category. Within this

 $\sim$ 27% of "Humane" animal product spend,  $\sim$ 58% was beef,  $\sim$ 8% was pork,  $\sim$ 6% was poultry, and  $\sim$ 28% was eggs. (**Figure 4.5**)

The top brands contributing to the total Real "Humane" spend under 1.1 were Firsthand Foods (47.47% of 1.1 "Humane" spend) Abbotsford Farms (26.36% of 1.1 "Humane" spend), and Joyce Farms (20.29% of 1.1 "Humane" spend). Both Firsthand Foods and Joyce Farms qualified as real through *Animal Welfare Approved by a Greener World*, while Abbotsford Farms qualified through *American Humane Certified*, as dictated by RFC's 1.1 standards (**Figure 2.1**).

#### B. Final Results – 3.0 Standards Results

Within the September 2022 purchasing period, \$248,365.08 worth of food purchased by CDS for Chase and Lenoir Dining Halls was considered "Real" under the new 3.0 standards, amounting to 24.16% of all food spending during this purchasing period (3.67% less than 1.1).

Figure 4.6 details the percentage contribution of each of 3.0's "Real Food" spending categories to total Real spend. The introduction of the 3.0 standards from RFC came with some name changes to each of the Real Food categories. Where 1.1 called it "Ecologically Sound", 3.0 says "Environmentally Sustainable"; where 1.1 called it "Fair", 3.0 says "Valued Workforce"; where 1.1 called it "Humane", 3.0 says "Animal Welfare"; the "Local and Community Based" category has remained under the same name between 1.1 and 3.0. While the names have changed, along with a select few of the qualifiers, these categories demonstrate the same values and goals and can be compared against each other between the two standards. As can be seen, 64.1% of Real spend was qualified under the "Local and Community-Based" (LCBE) category, 28% under the "Animal Welfare" (AW) category, 7.1% under the "Environmentally Sustainable" (ES) category,

and 0.8% under the "Valued Workforce" (VW) category (**Figure 4.6**). Overall, we can notice some changes in this distribution, with LCBE and AW categories accounting for a larger percentage of total Real Food spend under 3.0, and ES and VW categories accounting for a smaller percentage (**Figures 4.1 and 4.6**). Following will be a more in depth examination of each of these categories, as well as the identification of some changes between the two standards that left us with a smaller percentage of real food under 3.0.

#### Local and Community Based (LCBE) Spending

The results for 3.0's "Local and Community Based" spending percentage and distribution amongst food types did not change between the 1.1 and 3.0 standards. For a detailed explanation of 3.0's results under this category, refer to **Figure 4.2** and the *Final Results – 1.1 Standards: LCBE Spending*" section of this report. The reason behind the lack of change in this category between the different standards is due to the small changes made to this category between 1.1 and 3.0. All foods considered Real under the LCBE category for 1.1 held the same qualifications under 3.0 of proximity (<250 mi) to the institution, and size of the company (grossing <\$50 million per year). (**Figure 2.2**).

#### Environmentally Sustainable (ES) Spending

Under 3.0, 2.1% of food purchased during September of 2022 by CDS was considered Real under the "Environmentally Sustainable" (ES) category. When looking at the contribution of different food types to this 2.1%, we can see that a majority of ES spending was seafood (~62%), with beverages contributing ~11%, eggs accounting for ~8%, and breads and grains contributing ~6% (**Figure 4.7**). When comparing these numbers to 1.1 (**Figures 4.3**), we can see that 0.98% less food is considered to be ES

spending under 3.0 standards. This is due to the fact that dairy purchased by UNC is no longer considered Real under the 3.0 standards because *Fair Trade Certified* is no longer being considered as a qualifier for Real Food under these standards. Additionally, the *Monterey Bay Aquarium Seafood Watch Guide "Best Choices"* is no longer considered as a qualifier, removing brands like Java Fishery from the list of Real Food under 3.0. (**Figure 2.2**).

The top "Environmentally Sustainable" brands purchased by UNC under the 3.0 standards are North Coast Seafoods (35.65% of 3.0 ES spending), Portico Seafood (21.23% of 3.0 ES spending), and High Liner Foods (11.16% of 3.0 ES spending). We can see that Java fishery has been removed from the list of top brands due to the change in qualification, making room for High Liner Foods, which qualifies under *MSC Certified Sustainable Seafood* (**Figure 2.2**). Because of this change, North Coast Seafood and Portico Seafood are now responsible for a larger percentage of overall ES spend under 3.0.

Valued Workforce (VW) Spending

3.0 standard results for the "Valued Workforce" (VW) spending category show that 0.25% of food purchased by UNC during September of 2022 was considered real under this category (**Figure 4.8**). Consistent with 1.1's "Fair" category, dairy is the only food type contributing to VW spend (**Figure 4.4**). However, the total spend in this category has gone down by 0.17%.

Under 1.1, we saw that Chobani was the only brand considered Real under the "Fair" category. However, due to changes in qualifiers between 1.1 and 3.0, *Fair Trade* 

Certified no longer qualifies under 3.0's "Valued Workforce" category. The total spend in 3.0's VW category is not zero, however, because of the addition of *Worker-Owned Cooperative* as a qualifier under 3.0, allowing for Land o' Lakes to qualify and contribute 100% of VW spend (Figure 2.2). The decrease in spend between 1.1 and 3.0 for these categories is due only to a larger \$ amount being spent on Chobani than Land o' Lakes during this purchasing period.

#### Animal Welfare (AW) Spending

Under 3.0, 18.3% of animal-based food (eggs, dairy, meat) purchased by UNC during the selected purchasing period was considered "Real" under 3.0's "Animal Welfare" (AW) category. The main food types contributing to this 18.3% of animal product spend were beef (~84% of 3.0 AW spend) and pork (~12% of 3.0 AW spend). Poultry and eggs both also contributed <3% contribution to 3.0's AW spend. Dairy did not contribute to Real AW spend (Figure 4.9). When comparing these figures to 1.1's results, we can see that eggs are contributing significantly less to total AW spend than they did to "Humane" spend. Poultry is also contributing a noticeable amount less between 1.1 and 3.0's "Humane"/"Animal Welfare" categories (Figures 4.5 and 4.9). These changes are largely due to the removal of *American Humane Certified* as a qualifier for 3.0. This change removed brands like Abbotsford Farms, and Butterball from the list of Real brands (Figure 2.2).

Because of this change in qualifiers, three brands alone account for *all* of 3.0's "Animal Welfare" spending: Firsthand Foods (69.23% of 3.0 AW spend), Joyce Farms (28.45% of 3.0 AW spend), and Deb El Foods (2.32% of 3.0 AW spend). The removal of

Abbotsford Farms from the top brands list has allowed Deb El Foods, another egg brand, to make an appearance. However, eggs from this brand were only purchased once in all of September 2022, and do not contribute heavily to total AW spend.

#### C. Final Results – Overall Comparison of Results between 1.1 and 3.0

After reviewing the final results between RFC's 1.1 and 3.0 standards for "Real Food", 27.8% of purchasing during the September 2022 period by CDS for Chase and Lenoir Dining Halls was considered real under 1.1 standards, with 24.2% of purchasing during the same period being counted as real under the new 3.0 standards (**Figure 4.10**). Compared to 1.1 standards, 3.6% less food was counted as Real under 3.0's qualifications. Though this is not a large difference, it is still noticeable. The difference between results from the two standards is most notably due to the removal of qualifiers such as *Monterey Bay Aquarium Seafood Watch Guide:* "Best Choices", Fair Trade Certified, and American Humane Certified, which allowed for brands that counted as real under 1.1, such as Java Fishery, Abbotsford Farms, Butterball, and Chobani to be excluded from the list of Real Food brands under 3.0 (**Figure 2.2**).

Figure 4.11 gives a side-by-side comparison of total Real Food purchasing between the two standards, as well as the breakdown by Real Food category for both 1.1 and 3.0. We can see that while there was decreases in the "Fair" / "Valued Workforce", as well as the "Ecologically Sound" / "Environmentally Sustainable" categories between 1.1 and 3.0, the largest change in Real Food spend between the two standards can be seen in the "Humane" / "Animal Welfare" category. The main contribution to this difference is the removal of *American Humane Certified* from 3.0's list of qualifiers under this category (Figure 2.2), which alone resulted in \$30,348.37 less food being counted as Real under 3.0 when compared to 1.1 (Figure 4.11).

## V. Comparison to Previous Years

Comparison to September 2021 Food Purchasing Period

The contract signed in 2016 by Carol Folt to RFC's 1.1 standards was done so with the intention of performing biannual audits of CDS's purchasing, and using these results to compare and contrast changes in 1.1 Real Food purchasing throughout the years. The reason that RFC's updated standards such as 2.1 and 3.0 were not included in this contract, beyond the complications that would arise with having to update the contract every time a new standard came out, is because they wanted to be able to track and audit food purchasing at UNC with a consistent set of standards for more easy comparison. Confusion surrounding the purpose of the project from the Fall 2022 set of interns led to a lack of data from the 1.1 standards from the February 2022 purchasing period. Because our group did not audit 2.1 standards, we are not able to compare these results due to lack of consistency. Instead, data from the Spring 2022 group of interns who audited the September 2021 food purchasing period will be used for direct comparison, because they were the last group that performed an audit under 1.1 standards.

Table 5.1 shows a detailed comparison of total food spend for the September 2021 and September 2022 purchasing periods, total Real Food Spend, and the dollar and percentage contribution of each Real Food Category to the total Real Food Spend, under 1.1. Data for the September 2021 food purchasing period were pulled from the 2021 September Food Purchasing period RFC report (Cha, L., et al, 2021). We can see that the total amount spent on food between the fall of 2021 and 2022 actually decreased by a little over \$20,000. However, there was actually an increase in total Real Food spend in general, as well as across all of the Real Food

categories. The largest increase can be seen in the "Humane" category, where, compared to fall of 2021, there was \$70,461 more spent on food that qualified as "Humane" in the fall of 2022. The smallest increase can be seen in the "Fair" category, where there was only an increase of \$134 in total "Fair" spend between the fall of 2021 and 2022. Because the total food spend actually decreased, we can confidently say that these increases in Real Food purchasing are due to the more sustainable purchasing decisions being made by CDS over time.

#### Comparison of Real Food Percentages Over Time (2010-2023)

While it is helpful to compare RFC results from one year to the next, it is important to also see how these Real Food percentages have changed over time since RFC started at UNC as well. While we were not given access to consistent and reliable data detailing the 1.1 Real Food percentages throughout the years, previous groups have made efforts to estimate this timeline through graphs. Without having access to the data that went into making these graphs, our estimates of Real Food percentages over time, which can be seen in **Figure 5.2**, are based off of the extrapolation of estimated percentages from a previous group of interns. The data given to us from the last group of interns in the Fall of 2022 (Bryant, A., et al, 2022) were chosen to estimate these percentages due to their more clear depiction of Real Food percentages on a graph. The percentages shown on their graph were given as averages between the 1.1 standards 2.1 standards, where applicable.

The first thing to note on **Figure 5.2** is the first orange line placed at 2016, signifying the signing of the contract by Carol Folt. We can see a slight drop after the contract was signed, with a slow increase beginning to form until we reach our second orange line. This line signifies the

introduction of RFC's 2.1 standards. As previously mentioned, the results coming after 2.1's introduction are shown on the graph as an average between the results from 1.1 and 2.1 standards (represented by the orange box). We can see a steep decrease shortly after 2.1's introduction due to these standards being a bit stricter than 1.1. The star on the graph represents our results, represented as an average between the 1.1 and 3.0 standards (26% Real Food). We can see that there was a sharp increase in Real Food purchasing in comparison to previous years, which is consistent with our results from comparison with September of 2021's food purchasing (**Table 5.1**).

## VI. Challenges and Observations

Finding the percentage of Real Food was not the only takeaway from our experience. Through our research to evaluate the CDS purchases, we gained spicy insights into our vendors, producers that we work with, and the RFC Organization. Our insights fell into the categories of false advertising, brand transparency, advocacy and recognition, and disqualifiers under the 1.1 standards.

The main false advertising our intern group came across were buzzwords that align with certifications. In many cases, companies carefully word their brand descriptions on their website to seem certified or respectable for their quality of service or product. Company sustainability descriptions will even reference certifications to outline how they follow the standards of the third party authenticator, when they do not actually qualify or have the referenced certification(s). For example, Tyson, one of the CDS producers, claims that they conduct a "Humane and environmentally responsible production," when in reality the company has been found guilty of poor animal welfare and received scrutiny in 2021 for not following through on their statements regarding cage-free processes and safe work environments (Jacobs 2021). Tyson

also advertises their "cage-free" chickens on their website, which was removed as a qualifying standard in each RFC evaluation, including being removed from the 1.1 standards. Tyson is one example of the many companies we found in our research that used false advertising in their marketing to be perceived as sustainable, but in some cases the brands chose to be more transparent about their approach to sustainability.

We saw two types of brand transparency throughout our research process. On one hand, we found negative transparency from brands such as Turano who made it clear that they are not responsible for their supply chain and do not require their suppliers to certify that they are "complying with laws regarding slavery and human trafficking" (Turano 2023). We found this level of transparency to be shocking but not surprising as many companies avoid responsibility for the supply chain. On the other hand, we saw brands such as Aspire Bakeries, owned by Otis Spunkmeyer, release Sustainability or Environmental, Social, and Governance (ESG) reports. Within these reports, brands would outline their goals and initiatives taken to improve their impact on their people, food, the planet, their sourcing, and the community. Ideally, we would have analyzed and considered these transparency reports from companies, but due to the time constraint and the lack of flexibility in the RFC 1.1 and 3.0 standards, we were unable to wholly consider these factors into our decision.

ESG and Sustainability reports are not the only ways we saw brands go out of their way to promote and integrate sustainability within their company. However, even if brands went above and beyond, we might not have been able to consider their products as real food simply because they lacked the appropriate qualifications according to the RFC standards. Despite not having the qualifications, we came across a handful of companies that advocated for safe, fair, and sustainable practices. Some brands would even have certifications such as the Global Food

Safety Initiative, which focuses on not only sustainability and ethics in a production but also the remainder of the supply chain, however, we were not able to consider them to be real food as the certification is not accepted under RFC's standards. Even brands that received awards for their initiatives were not able to be considered real or recognized under any category. For example, Land O' Lakes only falls under real for 3.0 standards because they are an employee owned cooperative, but they also won awards for educating farmers, their environmental initiative, and sustainable leadership. Had we had more time to review companies, we might have been able to consider brands under a wider scope and include analyzing additional information such as ESG and Sustainability reports. We would have also been able to include more variables such as our partnership with producers that are Black, Indigenous, and People of Color.

The new 3.0 standards attempt to account for one of our primary concerns: the exclusion of the more qualitative efforts that companies do outside of certifying themselves, such as making ESG reports or winning sustainability-related awards. The most holistic standards to date, RFC 3.0 attempts to account for previous standards' shortcomings by introducing new "strategies." These strategies are a mixture of efforts on the university's side and efforts on the food brands' side. As holistic as they are, we came to the understanding that very few of these strategies are feasible under the internship as it stands. For instance, one of the strategies was to "invest resources (money, infrastructure, or staff capacity) with community organizations" ("Real Food Challenge" 2023). The interns have no control over the university's resources; all we can do is audit their food purchases and make recommendations accordingly. Thus, we found much of 3.0's strategy to be impractical in our particular context, and we chose to focus on 3.0's real food guide that was more of a revision of the 1.1 and 2.2 standards.

Another issue that we found common in both the old 2.1 standards and the 3.0 standards is that there is no explanation for the removal of previously qualifying certifications. Some exclusions were understandable, such as cage-free being excluded. We understand that there are better ways to certify humane practices than cage-free, especially as news about the reality of what "cage-free" means comes to light. Other certification removals seemed arbitrary and counter-productive, such as the American Human Certification and the Monterey Bay Seafood Watch's removal. Additionally, a point that another RFC group highlighted is the lack of B-corp certification on the RFC standards. While B-corp was added to the 3.0 standards, it only qualifies as real if the company is also local. This qualification seems like an arbitrary association. B-corp certification accounts for "verified performance, accountability, and transparency on factors from employee benefits and charitable giving to supply chain practices and input materials" ("About B Corp Certification" 2023). At the very least, we would expect B-corp certification to fall under the valued workforce or the environmental sustainability standards, not the local standards.

One glaring difference between the 1.1 and 3.0 standards was the exclusion of the disqualifier rules. These were rules that disqualified food brands based on whether they had labor violations, were guilty of criminal charges, sold ultra-processed foods, or used CAFOs.

Disqualifiers are an essential part of auditing, because they notify CDS of the companies that are particular violators of sustainability and morality. As such, it is concerning that they are not a part of the 3.0 standards, and we still researched disqualifiers through the 1.1 standards. To identify companies' violations, we researched a mixture of court cases and the website "Violation Tracker," a database of companies' violations according to settlements, court cases, and federal agency reports.

Out of the \$1,028,177 CDS spent on food in September 2022, around \$91,415 counted as "disqualified" food underneath the 1.1 standards. These foods made up just under 9% of CDS' overall food spend (Figure 6.1). While 9% is not necessarily a very high percentage, this should be more reason for CDS to consider limiting their purchases from some of the violating companies we found. In terms of disqualified spend by disqualifier category, labor violations was the highest percentage at 70.1% with ultra-processed food following at 13.2% (Figure 6.2). Ultra-processed foods was a particularly difficult category to pinpoint because of the subjectivity of what is "ultra-processed" and the nuance associated with some ultra-processed foods. For instance, tofu may be considered ultra-processed, but the organic tofu that CDS buys is especially not unhealthy. The next highest disqualifier category was guilty of criminal charges at 11.1%, followed lastly by use of CAFOs at 5.6% (Figure 6.2). As a note, as we approached our deadline, we prioritized companies that had labor violations and criminal charges as opposed to CAFOs and ultra-processed foods, because we felt that they presented more pressing concerns. Thus, if we had more time, the disqualified food percentage would likely have been longer.

A couple disqualified companies deserve particular attention. First, Sara Lee was disqualified for labor violations, as they paid "\$4M to black employees who say they were called racial slurs and exposed to black mold and asbestos more often than white workers" (Morris 2022). While we only spend \$975 with Sara Lee, that small spend is great encouragement for why we should stop spending with them. Second, Tyson Foods, disqualified for using CAFOs and having labor violations, has since 2000 paid \$88 million in employment-related offenses, \$51 million in environment-related offenses, and \$7.5 million in safety-related offenses ("Tyson-foods"). They have more offenses, but these were the ones relevant to the 1.1 standards. CDS spends quite a bit more with Tyson at around \$12,000, but CDS should still consider

transitioning to spending solely with the other poultry brands they buy from, such as Joyce Farms. These are both companies, among other companies CDS buys from, that make enough money to pay off their violations; these are situations where we need to evaluate the morality of continuing to purchase from these companies.

Additionally, we believe that the disqualified brands may even be under-represented. Many big-name companies like General Mills and Tyson use subcontractors for their factories. A recent NYT exposé argues that doing so allows these companies to distance themselves "from all the responsibilities that normally should come with employment," allowing the company to exploit migrant children for brutal jobs, among other abuses (Rascoe 2023). RFC tries to account for some of these supply chain issues through their disqualifiers, but we can only disqualify them if the company has been called to court. In cases where companies are using subcontractors, their abuses get swept under a rug and we remain unaware that they are far from being a "real" food brand. This relationship presents a deeper issue: our country's inability to manage and regulate supply chains. In particular, the agencies that inspect these violations are extremely under-resourced. A former senior official of the Wage and Hour Division calculated that in 1938—when the agency started—they had "64 times the relative number of inspectors to workplaces" than now (Rascoe 2023). The fact that so many abuses get pushed to the side by big-name companies means that we need to do everything we can to stop buying from the companies that we can prove are violating, if only to show that there are consequences to their actions.

### VII. Our Experience With RFC & Recommendations

This semester's RFC project took a couple weeks to get off the ground; in the beginning there were delays in data, with the CDS invoices not being available until a couple weeks into

the semester. Additionally, there was a general lack of organization with onboarding and scheduling with RFC, CDS, and other relevant parties. We were later informed that RFC's internal conflicts began in January, so this may be partly to blame. We never got on-boarded on the RFC website due to the fact that the website was not ready to accommodate 3.0 researchers yet. This seemed like a large oversight on the part of RFC, especially considering how that gave us no access to the resources they had for the researchers on the site. In terms of the actual research, it was difficult communicating with companies. The invoices we received did not always specify what line of foods we bought under certain brands. This detail became a concern when one brand had a line of food that would have been real and another that was not. In these cases, we had to contact the companies to find out which line CDS buys. In general, companies were not responsive to our emails, and we did not have enough time in the project to dig deeper. While organizing our research, it was hard for us to determine a precedent as to how past researchers put together their research. Though there were some resources on the Sakai page, it was hard to sort through and the information was variable between RFC groups. As a result, we made an effort to compile a Google Drive that future RFC intern groups can use. We provided templates and our own list of research that they can use as a basis for their research. Our group recommends that a transitional document that provides context and navigation through the RFC resources for the internship should be created at the end of each research project. Our recommended transitional document would provide a foundation and standard for the following RFC interns in their research and experience.

Other than organization of the research materials and resources, our intern group experienced another obstacle. About 80% of the way through our project around the time we were supposed to receive feedback on our data we received an email outlining the departure of

our RFC connection, Tina, and RFC's program directors as a movement against the company's internal conflicts of white supremacy and anti-back practices. An expert from the email follows:

"Rather than continuing to be complicit in an organization that has shown time and time again its own ties to white supremacy culture and inability to rectify its anti-Black and anti-worker practices, D, Dante, and Tina, the three remaining programmatic staff, are resigning as of April 14th, 2023."

Given this circumstance, our group was left to complete the remaining report without the support of the RFC organization or verification. Due to the lack of a third party auditor, we are unable to say for sure if our data is 100% accurate. However, we believe that within this moment of uncertainty, there is a great opportunity for change within the internship and our partnership with the RFC organization.

## VIII. Conclusions and Takeaways

Though the future of RFC is uncertain, it is vital that CDS continues to be mindful of their purchasing, since they have such a big stake in food. CDS spends over \$1 million on food monthly, and where they choose to spend that money holds a lot of weight. With the constant shifting of food brands' operating practices and their sustainable policies, it is important that some sort of auditing continues to happen to keep CDS' purchasing as up to date as possible. Not only should CDS strive to reach at least 20% real foods in the future, they should also take note of what brands they can be limiting their business from entirely. Future interns may be advised to research carefully and watch out for the ways in which food brands can advertise their food as "green" or "real." Future interns should also be mindful of how the standards are evolving, even outside of RFC, and what that means for "real" food and the brands that are left behind. Above

all, future interns should value the work that they are doing-though time consuming and difficult at times—as the insights gained are paramount to UNC's sustainability efforts. After over six years of consistent RFC research and data, we must do what we can to continue to hold CDS accountable.

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## X. Appendix

Figure 2.1: RFC 1.1 Standards, provided



r standara: Iness joods can be traced to nearby garms and businesses that are locally owned and operated.  Journing these foods supports the local economy by eleging money in the community and builds community elabions. The food travels fewer miles to reach insumers. The food travels fewer miles to reach insumers. The food is seasonal, and when it is fresh, it feen has a higher nutrient content.	RE Standard: Individuals involved in food production, distribution, preparation— and other parts of the food system— work in safe and fair conditions; receive a living wage, are ensured the right to a greinate and the right to a grienate process; and have equal apportunity for employment. Fair food builds community capacity and ensures and promotes socially just proctices in the food system.  Teen Light: Go for it! These criteria best rep.  Products with any of the following	RF Standard: Farms, businesses, and other operations involved with food production practice environmental stewardship that conserves biodiversity and preserves natural resources, including energy, wildlife, water, air, and soil. Production practices should minimize toxic substances as well as direct and indirect petroleum inputs.  **research**: The standard and count as real food	RF Standard: Animals can express natural behavior in a low-stress environment and are raised with no adde-hormones or unnecessory medication.
Producer <sup>1</sup> must meet <u>ALL</u> of the below criteria:			
Automatic Control of C	Products with <u>any</u> of the following		
controlled by the producer, its parent or family companies, and contract farmers must be within 150 miles of the institution. 250 pr Nc.  Producer must be a privately-traded or cooperatively-owned business that grosses less than 1% of the industry leader.  Independently owned businesses must have full autonomy and decision-making power about businesses must have full autonomy and decision-making power about business, processing, and distribution practices.  Products from cooperatively owned businesses must have been produced, progessed, and distributed within 150 miles of the institution. Must be a brite coop prather than contractors to a larger corporation  The product of the cooperative function of the cooperative function of the cooperative function.  No publicly— La ded	certifications:  Internationally Sourced:  Ecocent Fair Trade Certified  Fair for Life Certified by Fair Labeling Organization  (FLO)  Fair Trade Certified by Fair Labeling Organization  (FLO)  Fair Trade Certified by Fair Trade USA*  Domestically Sourced:  Food Justice Certified by Agricultural Justice Project  Fair Food Standards Council Fair Food Program  (Coalition of Immokalee Workers tomatoes)  Or, a single-source product that can confirm in writing  the following for ALL employees:  Living wage — WA-F is Has Advances?  Right to benefits  Day of rest and and overtime  Seniority  Equal pay for equal or equivalent work  Right to return to seasonal position	Products with any of the following certifications or claims:  All products:  Biodynamic Certified by Demeter Food Alliance Certified* USDA Organic* Protected Harvest Certification Rainforest Alliance Certified** Fish Only:  Marine Stewardship Council Monterey Bay Aquarium Seafood Watch Guide "Best Choices" (Regional Guide or Buyer's Guide) Coffee Only: Bird Friendly by Smithsonian Migratory Bird Center Produce Only: Produce grown in a farm or garden at the institution, in which the researcher can confirm the use of organic practices	Products with any of the following certifications or claims: All Species:  • Animal Welfare Approved by Animal Welfare Institute • Biodynamic Certified by Demeter • Global Animal Partnership Steps 4-S+ • Certified Humane by Humane Farm Animal Farm Care <sup>2,3</sup>

Yellow Light: Proceed with Caution. These criteria count as real food, but are not as strict as Green Light				
LOCAL & COMMUNITY BASED	FAIR	ECOLOGICALLY SOUND	HUMANE	
Producer¹ must meet ALL of the below criteria:  1. All production, processing, and distribution facilities controlled by the producer, its parent or family companies, and contract farmers must be within 250 miles of the institution. ● C ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ► ►	Products with any of the following certifications:  Fair Trade Certified Ingredient by Fair Trade USA Multi-source or multi-ingredient products:  50% of the ingredients in the product meet the above standards.	Products with any of the following certifications or claims:  • Fair Trade Certified by Fair Trade USA*  • Montery Bay Aquarium Seafood Watch Guide "Good Alternatives" (Regional Guide or Buyer's Guide)  • Salmon Sofe  • Transitional Organic by Ola  Multi-source or multi-ingredient products:  • Producer and 50% of the ingredients* must meet all of the above criteria.	Products with any of the following certifications or claims:  All Species:  • Certified Organic by USDA-AMS****  • Food Alliance Certified*  • Global Animal Partnership Step 3  Ruminants Only:  • AGA Grassfed  • "Process Verified Grassfed"** by USDA-AMS and also either "Never Ever 3 by USDA-FSIS" or "Naturally Raised" by USDA-AMS  Hogs Only:  • Certified Humane by Humane Farm Animal Care  Eggs-Layers Only**  • American Humane Certified (no enriched cage eggs):  • "Cage-Free" by USDA-AMS	
			See commont re American Humane certified is Springer MAn?	

RED LIGHT: <i>No-go.</i> These certifications, claims, etc., do <b>NOT COUNT</b> as real food <i>in the given category</i> Product can still meet real food criteria in other categories			
LOCAL & COMMUNITY BASED	Product can still meet real foo	d criteria in other categories  ECOLOGICALLY SOUND	
	Red Light 1: good start but not enough to	COUNT as real food (list not subscribe)	HUMANE
Producer is independently or cooperatively owned but does not meet <u>all</u> of the above criteria.	Products with the following certifications:  • Rainforest Alliance Certified* by Rainforest Alliance  • Food Alliance Certified*  Products that have been processed or shipped by companies with fair labor conditions comprised of ingredients with unconfirmed labor standards.	Products with the following certifications:  "Raised without Antibiotics"  "No Antibiotics Administered"  "Never Ever 3"  "Naturally Raised" by USDA-FSIS  GAP Certified (Good Agricultural Practices) by USDA  "Non-GMO Protect Verified"	Products with the following certifications:  Global Animal Partnership Steps 1 & 2  "Grass Fed" by USDA-FSIS (Ruminants)  "Gestation Crate Free" (Hogs)  "Free range" by USDA-FSIS (poultry)  "Free roaming" by USDA-FSIS (poultry)  "TGB-H-Fec/HST-Tree" by FDA (alary)
	Red Light 2: claim does not necessarily have s		accylost-rice by FDA (ddiry)
* 1		Products with the following claims:  "Natural"  "GM Free"  "GMO Free"	Products with the following certification:  GAP Certified (Good Agricultural Practices) by USDA
	Red Light 3: no way, not rea	food (list not exhaustive)	
Producer does not meet any of the above criteria.	Multi-source, highly processed products with no certification.	Products with the following claims:  • Monterey Bay Aquarium Seafood Watch Guide "Avoid" (regional guide)  Confinement or Battery Cages	Confinement or Battery cages, enriched cages, gestation crates, veal crates
		4	

## DISQUALIFICATIONS: Products containing disqualifying characteristics cannot count as real food in any category.

- Producer is known to be found guilty of criminal charges of slave labor or indentured servitude within the previous 10 years; producer is known to have been found guilty of, been cited, or settled a case relating to an OSHA, FSLA, or NLRB violation within the last 3 years (see assessment tips for more info)
- Producer is known to be a Concentrated Animal Feeding Operation (CAFO) (see assessment tips for more info)
   No
- Product is likely to contain GMOs (e.g. non-organic corn and corn products including high fructose corn syrup; soy and soy products; canola and canola products; beet sugar; papaya) (see assessment tips for more info)
- Product contains any of the following: Acesulfame-Potassium, Butylated Hydroxyanisole (BHA), Caramel Coloring, Olestra (Olean), Partially Hydrogenated Oil (trans-fats), Propyl Gallate, rBGH/rBST, Saccharine, sodium nitrate added, Dyes: Red #3, Yellow #5, Yellow #5, Yellow #5, Sucharine, sodium nitrate

#### 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)

<sup>1</sup> Producer is defined as the entity that produces the product. Thus, it could be a farmer, rancher, bakery, corporation, etc.

<sup>2</sup> For poultry, verify "Free Range" standards are followed

<sup>3</sup> Does not include hogs (*Certified Humane* hogs fall under Yellow Light)

Ingredients are defined as raw ingredients, measured by weight, not including water. Ingredients must meet a given criterion at the first step of the supply chain to qualify as Real Food

\*Source — Real Food Challenge (RFC). (2015). Fall 2015 Real Food Guide, Version 1.1.

**Figure 2.2:** RFC 3.0 Standards, from *Real Food Standards 3.0 Package* 

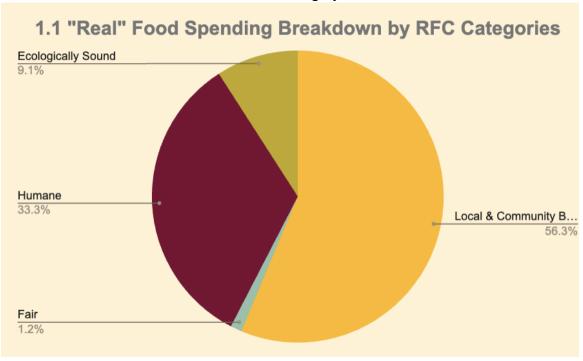
## Real Food Guide 3.0

Based Economies	Valued Workforce <sup>26</sup>	Environmental Sustainability <sup>27</sup>	Animal Welfare <sup>28</sup>
Level 3 - product/supplier	attributes that represent the m	ost significant expression of th	e value in a food product
Single Ingredient Products:  Ownership Structure*  Privately, cooperatively, or nonprofit owned and operated, or B Corp certified  Distance from Institution  production, processing and distribution facilities within 250 miles for meat, poultry, and seafood)  Size of company* (annual revenue)  Produce: less than \$1 million  Other: less than \$20 million  Multi Ingredient Products:  At least 50% of product (by volume) meets the Ownership, Distance, and Size criteria*  Aggregated Products:  Aggregator meets the Ownership and Distance criteria*  At least 75% of the suppliers meets the Ownership, Distance, and Size criteria*  At least 75% of the suppliers meets the Ownership, Distance, and Size criteria*  *Note: The Ownership and Size criteria should be applied to the parent	Processing, Manufacturing and Distribution  Union contract* Worker owned cooperative  Farms  Union contract* Worker owned cooperative  Worker Driven Social Responsibility Programs Milk with Dignity Fair Food Program  *Note - Qualifying unions include, but are not limited to: Familias Unidas por la Justicia  FLOC International Brotherhood of Teamsters United Farm Workers United Food and Commercial Workers Service Employee International Union UNITE HERE	Agricultural Justice Project     Bird Friendly (coffee only)     Certified Naturally Grown (produce only)     Demeter Certified Biodynamic     Grasslands Alliance (meat, poultry, and eggs only)     Real Organic Project (produce only)     Regenerative Organic Certified     Sustainably Grown Certified (produce only)     USDA Organic     USDA Transitional Organic	Beef Animal Welfare Approved by A Greener World Certified Grassfed by A Greene World Global Animal Partnership Ste 4, 5, and 5+ Regenerative Organic Certified Dairy Global Animal Partnership Ste 4, 5, and 5+ Regenerative Organic Certified Silver & Gold Poultry & Pork Animal Welfare Approved by A Greener World Global Animal Partnership Ste 4, 5, and 5+ Regenerative Organic Certified Greener World Global Animal Partnership Ste 4, 5, and 5+ Regenerative Organic Certified Greener World Global Animal Partnership Ste 5+
company.			
Local & Community Based Economies	Valued Workforce	Environmental Sustainability	Animal Welfare
Local & Community Based Economies	Valued Workforce	Sustainability	

Local & Community Based Economies	Valued Workforce	Environmental Sustainability	Animal Welfare	
Level 1 - product/supplier att	Level 1 - product/supplier attributes that reflect an attainable entry point to the value but is an on-ramp to Level 2 and 3 food products			
Single Ingredient Products:  Ownership Structure*  Privately, cooperatively, or nonprofit owned and operated or B Corp certified  Distance from Institution  production, processing and distribution facilities within 250 miles of institution (500 miles for meat, poultry, and seafood)  Multi Ingredient Products:  At least 50% of product (by volume) meets the Ownership* and Distance criteria  Aggregated Products:  Aggregator and at least 75% of the suppliers meets the Ownership* and Distance criteria  *The Ownership criteria should be applied to the parent company.	Equitable Food Initiative     Fair Trade International     (accepted for coffee, cocoa,     and sugar only)	American Grassfed (meat, poultry, eggs, and dairy only) Animal Welfare Approved by A Greener World (meat, poultry, eggs, and dairy only) Bee Better (produce only) Certified Grassfed by A Greener World (meat, poultry, eggs, and dairy only) Equitable Food Initiative (produce only)  Seafood* Aquaculture Stewardship Council (farmed kelp/seaweed only) Best Aquaculture Practice (farmed mollusks only) GlobalG.A.P GGN label (farmed mollusks, kelp, and seaweed only) Marine Stewardship Council Responsible Fisheries Management Certified Sustainable  *Only wild-caught finfish is accepted as Real Food. No farmed finfish qualifies as Real.	Beef & Pork  • American Grassfed Association Certified  • Certified Humane  • Global Animal Partnership: Step 1 & 2  Dairy  • Certified Humane  • Global Animal Partnership: Step 2  • Regnerative Organic Certified: Bronze  Eggs  • Certified Humane - Barn Raised  • Global Animal Partnership: Step 1 & 2  Poultry  • Certified Humane - Barn Raised  • Global Animal Partnership: Step 1 & 2  Poultry  • Step 2	

<sup>\*</sup>Source — Real Food Challenge (RFC). (n.d.). Real Food Standards 3.0 Package

**Figure 4.1:** 1.1 Real Food Breakdown by Real Food Category
56.3% of UNC September 2022 Real Food Purchasing for Lenoir and Chase Dining Halls was qualified under the "Local and Community-Based" category, 9.1% under the "Ecologically Sound" category, 33.3% under the "Humane" category, and 1.2% under the "Fair" category.



\*Note: Total percentages of this chart add up to more than 100% due to overlap caused by certain brands qualifying for multiple of these categories.

**Figure 4.2:** Breakdown of 1.1 & 3.0 LCBE Spending

19.03% of food purchased in September of 2022 by CDS for the Lenoir and Chase Dining Halls was qualified as "Real" under RFC's 1.1 and 3.0 "Local and Community Based" Spending category. The chart to the right ("By Food Type") demonstrates the distribution of food type within this 19.03% of real food spend under this category.

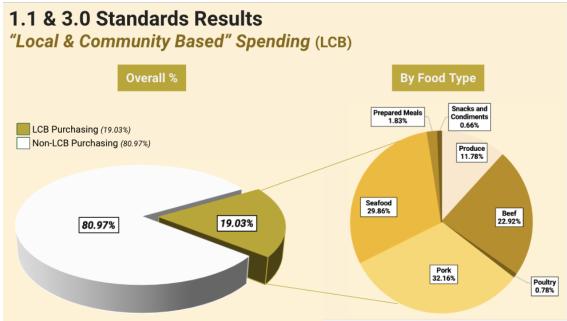
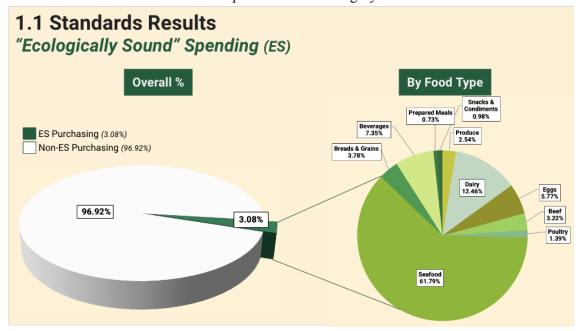


Figure 4.3: Breakdown of 1.1 ES Spending

3.08% of food purchased in September of 2022 by CDS for the Lenoir and Chase Dining Halls was qualified as "Real" under RFC's 1.1 "Ecologically Sound" spending category. The chart to the right ("By Food Type") demonstrates the distribution of food type within this 3.08% of Real food spend under this category.



**Figure 4.4:** *Breakdown of 1.1 "Fair" Spending* 

0.42% of food purchased in September of 2022 by CDS for the Lenoir and Chase Dining Halls was qualified as "Real" under RFC's 1.1 "Fair" spending category. The chart to the right ("By Food Type") demonstrates the distribution of food type within the 0.42% of Real food spend under this category.

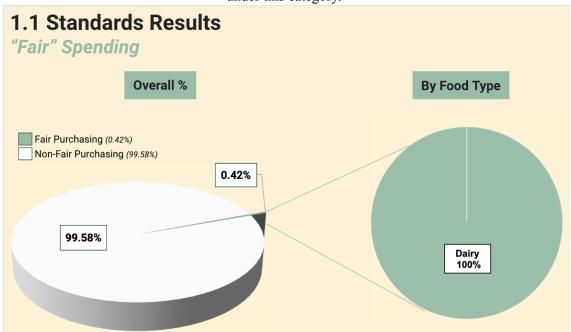
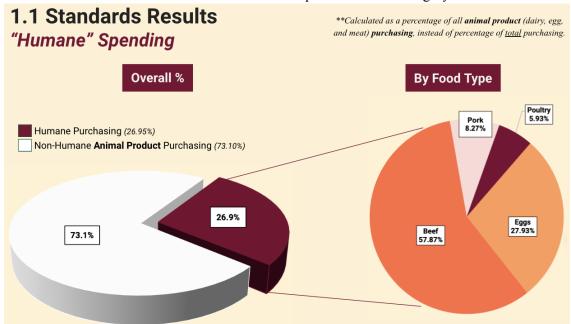


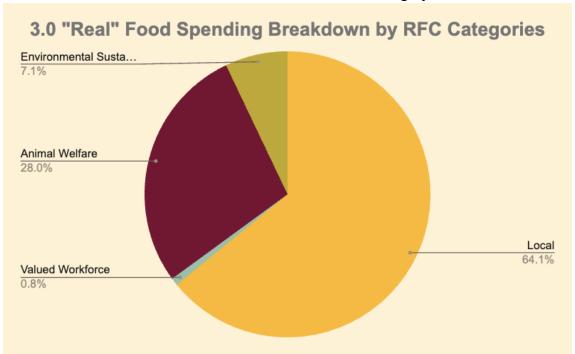
Figure 4.5: Breakdown of 1.1 "Humane" Spending

26.9% of animal-based food (milk, eggs, meat) purchased in September of 2022 by CDS for the Lenoir and Chase Dining Halls was qualified as "Real" under RFC's 1.1 "Humane" spending category. The chart to the right ("By Food Type") demonstrates the distribution of food type within this 26.9% of Real food spend under this category.



**Figure 4.6:** 3.0 Real Food Breakdown by Real Food Category

64.1% of UNC September 2022 Real Food Purchasing for Lenoir and Chase Dining Halls was qualified under the "Local and Community-Based" category, 7.1% under the "Environmentally Sustainable" category, 28% under the "Animal Welfare" category, and 0.8% under the "Valued Workforce" category.



\*Note: Total percentages of this chart add up to more than 100% due to overlap caused by certain brands qualifying for multiple of these categories.

Figure 4.7: Breakdown of 3.0 ES Spending

2.10% of food purchased in September of 2022 by CDS for the Lenoir and Chase Dining Halls was qualified as "Real" under RFC's 3.0's "Environmentally Sustainable" spending category. The chart to the right ("By Food Type") demonstrates the distribution of food type within this 2.10% of Real food spend under this category.

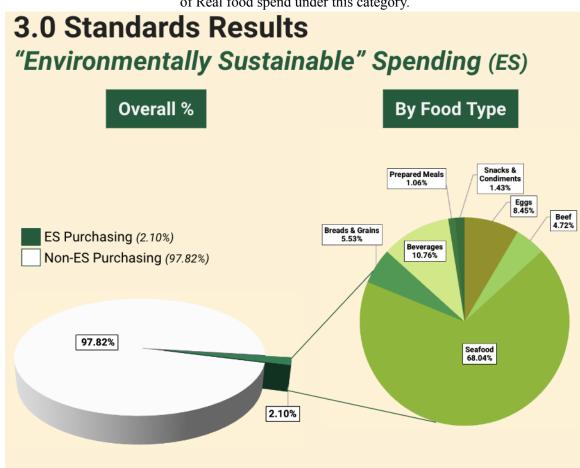


Figure 4.8: Breakdown of 3.0 VW Spending

0.25% of food purchased in September of 2022 by CDS for the Lenoir and Chase Dining Halls was qualified as "Real" under RFC's 3.0's "Valued Workforce" spending category. The chart to the right ("By Food Type") demonstrates the distribution of food type within this 0.25% of Real food spend under this category.

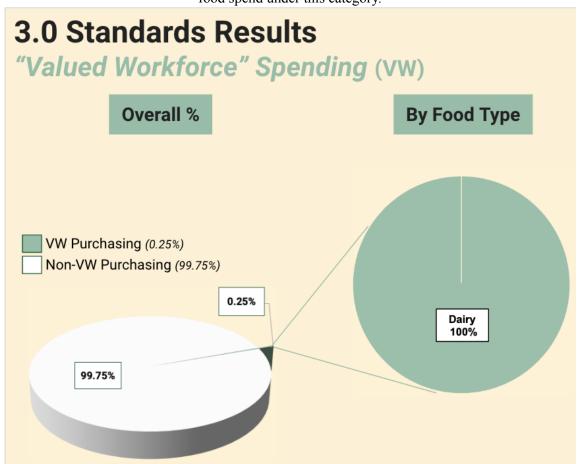
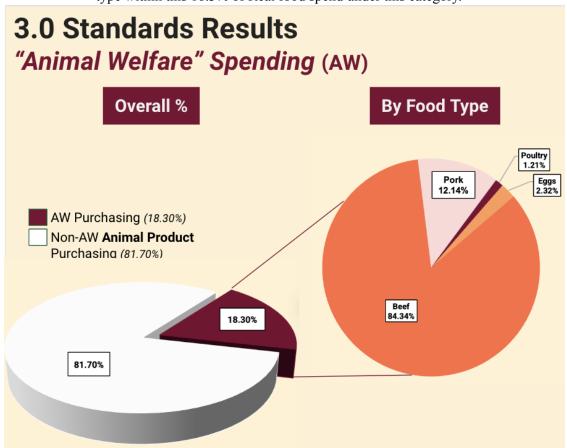
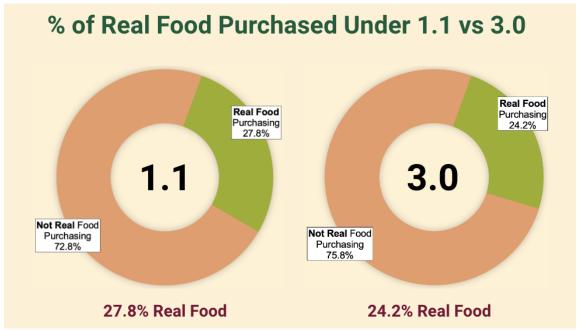


Figure 4.9: Breakdown of 3.0 AW Spending

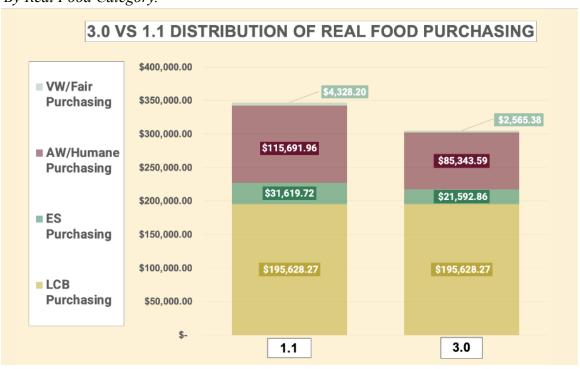
18.3% of animal-based food (dairy, eggs, meat) purchased in September of 2022 by CDS for the Lenoir and Chase Dining Halls was qualified as "Real" under RFC's 3.0's "Animal Welfare" spending category. The chart to the right ("By Food Type") demonstrates the distribution of food type within this 18.3% of Real food spend under this category.



**Figure 4.10:** Comparison of % Real Food Purchased under 1.1 vs 3.0 27.8% of food purchased from the September 2022 purchasing period was considered real under 1.1 standards, while 24.2% of food purchased during the same period was considered real under 3.0 standards.



**Figure 4.11:** Comparison of Real Food Purchasing between 1.1 and 3.0 – Overall, and By Real Food Category.

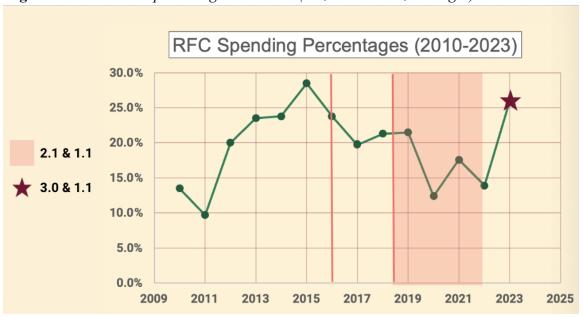


**Table 5.1:** Total Food Spend, Total Real Food Spend, and \$ and \$ Contribution of Each Real Food Category, between September 2021 and September 2022 purchasing periods.

			1 01
1.1	September 2021	September 2022	Change change in total spend of each category & change in % contribution to total real food purchasing
Total Food Spend	\$1,050,200	\$1,028,177	- \$22,023
Total Real Food Spend (percent of total purchasing)	\$225,477 <b>(21.47%)</b>	\$286,149 <b>(27.80%)</b>	+ \$60,672 (6.33%)
Total "Local & Community Based" Spend (and % of total spend)	\$157,789 <b>(15.02%)</b>	\$195,628 <b>(19.03%)</b>	+ \$37,839 (4.01%)
Total "Humane" Spend (and % of total spend)	\$45,231 <b>(4.31%)</b>	\$115,692 <b>(14.51%)</b>	+ \$70,461 (10.2%)
Total "Ecologically Sound" Spend (and % of total spend)	\$22,593 <b>(2.15%)</b>	\$31,620 <b>(3.08%)</b>	+ \$9,027 (0.93%)
Total "Fair" Spend (and % of total spend)	\$4,194 <b>(0.40%)</b>	\$4,328 <b>(0.42%)</b>	+ \$134 (0.02%)

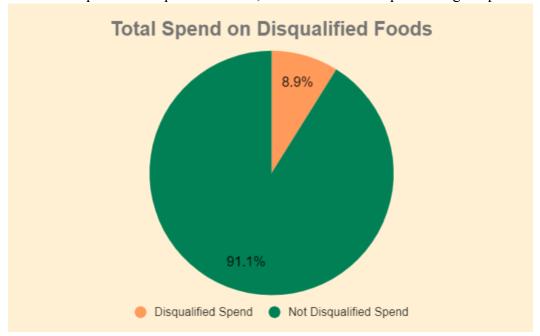
<sup>\*</sup>Source — Cha, L., Jordan, K., Killebrew, C., Kinsey, J., Ollis, N.. (2022) Carolina Dining Services 2021 September Purchasing Period, UNC-Chapel Hill Real Food Calculator Final Report. UNC Real Food Challenge Internship. Real Food Calculator Sakai Page.

**Figure 5.1:** *UNC RFC percentages over time (1.1, 2.1 and 3.0, averages)* 



\*Source — Bryant, A., Cooney, B., Cates, T., Kingery, Z.. (2022) Real Food Challenge Final Report – Fall 2022. UNC Real Food Challenge Internship. Real Food Calculator Sakai Page.

**Figure 6.1**: *Breakdown of disqualified foods*Total spend on disqualified foods, with 8.9% of total spend being disqualified.



<sup>\*</sup>Source — Violation tracker. (n.d.). Retrieved May 7, 2023, from https://violationtracker.goodjobsfirst.org/

**Figure 6.2**: *Breakdown of disqualified spend by violation category*Labor violations was the largest category due to the prevalence of big-name food brands, followed by ultra-processed foods, guilty of criminal charges, and CAFOs.



Figure 10.1: Qualification for Food Types, from RFC Winter 2023 Assessment Manual

Food Type	Includes:	Does not include: Key items (appropriate food type)
Produce	Fresh, cut, or frozen fruits and vegetables	Canned, cooked, and/or seasoned fruits and vegetable products (Prepared meals and entrees)
Dairy	Fluid milk, cheese, yogurt, ice cream, butter	Milk alternatives (Beverages), Non-dairy cheese, yogurt, ice cream, and butter (Snacks and condiments)
Eggs	Whole eggs, boiled eggs, liquid eggs	plant-based egg alternatives (Prepared meals and entrees)
Meat	Beef, lamb, pork, game meat (includes frozen and canned products)	plant-based meat alternatives (Prepared meals and entrees)
Poultry	Chicken, turkey, and other fowl (includes frozen and canned products)	plant-based poultry alternatives (Prepared meals and entrees)
Seafood	Finfish, crab, shrimp, clams and other mollusks, and seaweed (includes frozen and canned products)	
Breads and grains	Baked goods including bread, grain-based flour, cereal, rice	Nut-based flours such as almond and coconut flour, flaxseed meal (Nuts, seeds, and legumes)
Nuts, seeds, and legumes	Nut butters, nut-based flours, peas (canned or frozen), sunflower seeds, beans (canned or dry), lentils	
Beverages	Soft drinks, sports drinks, juices, smoothies, milk alternatives, tea, coffee	Syrup used in coffee and tea drinks (Snacks and condiments), dairy milk (Dairy)
Prepared meals and entrees	Sandwiches, frozen and dehydrated meals, ramen cups, most plant-based alternatives	Cut fruits and vegetables (Produce), baked goods (Breads and grains), snacks (Snacks and condiments)
Snacks and condiments	Cookies, crackers, sauces, oils, vinegar, popcorn, candy, chocolate, energy bars, syrups, ketchup, salad dressing	Nut butters (Nuts, seeds, and legumes)

<sup>\*</sup>Source — Real Food Challenge (RFC). (2023). Winter 2023 Assessment Manual.