Theme Meal Project: Harvest Meal and Spring Fling

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Sage Dietetic Internship

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For the theme meal project, my preceptor and I decided the most useful way to help the facility would be to split my requirements between two planned theme meals. This is due to the fact that most theme meals are planned over 6 months in advance. I helped with the fall Harvest Meal, which was served during the campus-wide sustainability week. I also helped plan possible menu items and ideas for the Spring Fling which will take place during spring semester, and which will be planned in January and February. These two meals will be discussed throughout the paper, and I will refer to which meal the experience is related to.

I. Customer Surveys

We used the results of a NACUFS national survey to help determine what changes we needed to make to our menu. This survey has been conducted at the school for multiple years. We used the results from last year's survey (2012) and compared them with the previous year (2011). (The reason we did not use this year's survey (2013) is due to the fact that the survey is conducted in October or November and was still being conducted through the end of my rotation with the facility.) The results from the survey were analyzed against the national average, as well as compared to the scores from the previous year. Since the theme meal would be served campuswide, we decided to look at overall scores rather than each facility's individual scores. We decided to focus only on the questions related to food, and tried to address the areas that were either below the national average or had dropped in score from last year. The only area that was below the national average this year was the "availability of posted menu items." Campus-wide there were three areas that had decreased in score since last time: "taste", "nutritional content", and "availability of posted menu items". The scores from this survey were used to help determine which food items to add to our menu for Spring Fling to help improve satisfaction with taste, as well as to increase the perceived nutritional content of food. After finding that one of the weakest areas of our food service operation was "availability of posted menu items" I would suggest increasing the amount of food produced for the Harvest Meal and Spring Fling. Also, I think giving menu items that are flavorful and have not been served before would be good ways to help improve the taste score. I also would suggest not serving anything that is fried at the Spring Fling or Harvest Meal to help increase the opinion that the food's nutritional content is healthy. This could also be achieved by adding a fruit or vegetable as one of the sides that gives a fresh taste to the plate, such as a grilled peach or apricot, or a vegetable such as carrots, squash, or peppers that have been steamed or baked.

An area not addressed by the NACUFS survey is sustainability. The university is very focused on sustainability, and makes that a target of theme meals. For the Spring Fling meal, we will consider what is in season locally at the time of the meal, and try to include these foods in our menu so we can purchase them locally. We also will try to buy from local organic farmers when possible. The facility is self-serve, so portion size for many items is hard to control. However to try to decrease waste, we will attempt to keep pre-portioned food such as sandwiches smaller in size to hopefully help decrease waste. Pertinent results from the NACUFs surveys are included in appendix G with the post surveys.

II. Review current guidelines

The university developed a document with guidelines for menu development and service. Due to the population they serve, and the all-you-can eat nature of the food, they do not have any restrictions or guidelines they follow in regards to nutrition. The guidelines focus more on what food groups must be served at each meal, safety of the food, and appearance of the food. It helps employees understand that all items must be labeled, and all allergens that are recognized as part of their "A9" allergen program (wheat, soy, eggs, dairy, peanuts, tree nuts, shellfish, fish, gluten) must be identified on the line. It states that all menus must be forecast three weeks in advance and high cost meals should be addressed at a weekly meeting. With these guidelines, they have a lot of flexibility to focus on getting a variety of food to please their guests without having many restrictions with calorie or fat levels. The university is currently looking into labeling items throughout their facility that are healthier choices, and are working on defining what the definition for that label would be. This has not yet been developed, but is in the works. For this project, we decided to try to stick to entrees that were less than 500 calories per serving.

III. New one-week menu

My facility has four dining halls. Three dining halls are on a 5-week cycle menu, and the fourth location is the main dining hall (C4C) with multiple stations to choose from at every meal. There are ten different stations in C4C: The Grill, Desserts, Whole Fields, Italy, Latin, Persia, Asia, Kosher, Sushi, and Black Coats. The Grill generally serves comfort foods and meat-based entrees. Desserts serves cookies, cakes, and pies. Whole Fields has a salad bar and ingredients for deli-style sandwiches. Italy serves Italian food including pasta made to order and oven fired pizza. Latin serves Latin food as well as burritos made to order. Persia serves Persian food. Asia serves Asian food, as well as serving breakfast. Sushi serves only sushi. Black Coats is only used occasionally and consists of a small "sample plate," created by one of the Chefs to show off their style or help them in their educational requirements. I completed a one-week menu that included a theme meal for the grill area in C4C for multiple reasons. One reason is that additional dining halls generally follow this menu and the grill menu is the only menu that is frequently changed. The Grill is also the station where theme meals are served, and my one-week menu was to include a theme meal. Also, the type of food at The Grill lends itself to being changed and having new items added.

For the one-week menu I tried to include foods that I thought would please university students and were not already included on the menu. I used past experience to include items that I had seen sell out at a different university's dining hall every time it was served. I also tried to consider which foods were in season or which foods were often served during the springtime. The Grill always has the option of mini hamburgers or a chicken breast, and offers portobello mushrooms to vegan students who request them. It also serves some type of potato side at lunch. Additionally, they serve one extra entrée at lunch and two entrees and a side at dinner, which is what my one-week menu was based on. I tried to pair entrees that contained pork with entrees that contained another type of protein for those who do not like or wish to eat pork. For the theme day, I tried to focus on getting foods that would be available to purchase locally and were in season, or were foods that are generally served during the spring. The theme meal is the dinner meal on Thursday. Thursday was chosen because they either serve theme meals on Wednesday or Thursday, and try to rotate the particular day of the meal. Harvest Meal was served on a Wednesday, so Spring Fling would be served on Thursday.

I found it harder than I thought to come up with unique dishes, to not repeat myself, and to serve foods that were complementary. Some items needed to be changed or altered in order to be feasible to serve thousands of people. For example, the chicken pot pie needed to be changed to be the chicken pot pie filling served with a fresh roll because it would not be efficient to make personal pies for each person, and if it was made in a hotel pan, not everyone would get crust with their meal. After working and reworking the menu, I came up with the menu included in this project.

See appendix A for one-week menu, including a picture version as well as a chart version of the planned menu.

IV. Recipe testing

It was interesting to look through different recipes, and decide which ones to include for the theme menu and testing. I decided to test two different recipes for possible service as the entrees for the theme meal: Ham and Swiss Sandwiches, and Chicken Pot Pie. We were unable to conduct a large or official taste test, but did enroll five colleagues to help with the taste testing of the recipes. While day-of service would be for thousands of people, we decided to try both recipes by making both a small amount (12 servings) and evaluating for ease of duplication to a larger scale. It was determined that both recipes can be easily scaled for a larger service.

The Ham and Swiss Sandwiches were fairly simple and cost-efficient to make. The university already makes their own rolls, and they slice their own deli meat and cheese. Knowing this, we knew we'd be able to keep cost down on these recipes. The sandwiches take very little time to assemble, which is an advantage for the cooks. The sandwich recipe has a poppy seed-butter sauce that goes over the top. After making the sandwiches, it was determined that the sandwiches could be assembled before service, but the sauce should only be added right before they went into the oven before service. The sauce originally called for Worcestershire sauce. After taste tests, we found that the Worcestershire sauce made the sandwiches too bitter (3 of 5 people polled gave this response). After eliminating it, the sandwiches were sweeter and more widely accepted. Of the people who tasted the recipe, all preferred the version without the Worcestershire sauce.

The original recipe for Chicken Pot Pie calls for making an actual pie with two crusts. With the large volume we will be serving at the Theme Meal, this was impractical. It was decided that we would follow the recipe and make the inside portion of the pie, then serve with an optional white roll instead of having a crust. This also gave the possibility for the entrée to be wheat-free, gluten-free, egg-free, and dairy free. The recipe would be made in a steam-jacketed kettle, and would then be transferred to hotel pans for storage in the hot box as well as service on the line. All 5 people who tasted the recipe liked it and thought no changes should be made.

By choosing these two items for entrees on the theme meal, multiple goals were met. They both provided different colors which would make for an aesthetically pleasing display. One is a harder food to eat (sandwiches with toasted bread) while the other had a softer texture (a soup or stew type texture with fresh-baked rolls). One entrée had pork, while the other featured chicken. The sandwiches had multiple allergens (wheat, gluten, egg, dairy) while the other had the option for fewer allergens (no wheat, gluten, eggs or dairy allergens if consumed without a roll). Both recipes were easily made on a large scale, and were accepted by those who tasted them. Both were altered from their original recipe for ease of service as well as customer satisfaction.

V. Nutrition Analysis

I did the nutrition analysis both for the one-week menu (which included a proposed menu for Spring Fling) as well as a nutrition analysis for the menu served at Harvest Meal compared to what the normal meal would have been. I used the program "Cook'n" to analyze the nutrients. I decided to use this program because of multiple advantages this program has over others. It allows you to input your own recipes, whether they be in pounds, ounces, or cups. It has a database of nutrition information for basic foods (including fruits and vegetables and generic brands). It also allows you to be more specific with the nutrition analysis by allowing you to customize recipes by selecting which brand you used or inputting the information from a food not in their database. This was an advantage because items such as butter may vary between different brands, and being able to customize the brand nutrition information, which may be improperly calculated if not using a software program. While this was not needed of this specific project, it may be of interest to those who are served the meal.

It was interesting to see the nutrition information for many of the items. The nice thing about working with a university dining operation is they are not overly concerned about limiting calories or fat. Also, the dining facility is an all-you-can eat facility, which allows for flexibility with your menu items. As discussed in a previous section, there are not guidelines for nutrition that must be followed; choices are based more on appearance and food safety. For this project, however, we decided the goal was to keep all entrees under 500 calories for a serving.

An advantage to completing the theme meal, as well as the one-week menu at the grill, is the flexibility in portion sizes which can decrease calories. Many of their items are bite size or slider

size versions of foods. However, they also have the ability to have a larger item, such as ham or prime rib, that is either pre-sliced and put under a meat warmer or sliced in front of the customers. When doing my nutrition analysis, I was really able to grasp what an advantage this is for the university. Most of my options were changed or planned to be bite-size, but the items such as the ribs and the pork chops which we planned for larger portions had a large increase in calories. While working on the menu, there were a few items we intentionally changed to decrease the calories and fat. Some of the recipes we decreased from a full sandwich to a slider specifically for the nutritional benefits. This allowed me to plan items that I thought college students would appreciate without worrying as much about limiting the fat, sodium, or calories.

I completed nutrition comparison of the two main entrees and the main side because these offerings are never available except during theme meals, while other items on the Harvest Meal menu are served on other days as well. The Harvest Meal and the regular menu items it replaced were both comparable in terms of nutrition. However, the Harvest Meal was much more appealing by how it was presented and served. The roasted ribeye for the Harvest Meal was very tender, and served by a chef cutting it as requested by patrons, while the petite tenderloin is a tougher cut of meat that needs to be marinated before cooking. The ribeye was also more of slices, giving you the real feeling of eating a steak, while the tenderloin is cut into small, two-bite strips. The chicken quarters were also beautifully presented with the herbed skin. The calamari on the other hand is a fried product and looks similar to any other fried product with a breaded skin. The roasted butternut squash was a great color to contrast with the meats, and didn't have much sauce with them. The lemon thyme carrots also normally have a good appearance, without much sauce. The taste on the theme meal was far superior to the meal it replaced because of the high quality of food and the inherent freshness. Even the butternut squash was local and had been picked earlier that week. The theme meal gave the feeling of a special occasion, and left the customers feeling treated and satisfied.

See appendix B for nutrition information and nutrition comparison.

VI. Sustainability efforts

For both the Harvest Meal and the Spring Fling, the university wanted to focus on sustainability. Regular meals sometimes include organic fruits and vegetables, and occasionally local foods. For the Harvest Meal, they tried to purchase every featured item from a local, organic, or local and organic source. Harvest Meal was a good time to buy local food items because it was the harvest season in Colorado. We also defined what "local" meant for each food, labeling as either being local (within the state) or local Boulder (within the county). We were able to increase the amount of food that fit these parameters for this meal compared to a regular meal due to the fact we were only purchasing the foods for one day, which meant we were not violating any contracts with other food suppliers.

To help decrease waste, the week before Harvest Meal we decided to conduct the biyearly "scrape your plate day." On this day the compost bins are brought out from the dish-room and students scrape their plates into the containers, rather than sending it to the back dish-room to be scraped. The contents of the compost bins are then collected and weighed. The weights are compared to the previous year, and are broken down by average waste per person. By conducting this day a week before the harvest meal, we were hoping to increase awareness of taking only what you need on your plate and decreasing waste. This same strategy may be used during the Spring Fling meal.

Cost per item was slightly higher than other menu items. Food cost per meal is tracked, but for theme meals like Harvest Meal, it is generally higher than the goal cost of \$3.61 per meal. However, the department focuses on food cost per month. Because of this, they try to keep food cost per meal on other meals lower than the goal so that they have a little extra room for the theme meal.

We did not encounter many challenges with these waste reduction and sustainability efforts. The university and the majority of employees are very focused on these two items already, so creating a meal where we focused on sustainability was looked upon positively and was highly supported. The local farmers and producers were excited to have the University purchasing items from them, and were able to give fair prices on the goods sold. The bakery did have an increased work load due to the nature of some of the products (for instance using fresh pumpkin instead of canned pumpkin for the pumpkin pie) but they were able to build it into their schedules without many extra work hours being required.

VII. Marketing

I was able to help with the advertisement for the theme meal, and was able to meet with the graphic designer to help make edits for the schedule of events for the week surrounding the Harvest Meal and the menu for Harvest Meal. Both were hung around campus the Friday before the week began, and the meal occurred on a Wednesday. I also worked to make tags for each of the local foods we were featuring that stated whether they were local, organic, or both, along with information about the farm or company that it came from. These tags were put on the line with the food for the students to see when they were choosing their food.

I also was able to create a possible idea for Spring Fling flyers. While these are not the final product, it was a good exercise to try and figure out how to emphasize entrée items. It also gave me the chance to work on adding short descriptions to meal items to help promote the food.

See appendix C for marketing materials for Harvest Meal and Spring Fling.

VIII. Budget and Costs

No additional equipment was required for the meals because the university is already very large and had more equipment on hand than was needed. The budget for the theme meal differed only in cost of food from other meals because they do not change the schedule or increase staff for these days and decorations were used from storage. I did budget comparison of the two main entrees and the main side because these offerings are never available except during theme meals, while other items on the Harvest Meal menu are served on other days as well. Costs were increased from normal meals. Part of this was because rather than using regular suppliers, the university used local and/or organic farms and manufacturers who do not have the competitive pricing. However, for this meal, we wanted to focus on sustainability not cost. Knowing that theme meals are generally a higher cost, the facility tries to keep the cost of meals down. They focus on cost of meals over a month, rather than per day or per week to allow them to have theme meals that cost more. While costs were increased, they were still within their budget for the month of \$700,000 for their main dining facility.

See appendix D for recipe cost analysis.

IX. Planning Schedule

The theme meal did not require any extra scheduling hours compared to a regular day. Because there is such a large workforce for each meal, the facility did not feel it was appropriate for me to plan a schedule by myself. I did talk with the Executive Chef, as well as some lower level managers, who explained how they scheduled people. The facility does not create itemized schedules. They have executive sous chefs, chef de cuisines, and other culinary staff at each station who individually decide how to have their staff complete tasks. My preceptor, who has worked with NACUFS interns in the past, has also developed a practice scheduling assignment that she had me do, and discussed with me upon completion.

See appendix E for the schedule for C4C dining, as well as one week of the one month practice schedule I completed with my preceptor.

X. Supervision

The enormity of the operation made it impossible for me to be the sole supervisor, or even main supervisor, of many parts of the project. I talked with the executive chef, purchasing manager and technology manager about ordering and procurement for the Harvest Meal, as well as what challenges may be faced with the Spring Fling menu. I was able to work in the bakery to help prepare part of the meal for the Harvest Meal. I assisted in making rolls, as well as viewing the climate-controlled room where meat and cheese are sliced, which would both be used for the Spring Fling Meal. I was able to help with the production of an item the bakery was previewing at the Harvest Meal (a homemade vegan pumpkin bar). I spent days observing and auditing the production areas both in C4C and in the other facilities to become a familiar face to the staff as

well as better understand the facility. I was there for the entirety of service of the Harvest Meal, observing how each building was doing, assisting when needed, and compiling pictures from each service area.

One of the interesting things I found was how the same menu was served at all four dining centers, but how each put their own twist on the meal. Three of the locations decided to have an executive sous chef or chef de cuisine carve the meat for each person who wanted it, while one location simply had it in a hotel pan on the line. Three of the dining areas put fall decorations around the serving line, while one chose to create a new serving line that was fully decorated and styled just for the Harvest Meal. One area decided to also create a special salad for the meal with items they had on hand. While I was not the only supervisor, I was recognized across campus as a supervisor, and my opinions about placement of food or decorations, production, and service were asked for at every location.

See appendix F for some of the images from Harvest Meal.

XI. Evaluation of Theme Meal

Since the facility is so large, and the NACUFS survey is done once a year, they do not generally conduct other satisfaction surveys for an overall menu. We decided to do two specific surveys, one about sustainability and one about gluten free offerings, during the Harvest Meal. By conducting the one about sustainability, we were able to see that the efforts we had made for the meal aligned with what the students thought was most important for sustainability. The gluten free survey allowed us to determine which gluten free products to consider adding to our dining facilities.

The sustainability survey asked questions about sustainability, with 1 being extremely important and 5 being not important at all. The results in number and graph form sorted by question, are found in appendix G. The two areas for sustainability that were extremely important to the most people were supporting local economies (37 of 110) and reducing our carbon footprint by decreasing travel distance of food (49 of 110). Both of these were areas we were able to help the environment by purchasing from local sources (within the state of Colorado). Only 35 people felt that increasing sustainability efforts is important. I would include in my next theme meal ways that individuals can help with sustainability efforts that are not difficult, such as turning off the lights or putting old papers in recycling instead of the trash can. This would help the 66 people who said they might make changes if it was easy for them be more willing to help in the sustainability effort across campus.

The gluten free survey was focused on gluten-free food offerings from Udi's, a company that the university already has a contract with. All of the products sampled were well accepted. The two most popular items were the chocolate chip cookies (17 likes) and the snickerdoodle cookies (15

likes). 20 surveys were completed. I would consider adding both of these options to our current menu.

The results from the sustainability survey and gluten free survey, as well as pertinent NACUFS results, are included in appendix G.

XII. Individual Reflection

The opportunity to be involved in two theme days was very interesting, and really gave me a perspective on how much work it is to pull theme days off when you have such a large scale environment. I was amazed by all the details that went into the day, and how far in advanced they are planned.

The Harvest Meal was interesting because I was able to observe it from every angle. I wasn't just in the kitchen, but I was also at the point of service. I ate the meal in the middle of college students who didn't know who I was, and was able to listen to their honest feedback as they ate the meal. I was able to go to all the facilities to see the differences in atmosphere each had. I was able to help with the advertising side of the meal. I was able to create tags about the food that were used on the line for Harvest Meal. I was able to see what things did not go well at Harvest Meal and suggest changes for Spring Fling.

The Harvest Meal was well received. The food was delicious, and everyone I was near was talking in a positive way about one of the food items on their plate that was part of the special menu. One of the dining centers went so far above the others on decorations that when people walked in they were amazed and stunned. It truly felt like a special occasion. The students indicated in the surveys about sustainability that supporting local economy and shortening travel distance of foods were most important to them, and these were two areas we had focused on for the theme meal by purchasing local food (within the state of Colorado).

The recipes all turned out well. We made extra food, which paid off because everyone was able to try whatever item they wanted without us running out of food. The decorations went well. They did not get in the way of the food but helped make the meal memorable.

The advertising did not go as well as hoped. One part of this was the main graphic designer was gone for two weeks before the event, so signs were hung less than a week in advance. Not everyone knew beforehand that Harvest Meal was happening. I heard multiple groups walk into the dining centers and say "what is Harvest Meal?" or "is Harvest Meal tonight? I didn't realize that." I would suggest earlier advertising next year. Also, on the flyers, Harvest Meal was not the central feature of Sustainability Week. Because it was in the middle of the flyer, I doubt people paid attention long enough to get to it. I would advertise the Harvest Meal as the main event during Sustainability Week.

For Spring Fling, I would suggest to three of the dining halls to put in more effort to decorating. It would help to create a special atmosphere for the students. I would also suggest getting the school newspaper involved by running a story about the upcoming theme meal, to hopefully increase the number of upper-classman who attend the meal. I would also suggest reaching out to local newspapers about upcoming theme meals. The university prides itself as being a place that people in the community come to eat. I believe by advertising special events more people from the community would come, especially if they knew it was promoting sustainable foods.

The biggest take-away I had from this meal was what impact individual managers can make on the atmosphere of food. As mentioned repeatedly, one facility had done extremely well decorating, and I noticed people talking about decorations and enjoying the meal. However, another facility had barely decorated and had not advertised and only put up some of the signs about the local food because I asked them if they had. It was a much different atmosphere and did not promote as well as the other locations how special the meal was. While originally this project seemed overwhelming, it was a great experience. It helped me to look for things I may have missed. It gave me the opportunity to have good discussions with all levels of management. It also helped me to understand what hard work goes into a theme meal of this scale.

Appendix A: One-Week Menus

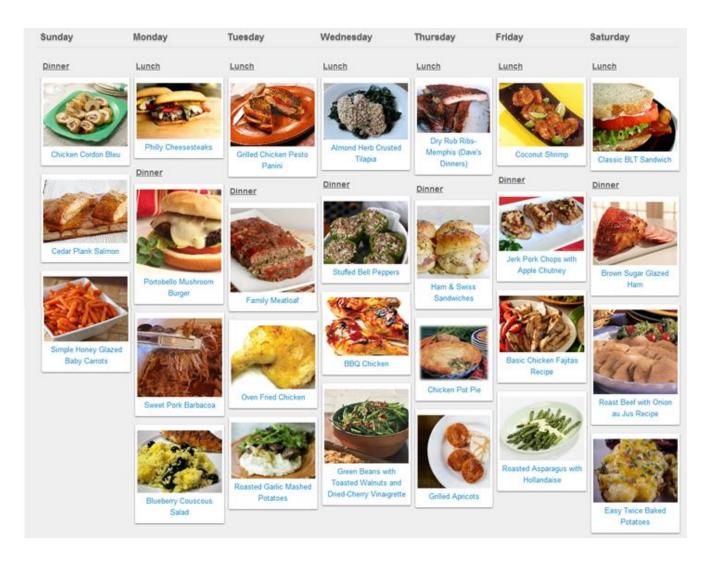


Figure 1: One-Week Picture Menu, section III

Day	Meal	Entrée 1	Entrée 2	Side
Sunday	Х	Х	Х	Х
Sunday	Dinner	Chicken Courdon Bleu	Cedar Plank Salmon	honey glazed carrots
Monday	Lunch	Philly cheese steak sandwich	X	X
Monday	Dinner	Portobello Mushroom Burger	Sweet Pork Barbacoa	Blueberry Couscous
Tuesday	Lunch	pesto chicken Panini	Х	Х
Tuesday	Dinner	Meatloaf	Oven Fried Chicken	Garlic mashed potatoes
Wednesday	Lunch	almond herb tilapia	Х	Х
Wednesday	Dinner	Stuffed Bell Pepper	BBQ Chicken	green bean with toasted walnuts
Thursday	Lunch	Dry rub ribs	Х	Х
Thursday	Dinner	Ham&Swiss Sandwiches	Chicken Pot Pie	Grilled Apricots
Friday	Lunch	coconut shrimp	Х	Х
Friday	Dinner	Apple chutney pork chops	chicken fajitas	Roasted asparagus with hollandaise
Saturday	Lunch	BLT	Х	Х
Saturday	Dinner	Brown Sugar Glazed Ham	roast beef with au jus	Twice Baked Potatoes

Figure 2: One-Week Menu in a Chart, section III

Day	Meal	Dish	Kcal	Total	Saturated	Sodium	Carbohydrates	Sugar	Fiber
2.43				Fat	Fat	<i>b</i> ouldin	e and only analos	Jugur	1 1001
Sunday	Dinner	Chicken Courdon Bleu	129	8	3	207	7	0	0
		Cedar Plank	90	3	0	473	18	18	0
		Salmon	70	5	0	175	10	10	U
		Honey Glazed Carrots	152	7	0	541	24	13	2
Monday	Lunch	Philly cheese steak sandwich	375	27	9	851	5	1	21
Monday	Dinner	Portobello Mushroom Burger	268	27	5	526	28	2	2
		Sweet Pork Barbacoa	90	0	0	94	24	24	0
		Blueberry Mango Couscous	92	7	1	295	8	6	1
Tuesday	Lunch	pesto chicken Panini	102	5	1	150	10	2	1
Tuesday	Dinner	Meatloaf	344	22	13	804	22	16	1
		Oven Fried Chicken	417	28	1	247	7	1	0
		Garlic Mashed Potatoes	310	21	6	2	29	2	2
Wednesday	Lunch	almond herb tilapia	156	14	2	357	4	1	2
Wednesday	Dinner	Stuffed Bell Pepper	173	13	9	59	7	1	2
		BBQ Chicken	380	23	7	445	13	12	0
		Green Bean with Toasted Walnuts	135	10	1	607	11	4	2
Thursday	Lunch	Dry rub ribs	479	36	1	349	2	2	0
Thursday	Dinner	Ham&Swiss Sandwiches	261	9	1	187	17	6	1
		Chicken Pot Pie	288	2	0	1018	51	5	5
		Grilled Apricots	48	3	0	18	5	4	1
Friday	Lunch	coconut shrimp	178	7	7	997	16	8	2
Friday	Dinner	Apple chutney pork chops	432	19	8	295	35	21	5
		Chicken Fajitas	204	9	2	334	25	0	1
		Roasted	135	15	1	637	1	0	0

Appendix B: Nutrition Calculations

Figure 3: One-Week Menu Nutrition Calculations, section V

Day	Meal	Dish	Kcal	Total Fat	Saturated Fat	Sodium	Carbohydrates	Sugar	Fiber
		Asparagus with Hollandaise							
Saturday	Lunch	BLT	207	15	3	356	12	1	0
Saturday	Dinner	Brown Sugar Glazed Ham	251	6	0	2223	13	13	0
		Roast Beef with au jus	99	6	2	224	1	1	0
		Twice Bake Potatoes	284	19	9	455	17	2	1

Figure 4 (cont'd): One-Week Menu Nutrition Calculations, section V

Harvest Meal												
	Kcal	Total Fat	Saturated Fat	Sodium	Carbohydrates	Sugar	Fiber					
Cider Marinated Chicken Quarters	77	2	2	194	18	0	2					
Roasted Ribeye	124	15	3	1456	3	0	1					
Oven Roasted Butternut Squash	71	3	0	190	11	0	1					
		D										

Regular Menu												
	Kcal	Total Fat	Saturated Fat	Sodium	Carbohydrates	Sugar	Fiber					
Petite Tenderloin	178	12	5	1170	3	0	2					
Calamari with Diablo Spice	104	2	2	1433	5	0	3					
Lemon Thyme Carrots	27	1	0	64	5	0	1					

Figure 5: Nutrition Comparison Theme Meal vs. Regular Menu, section V



Appendix C: Marketing and Promotional Material

Figure 6: Spring Fling Possible Flyer, section VII



Figure 7: Harvest Meal Local Tags, section VII

Monday October 21

OCTOBER 21 - 25, 2013

SUSTAINABLE FOOD

Movie Night: FRESH

Celebrates the farmers, thinkers and business people across America who are re-inventing our food system. Featuring Beaujo's Pizza provided by Residence Life

7-9pm Kittredge Multipurpose Rooms C&D

Tuesday October 22

Wednesday October 23

Talk About Tuesdays: Be Hip, Be Awaze Come learn about sustainable foods and so much more! A fun filled event with information, surveys, games and prizes. 5-7pm C4C Dining Center Atrium*

Culinary Connection CU's Chef Hadi will be preparing Lahmajun (Turkish Pizza) featuring lamb from a local farm, along with locally grown vegetables. 11am-2pm C4C Black Coats Station*

Harvest Festival

A celebration of local and organic foods. 5-7pm Darley, Libby, & Sewall,* 5-8pm C4C Smoke n Grill*

Thursday October 24

Sustainable Foods Showcase

Come check out and sample some of the local and organic options available throughout the Dining Centers and Retail operations, 11am-2pm C4C Dining Center Atrium*

Movie Night: King Corn and Big River Best friends try to grow and follow their pile of corn into the food system, what they find raises troubling questions about how we eatand how we farm.

Featuring food from Illegal Pete's provided by Residence Life 7-9pm Kittredge Multipurpose Rooms C&D

Saturday October 26

Boulder Farmers Market Day Check out the Boulder Creek Farmers Market!

Appropriate meal prices apply

Housing & Dining Services BOLLDER

and share the state of the state of

Celebrating good local, organic and otherwise sustainable foods for everyone!

Figure 8: Sustainability Week Flyer, section VII

HARVEST FESTIVAL

2013 menu



Red = Local & Organic (Boulder County) Black = Local (Boulder County) Green = Local & Organic (Colorado) Blue = Local (Colorado)

dinner:

dessert:

Housing & Dining Serviced

5

Chef Carved Never Ever Ribeye with Roasted Shishito Peppers Served with Au Jus (Ribeye, Shishito Peppers)

Cider Basted Chicken Quarters Served with a Roasted Apple & Craisin Chutney (Chicken, Apple Cider, Apple)

*Harvest Vegetable Ratatouille over Duel Color Quinoa (Heirloom Tomatoes, Vine Tomatoes, Onions, Carross, Quinoa)

*Herbed Smashed Red Potatoes (Red Posatoes, Pariley)

*Roasted Butternut Squash (Butternut Squash)

Local Honey Glazed Baby Carrots (Baby Carrots, Honey)

*Assorted Salads

Colorado Harvest Rolls (Wheat Flour)

Colorado Peach Pie & Cherry Pie (Peaches, Cherries)

> Pumpkin Bars (Pumpkins)

> > * Denotes suitable for a vegan diet.

Figure 9: Harvest Meal Flyer, section VII

A8

Appendix D: Cost Analysis

]	Harvest N	Ieal		
Recipe Name	Recipe Cost	# of pan or lbs	Cost/Pan or Cost/lb(if app)	# serving/ recipe	Cost/ Serving
Oven Roasted Butternut Squash	\$30.25	5 x 2" full pan	6.05/2" full pan	160 x 3 oz svg	\$0.19
Roasted Ribeye	\$1,620. 60	148 lbs	10.95/lb	592x 4 oz svg	\$2.74
Cider Basted Chicken Quarters	\$241.92	9 x 2" full pan	26.88/2" full pan	216 x pieces	\$1.12
				Total Cost/meal	\$4.05
	N	Jeal Rep	laced		
Recipe Name	Recipe Cost	# of pan or lbs	Cost/Pan or Cost/lb(if app)	# serving/ recipe	Cost/ Serving
Lemon Thyme Baby Carrots	\$16.80	7 x half pan	2.4/half pan	112 x 2oz svg	\$0.15
Petite Tenderloin	\$124.74	4.2 x 2" full pan	29.70/2" full pan	101	\$1.24
Calamari Strips with Spicy Diablo Sauce	\$138.00	7.5 x 2" full pan	18.40/2" full pan	100	\$1.38
			n Dogular Manu costion	Total Cost/meal	\$2.77

Figure 10: Cost Analysis Harvest Meal vs. Regular Menu, section VIII

Appendix E: Scheduling

Jniform:	CI: Asia:	MCO: Rosario Cardoza Jakeline Fuentes	Schedule: 6-230 6-1	Lead	Unif	orm: CI: MC Grill:	CO: Mike Maes Will Clapp	Schedule 6-230 Lead	e:	1230-close
	=	Steve Lodwick Man Suba Tamang Andrea Hagler	Lead 12-5		1230-close 1230-close	\equiv	Gigi Rubio Maria Castorena	9-530 8-430		
	=	Molly Killingsworth			4-cl		Sijia Li Elizabeth Binggeli Max Ramge	9-1	9-1:30 12-4	
	Black (Coats:				\equiv	Eddie Villegas Kanchan Bhattarai Jack Pine Delaney Taylor			4-cl 4-cl 4-cl 4-cl
	Checke	Imelda L Bo Gao	6-230 8-12			Kosher:	Jeff Horne Tiffany Sanders Ezra	8-430 9:00-12	11:30-3:	30
	=	Sarah Kamphaus Mirmortazavi, Mona Jessica Flanagan		10-3 2:15-5	5-730	Italian:	Etamar Robert Sanchez		10-6	3-7
	=	Jessica Flanagan Cody Widiger			4-cl		Angelina Lova Sambo	8-430		1230-close
	Cold R	unner: Hector Hernandez Sergio Macis	530-2 7-330		1230-close	==	Danny V Keiko Benjamin Keller	8-12		11-730 1230-close
	\equiv	Kraig Ewert Derek Linan Chen Cui Josh Westbrook	7-11	2-6 10-2 11-3	1230-01050	\equiv	John Nguyen Patrick Walsh Brittany Stopper	0-12	1030-230 11-3 12:15-5	D
	_	Alex Borenstein Andrew Green Juan Prestamo		11-3	4-cl 5-cl		Robert Alvaro Matt Spacek			4-cl 4-cl
	Desser	Henock Teshome			5-cl		Mark Allan Cook Jacob Selig Aislynn Leibee			3-cl 4-cl 12-cl
		Cindy L Michael McGirk Kaylee Hodges	6-230	7-1	12-cl	Latin:	Jose Colis Martha Perez	6-230 6-230		
	_	Nathaniel Ramm Christopher Harmon			4-cl 215-cl 4-cl	==	Suna Sapkota Josefina Treio Nathan Blev	730-4		1230-close 1230-close
	_	Colleen O'Connor			4-01		Matthew Bohcali Bridgette Harrison	7-11 8-12		1250-01050
	Dish:	Carlos Lozano Martin Tremillo Lucas Soria	6-230 6-230	9-530			John Kealey Ethan Lilly Avram Perera		1-5	4-cl 4-cl
	_	Mike Seager Jim S	8-1	9-550	1230-close		Reid Chaloupka Travis Peccorini		1130-430	4-cl
	_	Roberto Orozco Justin Easterday			11-cl 1230-close	Persia:	Nathan Noell Kyle White			1-close 1230-close
		Sanket Nasre Keara Leahy	8-12 9-1	10-3		==	Rachid Latrache Wes Soule Ryan Strzepa	8-430	12-4	1230-close
	=	Roberto Zamora Nick Carv Sara Song	8-11	10-2		==	Dominic Murphy Jack Evans		12-4 12-4	5-cl
	_	Megan Cota Zoe Koppenhofer Matan Halzel		1230-43 12-5 11-3	30		Andrei Kuitsinski Yongyang Huang			4-cl 4-cl
	_	Catherine Michael Milton Lockett		11-3 1-5 12-4		Production	Ken Davis	7-330 6-230 6-230		
	_	Daniela Mendez Cehong Luo Amanda Rose			3-cl 3-cl 4-cl	==	Maria Acosta Jaime aereola Juan Munoz	6-230 8-430		
		Julia Sederstrom Mike Schmidt			4-cl 5-cl 4-cl	==	Gerry Prete Thomas Liddell Andrew Wylde	7-11	9-530	4-cl
		Rose Salerno Ariel Alonso Lydia Hughes			415-cl 3:30-cl		Kalpana Adhikari	7-330		
		Olivia Gutierrez Daniel Butts Brian Grieve			4:30-cl 4-cl 5-cl	Salad:	Mava Sunawar		8-630	
	DRA:	Daniel Burdin			4-cl		Arati Chitrakar Micaela Jimenez	6-230 6-430		10-cl
	_	Cecile Schnegg TC Jason Evans	7-11	2-6	10-7		Pi-Ying Chang Peng "Marv" Zou Jason Evans	745-114:	5	1130-close
		Sara Seidel Caty Murphy -Dunn		1-6	4-cl	==	Kevin Cossette Carter Brooks Sarah Alghareeb Hao Yue		2-6	3-cl 5-cl 4-cl
	Grab '				- CI	Sushi:	Laxmi Rena	730-4		
		Maria Del torre Georgina Jurado	530-2 6-230			==	Erna Lukac Haley Sladek	730-4 1030-330	0	
	_	Margaret lepper Nathan Ferrick	830-5 7-10:30	10.2		SAII:	Joel Carbaugh	1-close		
	=	Samantha Oesterling Kirill Novik Adam Manz		10-2 2-6	4-cl		Austin Jackson Abby Urwiler	5-cl 3:30-cl	Desserts Asia	
	=	Mohammed Jallow Josh Leftin Sydney Parera			4-cl 6-cl 4-cl	$\equiv \equiv$	Amy Richman Lizabeth Rodriquez Kavlee Hodges Charlie Sprouse	3:30-cl 5-cl 12-cl 5-cl	Desserts	
	Late N	ie <u>ht Cle</u> aning/Custodial: Blair Sean Harvey		1130-cl 7:00-11	ose 30	SAIII:	Pablo Moreno Doug Odden	4-cl 1-cl		
	_	Mitch Hild Samuel Danford		5-1130 7:00-11 7:00-11			Amanda Muse	5-cl		

Figure 11: Schedule C4C Tuesday Prep for Harvest Meal, section IX

CI: MCO:		Schedule:	day	Ur	niform: CI: MC		Schedule	e:	1999
;	Rosario Cardoza Jakeline Fuentes Steve Lodwick	6-230 6-1		1230-close	Grill:	Mike Maes Will Clapp Gigi Rubio Maria Castorena	6-230 8-430	Lead 9-530	1230-
	Man Suba Tamang Alex Borenstein Peter Ehmann Nataly Banda Lee Potter		2-6	1230-close 5-cl 4-cl 4:15-cl		Sandeep Adhikari Sydney Parera Olivia Gutierrez Jennica Leftin Kelley McCahill Johanna Protheroe	Latin Ple 10-1:50	ease	4:30-c 4-cl 4-cl 3-cl
	Imelda Landin Weizhi Zhou	6-230 8-12			Kosher:	Jeff Horne			
Checkers:					Italian:	Rosa Ouintana Sambo Doung	7-330		1230-
=	Amanda Rose Mirmortazavi, Mona Deanna Gill		12-4 2:15-5	430-c1		Angelina Lova Roberto Sanchez Danny V Keiko Hunt	8-430	10-630	11-73 1230-
Cold Runner:	Lydia Hughes Hector Hernandez	530-2		430-c1	$\equiv \equiv$	Bridgette Harrison Amogh Simha Xinyi Fu Mercedes Faraoni Tristan Elias	8-2	10-3 1-5 11:15-8	4-cl
\equiv	Sergio Macis Elov Kraig E Derek Linan	7-330 7-11		1230-close 1230-close		Daniel Burdin Reid Chaloupka Brendan Evers Farjana Khan			5-cl 4-cl 4-cl 4-cl
\equiv \equiv	Edward Wilson Thomas Walker			5-cl 4:30-cl	Latin:	Jose Colis Martha Perez Nathan Blev	6-230 6-230	Lead	1230-
	Cindy L Sanket Nasre	6-230	10-2			Josefina Trejo Zach Jacobs Megan Webber Sandeep Adhikari	9-1	11-3 12:30-6	1230
;	Amy Richman Joel Carbaugh Carter Brooks Sean Micek		12-5:30	1-cl 5-cl 4-cl	Persia:	Patrick Dowdle Alexandra Propst Stephen Randle			4-cl 4-cl 4-cl
Disk						Kyle White			1230
	Carlos Lozano Martin Tremillo Lucas Soria Mike Seager	6-230 6-230 8-1		1230-close	\equiv	Rachid Latrache Nathan Noell Wes Soule Shannon Curley	7-330 7-1030		1-clo 1230
\equiv	Jim S Roberto O Jingyan Shen Josh Tobey	7-11 730-1130		1230-close 1030-cl	Production	Sean Fitzsimmons David Krieger			4-cl 3-cl
	Brett Barsanti Hanh Le Nick DeSordi	8-12	115-515 1-5		$\equiv \equiv$	Ken Davis Maria Acosta Juan Munoz Gerry Prete	7-330 6-230 8-430	9-530	
	Jesse Fisher Nathan King Taran Brown Leandra Laws		1230-530	5-cl 4-cl 4-cl		Jaime aereola Gaoyuan Lu James Onorato Kalpana Adhikari	6-230 7-11 7-330		4-cl
	Nora Hickins Juan Prestamo Travis Peccorini Brian Pereksta Brian Grieve			4:30-cl 5-cl 4-cl 415-cl 5-cl	Salad:	Micaela Jimenez Pi-Ying Chang Peng "Mary" Zou Arati	6-230 6-430		1130 10-cl
	Kimi Ismail Michael Mcgirk			4-cl 3-cl	\equiv	Taylor Berger Chia-hsin Yang Diana Orona Katarina Harp	7-11	10-1:30	4-cl 4-cl
	Cecile Timothy Salazar	7-11 10-2		10-7	Sushi:	Radha Karki Laxmi Rena Andread Hagler	7-330 730-4 8-12		
	Parth Shah Nathan Ferrick Dane Maher Colin Weber	10-2		4:30-cl 3-cl 3-cl	SAII:	Johnny Slaughter Charlie Sprouse Amy Richman	11-4 10-2:30 12-5:30	GNG Latin Desserts	
]	Georgina Jurado Maria Del torre Margaret lepper	6-230 530-2	9-530			Lee Potter Lizabeth Rodriguez Joel Carbaugh	4:15-cl 2-cl 1-cl	Asai Latin Desserts	
\equiv	Angi Zhang Jacob Graige Johnny Slaughter Montek Thind	7-11	1-5 11-4 12-4		SAIV:	Alexandria Berroud Kavlee Hodges	2-cl 5-cl		
	Nicolas Selix Giavanna Calabria			4-cl 4-cl		Amanda Muse Doug Odden	2-cl 3-cl		
					Late Night	Cle <mark>aning:</mark> David Simmons			1130

Figure 12: Schedule C4C Wednesday Harvest Meal, section IX

Schedule - A	ug 2014	Sun	Mon	Tues	Wed	Thur	Fri	Sat	Sun
		24-	25-	26-	27-	28-	29-	30-	31-
Name	Position	Aug	Aug	Aug	Aug	Aug	Aug	Aug	Aug
				5 a -		5 a -	5 a -	5 a -	
Bob Butler	Cook 1	off	off	2 p	off	2 p	2 p	2 p	off
				11 a -	11 a -	11 a -			11 a -
Alan Harris	Cook 1	sick	off	8 p	8 p	8 p	off	off	8 p
Jennifer		5 a - 2	5 a -		5 a -				5 a -
Stone	Cook 2	р	2 p	off	2 p	off	off	off	2 p
Harry		call in	11 a -				11 a -	11 a -	
Johnson	Cook 2	11-8	8 p	off	off	off	8 p	8 p	off
Mary									
Montgomer	FSWB/			11 a -	11 a -		11 a -	11 a -	
у	Pantry	off	off	8 p	8 p	off	8 p	8 p	off
	FSWB/	5 a - 2	5 a -	5 a -	5 a -	5 a -			5 a -
Joe Bates	Pantry	р	2 p	2 p	2 p	2 p	off	off	2 p
Elen	FSWB/	11 a -	11 a -			9 a -	5 a -	5 a -	11 a -
Stevens	Pantry	8 p	8 p	off	off	6 p	2 p	2 p	8 p
Adella	FSWA/			7 a -		7 a -	7 a -	7 a -	
Vincent	Salads	off	call in	4 p	call in	4 p	4 p	4 p	off
Estella	FSWB/	7 a - 4							
Martinez	Salads	р			death	in famil	y - off		
Jose	FSWB/		6 a-		6 a-	6 a-			6 a-
Fernandez	Dish	6 a-3p	3p	off	3p	3p	off	off	3p
Benjamin	FSWB/	11 a -	11 a -	10 a -	10 a -				11 a -
Frank	Dish	8 p	8 p	7 p	7 p	off	off	off	8 p
Fred	FSWA/			11 a -	11 a -	11 a -	11 a -	11 a -	
Schmidt	Custodian	off	off	8 p	8 p	8 p	8 p	8 p	off
Javier	FSWA/		8 a -	8a-	-	8 a -	6 a -	6 a -	
Martinez	Custodian	off	4 p	4 p	off	4 p	3 p	3 p	off
				I I			<u> </u>	I I	9

FTEs

Figure 13: One Week of One Month Practice Schedule, section IX

Appendix F: Harvest Meal Images



Figure 14: Harvest Meal Images, section X

Appendix G: Surveys

Appendix G. Surveys		
Food	University	National
Overall	3.87	3.79
Taste	3.70	3.68
Eye appeal	3.82	3.68
Freshness	3.65	3.62
Nutritional content	3.49	3.47
Value	3.65	3.55
Availability of posted menu items	3.92	3.94
Variety of menu choices	3.59	3.56
Variety of healthy menu choices	3.54	3.47
Variety of vegetarian menu choices	3.66	3.59

Figure 15: NACUFS Results University vs. National Average, section I

	Our Dinin	g Centers	Natio	nal
	2012	2011	2012	2011
Food: Overall	3.87	3.85	3.79	3.76
Taste	3.70	3.71	3.68	3.66
Eye appeal	3.82	3.76	3.68	3.67
Freshness	3.65	3.62	3.62	3.60
Nutritional content	3.49	3.52	3.47	3.45
Value	3.65	3.64	3.55	3.52
Availability of Posted menu items	3.92	3.93	3.94	3.93
Variety of menu choices	3.59	3.52	3.56	3.54
Variety of healthy menu choices	3.54	3.51	3.47	3.44
Variety of vegetarian menu choices	3.66	3.61	3.59	3.55

Figure 16: NACUFS Survey Results 2012 vs. 2011, section I

Initial Results

Supporting local economies

Response	Count
1	37 34%
2	36 33%
3	18 16%
4	11 10%
5	8 7%
	Total: 110

Strengthening our connection to local communities

Response	Count
1	31 28%
2	29 26%
3	24 22%
4	18 16%
5	8 7%

Figure 17: Sustainability Survey Results Bar Graphs, section XI

 Response
 Count

 1
 49

 2
 26

 3
 15

 4
 9

 9
 86

Strengthening our connection to the earth by eating seasonally

Response	Count
1	27 25%
2	32 29%
3	26 24%
4	17 16%
5	7 6%
	Total: 109

Figure 18: Sustainability Survey Results Bar Graph cont'd, section XI

The best way to support a local economy, such as the economy of Boulder, is to buy goods (groceries, clothing, toiletries, etc)

Response	Count
At large chain stores that may employ workers from the local economy	4 4%
Online from discount retailers	5 5%
From stores that sell locally-produced goods	84 78%
From second-hand/thrift stores	5 5%
Don't know	10 9%
	Total: 108

Imagine that we had to pay for all the costs associated with the goods we use every day, including costs we may not see. What would go into calculating the true costs of a product?

Response	Count
The cost of raw materials to make the product	6 6%
The cost of environmental damage caused by production and packaging	10 9%
The cost of health care / quality of life for employees who manufacture the product	6 6%
The cost of disposal (once the product is used up or no longer needed)	4 4%

Figure 19: Sustainability Survey Results Bar Graph cont'd, section XI

Workers around the world face a variety of social injustices, including low wages, poor working conditions, and lack of access to education. To help improve conditions for these workers you can:

Response	Count
Support corporations that do not allow workers to join labor unions	9 8%
Support large corporations because they generally have more money to pay workers	7 6%
Only purchase products from companies that conduct business in a socially responsable manner	71 65%
Buy the newest products to keep factories around the world open	4 4%
Support large corporations that produce a "green" or "humane" version of their standard product	10 9%
Don't know	9 8%
	Total: 110

Figure 20: Sustainability Survey Results Bar Graph cont'd, section XI

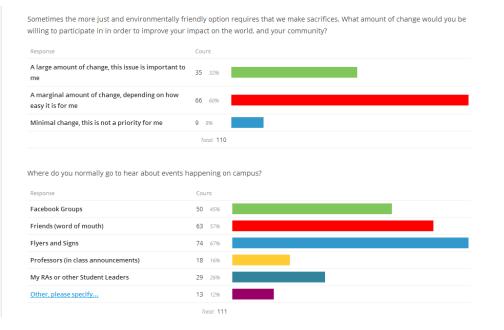


Figure 21: Sustainability Survey Results Bar Graph cont'd, section XI

Items	Like	Don't Like	Comments
Chocolate Chip Cookies	17		good but a bit dry, love, didn't expect GF cookies so good
Snickerdoodle Cookies	15		my favorite!, really good!, the best one!, Absolutely amazing
Oatmeal Raisin Cookies	10	1	love
Double Chocolate Muffins	14		love
Cinnamon Raisin Bread	12		
Bagels*	5	2	Where?

*already available in the C4C dining hall

Figure 22: Gluten-free Survey Results, section XI