Real Food Challenge 2016 Report Indiana University – Bloomington

Research and Report by: Angela Babb Juan del Valle Coello **Yichen Dong Thaddeus Grantz** Hongyu Ji **Cory Lamping** Addison Lively Wei Lu Zeyu Niu Caleb Rasmussen Andrea Salazar Quinn Schneider **Chong Wang** Siyu Wu Lihan You Qi Zhou Linlin Zhu

Executive Summary

During Spring semester 2016, students of the GEOG-G306: Real Food Challenge completed an assessment of food on the Indiana University-Bloomington campus using the Real Food Challenge framework. Seventeen students and one instructor researched over \$18 million in food expenditures at IU-B, spent over the 2014-2015 fiscal year. This research includes all three dining operations at IU-B: Residential Programs and Services (RPS), Athletics Dining, and Sodexo in the Indiana Memorial Union. Over 23,000 food products were part of this research project.

The Real Food Challenge is a national initiative to transform the food system to one that is just, healthy, and sustainable, by leveraging institutional purchasing power and increasing education opportunities. The Real Food Challenge class began at IU-B as a collaboration between the IU Office of Sustainability Food Working Group (FWG) and the Department of Geography. The FWG uses this RFC research for sustainability reporting (AASHE STARS) and for setting sustainable food purchasing goals.

At IU-B, students found approximately 3.83% of FY14-15 food expenditures to be real, per the RFC definition of real food. This is food that meets the criteria in at least one of the four following categories: local and community-based, fair, ecologically sound, and humane. Out of \$18.6 million in total food expenditures, \$714K met the RFC criteria. This 3.83% is comprised of 2.94% local and community-based, 0.06% fair, 0.82% ecologically sound, and 0% humane.

Over half (56.9%) of food expenditures were found to be disqualified, per the RFC criteria. More than \$4 million was disqualified for containing genetically-modified ingredients. Another \$4.3 million in animal products was disqualified for being sourced from concentrated animal feeding operations (CAFOs). Other common disqualifiers included high fructose corn syrup, labor violations, caramel coloring, sodium nitrite/nitrate added, and several food dyes, including yellow #5 and yellow #6. These are considered disqualifiers for a number of social, ecological, political, and public health reasons.

The following report provides more detail on the Real Food Challenge and the research completed during the Spring 2016 semester. A supplementary document for the dining directors lists all items found to be real. It is highly recommended that IU-B continues to increase the procurement of real food, and that potential manufacturers and distributors increase their transparency as well as their sourcing of real food products and ingredients.

Introduction

If I was told to describe the American food system in one word it would be convenience. Our lives are driven by the need to be productive, the need for efficiency, the need to want more. If we see our neighbor has gotten a new car, see them bringing in a bigger television and leaving the big cardboard box by the curb, it makes us want. When we see an ad for the newer, better version of the thing we already own, it makes us desire the new special one that just makes everything so much more convenient. The same can be said with our food. We want the cheapest, fastest lunch so we can get back to work, so we can get these bigger better things, so we can have convenience at our fingertips. But when disease creeps in, seemingly out of nowhere and our antibiotics won't work, because of mass production of cattle and preemptive antibiotic treatment, it won't be convenient. When our children are all obese in first grade with cardiac problems and type 2 diabetes from the added sugar in our food, it won't be convenient. When the soil is barren and blowing away in the wind, lacking all nutrients to promote healthy agriculture, it will not be convenient. The system we are all a part of, whether a farmer, producer, distributor, manufacturer, scientist, teacher, student or simply a consumer, is slowly killing the world. Sure the media is plaguing our every news outlet and favorite website with this controversial topic and the other, but everything we do, every day we are alive, the food system plays a role.

The Real Food Challenge IU believes we have a responsibility to take care of the world, and all things in it. This isn't limited to animals and soil health, but people too. We aren't an organization determined on converting everyone to veganism and setting animals free. We aren't in the business of making people feel like their every bite is destroying the world. What we are determined to do, though, is help. But we can't do it alone. We need the farmers to realize that there are other ways beyond monocultures and metric tons of pesticides and fertilizers. We need scientists to realize that what they are creating will not always be used for what they intended. We need producers and manufacturers to realize that their bottom line feeds someone else's family. We need distributors to realize that transparency is key to helping us in our efforts. We need students and teachers to realize that there is hope, that the numbers shown below are just that, numbers, we can make them into history if we all choose to do so. What everyone needs to realize is that we are living our lives together. We are all eating the same food, the same people grow it, the same people prepare it, and we all eat it. But what we are eating is not good for us.

RFC History

The Real Food Challenge (RFC) is non-profit organization that began in 2007 as a self-funded program of The Food Project based in Boston, MA. The primary mission for the organization is to build a passionate and productive community of student food activists to build a sustainable food system. RFC, as a part of larger food movement, supports a national network of student food activists, focusing on the quality, taste, nutrition, and ethical sourcing of food production and consumption.

The RFC definition of sustainable food has become widely accepted through nation. The RFC thoroughly evaluates the food system and covers diverse aspects of sustainability of food. Real Food has been defined as food, which truly nourishes producers, consumers, communities and the earth. RFC is comprised of three major initiatives: a student campaign, a campus commitment, and

the real food calculator. The objective is to increase the transparency of our food system, increase education regarding sustainable food systems, and set clear future procurement goals.

The RFC initiative has been started on many colleges by student activists working to increase awareness of the importance of sustainable food. Indiana University has been participating in Real Food Challenge since 2013. Indiana University-Bloomington currently has three food providers, Residential Programs and Services (RPS) Dining, Athletics Dining, and Sodexo. These three dining services at IU adopted the RFC definition of sustainable food in 2013 and students using the real food calculator released the first preliminary assessment results in 2014.

In this report, we clearly state the strategies of defining sustainable food and provide a better understanding of the origin of our food's ingredients. RFC defines "real" food as that which satisfies the criteria in at least one of the categories listed on the strategies below. A more detailed description of the criteria can be found at realfoodchallenge.org.

Methodology

Criteria

Real Food Challenge has a clear list of criteria defining what foods can be counted as real or not. This is to eliminate discrepancies that may arise between independent institutions and to allow comparative analysis. RFC specifies four categories (Local & community-based, fair, ecologically sound, and humane) with clear guidelines of what must be in place for the food to be counted as real in a given category. The list of criteria is also categorized as "green" or "yellow" with green being most satisfactory and yellow being acceptable. Items that do not meet the criteria are categorized as red (not real) and may also be disqualified.

To be considered <u>local and community-based</u>, the company must be a privately-traded or cooperatively-owned business that grosses less than 1% of the industry leader that is within 150 miles of the institution. This is to ensure that individuals within the company have the freedom to make decisions about the business and distribution practices of the company. Additionally, in order to be considered local, the total product must have been produced, purchased, and distributed within the 150 radius. The purpose of the radius is to ensure that resources are being redistributed into the area they are produced so that a stronger local economy can be established. This also ensures that the food travels the least amount of distance making it the freshest possible for the consumer making it higher in nutritional content. Food can qualify in the yellow zone of local and community based if 50% of the ingredients on the list fit are produced, processed, and distributed within a 250 mile radius of the institution.

Products can be considered <u>fair</u> if they have the following certifications: Ecocert Fair Trade Certified, Fair for Life Certified by IMO, Fair Trade Certified by Fair Trade Lab, Fair Trade USA, or Food Justice Certified. These certifications are to ensure that all workers involved in food preparation, distribution, and production are treated to equitable wages and working conditions. The fair component is important to real food because it creates more sustainable food system through social justice for food workers. Products can earn a yellow light if 50% of the ingredients listed are certified by one of the above ways.

Food is considered <u>ecologically sound</u> if they contain one of the following certifications or claims: Biodynamic Certified, Food Alliance Certified, USDA Organic, Protected Harvest

Certification, or Rainforest Alliance Certified. Additionally, fish can be certified by the Marine Stewardship Council or if they are on the Seafood Watch Guide's "Best Choices" Guide. Coffee can be considered ecologically sound if it is certified Bird Friendly. Ecological food leads to a more sustainable and real food system by creating a system of environmental stewardship and awareness where preserving biodiversity is a priority. This includes being aware and conscious of energy, wildlife, water, air, and soil usage and finding ways to to protect the resources currently available. Ecologically sound products do not use toxic products and strive to reduce the footprint the product leaves on the earth.

Finally, animal products are considered <u>humane</u> if it has been Animal Welfare Approved, Biodynamic Certified, Certified Human, or on step 4-5+ on the Global Animal Partnership Steps. Additionally, products can be yellow light products if they are Certified Organic, Food Alliance Certified, Global Animal Partnership step 3. There are more specific classifications for cows, hogs, and egg-layers. Human certifications ensures that animals are allowed to live in low-stress environments where they are raised without hormones, antibiotics or excessive medications. This allows the animals to have the best life possible and then can provide the highest quality nutrients to the consumers.

In addition to determining if the product is real, the RFC also includes *disqualifiers*. Disqualifiers are components of the product or the manner of production that in some way deems the product unhealthy, unethical or not safe for use. If a disqualifier is found, the product is automatically discounted as real. These disqualifiers are products with violations such as OSHA, FLSA and NLRB, from Concentrated Animal Feeding Operations (CAFOs), Genetically Modified Organisms (GMOs), and products that contain certain chemicals that the RFC considers too dangerous to be in food. Below is a list of the disqualifiers and the reason for disqualification:

- *OSHA, FLSA, NLRB violations* If a producer is found to have a violation through any of these standards, the product is disqualified. This is due to safety and health issues as well as fair labor standards.
- Concentrated Animal Feeding Operations CAFOs are farms that the EPA defines by the number of animals contained in a particular space and the pollutants caused by the practices used in this space. CAFOs are not only extremely dangerous for the animals confined there, but also have devastating effects on the environment and harmful human health impacts.
- *Genetically Modified Organisms* GMOs are greatly contested around the world. In the United States nearly all corn and soy products are GMOs. They are counted as disqualifiers because of the threats to human health, the environment, and the violations of farmer and consumer rights.
- Chemicals/coloring The majority of the chemicals listed are disqualified because they are a known or suspected carcinogen. These include Butylated hydroxyanisole (BHA), Acesulfame-potassium, caramel coloring, Propyl Gallate, Sodium nitrate and nitrite. The following are chemicals that may be carcinogenic, but also have other known harmful effects on health.
- Olestra This chemical inhibits the absorption of some vitamins and other nutrients.
 This is dangerous for a multitude of reasons but specifically it causes a depletion of carotenoid, which help lower risk of cancer.

- Partially Hydrogenated Oil (trans-fats) Trans-fats are widely recognized as unhealthy for cholesterol levels. High cholesterol in turn can cause heart attacks and strokes.
- *rBGH/rBST* These hormones are injected into dairy cows to make them produce more milk. These hormones are harmful to cows, undermine efficacy of antibiotics in humans and are possible carcinogens. They also cause harm to the environment.
- *Saccharine* This artificial sweetener was previously found to be carcinogenic, although that has now been revoked. However it has been linked to possible triggers in insulin release.
- Dyes Red #3, Yellow #5, #6, Blue #3 These four dyes are linked to cancer, hyperactivity in children, and can affect men's sexual health (this is mostly applicable to yellow dye).

Assumptions & Certifications

Because many corporations do not make their information readily available we have to work on some assumptions. The certifications listed above were researched extensively by the Real Food Challenge to determine their legitimacy. The RFC provides a Guide that categorizes these certifications into three categories of "Realness:" Green being the best, Yellow being "real" but not great, and Red, not real. We always assume that a food is not "real" unless it has one of the certifications listed under Green or Yellow in the RFC Guide.

We rely on third party databases in order to confirm the food's compliance with the RFC criteria. Aside from local & community-based, each category relies primarily on stringent third-party certifications because we want to avoid green and blue washing in the food industry. We see many companies advertise their certifications as though they apply to all products rather than a select few (green and blue washing). Therefore, we must assume that marketing is misleading, so we double-check company claims with reporting by the third-party certifier.

As disqualifiers go, we have to assume that processed corn, soy, and canola products are genetically modified unless certified organic. This is because over 90% of these crops grown in the U.S. are genetically-modified organisms (GMOs). Since GMOs are not officially labeled, we assume that any non-organic product/ingredient derived from corn, soy or canola is GMO and hence disqualified.

Many suppliers of animal products are tied to large corporations like Tyson and Cargill, which have been cited as concentrated animal feeding operations (CAFOs). We assume that companies affiliated with these large companies are CAFOs. If there is no humane certification on an animal product, and the source is a large farm (1,000+ heads) or is unknown, we assume it is a CAFO. According to the EPA, a CAFO is defined as a large operation where animals are confined for more than 45 consecutive days and where the owners have been cited for air/soil/water pollution.

Research Process

The research process begins with acquiring the data on food expenditures. RPS and Sodexo run internal usage reports which list all items purchased and from whom. The RPS report is exhaustive, however the Sodexo report does not capture all vendor and item purchases. For the

remainder of Sodexo, and for all of Athletics, the course instructor, Angela Babb, reaches out to vendors to request usage reports (also called velocity reports). These reports list all items sold/purchased by product number and description with total dollars spent over the specified time period (FY1314).

We then split up the products between us. This semester, we have seventeen students in five teams researching over 45,000 line items. We split up the products by distributor (e.g. Piazza, GFS, etc.). For direct vendors such as Prairie Farms, we are researching one company with many farms. For distributors such as Gordon Food Service (GFS), we are researching many companies connected to many brands, manufacturers, and farms.

We start by researching a company online to see if they offer any real food products. Whenever a company offers a product that can be considered fair, ecologically sound, or humane they are likely to promote it in one-way or another. When companies offer such products, they are likely to highly promote this on their packaging or anywhere they can on the website, even if it only refers to a few of their products. However we don't just take the company's word. We double-check company claims using multiple third party certification websites such as the Fairtrade Labelling Organization International (FLO)/ World Fair Trade Organization (WFTO) websites or the US Department of Agriculture (USDA) website or many others.

For direct vendors, we ask them to identify the farms from which they source. If they are able to give us a list of farms, we can then research the specific farms. For larger distributors, we often search as far as the brand before finding there are no real products available.

We then review the nutritional information and ingredient lists, looking for disqualifiers. We find nutritional information on the websites of large companies but the products of smaller companies require more in-depth research such as contacting the company directly via email or telephone. Once we have gone through all of the steps of the research process we are able to determine what can and cannot be considered "real".

Results

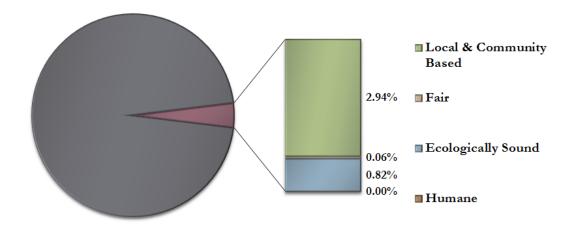
Overall

For fiscal year 2014-2015, we found average 3.83% of food expenditures to be on real food. This includes 2.94% local and community-based, 0.06% fair, 0.82% ecologically sound, and 0% humane.

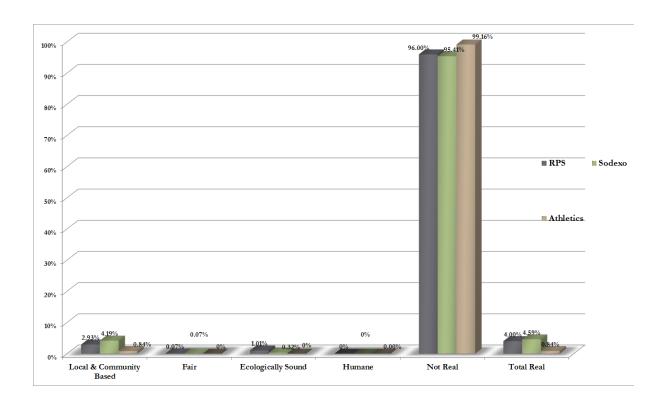
The money we spent on Ecologically sound decreased from \$193,747 to \$153030 (-21.02%). Expenditures on Local & Community Based decreased from \$768,633 to \$550246 (-28.41%). Only fair trade expenditures increased, from \$3,662 to \$11708 (+319.72%).

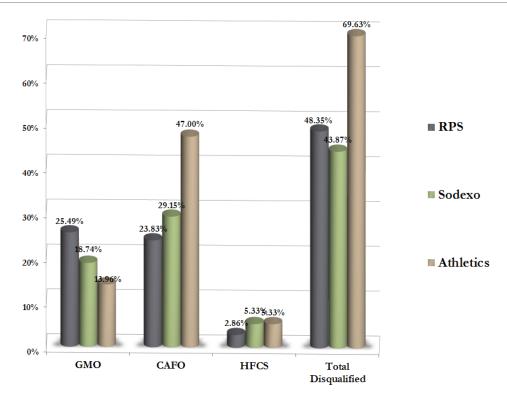
| Category | RPS | RPS% | Sodexo | Sodexo % | Athleti cs | Athl% | Totals | Overa |
|---------------------------------|--------------|------------|-------------|-------------|---------------|--------|--------------|------------|
| Local & Commu- nity Based | \$417,708 | 2.93% | \$119,502 | 4.19% | \$13,035 | 0.84% | \$550,246 | 2.94% |
| Fair | \$9,654 | 0.07% | \$2,054 | 0.07% | \$0 | 0.00% | \$11,708 | 0.06% |
| Ecologic- ally Sound | \$143,788 | 1.01% | \$9,242 | 0.32% | \$0 | 0.00% | \$153,030 | 0.82% |
| Humane | \$0 | 0.00% | \$0 | 0.00% | \$0 | 0.00% | \$0 | 0.00% |
| Not Real | | 96.00 % | | 95.41% | | 99.16% | \$17,972,584 | 96.17 % |
| Real | \$571,150 | 4.00% | \$130,798 | 4.59% | \$13,035 | 0.84% | \$714,983 | 3.83% |
| | \$14,279,215 | | \$2,849,911 | | \$1,558,440 | | \$18,687,566 | |

Real Food = 3.83%

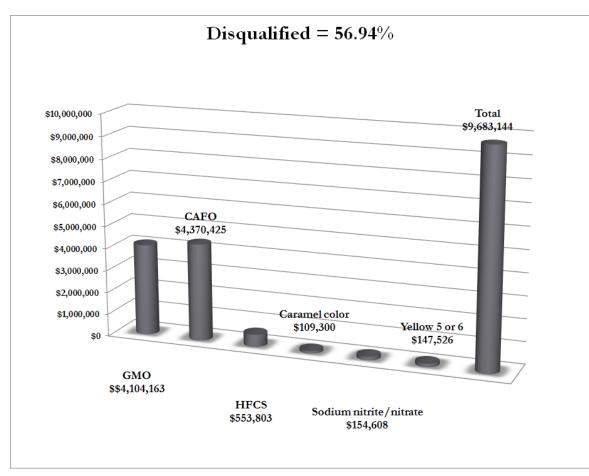


The total number of non-real food is enormously large. Especially Athletics has 99.16% non-real food. The average percentage of non-real food is 96.86%.





We found a total of 69.63% of food expenditures to be disqualified, or \$9683144. We found that the Athletic



s has the largest percent age of disquali fied food. RPS has the most GMO food (about ½). Athletic s has the most **CAFO** food (about 1/2).

| | RPS | Sodexo | Athletics |
|------------------------|--------|--------|-----------|
| GMO | 25.49% | 18.74% | 13.96% |
| CAFO | 23.83% | 29.15% | 47.00% |
| HFCS | 2.86% | 5.33% | 5.33% |
| Caramel color | 0.73% | 0.23% | 0.05% |
| Sodium nitrite/nitrate | 1.08% | 0.02% | 0.00% |
| Yellow 5 or 6 | 1.00% | 0.16% | 0.13% |
| Total Disqualified | 56.59% | 52.81% | 69.63% |

Change from last year

The amount of disqualified food is still enormously large, and it's even larger than before. This year there is 56.94% total disqualified food, which is 8.24% more than FY1314. The expenditure on disqualified food is \$ 9,683,144.07, which is \$1,249,807 more than FY1314. The money spent on GMO products almost stayed the same. The rest has slightly increased since the last assessment.

The percentage of real food from FY1314 is: RPS at 5.38%, Sodexo at 5.57% and Athletics at 1.27%. This year, RPS is at 4%, Sodexo is at 4.59%, Athletics is at 0.84%. The percentage of real food decreased for all three operations. We believe this is the result of better, more thorough research from our class. We found several items that were mistakenly counted as real in the last assessment. With more data, more students, and more vendor assistance, we believe our results for FY14-15 are the most reliable and accurate estimates of real food yet. We also believe that our numbers will continue to become more accurate and truly reflect our dining operations.

Vendors

Albert Uster

Albert Uster Imports provides the nation's largest selection of imported specialty pastry ingredients, tartlets, decorations, and confections. They are located in Gaithersburg Maryland but import almost all of their products. Indiana University bought almost 100 items and none of them were found to be real food. In addition 22 products were disqualified due to genetically modified organisms and yellow dye #5 and #6. In order to provide real products Albert Uster needs to focus on attaining certificates for fair and ecologically sound and eliminate disqualified ingredients.

Alpha Baking Company

Alpha Baking Company is a wholesale bakery based in Greenwood. They mainly provide fresh and frozen bread, buns, bagels and rolls. Alpha Baking has four production facilities: two in Chicago, one in Indiana and one in Wisconsin. All four plants are certified kosher and Wisconsin plant is also certified organic. However, most of their products contain high fructose corn syrup and soybean oil, which count as disqualifiers, and we do not purchase from the certified organic warehouse. Therefore Alpha Baking cannot count as real food. The vendor can use organic corn and soy ingredients to be qualified. In order to be real, they need to eliminate disqualifiers, acquire

certifications for ecologically sound and/or verify that more than half of their ingredients are sourced from within 250 miles.

Astor Chocolate Corp / Simply to Go

Astor Chocolate Corp and Simply to Go (STG) are combined in this report, for any STG products containing chocolate comes from Astor, the vendor. The university purchases various togo snacks like chocolate covered raisins and roasted and salted peanuts from this vendor. For the most part, Astor and STG have no transparency. However, with the data we could find, many of the "roasted and salted" products were disqualified for GMOs like canola oil, and this information was discovered only because a student found the products on campus and read the ingredients in person. Because of the lack of transparency, we are uncertain of any other possible GMOs in addition to canola oil. Overall, none of this vendor's products qualify as real. We encourage Astor to change this status by using non-GMO oils and to take heed of the Rainforest Alliance certification requirements for their "premium Belgian chocolate". This way Astor can be free of GMOs and become an ecologically sound company. We would also encourage them to pursue fair trade certification.

Aunt Millie's

Aunt Millie's is located in Bloomington, IN. Aunt Millie's has an offering of 211 items that are sourced locally. The products that Aunt Millie's offers are various bread or grain items. Aunt Millie's offered a nutritional information guide in which each product they had to offer was labeled with the nutritional information like fats, calories, and the other basic health things. Because Aunt Millie's website focuses on non-GMO bread, as seen on the homepage, they put this as a category as well in which 13 items do not contain GMOs. Another part of the guide is partially hydrogenated oils which are disqualifiers and nearly 90% of the 211 items do not contain partially hydrogenated oils (trans fats) and approximately a third of items do not contain high fructose corn syrup either. There was transparency offered for Aunt Millie's and we feel that they can be a very useful vendor as they offer some items that can be considered real food. Although some categories can be found as possibly being real from the nutritional guide, we recommend Aunt Millie's take it a step further in offering more transparency on all ingredients in all their items. We can count their products as real if they eliminate disqualifiers and show that at least 50% of ingredients are sourced from within 250 miles.

Bajco 100 LLC DBA Papa Johns

Bajco Group is a privately owned holding company headquartered in the United States with offices in Canfield, Ohio and Lahore, Pakistan. The group is comprised of fourteen associate companies which independently own and operate 129 Papa John's Pizza units across the United States. Athletics Dining purchases pizza from Bajco 100 LLC DBA Papa Johns. Although we were unable to acquire data on the specific purchases made by Athletics Dining, we know by researching the general products offered by Papa John's that they are largely disqualified. The dipping sauces contain non-organic soybean oil and are thus disqualified for containing genetically modified organisms. Considering the size of the business and lack of transparency, we assume the cheese and

other animal products to be from Concentrated Animal Feeding Operations. To avoid disqualification, Bajco 100 LLC DBA Papa Johns would need to change their ingredients and increase their transparency.

Beasley/Troyer Foods, Inc.

Troyer's Food, Inc. acquired Beasley Food Service in 2007; this vendor is listed as Beasley/Troyer Foods, Inc. in the CBORD reports and commonly referred to as "Beasley/Troyers". Troyer Foods is a distributor of food, supplies and equipment in the Midwest region of the United States. RPS Dining purchases mostly produce from Beasley/Troyers. Some of this produce is locally grown, but this is not indicated on CBORD reports or the vendor website. To count the locally grown produce as real, Beasley/Troyers would need to increase their transparency by marking local items as "local" on invoices, or better yet, assigning unique SKU numbers to produce items based on their point of origin.

Bakehouse Scholars Inn

Bakehouse Inn sells sells primarily bagels to RPS and Sodexo. Their products are not disqualified but also do not count as real. Transparency of where they get their ingredients is still in question. To be considered real, they would need to show that at least 50% of the ingredients in their bagels are sourced from within 250 miles. Alternatively, they could pursue certification in the ecologically sound category.

Coca-Cola Company

Coca-Cola is a beverage company selling soft drinks around the world. Their sales are in more than 200 companies, with billions of bottles per day on sale. Most of their products are not real considering the qualification strategy of the Real Food Challenge. They are too large of a company to be considered local, so to be considered real, Coca Cola would need to acquire certification in the ecologically sound category and eliminate the following disqualifiers found in their products: caramel coloring, high fructose corn syrup.

Delco Pizza Suppliers

Delco foods provides pizza and other food products within the American food market. The company does not provide much information to the public, such as the source of their products and the nutritional values and ingredients. Moreover, the ingredients are also not included on their packages. We have not disqualified them because we do not know the ingredients in their products, but along these same lines, we cannot count them as real. To count any Delco products as real, Delco would need to increase transparency and offer foods that meet the real food guidelines.

Donahue Distribution / Heartland Foods

Donahue represents a very small amount of the food purchased by IU. Donahue sells only mixes for waffles and pancakes, none of which count as real and all of which are disqualified for containing GMOs. We suggest either convincing Donahue to create a line of waffle and pancake mixes which certify as real or to find a distributor of such items that are.

Dawn Bakery

Dawn is a wholesale and the only full-line distributor of bakery supplies, which has a comprehensive range of bakery products based in Jackson Michigan. The company also provides grocery and dairy. Their products are gluten-free and are recognized with an Export Achievement Certificate. They have implemented the International Food Standard (IFS) certification that strongly encourages sustainable practices. This is a recognized part of the Global Food Safety Initiative (GFSI). There is no information about other certificates, also most of their products are found out contain genetically modified organisms. Therefore they are disqualified for that. Since they lack of related certificates for fair, ecologically sound and humane, it cannot be counted as real food. In order to be qualified, the company should first stop using genetically modified organisms and instead use organic ingredients. To be real, the company needs to receive certificates that are listed in the criteria.

Dawn Special Order

Dawn Special Order is a company which appeared in the RPS data. There are few products which we researched that are produced from this company. Some of them are the grocery and others are non-food. It is not a local company so cannot count as real in the local and community-based category. In addition, it is not fair or ecological. They do not have any humane record. The lack of data suggests that they source from Concentrated Animal Feeding Operations (CAFOs). Dawn would first need to increase transparency to be considered real food.

Fair Market Inc.

Fair Market Inc. is a leader in the wholesale discount food market, which is a unique service in the food industry. The company is involved in distributing and repacking the large quantities of food at the best price. IU only purchases four items from Fair Market Inc. These items that are purchased are spicy chicken patties, chicken breasts, beef stir fry, and fajita beef. Of these four products, none are considered to be real food. These four items are also disqualified because of GMOs and for being from CAFOs as well. We recommend that Fair Market looks at more organic meats that are not from CAFOs. We also recommend more transparency by Fair Market in providing the details of the food that is being offered.

Farmer Brothers Company

Farmer Brothers is a leading national roaster, manufacturer, wholesaler and distributor of high-quality branded and private label coffees, teas, spices and culinary products to foodservice, convenience stores and grocery retailers. In 2014, they launched a Direct Trade Verified Sustainable (DTVS) program and purchased 26% of green coffee through a voluntary sustainability standard. Athletics Dining purchases coffee from Farmer Brothers. Although we were unable to acquire data on the specific products purchased, our general research on the company leads us to believe that the products are not disqualified and some products may be real. In order to count as real, we would need written documentation that coffee producers involved with the DTVS program are receiving living wages, right to benefits, day of rest and overtime, seniority, equal pay for equal

or equivalent work, right to return to seasonal position, and the right to freedom of association. Alternatively, Farmer Brothers and Real Food Challenge can work together to verify the DTVS program as a qualified certification in the Fair category.

Fischer Enterprises DBA Dippin' Dots

Fischer Enterprises owns Dippin' Dots, producer of frozen ice cream, and is based in Edmond, Oklahoma. Athletics Dining purchases Dippin' Dots ice cream for concessions. Although we were unable to acquire data on the specific purchases made by Athletics Dining, our general research on Dippin' Dots leads us to consider their product disqualified. Fischer Enterprises DBA Dippin' Dots incurred an OSHA violation in the last 3 years. Additionally, the lack of transparency leads us to believe the product is sourced from concentrated animal feeding operations (CAFOs). To count as real, or at least not disqualified, Fischer Enterprises would need to go 3 years without a labor violation and increase their transparency, and likely change the sourcing of their milk to non-CAFO dairies.

Fortune Fish

Fortune Fish provides canned and other fish and shellfish to IU. They had several products that were considered real as they were Monterey Bay Seafood Watch certified. They had some other products that were farm raised and had certifications, however these certifications are not yet recognized by the Real Food Challenge. Their customer service was very helpful in getting me any information I needed. I would suggest that, although they have a great start to sustainability, they increase their purchasing and providing of Monterey Bay Seafood Watch certified fish to IU.

Gold Medal

Gold Medal makes only flour, and only a few varieties at that. None of their products appear to have any GM ingredients or would be disqualified for any reason. They do offer a USDA-Certified organic all-purpose flour, switching to purchasing that line would be quick, easy, and relatively cheap way to increase our percentage of real food.

Hubbard & Cravens

Hubbard & Cravens is an independently-owned company established in 1991 by Rick Hubbard and Jerry Cravens, and the company's idea is to offer the finest coffee and tea available. This company trades international and seeks all over the world to find the high quality coffee and tea. Since "currently, our products are served at our four retail locations in the Indianapolis area", so it is still a small company. And according to the research of RPS, expect a limited number of coffee and tea products, most of Hubbard & Cravens productions are non-food productions, such as cleaner, spoon and coffee maker. Besides all these non-food productions, the other coffee and tea productions have no disqualify record or GMO using record. We can count Hubbard & Cravens coffee as real if they acquire fair trade certification or show us that the product is directly traded, with a guarantee of the rights listed in the real food guide.

Klosterman Baking Company

Klosterman Baking Company is a family-owned bakery based in the Midwest and serving commercial customers across the United States. Klosterman has production facilities in Indiana and Ohio, and distribution centers in Indiana, Ohio, Kentucky and Tennessee. Sodexo purchases an assortment of baked goods from Klosterman. The majority of Klosterman breads contain nonorganic corn syrup and/or soybean oil, so are disqualified. In order to not be disqualified, Klosterman would need to use organic corn and soy ingredients. To be considered real, Klosterman would need to eliminate disqualifiers and verify that at least 50% of their ingredients are sourced from within 250 miles or that at least 50% of their ingredients are certified organic.

KeHe Tree of Life

KeHe Tree of Life has a broad range of provisions from dairy products to beverages. It acts more like a large distribution center. They have coffee, tea, milk, and yogurt. With its headquarters in Canada, the company has had issues with their products and qualifications. Under the ecological considerations, their products met the requirements challenge test. Besides, they have organic options, which include luna bars, and there are recommendations that these options should be on offer for a longer time. None of their products are banned nor disqualified. We count a majority of these items as real, as they have certifications recognized by the real food challenge.

McConnell & Sons

McConnell & Sons is a major food distributor for IU. Various types of food products they distribute can range from juice beverages to dairy and everyday grocery shelf items. We found most of this distributor's products to be disqualified. Reasons for a majority of the disqualifications is due to their foods coming from concentrated animal facilities (CAFO), or containing partially hydrogenated oil, and another common disqualifier for most foods: genetically modified organisms. Though they do provide real products as well, but these products are a minority in this company's inventory. In order for McConnell & Sons to distribute real food, they should look to alternative companies that provide "real food". Furthermore, they should communicate to their manufacturers about providing better ingredients in their foods if they want them to keep distributing the products that they buy.

McLane Company Inc.

McLane is an American supply chain services company, distributing grocery and food to convenience stores, mass merchants, drug stores and military locations and chain restaurants throughout the United States; it is headquartered in Temple, TX. Sodexo sources from McLane but we were unable to acquire data on the specific items purchased. The McLane website does not have any information on what products are distributed. Considering this extreme lack of transparency, we cannot consider any McLane products to be real and we assume that many of them are likely disqualified for containing genetically modified organisms or coming from concentrated animal feeding operations. In order to count as real or at least not be considered disqualified, McLane would need to start with increasing their transparency.

Meadowbrook Meat

Meadowbrook Meat is a major national food distributor, headquartered in Rocky Brook, North Carolina, with many regional distribution centers, and wholly owned by McLane. Meadowbrook Meat mainly services restaurants and is one of Sodexo's major suppliers. There was a severe lack of transparency with regards to Meadowbrook Meat and Sodexo, with researchers unable to even locate the correct distribution center, only getting as far as uncooperative corporate offices. The company's website provides no information as to what types of food it distributes (possibly due to regional diversity) nor whether it has any environmental or social standards regarding where its products come from or how they are produced. To even allow for the possibility of Meadowbrook Meat products being counted as real, transparency would need to greatly increase.

Merwin W. James dba Kountry Kids Kettle Korn LLC

Merwin James dba Kountry Kids Kettle Korn is a family-owned company based in Indianapolis, IN. Athletics Dining contracts with Merwin James to sell kettle corn as concessions at sporting events. We were unable to acquire data on the specific products sold. Given that kettle corn likely contains non-organic corn, soy and/or canola ingredients, we assume this product to be disqualified. To be considered real, or at least not disqualified, Merwin James could source at least 50% of their ingredients from within 250 miles and use non-GMO or organic corn/soy/canola. Increasing transparency on their website would also help.

Michael's Finer Meats and Seafood

Michael's Finer Meats is a meat and seafood distributor based in Columbus, Ohio. Sodexo purchases a variety of meats from Michael's Meat, including salmon, shrimp, mussels, tuna, beef, lamb, pork and poultry. The bulk of their beef comes from farms in Colorado, Kansas, Iowa and Nebraska. We were unable to identify the origin of any of these products, so given this lack of transparency, we assume the non-seafood items to be sourced from concentrated animal feeding operations. To avoid disqualification, Michael's Finer Meats could increase their transparency of their sourcing, particularly from non-CAFOs. To be considered real, they would need to source from local (non-CAFO) farms, or they could acquire humane and/or ecologically sound certifications on their meat and seafood, respectively.

McFarling Foods

McFarling Foods is one of the largest independently-owned foodservice distributors in Indiana and a shareholder in Unipro Foodservice Inc., the world's largest foodservice. The productions McFarling sells daily are mainly fresh seafood, fresh produce, fluid milk, and ice cream. As this company says it is "becoming Indiana's largest 100% employee-owned food distributor", McFarling Food also indicates that many products are under the control of USDA-inspected. However, most of products are disqualified for lack of transparency and the subsequent assumption they are sourced from Concentrated Animal Feeding Operations. To be considered real, McFarling would need to increase transparency and pursue certifications in the ecologically sound and/or humane categories.

Natural Distribution

Natural Distribution sells product to Sodexo for the Starbucks and Sugar & Spice shops in the IMU. We were unable to acquire data on the specific purchases. Based on general research of Starbucks and Sugar & Spice, we did not find any potentially real products. Some of the products (e.g. syrups) may be disqualified. To be considered real, Natural Distribution would need to first increase transparency and provide us with a usage report.

Performance Foodservice - Fox River

Performance Foodservice is a national food distributor that delivers more than 125,000 food and food-related products to 85,000 customer locations on a daily basis from 24 broadline and 10 specialty distribution locations. RPS purchases an assortment of ingredients for the Sbarro franchise in the Wright Place food court. None of these products were found to be real, and approximately half were disqualified for containing genetically modified organisms or coming from concentrated animal feeding operations. To avoid disqualification, Performance could change their ingredients (for instance, by using organic corn and soy) or increase transparency of their meat and poultry sourcing, particularly if any of it is from non-CAFOs.

Peets Coffee

Peets Coffee sells coffee and tea and some non-food products to Sodexo. The company has been in operation for a long time. Several of their products count as real, as they have either fair or ecologically sound certifications. We would encourage Peets Coffee to increase the number of products they offer with these certifications.

Piazza Produce

Piazza Produce, a distributor based in Indianapolis, supplies a large amount of produce and other items to both RPS and Sodexo. Piazza Produce was one of the largest suppliers of real food for the IU campus, primarily falling within the "local" category, a definition in which Piazza coincides with the Real Food Challenge (defining "local" as a radius of 250 miles). Real and local products from Piazza various cheeses, apples, eggs, and other types of produce, dairy, and meat products, as well as more elaborated items. At the same time, however, many Piazza products were disqualified, even if locally sourced, due to the presence of GMO's (mainly corn or soy additives) in foods and/or CAFO sources. Piazza demonstrates good potential for increasing the amount of local and real food provided to IU; for the future, we recommend that Piazza make brand information more easily available on its website (to facilitate product research), minimize purchases from CAFO's (even if local), expand information on the sources of its products, and (particularly for produce) clarify what time periods products are local, given seasonal variation in production.

Pizza Hut

Pizza Hut sells mostly pizza within the IMU and to Athletics. Because of the large size of their operation and the lack of transparency, we consider most of their items to be disqualified for GMOs and coming from CAFOs. To be considered real, Pizza Hut would have to begin with increased transparency and sourcing of organic, humane products.

Prairie Farms

The university buys some of its dairy products like milk and cheese from Prairie Farms. According to the data, most of Prairie Farms qualifies as real. This vendor stays true to locality, settling within the 250-mile radius required to be local and community-based. Furthermore, Prairie Farms participants do not have large herds, for each farm holds 100 head of cattle or less. As a result of these promising finds, the university should definitely continue working with this vendor. Some items are disqualified, particularly chocolate milk and yogurt, for disqualified ingredients. To build on being local with no disqualifiers, it is imperative that Prairie Farms now focuses on producing its dairy products from humane environments for both animals and workers and eliminates disqualified products in the chocolate milk and yogurt.

Reinhart Foodservice

Reinhart Foodservice is the 4th largest foodservice distributor in the country, serving independent restaurants, delis, sporting venues, schools, nursing homes, hospitals, the military and chain accounts. Based in Wisconsin, Reinhart operates 29 distribution centers across the US and a meat processing facility. Sodexo purchases a substantial amount of products from Reinhart, though we were unable to acquire data on the specific purchases made. The company does not appear to offer any products that would be considered real, and many of the products appear to be disqualified. To be considered real, Reinhart would need to first increase their transparency and provide us data for research. Further, they could list items on their website that have fair/ecologically sound/humane certifications.

Royal Cup

Based in Birmingham, Royal Cup has served a large population from the sale of coffee and coffee products. They have broken the norm of in-house delivery to office settings where they collaborate with institutions to ensure they meet their demands. Particularly, their coffee is the roasted and has been on the market from 1896. Being a privately owned company, they met one of the qualifications of ownership. The biodiversity demands are not met by their goods such as the packaging systems. To alter all these, they will need to change the above disqualifying reasons to respond to ownership, the health of the people and environmental considerations. They would need to increase transparency and pursue certifications in the ecologically sound and/or fair categories.

Scholars Inn

Scholars Inn is a café and wines bar that deals sell coffee, tea and alcoholic products to the people around the place. As a privately owned company, it is wise to investigate the health and the ecological concerns to find out if its products are real. The health considerations have not met much opposition and cannot be said to be harmful to the workers and consumers. Ecological friendly measures are not yet met depending on their packaging in non-biodegradable cans and bottles. None of the products are disqualified in the market. For them to have their foods rated as real, they will have to ensure transparency and either show that at least 50% of ingredients are sourced within 250 miles and/or pursue ecologically sound certification.

Snacks on Racks

Snacks on Racks, Inc. is a wholesale distributor and merchandiser of bulk and packaged confections, candy and snack mixes. They sell product to Athletics Dining for concessions, although we were unable to acquire data on the specific products purchased. Given that their products are largely processed sugars, we believe most of it is disqualified for genetically modified organisms, high fructose corn syrup, food dyes and/or other disqualified ingredients. To be considered real, Snacks on Racks would need to first increase transparency, then offer some options with organic ingredients.

Sorce Enterprises

Sorce Enterprise is a distribution center located in Peroria Illinois that provides frozen, refrigerated, and fresh food items including produce, meat and poultry to 9 different state in the Midwest. Since there is no transparency in order to see the different products and where they come from then none of their products are real. Creating transparency is the first step to provide real food.

Starbucks

Starbucks is a coffee shop in America. Its location is in Seattle in the United States of America. Mostly, they use the roasted beverage as their major products. Despite their ethical standards, their products are not considered real. They do not meet the qualifications set for real products, especially the health conditions. The other reasons are the reliance on a third party verification of their products, which do not present transparency. The CAFÉ certification is not transparent and thus not recognized by the real food challenge. Some of their syrups are disqualified for high fructose corn syrup and/or caramel coloring. To be considered real, they would need to eliminate these ingredients, offer fair trade certified coffee, and/or increased transparency of their CAFÉ practices.

Susan Myers

Susan Myers is a woman based in Nashville, IN that makes Needmore Oatcakes. Sodexo Dining purchases a significant amount of these oatcakes for the IMU. The oatcakes are manufactured locally, but the ingredients are not sourced locally; we do not consider the oatcakes to be real, but they are also not disqualified. To be considered real, Susan Myers would need to source at least 50% of ingredients from within 250 miles or make the oatcakes with at least 50% certified organic ingredients.

Sushi King

Sushi King is a distributor of fish and sushi rolls. It was very hard to find any information about where anything came from or exactly where they were sourcing their fish and vegetables. None of their products were disqualified, though none of them were considered real either, as they didn't have traceable ingredients. In the future it might be helpful for the company to provide even a little more transparency, such as the farms they use, or even the distributor they get their vegetables from, as well as their fish.

Sysco - Indy

Sysco Corporation is an American multinational corporation involved in marketing and distributing food products to restaurants, healthcare and educational facilities, hotels and inns, and other foodservice and hospitality businesses. RPS Dining purchases baked goods, seafood, meat, coffee, tea, and grocery items from the Sysco distribution center in Indianapolis, IN. We did not find any of their products to be real, and some were disqualified for containing high fructose corn syrup, genetically modified organisms, or for coming from a concentrated animal feeding operation. To be considered real, Sysco would need to provide certified fair/ecologically sound/humane options. Providing an option to search for these certified products on the website would help.

Two Degrees Inc

Two Degrees is a one-for-one food company that produces vegan snack bars. The location of the company is in San Francisco. They decided to start a new kind of Food Company: one that would make healthy, delicious products and help feed hungry children around the world. Every product which they sold will donates a meal to a hungry child in need. Two Degrees Food has provided meals to children in areas including the United States, Kenya, India, Malawi, Somalia, Colombia, and Myanmar. They are not a local company and they are not fair or ecological. Based on the above information, their products are not real food. To be real, they need to begin with increasing transparency and then pursuing third-party certification.

UGo bars

We found Ugo Bars to not be considered "real food." They are a locally owned and produced here in Bloomington, Indiana, but their ingredients are not proven to be sourced from within 250 miles. Their products are a trending variety of granola bars in the non-GMO gluten free family. Information on their website explains how they strive on using all natural ingredients that provide efficient nutrients such as carbs, proteins, healthy fats and fiber that can be beneficial and satisfy hunger in one bar. Some of these ingredients that can be found in their bars are flax seeds, nuts, chia, raisins, cherries. They are a good provider for IU, being that they are local and provide a healthy and safe product to provide for campus. A recommendation to them would be to provide their bars at every snack counter all over campus and maybe add more food varieties in their company to help replace foods that are disqualified.

US Foods

US Foods appears to be one of the most diverse food vendors in America. The company has several branches nationwide that deal with kitchen, hospitality, and spreads to government and institutions. With a capacity of 25000 workforces, they provide cooking services around the country. Besides, they are not real from the manner they acquire their foods. They outsource from the rest of the world within inconsiderable miles of operations. It disqualifies them from the community basing. Their health conditions though would appear good and relatively healthy; they have to change their ownership to get their resources from the locals. Besides, they have not had their products disqualified in the past and can continue in the same line. The transparency of the vendors is a matter that should be considered to make them look real in their services.

Vistar of Kentucky

Vistar is the only national distributor to the vending and micro market industries. Vistar of Kentucky is based in Louisville, KY, and is a distributor of vending, office coffee, disposables, theatre and concession supplies. Athletics Dining purchases a substantial amount of product from Vistar of Kentucky, although we were unable to acquire data on the specific products purchased. It is possible that a significant portion of these purchases from Vistar are of non-food items. After general research on this distributor and their product line, we did not find any real options offered by Vistar of Kentucky. We can see by their list of preferred supplies (e.g., Nestle, Pepsico, ConAgra, General Mills, Kellogg's, etc.) that most of their products are likely disqualified for containing genetically modified organisms, high fructose corn syrup, and other disqualifiers. To be considered real, Vistar of Kentucky would need to offer certified fair/ecologically sound/humane options.

Wabash Coffee

Wabash Foodservice, Inc. is a complete Foodservice and Convenience Store Distributor located in Vincennes, Indiana. It is a coffee supplier that founded in 1950. In 1961, Wabash foodservice expanded by warehousing and buying it's own product and it's own product lines. In 1982, Wabash coffee ex new facility. It is worth mentioning that this company is WBE-certified, which stands for Woman Business Enterprise. It means that women have majority ownership and stock share of a company. In addition, their foods are real because most of their product lines are USDA Inspected Fresh Meat and Healthcare Products and so on. In addition, Wabash foodservice does not have OSHA violations in the past five years. I can conclude that none of their foods are disqualified, but we would need certification to count them as real.

Weinstein

Since 1937, Weinstein Beverage Company started its business in North Central Washington. It is a company that provides soft drinking, hydration & juices and energy drinks, including Pepsi, MtnDew, 7up and Starbucks and so on. This company has been in NCW for over 75 years and they are the only major soft drink supplier to have a lot of support from local organizations, events and festivals. Weinstein beverages contain GMO so they are not real food. In addition, they have OSHA violation in the past three years so they are disqualified. I think they need to label their products in GMO and provide less Fructose contents in their products in order to produce more real food.

Wesley Key DBA Chick-fil-A

Chick-fil-A is an American fast food restaurant chain headquartered in the Atlanta suburb of College Park, Georgia, specializing in chicken sandwiches. Athletics Dining sources product from Wesley Key for concessions. Given the national scope of the Chick-fil-A operation and the lack of transparency regarding the origin of products, we consider this product disqualified; the chicken is most likely coming from concentrated animal feeding operations. To avoid disqualification, Chick-fil-A would need to increase transparency and source from non-CAFOs; to be considered real, Chick-fil-A would need to acquire humane certification.

Recommendations

Dining Services

Currently, the amount of "real" food provided by IU dining services is problematically low; the most important recommendation we can make for dining services is to put greater priority on sourcing a greater amount of sustainable food. This can be accomplished incrementally in several ways. Many of the suppliers and distributors that IU works with already sell a large array of real products, in particular local ones, and an effective step for dining services would be increase the proportion of local foods it buys from these suppliers. Moreover, many local foods are disqualified due to the presence of GMO's or because of CAFO origin; we believe that RPS, Sodexo, and Athletics, being such important consumers of these companies, have the potential to effect change by insisting on GMO-free and CAFO-free local food. Below are several suggestions:

Dairy products, including milk, cheese, and ice cream: IU currently obtains many of its dairy products from Piazza, which sources many of them from CAFO's. However, there exist local farms, in particular Traderspoint Creamery, which produce a variety of dairy products through organic, humane processes. The volume of purchases from Traderspoint Creamery through Piazza should increase, and these items should be advertised as ecologically sound and animal-friendly.

Meat: Most of the meat produced in the U.S. is, unfortunately, of CAFO origin, and the IU food system largely reflects this fact. However, there are local farms which can provide more sustainable meat. In particular, Smoking Goose, whose products are distributed by Piazza, is a local, non-CAFO specialty meat producer. Dining Services should purchase a greater amount of Smoking Goose products from Piazza and advertise them more clearly to students.

Fair Trade Items: Dining Services obtains a variety of Fair Trade items from several suppliers; we see no particular reason for Dining Services not to increase its share of Fair Trade items, switching, for instance, currently non-Fair Trade coffee to fair trade. For instance, we see potential for all coffee sold by Dining Services to be Fair Trade (instead of the current few options), and doing so would go a long way in positively impacting the IU food system.

One laudable step that IU Dining Services already takes is to highlight local products, such as fruit and snacks, through signage, as well as organic and fair trade items. This is a useful method that should be applied to other products as well. Currently, only a few snacks have this indication present at dining locations; this indication should be expanded to all local products. For meals prepared by food court employees with local ingredients, the word "local" should be highlighted in the product description students see; if not all ingredients, then at least local ingredients should, such as "sandwich with local cheese," etc. One indication that is not present (or that at least we have not noticed) is CAFO-free for non-CAFO animal products; this step in particular could increase student awareness and provide necessary information to shift student demand in more sustainable directions.

In addition, we believe that IU Dining Services could increase awareness about sustainable foods and available options through different types of programming. The Indiana University

campus already organizes events such as Big Red Eats Green, and a small farmer's market has recently started in the IMU. We believe that RPS and Sodexo could replicate these ideas by preparing and advertising, for instance, a "local item of the week," or by having a "local produce" or "CAFO-free" section of a salad bar or refrigerator.

Piazza Produce in particular has great potential to increase the share of real food at IU. Dining Services should explicitly request in its contract an increased share of local products from Piazza wherever possible, and should work to improve the SKU identification system for the farms of origin. Additionally, if feasible, it should purchase large volumes of local produce from Piazza when available, and freeze them for later use, thus cutting costs and increasing sustainability.

RFC Researchers

When researching products, student researchers should be aware of the specific languages of nutrition labels and brand marketing. Researchers should be familiar with the requirements for real certification and understand the conditions for disqualification thoroughly. Many of the corn and soy products are hidden under different names as additives, such as maltodextrin. Familiarize yourself with all common additives derived from corn and soy. In addition, be wary of products likely to contain genetically modified (GM) ingredients. Some commonly GM crops include corn, soy, canola, papaya and zucchini. Be sure that all products which promote themselves as being sustainable or "green" carry appropriate third-party certifications as well as avoid any disqualifiers such as labor violations. Many products may not list appropriate ingredients lists on their websites; therefore, finding third-party websites that provide the nutrition facts of products can be extremely helpful as well as image searching the product to look for pictures of the product which include the nutrition facts and ingredients.

If all else fails, do not be afraid to reach out to the company via email or telephone to attain their ingredients lists, ask about their sourcing standards, or any other questions you may have. When entering data into the spreadsheet, pay attention to the precise formatting and specific language required to upload to the RFC calculator. Be consistent and thorough in your data entry.

Conclusion

The net decrease in percentage is a result of an increase in data transparency and research methods due to our newfound ability to disqualify products considered real in the past. RFC will continue to refine the research process and ask for increased coordination with all relevant parties towards creating a more sustainable and equitable food system on the Bloomington campus. Demands from the university for this change will make the availability of real food easier in the future, increasing local and regional food security and bolstering local and regional food systems. Committing to increasing Indiana University's purchasing of real food is in line with the Campus Master Plan's commitment to sustainability and reducing the campus carbon footprint. Through collaboration between the university and vendors, we can create a local and regional food system to confront increasing inequality and combat global climate change for a more sustainable campus, community, country, and world.