- Final Report -

Acute Gastroenteritis (AGE) Outbreak: D.C. Cobb's McHenry, Illinois

September 2022

Investigated by: McHenry County Department of Health 2200 North Seminary Avenue Woodstock, Illinois 60098

TABLE OF CONTENTS

Narrative

Introduction
Methodology
Investigation Process
Timeline4
Statistical Analysis9
Findings 11
Epidemiological Investigation11
Environmental Health Investigation14
Discussion 16
Control Measures
Appendices
A – Press Releases
B – Epidemiological Questionnaire
C – Employee Questionnaire
D – Follow-Up Questionnaire
E – Epidemiological Findings
F – Laboratory Results
G – Environmental Findings and Recommendations
H – Bivariate Food Item Analysis for Dishes118
I – Bivariate Food Item Analysis for Individual Ingredients133

INTRODUCTION

On September 12, 2022, the McHenry County Department of Health (MCDH) was notified of multiple customers who became ill with acute gastroenteritis (AGE) after dining at D.C. Cobb's located at 1204 N Green St, McHenry, IL (D.C. Cobb's McHenry). The Division of Environmental Health conducted a full inspection of D.C. Cobb's McHenry that same day, wherein an Environmental Health Practitioner evaluated and reviewed food handling procedures and practices. After the inspection, the Food Program Supervisor confirmed with the restaurant manager that the restaurant had received calls from two (2) separate parties who experienced gastrointestinal illness after consuming food from D.C. Cobb's McHenry.

MCDH opened an outbreak investigation into the cluster of illnesses linked to D.C. Cobb's McHenry on September 13, 2022. The case-control study conducted by MCDH identified one hundred seventy-three (173) ill individuals, one hundred sixty-eight (168) patrons who experienced vomiting and/or diarrhea after eating food from D.C. Cobb's from August 29, 2022 through September 16, 2022 and five (5) staff who experienced vomiting and/or diarrhea before or after working at D.C. Cobb's McHenry from August 29, 2022 through September 19, 2022. A case-control study identifies a sample of ill individuals during a specific timeframe and does not necessarily identify all individuals who became ill. The total number of ill individuals identified via this case-control study may therefore underreport the total number of ill individuals associated with this cluster of illness.

This report will review the methodology utilized in this investigation, the final findings, and a discussion of those findings and recommendations to prevent future illness. The appendices include graphs and tables depicting data from the epidemiological and environmental health investigations and laboratory testing, along with various forms used to conduct and organize the data/information received in the field.

METHODOLOGY

Investigation Process

A foodborne illness investigation consists of epidemiological and environmental health investigations, which are conducted concurrently.

The epidemiological investigation includes obtaining case histories of those ill and those who are well (but still potentially at risk of illness because of a shared exposure with the ill).

From these preliminary efforts, a case definition is developed to appropriately classify individuals interviewed as either a case or a non-case. Case history interviews are standard practice in communicable disease investigations and involve the collection of self-report data pertaining to illness experienced (including the symptoms, duration, onset date, and clinical care) and food exposures. It is outside the scope of this investigation to verify the data reported during the case investigation process. However, the robustness of the statistical analyses used during the illness investigation ensures the validity of the epidemiological investigation.

Statistical analyses are used to determine what food exposures could be related to disease. The most common statistical test used in the outbreak setting is the chi-square test for association. It is important to note that the chi-square test for association is more reliable when a large sample size is available. The statistical power of the chi-square test declines as sample size decreases, making it difficult to establish a single food item as the source of the outbreak. Fisher's Exact Test can be used with smaller sample sizes to better identify associations between food exposures and illness. A relative risk (RR) or odds ratio (OR) is also used to identify potentially implicated food items. Traditionally, a RR or OR greater than or equal to two signifies a food item requiring further exploration.

In addition to conducting case histories and performing statistical analyses of food exposures, it is also necessary to obtain clinical specimens to identify an etiologic agent of the illness during the epidemiological investigation.

Paralleling this epidemiological investigation is an environmental health investigation. This includes the physical and procedural examination of pertinent operations and the collection of samples of implicated food items.

The next stage of this investigation includes the development of hypotheses about the contributing factors to the illness and examination of associations that develop from the data that have accumulated from the environmental health, epidemiological, and laboratory findings. Following this, recommendations and control procedures are developed to prevent future illness.

Timeline

On September 12, 2022, the Division of Environmental Health received a complaint, alleging five (5) individuals who had eaten at D.C. Cobb's McHenry on September 5, 2022 were experiencing gastrointestinal symptoms. During the morning of September 12, 2022, the Food Program Supervisor also received a voicemail from a manager at DC Cobb's McHenry

indicating that they had also received calls alleging illness from individuals who had eaten at the food establishment. The voicemail was not retrieved until the afternoon of September 12, 2022. An Environmental Health Practitioner was sent to the food establishment to conduct an inspection, obtain further information (including invoices for food products utilized from September 1 through September 5, 2022), to review the employee illness log and establishment's illness policy, and to request retention of any remaining prepared food items from that time. During the inspection, Environmental Health staff were advised of a recently ill employee and provided with contact information for further follow-up by Communicable Disease (CD) staff. After the completion of the inspection, the restaurant manager and Food Program Supervisor confirmed that there were two (2) separate complaints of illness, from two (2) parties, associated with eating food from D.C. Cobb's McHenry. The food establishment was allowed to continue to operate as there were two confirmed complaints at this time associating illness with consumption of food at D.C. Cobb's McHenry approximately one (1) week prior, the cooperation of the establishment, and there was no indication of an ongoing public health issue.

On September 12, 2022, the Environmental Health staff notified the CD Program of the illness report they received from the public on September 12, 2022. The CD staff interviewed one (1) patron who identified five (5) individuals among their party who had dined at DC Cobb's McHenry on September 5, 2022 with symptom onset dates ranging from September 6 through September 7, 2022. On September 13, 2022, Environmental Health staff notified the CD Program of the second illness report made directly to the restaurant. The CD staff interviewed one (1) patron on September 13, 2022, identifying a total of eight (8) coworkers with onset dates ranging from September 9 through September 10, 2022. The group of coworkers ordered food from DC Cobb's McHenry via takeout the afternoon of September 7, 2022. A total of ten (10) individuals were reported to have eaten food from D.C. Cobb's McHenry, eight (8) of whom reported illness.

A re-inspection of D.C. Cobb's McHenry was conducted by Environmental Health staff on September 13, 2022, to ensure that required priority and/or priority foundation violations were corrected.

To better evaluate the scope of the illness outbreak, MCDH issued a press release on September 13, 2022 (Appendix A) requesting that patrons who had dined at D.C. Cobb's McHenry from August 29 through September 13, 2022 complete a questionnaire (i.e., the

epidemiological questionnaire) to assist MCDH in conducting case history interviews, regardless of whether they developed symptoms. The epidemiological questionnaire consisted of an online outbreak investigation form created in REDCap (Appendix B). REDCap allows data to be collected online in real-time and stores data in a secure, web-based portal. CD staff also sent out the epidemiological questionnaire to previously identified ill patrons who had reported illness to MCDH. Additionally, CD staff conducted case history interviews by phone for patrons of D.C. Cobb's McHenry who needed assistance with the online form. The epidemiological questionnaire was completed by patrons of D.C. Cobb's McHenry (on their own online or by interview with CD staff) from September 13 to September 15, 2022. The form was closed on September 15, 2022, as sufficient responses were obtained for the case-control study. Though the initial press release requested information from patrons who ate from August 29 through September 13, 2022 several individuals who ate at D.C. Cobb's McHenry on September 14, 2022 completed the questionnaire while it was open and are also included in the case-control study. Additional calls were received by CD staff after the epidemiological questionnaire was closed, including individuals who ate on September 16, 2022. These patrons are also included in the case-control study. MCDH issued a press release on September 16, 2022 (Appendix A) informing the public that the questionnaire was now closed as enough responses (508) questionnaires) were received to conduct the case-control study.

In addition to the epidemiological questionnaire completed by patrons of D.C. Cobb's McHenry, an employee survey (Appendix C) was developed by Epidemiology Program and Environmental Health staff. The employee survey was created in REDCap and consisted of an employee specific outbreak investigation form used to collect case history interviews from employees, including questions regarding food handling responsibilities, operational procedures, illness history, and work schedule. The employee survey also asked employees about any connection to Landmark Elementary located at 3614 Waukegan Rd, McHenry, IL. A previous outbreak of Norovirus was identified at Landmark Elementary in August 2022. Given the proximity between the school and the food establishment, MCDH staff needed to determine if there was a link between the two (2) illness outbreaks. The employee survey was provided to the general manager of D.C. Cobb's McHenry on September 15, 2022 for completion by all employees.

On September 15, 2022, Environmental Health staff were onsite at D.C. Cobb's McHenry to observe food handling procedures and processes and to obtain ice and water samples for analysis. Any observed critical violations were required to be corrected immediately.

A case definition was also developed at that time to characterize ill persons. A case was defined as:

A) An employee of D.C. Cobb's in McHenry who worked at the restaurant sometime during the timeframe of August 29 through September 19, 2022 and was ill before or after working at D.C. Cobb's in McHenry with symptoms including two or more episodes of vomiting or three or more episodes of diarrhea in a 24-hour period

OR

B) An individual who ate food from D.C. Cobb's in McHenry sometime during the timeframe of August 29 through September 16, 2022 and became ill after eating food from D.C. Cobb's in McHenry with symptoms including two or more episodes of vomiting or three or more episodes of diarrhea in a 24-hour period

One hundred seventy-three (173) ill individuals (i.e., cases) and two hundred seventy-five (275) well individuals (i.e., non-cases) were either interviewed by MCDH CD staff or completed the outbreak investigation forms (i.e., the epidemiological questionnaire or employee survey). One (1) individual who completed the epidemiological questionnaire was excluded from the investigation as it could not be determined if they experienced multiple bouts of diarrhea. An additional eleven (11) individuals who completed the questionnaire were excluded from the investigation as their incubation period (i.e., the time between when they ate food from D.C. Cobb's McHenry and when they first started experiencing symptoms) was greater than 5 days. This timeframe was established based upon preliminary data indicating that Norovirus was the likely pathogen of interest in the investigation. An incubation period greater than 5 days is atypical for Norovirus. An additional sixty (60) individuals who completed the questionnaire were excluded from the investigation as they either had been experiencing gastrointestinal symptoms prior to eating food from D.C. Cobb's McHenry or mentioned other possible exposures that made it difficult to determine if their illness was associated with D.C. Cobb's McHenry (Appendix E, Table 1).

Though the epidemiological investigation identified one hundred seventy-three (173) ill individuals, there was no evidence of ongoing spread after September 13, 2022. As such, the restaurant was allowed to continue to operate.

From September 13 through September 15, 2022, the Food Program Supervisor requested and received a list of ingredients associated with food dishes, specific information regarding garnishes used with food dishes, and additional information regarding the product ingredients for the special menu items offered during the timeframe of August 29 through September 15, 2022. This list was used in the statistical analyses to determine if any specific ingredient was associated with illness.

Since the likely pathogen of interest was determined to be Norovirus, on September 16, 2022, the Food Program Supervisor contacted the general manager and advised him that the food establishment would need to conduct a thorough sanitizing of the facility with a Norovirus effective sanitizer, including non-food related, common-touch surfaces. The Food Program Supervisor provided the manager with written guidance to effectively complete the sanitizing process. Environmental Health staff conducted status inspections of the sanitizing process on September 16 and September 17, 2022.

Thirty-one (31) cases who completed the epidemiological questionnaire were still experiencing symptoms at the time they completed the outbreak investigation form. A follow-up survey (Appendix D) was sent to these individuals on September 19, 2022 to determine the duration of the symptoms they experienced. The follow-up survey was completed from September 19 through September 20, 2022. Twenty-two (22) individuals completed the follow-up survey.

On September 19, 2022, Environmental Health staff visited the food establishment and spoke with the general manager regarding the limited number of employee surveys completed to date. The general manager was reminded that all employees needed to complete the survey and was advised that Environmental Health staff would be onsite September 20, 2022 to conduct inperson surveys of any employees who had not completed the online form. A list of all employees who worked at the establishment from August 29, 2022 forward was requested and received.

Periodic analysis of the expanding picture of the outbreak helped to focus the epidemiological, sample collection, and environmental health investigations. A thorough analysis was conducted of all interview data from September 14 through September 22, 2022 utilizing

SAS 9.4 software. In addition to the analysis of food items, an epi curve was created (Appendix E, Figure 1), and median incubation period between exposure and illness and median duration of the symptoms were calculated (Appendix E, Figures 3-4).

From September 15 through September 19, 2022, stool specimens were obtained from six (6) cases for analysis. Four (4) specimens were obtained by CD staff, and two (2) specimens were collected by hospital laboratories while treating ill individuals. Specimens were submitted for testing to the Illinois Department of Public Health (IDPH) Laboratory on September 19 and September 20, 2022.

A meeting was held at the McHenry County Department of Health offices on September 20, 2022, with the managers of D.C. Cobb's McHenry to discuss the September 12, 2022 inspection of the food establishment. The managers provided Environmental Health staff with a written plan to ensure progressive intervention to prevent critical violations.

Based upon the food analysis, Environmental Health staff went to the food establishment on September 23, 2022 and interviewed five (5) food establishment staff including food handlers and managers regarding the detailed handling, preparation, and service of multiple food items including corn salsa, southwest sauce, grilled chicken, pulled pork, green onion, red onion, sour cream, shrimp, salad mix, romaine leaf lettuce, sliced iceberg lettuce, fried pickles, Cobb's nachos, dynamite shrimp, chicken caesar salad, crispy asiago, Mediterranean salad, vampire tacos with bacon, ground beef, cauliflower wrap, deep fried cauliflower, southwest chicken wrap, pub cheese, thunder burger and build your own burger (Appendix G).

An additional full inspection of D.C. Cobb's McHenry was completed by Environmental Health staff on October 11, 2022.

Statistical Analysis

The statistical analysis included cross tabulations of exposure information (i.e., food items) versus illness status (i.e., well or ill), which is referred to as a bivariate analysis. In a bivariate analysis, the association between exposures with illness is examined for each exposure separately. Food items were analyzed both as dishes (Appendix H) and individual ingredients (Appendix I). To analyze ingredients, all dishes were broken down into their composite ingredients, and MCDH analyzed the association between anyone who ate that ingredient and illness. A few dishes contained unique ingredients that were not included in the bivariate analysis, such as the pickles from the dish fried pickles with Cobb's southwest sauce.

Statistically significant associations ($\alpha < 0.05$ and $\alpha < 0.1$) were determined via the chisquare test for association or Fisher's Exact Test (depending on which was appropriate based on expected cell counts) and an OR was calculated. The bivariate analysis performed at $\alpha < 0.05$ means that we are 95% confident that those exposures are associated with illness. The bivariate analysis performed at $\alpha < 0.1$ means that we are 90% confident that those exposures are associated with illness. Both analyses strongly indicate food items associated with illness; however, an exposure found to be associated with illness only in the analysis performed at $\alpha < 0.05$ 0.1 is not as strongly implicated as a cause of illness compared to exposures identified in the analysis performed at $\alpha < 0.05$.

As multiple food items were found to be associated with illness status, multiple logistic regression was used to determine exposures significantly associated with illness ($\alpha < 0.05$ and $\alpha < 0.1$) while adjusting for other significantly associated food items (Appendix E, Tables 3-6). Multiple logistic regression allows for the examination of the association between multiple exposures and illness at the same time. The final model allows the OR of each exposure to be calculated while controlling for other causes of illness (in this case, other food exposures). If the multiple logistic regression for dishes or the multiple logistic regression for ingredients contains more than one food exposure, this indicates that there was likely more than one source of food contaminated with Norovirus.

Food items (either dishes or ingredients) found to be associated with illness in the bivariate analyses performed at $\alpha < 0.05$ were included in the multiple regression analyses performed at $\alpha < 0.05$. Food items found to be associated with illness in the bivariate analyses performed at $\alpha < 0.1$ were included in the multiple regression analyses performed at $\alpha < 0.1$. As with the bivariate analyses, any food item identified in only the multiple regression analyses performed at $\alpha < 0.1$ is still associated with illness, but it is not as strongly implicated as the food items identified in the analyses performed at $\alpha < 0.05$.

The Wald Test was used to determine the statistical significance of the model overall. The final model was chosen using forward selection, and the model with the lowest AIC score was selected from among the models where all food items were statistically significant at the designated α criteria (either $\alpha < 0.05$ or $\alpha < 0.1$). As romaine and iceberg lettuce were found to be associated with each other (as most dishes with romaine lettuce also contained iceberg lettuce), the multiple regression for ingredients examined the association of lettuce (i.e., both

types of lettuce combined into a single food item) with illness rather than looking at romaine or iceberg lettuce separately.

FINDINGS

Epidemiological Investigation

Five hundred twenty (520) people who either worked for or ate food from D.C. Cobb's in McHenry during the timeframe of August 19 to September 16, 2022 were interviewed either by CD staff or via the outbreak investigation forms. One hundred seventy-three (173) cases were identified, including one hundred sixty-eight (168) patrons and five (5) employees (Appendix E, Table 1).

The symptoms of the first ill individual identified in the case-control study began on August 29, 2022. Most cases experienced symptoms between September 6 and September 13, 2022 (137 cases, 80.1%). The epi curve is atypical compared to <u>standard epi curves</u> during a foodborne outbreak (i.e., the curve does not have the standard bell-like shape) (Appendix E, Figure 1). The illness was characterized by abdominal cramps (89.6% of cases), diarrhea (89.0% of cases), nausea (82.1% of cases), and fatigue (75.7% of cases) (Appendix E, Figure 2). Illness was severe enough in some cases to require treatment in the emergency department (11 cases) and even hospitalization (2 cases, with a mean duration of stay of 3 days). The median incubation period was 32.5 hours with a range of 1-114 hours (Appendix E, Figure 3). The median duration of symptoms was 24 hours with a range of 1-360 hours (Appendix E, Figure 4). The symptoms, incubation period, and duration are typical of several foodborne pathogens, including Norovirus, *Shigella, Salmonella*, and *Campylobacter*. An examination of possible foodborne pathogens is provided in Appendix E, Table 2.

Clinical specimens from five (5) cases were positive for Norovirus. Of these five (5) specimens, four (4) specimens were positive for Norovirus Subtype G1, and the subtype of one specimen is unknown (Appendix F, Table 1). The specimen with the unknown subtype of Norovirus was also tested for Campylobacter, Shigella, Salmonella, Vibrio, Vibrio cholerae, *Yersinia enterocolitica*, enteroggregateive *E. coli*, enteropathogenic *E. coli*, enterotoxigenic *E. coli*, enterotoxigenic *E. coli*, E. coli O157, enteroinvasive *E. coli*, Cryptosporidium, Cyclospora cayetanensis, Entamoeba histolytica, Giardia lamblia, Adenovirus F. 40/41, Astrovirus, Rotavirus A, and Sapovirus; the specimen was negative for all these etiologic agents. The last specimen tested was only tested for bacterial growth and had a negative result.

No employees of D.C. Cobb's McHenry identified a connection with Landmark Elementary in the employee survey. Most questions from the employee survey were qualitative in nature and were used to inform the environmental health investigation. To ensure confidentiality, qualitative data will only be provided in summary form. Quantitative data for ill employees was combined with data for ill patrons and is included in the data above.

With respect to the food item analysis, the bivariate analysis of dishes indicated many dishes (sometimes referred to below as "implicated dishes") were associated with illness. The bivariate analysis of the dishes served at D.C. Cobb's McHenry indicated that the chicken Caesar salad, southwest chicken wrap, fried pickles with Cobb's southwest sauce, Cobb's nachos, salad (this includes any type of salad), the burger with grass-fed beef patty, the Thunder Burger, the Elotes Burger, and the build your own burger with avocado had a statistically significant association with illness at $\alpha < 0.05$. All dishes mentioned above were found to be associated with becoming ill except for the burger with grass-fed beef patty and the Thunder Burger, which were found to be associated with not becoming ill (a food item could be associated with not becoming ill because an individual who ate that food item was less likely to eat a food item associated with becoming ill; as an example, a vegetarian is unlikely to become ill during an outbreak where the cause was a dish containing meat; food items more commonly eaten by vegetarians and less likely eaten by non-vegetarians would likely be associated with not becoming ill as a result – this example is meant to illustrate how a food could be associated with not becoming ill, but this specific scenario is not what occurred in this this outbreak). Dynamite shrimp, vampire tacos with bacon, and wraps (this includes any type of wrap) were also found to have a statistically significant association with illness at $\alpha < 0.1$ (Appendix H).

There are three possible reasons for identifying that multiple dishes were associated with becoming ill: 1) the dishes contained a common ingredient that was the source of illness in all implicated dishes, 2) the dishes were commonly eaten together, and only one dish was the true cause of illness (but because dishes were eaten together, it appeared as if multiple dishes were associated with illness), or 3) multiple dishes were contaminated with Norovirus and were acting as fomites. Fomites are inanimate objects that can become contaminated with a pathogen and act as the vehicle for transmission of that pathogen. To distinguish between these three possibilities, MCDH conducted two follow-up investigations – a bivariate analysis of the association between

ingredients and illness and a multiple logistic regression analysis of the association between implicated dishes and illness.

The bivariate analysis of individual ingredients used in dishes served at D.C. Cobb's McHenry indicated that green onion, romaine lettuce, iceberg lettuce, shrimp, corn salsa, sour cream, red onion, jalapeño, pulled pork, and grass-fed beef had a statistically significant association with illness at $\alpha < 0.05$ (all dishes mentioned above were found to be associated with becoming ill except for pulled pork and grass-fed beef, which were found to be associated with not becoming ill). Caesar dressing, ranch dressing, fresh tomato, and chicken were also found to have a statistically significant association with illness at $\alpha < 0.1$ (Appendix I). Similar to the bivariate analysis of dishes, multiple ingredients (sometimes referred to below as "implicated ingredients") were found to be associated with illness. As such, it was necessary to perform a multiple logistic regression analysis of the association between implicated ingredients and illness to differentiate between two possible scenarios: 1) the implicated ingredients were commonly eaten together and only a subset of ingredients were the true cause of illness, or 2) multiple ingredients were contaminated with Norovirus and acted as fomites.

The multiple regression analysis for dishes performed at $\alpha < 0.05$ indicated three (3) dishes were associated with illness after adjusting for other significantly associated dishes: salad (i.e., all salads), southwest chicken wrap, and fried pickles with Cobb's southwest sauce. The OR for salad, southwest chicken wrap, and fried pickles with Cobb's southwest sauce were 2.179 (95% CI = 1.333, 3.562), 3.471 (95% CI = 1.404, 8.581), and 2.722 (95% CI = 1.248, 5.939), respectively, after adjusting for other significantly associated dishes (Appendix E, Table 3). This indicates that after adjusting for other significantly associated dishes, the odds of becoming ill among those who ate salad were 2.179 times the odds of becoming ill among those who did not eat salad, the odds of becoming ill among those who ate the southwest chicken wrap were 3.471 times the odds of becoming ill among those who did not eat the southwest chicken wrap, and the odds of becoming ill among those who ate the fried pickles with Cobb's southwest sauce were 2.722 times the odds of becoming ill among those who did not eat the fried pickles with Cobb's southwest sauce. As an OR approximates a RR, this means that people were approximately 2.2, 3.5, or 2.7 times more likely to be ill after eating salad, the southwest chicken wrap, or the fried pickles with Cobb's southwest sauce, respectively. The multiple regression analysis for dishes performed at $\alpha < 0.1$ identified an additional three (3) dishes that were associated with becoming

ill: Cobb's nachos (OR = 2.324, 90% CI = 1.069, 5.051), dynamite shrimp (OR = 3.345, 90% CI = 1.215, 9.204), and vampire tacos with bacon (OR = 3.539, 90% CI = 1.326, 9.446) (the burger with grass-fed beef patty was associated with not becoming ill, OR = 0.389, 90% CI = 0.185, 0.816) (Appendix E, Table 4). All three (3) dishes were at least 2 times more likely to cause illness based off their ORs.

The multiple regression analysis for ingredients performed at $\alpha < 0.05$ indicated two (2) ingredients were associated with illness after adjusting for other significantly associated ingredients: lettuce (either romaine or iceberg lettuce) and green onion. The OR for lettuce and green onion were 2.374 (95% CI = 1.587, 3.550) and 3.260 (95% CI = 1.049, 10.132), respectively, after adjusting for other significantly associated ingredients (Appendix E, Table 5). This indicates that after adjusting for other significantly associated ingredients, the odds of becoming ill among those who ate lettuce were 2.374 times the odds of becoming ill among those who did not eat lettuce, and the odds of becoming ill among those who ate green onion were 3.260 times the odds of becoming ill among those who did not eat green onion. This means that people were approximately 2.4 or 3.3 times more likely to be ill after eating lettuce or green onion, respectively. The multiple regression analysis for ingredients performed at $\alpha < 0.1$ identified an additional ingredient that was associated with becoming ill, jalapeño; but the OR is less than 2 (OR = 1.483, 90% CI = 1.040, 2.116), so jalapeño does not have a strong association with illness (grass-fed beef was associated with not becoming ill, OR = 0.434, 90% CI = 0.209, 0.902) (Appendix E, Table 6). Therefore, the overall interpretation of the multiple regression analysis for ingredients performed at $\alpha < 0.1$ is the same as that performed at $\alpha < 0.05$.

Environmental Health Investigation

Ice and water samples were negative for E. coli and total coliform bacteria.

During the food establishment inspections and onsite observations associated with the foodborne illness outbreak investigation, multiple Priority and Priority Foundation violations were documented. Priority and Priority Foundation items are those that most directly relate to the control of hazards that most frequently contribute to foodborne illness (see Inspections, Observations, Employee Surveys and Product Flow Evaluations in Appendix G). These violations included:

• A lack of hot water at a minimum temperature of 100 degrees Fahrenheit at the kitchen food service hand sinks

- Food preparation taking place where there was no access to a food service hand sink
- Improper hand washing procedures
- Lack of paper towels at one of the food service hand sinks
- Improper sanitizer concentration in sanitizer buckets and a sanitizer spray bottle
- Soiled hand towel stored on clean food contact surface
- Temperature Control for Safety (TCS) foods stored at room temperature
- Lack of sanitizer test kits onsite
- Failure of a food handler to wear food service gloves to cover artificial fingernails
- Fruit fly activity in a food storage area
- Soiled food contact surfaces
- Chemical dish machine not reaching minimum sanitizer concentration to sanitize dishware.

Six (6) significant operational deficiencies were identified through the employee surveys as follows:

- No response was provided by any employee to the question of how to report a lack of tempered water at a food service hand sink
- No response was provided by any employee as to the procedure to follow in the event that there is a lack of soap or paper towels at a food service hand sink.
- Approximately 30% of the employees responded that there is no monitoring of handwashing practices by management.
- Ill employees returned to work within 24 hours of a gastrointestinal illness, which is in conflict with the existing health policy on file at the food establishment.
- Food employees failed to recognize that their responsibilities included the handling and/or service of ready-to-eat foods.
- Multiple employees indicated that handwashing takes place either in the bathroom or at a sink that is not designated for hand washing purposes only.

There was no mishandling of a single, specific food item that was identified during the review of the preparation of the designated food products; however, there were six (6) general food handling deficiencies identified during the review process:

- No information was provided about utilization of quick chilling methods, date and time labeling of cooling, prepared food products or monitoring of cooling temperatures of TCS foods.
- Limited quality checks are completed upon receipt of food items. There is no distinction made between a quality check and verifying the wholesomeness of the food item upon receipt.
- While the correct minimum internal cooking temperatures were provided by interviewed staff; no detailed information was provided regarding who/how the internal temperature of the food product is actually verified. Prep staff appears to utilize cooking time as the primary control.
- No information was provided regarding separation of raw and cooked food products in storage.
- Only some of the food product reviews included information regarding handwashing at appropriate stages in the food preparation.

DISCUSSION

One hundred seventy-three (173) ill individuals, including one hundred sixty-eight (168) patrons and five (5) employees, were identified in the case-control study conducted by MCDH. As mentioned previously, a case-control study only identifies a sample of ill individuals during a specific timeframe and does not necessarily identify all individuals who became ill. The total number of ill individuals identified via this case-control study may therefore underreport the total number of ill individuals associated with this cluster of illness.

The pathogen identified for this outbreak was Norovirus (specifically Norovirus Subtype G1). The incubation period, symptoms experienced by the ill individuals, and the duration of illness were all consistent with Norovirus infection. Clinical specimens from five (5) cases were positive for Norovirus, four (4) of which were positive for Norovirus Subtype G1 (with the last having an unknown subtype).

Norovirus causes an acute infectious nonbacterial gastroenteritis. It is fecal-borne, found in the small intestines of infected persons. It is typically brought into the food chain by people who do not properly wash their hands after using the bathroom. Humans are the only reservoir for these foodborne viruses. Data suggests that people infected with Norovirus may continue to shed virus for a period up to two weeks after symptoms subside.

There are two distinct trends in the epi curve (Appendix E, Figure 1), one from August 29 – September 5, 2022, and one from September 6 – September 13, 2022. Between August 29 – September 5, 2022, a lower number of cases became ill compared to September 6 – September 13, 2022 (the median number of cases who became ill from August 29 – September 5 and September 6 – September 13, 2022 was 3.5 and 18.5 cases, respectively). Less cases may have been identified from August 29 – September 5, 2022 either because less people became ill during this timeframe or because less people who became ill during this timeframe completed the epidemiological questionnaire due to the amount of time elapsed between their illness and the availability of the survey.

In both timeframes, there is no clear bell-like shape that would be indicative of a single point source of illness, such as a contaminated food item or ill employee. Instead of a bell-like shape, the total number of cases who became ill each day in the epi curve is relatively similar within each of the two distinct timeframes, and cases do not start to decrease until September 13, 2022 – the day after Environmental Health staff implemented specific control measures at D.C. Cobb's McHenry. Therefore, the trends seen in the epi curve are not indicative of a single point source.

The food item analysis identified that people were approximately 2.2, 3.5, or 2.7 times more likely to be ill after eating salad, the southwest chicken wrap, or the fried pickles with Cobb's southwest sauce, respectively. Three other dishes were found to be associated with illness, although they are not as strongly implicated as a cause of illness: Cobb's nachos, dynamite shrimp, and vampire tacos with bacon. Additionally, the food item analysis identified that people were approximately 2.4 or 3.3 times more likely to be ill after eating lettuce or green onion, respectively. Taken together, the analyses for dishes and ingredients indicates multiple dishes and ingredients were associated with illness.

With regards to the ingredients identified, lettuce (both romaine and iceberg) is common among many different dishes, including the salads and southwest chicken wrap that were found to be associated with illness in the multiple regression analyses of dishes. The green onion was only eaten in two shrimp dishes, including the dynamite shrimp found to be associated with illness in the multiple regression analysis of dishes performed at $\alpha < 0.1$. Identifying that these

ingredients were associated with increased illness does not necessarily imply that eating these ingredients caused illness. Several dishes identified in the multiple regression analyses of dishes do not contain romaine/iceberg lettuce or green onion, including the fried pickles with Cobb's southwest sauce, Cobb's nachos, or vampire tacos with bacon. These dishes commonly have ready-to-eat ingredients added after cooking, allowing for these ingredients to become contaminated with Norovirus by a food handler when they are added to the dish.

It could not be determined during this outbreak investigation exactly how Norovirus was introduced into the food establishment. Typically, Norovirus is introduced into a food establishment through a contaminated food product or through an ill individual. The epidemiological investigation confirmed that there were multiple food items associated with illness, and multiple sources of illness. MCDH is also aware of Norovirus infection in the community at the time of the outbreak, through investigation of an unrelated, confirmed outbreak of Norovirus at a local school. Therefore, the likelihood a food item was received at the food establishment already contaminated with Norovirus is low, and this is unlikely to be the source of the outbreak.

Norovirus is highly infectious and is easily spread person to person and on surfaces that have not been properly cleaned and sanitized. At least five (5) employees were confirmed, through the employee survey, to have worked at the food establishment during their infectious period after being ill with Norovirus symptoms consistent with the case definition for this outbreak. These employees returned to work within twenty-four hours after their symptoms subsided. Food handlers are required to be excluded from work a minimum of 48 hours after being symptomatic and must be educated about good hand hygiene.

There is currently no test available to verify the presence or level of Norovirus contamination on a surface or in a food item. However, regardless of the way that Norovirus was introduced into the food establishment – through inspection, observation, employee surveys, and food product flow evaluations – the Division of Environmental Health identified multiple breakdowns in critical operational procedures that created an environment where Norovirus could remain viable and be readily transferred from food handlers to surfaces, surfaces to food items or patrons, and food handlers to food items – all of which could result in illness spreading to patrons. The most significant of these operational deficiencies are as follows:

- 1. Failure to provide hot water at a minimum temperature of 100-degree Fahrenheit at the kitchen food service hand sinks.
- 2. Food preparation taking place where there was no access to a food service hand sink
- 3. Improper hand washing procedures and washing of hands at sinks that are not designated as food service hand sinks
- 4. Failure to provide paper towels at one of the food service hand sinks
- 5. Failure of a food handler to wear food service gloves to cover artificial fingernails
- 6. Failure to provide a procedure for reporting/correcting a lack of tempered water and/or lack of soap and paper towels at a food service hand sink
- 7. Approximately 30% of employees indicated that there is no monitoring of handwashing practices by management.
- 8. Failure of food service employees to recognize that their responsibilities include the handling and/or service of ready-to-eat foods. Ready-to-eat foods require additional hand washing procedures and barriers to prevent transfer of contaminants to food items.
- 9. Multiple employees indicated that handwashing takes place either in the bathroom or at a sink that is not designated for hand washing purposes only.
- 10. Failure to provide information regarding handwashing at appropriate stages in the food preparation/food handling processes during the product flow evaluations.
- 11. While the correct minimum internal cooking temperatures were provided by interviewed staff, no detailed information was provided regarding who/how the internal temperature of the food product is actually verified. Prep staff appears to utilize cooking time as the primary control.
- 12. Soiled food contact surfaces
- 13. Chemical dish machine not reaching minimum sanitizer concentration to sanitize dishware.
- 14. Failure to provide test kits to ensure that sanitizer levels are at effective and safe levels.

Upon intervention by Division of Environmental Health staff to ensure correction of the above deficiencies, the illnesses associated with the outbreak were immediately and dramatically reduced until no additional cases of illness were reported.

CONTROL MEASURES

All the corrective actions listed in the summary of Inspection, Observations, Employee Surveys and Product Flow Evaluations must be implemented by the food establishment. The food establishment will be placed on a quarterly inspection schedule for a minimum of one (1) year. MCDH staff will provide in-service trainings to all D.C. Cobbs McHenry staff on the characterization of common foodborne illness pathogens and the general transmission of communicable diseases; and hand washing procedures, locations and frequency. In addition, the Department recommends implementation of the following:

- Appropriate management strategies must be put in place to ensure adherence by all food staff to food protection principles and practices to minimize the potential for future foodborne illness outbreaks. These include employee illness reporting; exclusion of ill employees; hand washing locations, procedures and frequencies; handling of ready-to-eat foods; and disinfection of food contact and common touch surfaces.
- Additional staff of D.C. Cobb's McHenry should become Certified Food Protection Managers to oversee all food handling procedures. It is recommended that certified personnel include front line staff as well as management.
- 3. A self-inspection system should be developed by the operators of D.C. Cobb's McHenry and utilized by the Persons-In-Charge. The self-inspection system should incorporate necessary, immediate interventions when critical problems are identified.
- 4. A complete Hazard Analysis and Critical Control Point program should be developed and implemented at the food establishment.

Appendix A

Press Releases



FOR IMMEDIATE RELEASE

2200 N. Seminary Ave. Woodstock, IL 60098 (815) 334-4510 Fax: (815) 334-4635 Media Contact: Lindsey Salvatelli Office: (815) 334-4456 Cell: (815) 236-3238

September 13, 2022

MCDH.info

Illness outbreak investigation linked to McHenry establishment

McHENRY COUNTY — The McHenry County Department of Health is reporting an outbreak of a gastrointestinal illness linked to D.C. Cobb's, 1204 N. Green Street, McHenry.

MCDH has identified an outbreak at the location after receiving complaints of 13 people who became ill after eating at the establishment. MCDH is continuing its investigation into the source and type of outbreak at this time.

D.C. Cobb's is fully cooperating with MCDH staff during this ongoing investigation, including working closely with MCDH Environmental Health staff to ensure safe food handling practices.

Those who ate at the food establishment from Aug. 29 through Sept. 13 are being asked to complete a survey to assist MCDH in collecting data to help determine the cause of this illness. It is important that those who ate during this time complete the survey whether they have developed symptoms or remain well. The survey is a confidential, secure webform that is Health Insurance Portability and Accountability Act (HIPAA) compliant and can be found at https://redcap.link/DC_Cobbs.

The MCDH is advising anyone who is experiencing severe gastrointestinal symptoms to consult with their healthcare provider.

Those with questions or who are unable to access the survey can call (815) 334-4500 and ask for a Communicable Disease Nurse.

###



September 16, 2022

FOR IMMEDIATE RELEASE

2200 N. Seminary Ave. Woodstock, IL 60098 (815) 334-4510 Fax: (815) 334-4635 Media Contact: Lindsey Salvatelli Office: (815) 334-4456 Cell: (815) 236-3238

MCDH.info

Gastrointestinal illness outbreak investigation ongoing

McHENRY COUNTY — The McHenry County Department of Health has closed its illness outbreak survey linked to D.C. Cobb's, 1204 N. Green Street in McHenry, and is continuing its gastrointestinal illness outbreak investigation.

After sharing the illness outbreak investigation survey on Tuesday, MCDH received 508 completed survey responses. MCDH would like to thank everyone who completed the survey for their assistance in the investigation.

The data collected from the survey and individual interviews is being analyzed to determine the scope and cause of the outbreak including whether any food items are the likely source of the illness and to identify other risk factors that contributed to the spread. Stool specimens are being collected from ill individuals to be tested to identify the type of pathogen that led to the illness.

MCDH staff is conducting a food analysis using the data collected from the survey. The food analysis involves looking at the foods that ill and well individuals ate to determine the likelihood that someone became ill after eating a particular food item. It is not always possible to determine a single food item during an outbreak investigation. This can happen if multiple food items led to the spread of illness or if there is not enough information to determine the cause of illness.

MCDH initially launched an investigation after receiving a call from the owner of the food establishment and a complaint of potential illness from individuals who had eaten at the restaurant five to seven days earlier. MCDH Environmental Health has been working with the food establishment owner since the start of the investigation and continues to provide guidance and updates to the owner who is fully cooperating.

The MCDH is advising anyone who ate food prepared at the food establishment and is experiencing severe illness to seek medical attention.

###

Appendix B

Epidemiological Questionnaire

Illness Investigation Associated with D.C. Cobb's McHenry

The McHenry County Department of Health is investigating illnesses that occurred after eating food from D.C. Cobb's (McHenry) restaurant (located at 1204 N Green St, McHenry, IL 60050) on or after 8/29/2022.

We are asking individuals who ate at D.C. Cobbs in McHenry to complete this survey whether you became ill or not. The survey will take 10-15 minutes to complete and includes questions about symptoms, illness onset, doctor's visits, and foods eaten from the restaurant. This information will help us to try and understand what happened to cause illnesses.

Once you have started the survey, please complete it and do not start a new survey by clicking on the link again. If you are completing this survey for more than one person, please submit each survey individually. If you need to change an answer, you can contact McHenry County Department of Health at 815-334-4500.

This survey and any collected information is confidential. In addition, the database used to collect this information is confidential and HIPAA Compliant.

We thank you for your time and participation in this important survey.

Page 1 of 5 *Must Provide Answer		
Are you completing this survey for yourself or on behalf of someone else?*	 Self On behalf of someone else 	
For whom are you completing this survey?*	 Child Spouse Other 	
Are you under the age of 18?*	○ Yes ○ No	
By checking this box, if I am under the age of 18, I agree that I have received parental permission to complete this survey.*	⊖ Agree	



Page 2 of 5 Demographic Information		
Please enter your demographic information below. If	you are entering information on behavior	alf of
someone else, please enter their information.		
*Must Provide Answer		
First Name*		
Last Name*		
Date of Birth*		
Sout .		
Sex*	MaleFemale	
Phone #*		
E-mail Address*		
Home Address*		
City*		
Zip*		
County*		
State*		
Do you handle food as part of your job?*	⊖ Yes	
	○ No	
Occupation*		
What is your place of employment?*		



Page 3 of 5 Food Information

Please answer the questions below regarding DC Cobbs in McHenry (located at 1204 N Green St, McHenry, IL 60050). If you are entering information on behalf of someone else, please enter their information.

*Must Provide Answer			
Who are you completing this survey for?: [interviewee_1] Name: [first_name] [last_name]			
For whom are you completing this survey?: [interviewee_2] Name: [first_name] [last_name]			
Did you eat or drink anything from DC Cobbs in McHenry on or after August 29, 2022?*	○ Yes ○ No		
What date did you first eat or drink anything from DC Cobbs?*	(MM/DD/YYYY)		
What time did you first eat or drink anything from DC Cobbs?*	(HH:MM)		
Appetizers			
Did you order an appetizer from DC Cobb's?*			
Did you taste or eat any of the following items from DC Cobb's? If you are not sure, answer if you would have LIKELY ate/drank th	e item.*		
Mozzerella Wedges			
Did you taste or eat any of the following sauces with the mozzarella wedges?			
 Cobb's Southwest Hart's Marinara Garlic Aioli No sauce 			
Pretzel Sticks			
Did you taste or eat Cobb's Logger cheese dip with the pretzel sticks?	⊖ Yes ⊖ No		
Chicken bacon ranch quesadillas	⊖ Yes ⊖ No		
Did you taste or eat any of the following on the chicken bacon ranch quesadilla?	 □ Pico de gallo □ Guacamole □ None 		
Cobb's Nachos			



Which protein did you eat on Cobb's nachos?	
 Beef Spicy chorizo Pulled pork Chicken 	
Did you taste or eat any of the following on Cobb's nachos?	 Pico de gallo Sour cream Guacamole
Sliders	
Which of the following sliders did you order? Select all that were tasted or eaten.	
 Corn fed beef Grass fed beef Bison Homemade pulled pork 	
Fried Pickles	
Did you taste or eat Cobb's Spicy Southwest sauce with the fried pickles?	⊖ Yes ⊖ No
Dynamite Shrimp	
Did you eat or taste Cobb's homemade spicy dynamite sauce with the dynamite shrimp?	⊖ Yes ⊖ No
Buffalo Cauliflower Lightly breaded cauliflower tossed in choice of sauce.	⊖ Yes ⊖ No
Which of the following sauces did you eat or taste on the buffalo	cauliflower?
 Buffalo Dynamite BBQ Mango Habanero Honey-Sriracha No sauce 	
Did you eat or taste any of the following dressings with the buffalo cauliflower?	 ☐ Ranch ☐ Bleu cheese ☐ No dressing
Jalapeno Poppers Bacon wrapped, grilled jalapenos stuffed with chorizo and cream cheese	⊖ Yes ⊃ No
Did you taste or eat Cobb's Southwest sauce with the jalapeno poppers?	⊖ Yes ⊖ No
Cobb's Totchos	⊖ Yes ⊖ No



Which protein did you eat on Cobb's totchos?			
 Beef Spicy chorizo Pulled pork Chicken 			
Did you taste or eat any of the following on Cobb's totchos?	Pico de gallo Sour cream Guacamole None		
Spinach-Artichoke Dip			
Cobb's Wings Boneless or Traditional	⊖ Yes ⊖ No		
Which of the following sauces did you eat or taste on your wings?			
 Buffalo Dynamite BBQ Mango Habanero Honey-Sriracha No sauce 			
Did you eat or taste any of the following dressings with your wings?	☐ Ranch ☐ Bleu Cheese ☐ No dressing		
Did you modify your appetizers in any way (such as removing or your order below.	r adding ingredients)?Please specify how you modified		
Non-Alcoholic Beverages			
Did you order a beverage other than water from DC Cobbs?*	⊖ Yes ⊖ No		
Did you drink any of the following items from DC Cobbs?* If you are not sure, answer if you would have LIKELY ate/drank the item.			
Soda or brewed ice tea			
Lemonade Shakeup			
Flavor of Lemonade Shakeup	 Strawberry Blackberry Raspberry Pineapple Kiwi Black Cherry Blueberry Mango Passionfruit Peach No flavor added 		
Flavored Ice Tea			



Iced Tea Flavor	 Strawberry Blackberry Raspberry Pineapple Kiwi Black Cherry Blueberry Mango Passionfruit Peach No flavor added 		
Egg Rolls			
Did you order an egg roll from DC Cobbs?	⊖ Yes ⊖ No		
Did you taste or eat any of the following egg rolls from DC Cobbs? If you are not sure, answer if you would have LIKELY ate/drank select "yes" for all egg rols you ate on the sampler.			
Avocado Egg Rolls Stuffed with chorizo, fresh avocado, cream cheese, and pico de gallo, served with fresh salsa verde.	⊖Yes ⊖No		
Southwest Egg Rolls Stuffed with diced grilled chicken, spinach, black beans, sweet corn, roasted red peppers, and jack cheese, served with Cobb's Southwest sauce.	⊖ Yes ⊖ No		
Sweet & Spicy Bison Rolls Stuffed with fresh ground bison, jack cheese, fresh jalapeños, and honey sriracha sauce, served with Cobb's dynamite sauce for dipping.	⊖ Yes ⊖ No		
Italian Beef Egg Rolls Stuffed with thinly sliced Italian beef, mozzarella, and spicy giardiniera, served with creamy horseradish sauce.	⊖ Yes ⊖ No		
Bowls			
Did you order one of bowls from DC Cobbs?	⊖ Yes ⊖ No		
Did you taste or eat any of the following bowls from DC Cobbs?* If you are not sure, answer if you would have LIKELY ate/drank the item.			
Cobb's Bowl Cobb's rice blend topped with hard boiled egg, bacon, tomato, cucumber, avocado, red onion, & Southwest Sauce.	○ Yes ○ No		
Southwest Bowl Cobb's rice blend topped with Honey-Sriracha Chicken, Fire roasted red pepper, corn salsa, tortilla chips & avocado.	⊖Yes ⊖No		
Buffalo Bowl Cobb's rice blend topped with your choice of breaded or grilled chicken tossed in buffalo sauce, red onion, cucumbers, crumbled bleu cheese, bleu cheese dressing and bacon.	○ Yes ○ No		



Shrimp Bowl Cobb's rice blend topped with breaded shrimp, iceberg lettuce, diced tomatoes, green onion & spicy dynamite sauce.	⊖ Yes	⊖ No
Did you modify your bowl in any way (such as removing or ad order below.	ding ingredi	ents)?Please specify how you modified your
Salads		
Did you order a salad from DC Cobbs?	⊖ Yes	⊖ No
Did you taste or eat any of the following salads from DC Cobbs? If you are not sure, answer if you would have LIKELY ate/drank		
Cobb's Cobb Cobb's mixed greens, grilled chicken breast, bacon, red onion, cucumber, tomato, avocado, cheddar, a hard boiled egg, and ranch dressing - served chopped.	() Yes	⊖ No
Apple Pecan Salad Cobb's mixed greens, grilled chicken breast, candied pecans, sliced apples, bleu cheese crumbles, and homemade honey pecan vinaigrette.	⊖ Yes	⊖ No
Chicken Caesar Salad Cobb's mixed greens, grilled chicken breast, tomato, parmesan cheese, homemade garlic croutons, freshly baked asiago cheese chips, and Caesar dressing.	⊖ Yes	⊖ No
Southwest Chicken Salad Cobb's mixed greens, crispy fried chicken, black beans, sweet corn salsa, tortilla strips, cheddar, red onion, and creamy cilantro-lime dressing.	⊖ Yes	⊖ No
Mediterranean Salad Cobb's mixed greens, grilled chicken breast, hard boiled egg, Kalamata olives, spinach, onion, tomato, feta cheese, and Mediterranean vinaigrette.	⊖ Yes	⊖ No
Wedge Salad Iceberg wedge with bacon, tomato, bleu cheese crumbles, hard boiled egg, and bleu cheese dressing.	⊖ Yes	⊖ No

Did you modify your salad in any way (such as removing or adding ingredients)?Please specify how you modified your order below.

Handhelds



i age o

Did you order a handheld at D.C. Cobbs?*	
Did you taste or eat any of the following items from DC Cobbs?* If you are not sure, answer if you would have LIKELY ate the item	۱.
Pulled Pork Sandwich Pulled pork, house bbq sauce, and onions on a pretzel bun	⊖ Yes ⊖ No
Vampire Tacos	
What type of tacos did you eat/taste? Please select all that apply	 Spicy chorizo Buffalo cauliflower Chicken Shrimp Beef Pulled Pork
What toppings did you eat/taste on your Vampire Tacos? Please select all that apply	 Bacon Avocado Pico de gallo Chipotle cream sauce Cotija cheese
Did you eat/taste the Cobb's loaded rice served with the Vampire Tacos?	⊖ Yes ⊖ No
Hart's Italian Beef Italian beef, melted mozzarella, and hot giardiniera on toasted garlic bread	⊖ Yes ⊖ No
Honey-Sriracha Chicken Sandwich Chicken breast in honey-Sriracha sauce, topped with pepper jack cheese, fresh grilled jalapenos, lettuce, tomato, and chipotle mayo on a brioche bun	⊖ Yes ⊖ No
Did you order your Honey-Sriracha Chicken Sandwich with grilled or fried chicken?	⊖ Grilled ⊖ Fried
Adult Grilled Cheese Pepper jack, cheedar cheese, bacon, and tomato served on grilled sourdough bread	⊖ Yes ⊖ No
Cobb's BLT Bacon, lettuce, tomato, and garlic aioli served on grilled sourdough bread	⊖ Yes ⊖ No
Did you modify your handheld in any way (such as removing or	adding ingredients)?Please specify how you modified

your order below.

Mac & Cheese



Did your order mac & cheese from DC Cobbs?*	⊖ Yes	⊖ No	
Did you taste or eat any of the following Mac & Cheese dishes from DC Cobb's? If you are not sure, answer if you would have LIKELY ate/drank the item.*			
Chicken Bacon Ranch Diced chicken, crumbled bacon, and ranch	⊖ Yes	⊖ No	
Chicken Bacon Ranch Diced chicken, crumbled bacon, and ranch	⊖ Yes	⊖ No	
Buffalo Chicken Mac Diced chicken, buffalo sauce, bleu cheese crumbles	⊖ Yes	⊖ No	
Chicago Mac Chicago-style sliced Italian beef, spicy giardiniera, and mozzarella	⊖ Yes	⊖ No	
Pulled Pork Mac Pulled pork, onion strings, and house BBQ	⊖ Yes	⊖ No	
Did you order the Build Your Own mac & cheese?	⊖ Yes	○ No	



Which of the following did you eat or taste on the build your own mac & cheese?

 Truffle Oil Bleu Cheese Mozzarella Swiss Cheese Spinach Egg Guacamole Pico de Gallo Bacon Grilled Onion Onion Strings Nacho Cheese Green Olives Parmesan Marinara Avocado Fresh Jalapenos Green Onion Tomatoes Basil Mushrooms Giardiniera Sun-Dried Tomatoes Sweet Corn Salsa Fresh Salsa Verde Shrimp Chicken Chorizo Pulled Pork 	

Did you modify your mac & cheese in any way (such as removing or adding ingredients)?Please specify how you modified your order below.

Wrap-Ups		
Did you order a wrap at D.C. Cobbs?*	⊖ Yes	⊖ No
Did you taste or eat any of the following items from DC Cobbs?* If you are not sure, answer if you would have LIKELY ate the item.		
Crispy Chicken BLT Wrap Fried chicken, bacon, lettuce, tomato, and mayo on a flour tortilla	⊖ Yes	⊖ No
Buffalo Mac Wrap Mac & cheese, chicken breast, bacon, and buffalo sauce on a flour tortilla	⊖ Yes	⊖ No
Italian Beef Wrap Thinly sliced Italian beef, melted mozzarella, hot giardiniera, and bacon on a flour tortilla	⊖ Yes	⊖ No



Asiago Chicken Wrap Chicken breast, asiago cheese, bacon, ranch, guacmole, shredded lettuce, and tomato on a flour tortilla	⊖ Yes	⊖ No
Dynamite Shrimp Wrap Spicy dynamite shrimp, lettuce, onions, green peppers, tomato, and pepper jack cheese on a flour tortilla	⊖ Yes	⊖ No
Mediterranean Wrap Grilled chicken breast, hard boiled, Kalamata olives, spinach, onions, tomatoes, feta cheese, and Mediterranean vinaigrette on a flour tortilla	⊖ Yes	⊖ No
Cauliflower Wrap Spicy fried cauliflower in dynamite sauce with avocado, pico de gallo, chipotle cream sauce, shredded lettuce, and cotija cheese on a flour tortilla	⊖ Yes	⊖ No
Southwest Chicken Wrap Fried chicken, lettuce, black beans, sweet corn salsa, tortilla strips, cheddar, red onion, cilantro-lime dressing in a warm tortilla	⊖ Yes	⊖ No
Did you modify your wrap in any way (such as removing or add order below.	ng ingredi	ents)?Please specify how you modified your
Friday Fish Fry		
Did you taste or eat Fish Fry at D.C. Cobbs?* The Fish Fry is only available on Fridays	⊖ Yes	⊖ No
Which of these items did you eat with your Beer Battered Fish Fry Select all that apply	?	
 ☐ Fries ☐ Coleslaw ☐ Homemade tartar sauce ☐ None 		
Burgers		
Did you order a burger at D.C. Cobbs?*		
	⊖ Yes	⊖ No
Which protein did you eat on your burger?* What type of patty did you have?	⊖ Yes	⊖ No



Did you build your own burger or choose a burger off the menu?*		
 I built my own burger I chose a burger off the menu 		
The Ricky Bobby Jalapeno popper, pepper jack, bacon, fried egg, southwest sauce	⊖ Yes	⊖ No
The Hart Attack Pulled pork, fried egg, black forest ham, onion strings, BBQ, jalapenos, pretzel bun	() Yes	⊖ No
The Court House Mini quesadilla, pico de gallo, tortilla strips, Cobb's southwest sauce	⊖ Yes	⊖ No
The Stompanato Fresh mozzarella, balsamic tomatoes, olive oil mayo, fresh basil, balsamic reduction	⊖ Yes	⊖ No
The Windy City Italian beef, mozzarella, spicy giardiniera	⊖ Yes	⊖ No
The DC Cobb Sauteed onion, bacon, cheddar, BBQ	⊖ Yes	⊖ No
The Jailhouse Guacamole, pepper jack cheese, fried jalapeno caps, spicy chipotle pepper	⊖ Yes	⊖ No
The Orson Welles Fried mozzarella wedge, marinara, italian sausage patty	⊖ Yes	⊖ No
The Peasley Chorizo, corn salsa, pepper jack cheese, cajun spice blend	⊖ Yes	⊖ No
The Politician Battered & deep fried bacon, garlic aioli, sun dried tomato, romaine lettuce	⊖ Yes	⊖ No
The Woodstock Fresh mozzarella, boursin cheese, roasted red peppers, balsamic reduction	⊖ Yes	⊖ No
The Popeye Caramelized onion, garlic sauteed spinach, bleu cheese, cracked black pepper	⊖ Yes	⊖ No
The Dick Tracy Grilled onions, muchrooms, bacon & swiss served between 2 grilled cheese sandwiches	⊖ Yes	⊖ No



The Blue Streak Chicken tenders, buffalo sauce, bleu cheese, celery salt	○ Yes ○ No
The Thunder Caramelized onion, white truffle pub cheese on pretzel bun	○ Yes ○ No
The Groundhog Cheddar cheese, hash browns, bacon, fried egg	○ Yes ○ No
The Hurricane Mac & cheese, bacon, onion strings	○ Yes ○ No
The BFM Jalapenos, pepper jack cheese, bacon, cajun seasoning, honey-Sriracha drizzle	○ Yes ○ No
The Challenger 3 half-pound patties, American cheese, lettuce, tomatoes, mayonniase	○ Yes ○ No
What kind of bun did you eat/taste on the build your own burger?	 Brioche Pretzel Grilled Cheese Gluten Free None
What kind of cheese did you eat/taste on your build your own burger?	 Cheddar Swiss Bleu Cheese American Fresh Mozzarella Pepper Jack Truffle Pub Cheese None
What kind of veggies did you eat/taste on your build your own burger?	 Spinach Pico de gallo Sautéed onion Jalapenos Mushrooms Fresh basil Roasted red peppers Sun dried tomatoes Chipotle peppers Sweet corn salsa Balsamic tomatoes Onion strings Fried jalapeno caps None



What other toppings did you eat/taste on your build	Battered deep fried bacon
your own burger?	🗌 Mac & cheese
	🗌 Bacon
	Balsamic reduction
	🗌 Marinara
	Hash browns
	Pulled pork
	Mini quesadilla
	Fried egg
	Avocado
	☐ None
	—

Did you modify your burger in any way (such as removing or adding ingredients)?Please specify how you modified your order below.

Sides		
Did you order a side at D.C. Cobbs?*	⊖ Yes	⊖ No
Did you taste or eat any of the following items from DC Cobbs?* If you are not sure, answer if you would have LIKELY ate the item.		
Fries	⊖ Yes	⊖ No
Homemade Soup	⊖ Yes	⊖ No
Sweet Potato Fries	⊖ Yes	⊖ No
Parmesan Truffle Fries	⊖ Yes	⊖ No
Fried Pickle Chips	⊖ Yes	⊖ No
Tater Tots	⊖ Yes	⊖ No
Mac & Cheese	⊖ Yes	⊖ No
Fried Cheese Curds	⊖ Yes	⊖ No
Bacon Cheese Fries	⊖ Yes	⊖ No
Side Salad	⊖ Yes	⊖ No



What dressing did you put on your side salad?	 Ranch Bleu Cheese Caesar Balsamic 1000 Island French Honey-Pecan Vinaigrette Italian Honey Mustard Creamy Cilantro-Lime Oil & Vinegar No Dressing
Desserts	
Did you taste or eat any of the following items from DC Cobbs?* If you are not sure, answer if you would have LIKELY ate the item	
Did you order a dessert at D.C. Cobbs?*	◯ Yes ◯ No
Homemade Cookie Dough Cheesecake Served with vanilla ice cream	⊖ Yes ⊖ No
Flavor of Month Cheesecake Served with vanilla ice cream	⊖ Yes ⊖ No
Apple Pie Egg Rolls Served with vanilla ice cream	⊖ Yes ⊖ No
Homemade Twix Bars Shortbread cookie base layered with caramel and dark chocolate, served with a scoop of vanilla ice cream	⊖ Yes ⊖ No
Chocolate Lava Cake Served with a soop of vanilla ice cream	⊖ Yes ⊖ No
Did you modify your dessert in any way (such as removing or add order below.	ing ingredients)?Please specify how you modified your
Cocktails	
Did you order a cocktail at D.C. Cobbs?*	○ Yes ○ No
Did you drink any of the following items from DC Cobbs?* If you are not sure, answer if you would have LIKELY ate/drank th	e item.
Tropical Minds Cobb's Vodka, Giffard Grapefruit Liqueur, Mint, Lemon, Club Soda	○ Yes ○ No
Blueberry Basil Smash Hendrick's Gin, Blueberry Puree, Basil, Fresh Lemon	○ Yes ○ No

Cobb's Cadillac Marg
Milagro Reposado, Triple Sec, Grand Marnier, Lime, Salt
Rim

⊖ Yes ⊖ No



Woodstock Whiskey Sour Rittenshouse Rye "Bottled in Bond", lemon, egg white, aromatic bitters, red wine float	⊖ Yes ⊖ No
Aperol Spritz Aperol, prosecco, club soda, dehydrated orange	⊖ Yes ⊖ No
Hub Bacon Old Fashioned Bacon infused Old Forester 86 Bourbon, brown sugar, orange bitters, candied bacon	⊖ Yes ⊃ No
Additional Food Questions	
What other food/drinks did you have from D.C. Cobb's?	
Do you have any leftover food from D.C. Cobb's?	○ Yes ○ No



Page 4 of 5 Illness Information

Please answer the questions below regarding any symptoms you experienced after eating at DC Cobbs in McHenry. If you are entering information on behalf of someone else, please enter their information.

*Must Provide Answer			
Who are you completing this survey for Name: [first_name] [last_name]	?: [interviewee_1]		
For whom are you completing this surve Name: [first_name] [last_name]	ey?: [interviewee_2]		
Were you ill with gastrointestinal illness or vomiting) in the week prior to or while from DC Cobbs?*		⊖ Yes ⊖ No	
Have you been sick with vomiting or dia eating at DC Cobbs?*	rrhea after	○ Yes ○ No	
Which of the following symptoms have	you had?*		
	Yes	No	Unknown
Nausea	0	0	0
Vomiting	0	0	0
If Yes to vomiting, did you have 2 or more instances in any 24-hour period?	0	0	0
Myalgia (muscle aches)	\bigcirc	\bigcirc	\bigcirc
Abdominal (stomach, belly) cramps	0	0	0
Unusual fatigue (feeling tired)	\bigcirc	0	0
Fever (If Yes, enter temp below)	\bigcirc	\bigcirc	0
Shaking chills	\bigcirc	0	0
Any diarrhea or loose stools	\bigcirc	0	\bigcirc
If Yes to diarrhea, did you have 3 or more loose stools in any 24- hour period?	0	0	0
Any blood in stools	\bigcirc	\bigcirc	\bigcirc
Headache	\bigcirc	0	0
Other Symptoms:	0	0	0
Other Symptoms (specify)*			

What was your highest temperature?



On what date did you first feel sick?*		
	((mm/dd/yyyy))	
At what time did you first feel sick?*		
Are you still having any vomiting or diarrhea now?*	○ Yes ○ No	
How many hours did the vomiting/diarrhea last?*		
	((hours))	
Did you get tested for COVID-19 after getting ill, including use of a self test?	○ Yes ○ No	
Did you test positive for COVID-19?	○ Yes ○ No	
Did you see a health care provider?	○ Yes ○ No	
If yes, whom?		
What was your diagnosis?		
Did you visit an ER?	○ Yes ○ No	
If yes, specify where		
Did you give a stool specimen?	○ Yes ○ No	
If yes, when/where?		
	((when/where))	
Have you received the lab results?	○ Yes ○ No	
If yes, what were the results?		
What was your diagnosis?		
Are you willing to provide a stool specimen?*	○ Yes ○ No	
Did you get admitted to the hospital overnight?	○ Yes ○ No	



Where were you admitted?

What was the date of admission?

((mm/dd/year))

What was the date of discharge?

((mm/dd/year))



Page 5 of 5 Additional Information	
Please answer the remaining questions below. If you a	re entering information on behalf of someone
else, please enter their information.	
*Must Provide Answer	
Who are you completing this survey for?: [interviewee_1] Name: [first_name] [last_name]	
For whom are you completing this survey?: [interviewee_2] Name: [first_name] [last_name]	
Was anyone in your household who did not eat food from D.C. Cobb's ill with gastrointestinal illness (diarrhea or vomiting) either BEFORE or AFTER you ate food from there?	○ Yes ○ No
If Yes enter names, onset dates, and symptoms	
Do you know of anyone else who ate food from D.C. Cobb's that became ill?	<pre>○ Yes ○ No</pre>
McHenry County Department of Health would appreciate it if you food from DC Cobbs.	can send the link to this form to anyone else who ate
Do you believe there is any other reason you may have become ill other than eating food from D.C. Cobb's? Do you have any other comments?	
This marks the end of our survey. Thank you for your time! If we need additional information, may we contact you again?	○ Yes ○ No



Appendix C Employee Questionnaire

D.C. Cobb's McHenry Employee Survey/Encuesta de empleados de DC Cobb's McHenry

EnglishMCDH is collecting information regarding staff illness at D.C. Cobb's. We request that all employees complete this short survey.

This survey and any collected information is confidential. In addition, the database used to collect this information is confidential and HIPAA Compliant. The survey will only take a few minutes to complete and includes questions about symptoms, illness onset, doctor's visits, and foods eaten during the event. This information will help us to try and understand what happened to cause illnesses.

Please answer each question, even if it's answering "Unknown". Once you have started the survey, please complete it and do not start a new survey by clicking on the link again. If you need to change an answer, you can call 815-334-4500 and ask to speak with a communicable disease investigator regarding your survey submission.

All information provided is confidential and is for public health use only. If you have any questions about the survey you may call 815-334-4500.

We thank you for your time and participation in this important survey.

* Denotes Required Field

Â

EspañolMCDH estÃ_i recopilando informaciÃ³n sobre la enfermedad del personal en D.C. Cobb's. Solicitamos que todos los empleados completen esta breve encuesta.

Esta encuesta y cualquier informaciÃ³n recopilada es confidencial. AdemÃ_is, la base de datos utilizada para recopilar esta informaciÃ³n es confidencial y cumple con HIPAA. La encuesta solo tardarÃ_i unos minutos en completarse e incluye preguntas sobre los sÃ-ntomas, el inicio de la enfermedad, las visitas al médico y los alimentos consumidos durante el evento. Esta informaciÃ³n nos ayudarÃ_i a tratar de entender lo que sucediÃ³ para causar enfermedades.

Por favor, responda a cada pregunta, incluso si estÃ_i respondiendo "No Se". Una vez que haya comenzado la encuesta, complétela y no inicie una nueva encuesta haciendo clic en el enlace nuevamente. Si necesita cambiar una respuesta, puede llamar al 815-334-4500 y pedir hablar con un investigador de enfermedades transmisibles con respecto a la presentaciÃ³n de su encuesta.

Toda la informaciÃ³n proporcionada es confidencial y es solo para uso de salud pÃ^oblica. Si tiene alguna pregunta sobre la encuesta, puede llamar al 815-334-4500.

Le agradecemos su tiempo y participaciÃ³n en esta importante encuesta.

* Denota Campo Obligatorio

Preferred Language Idioma Preferido ◯ English/Inglés
 ◯ Spanish/Español

Please enter the following demographic information. Ingrese la siguiente informaciÃ³n demogrÃ_ifica

First Name

Primer Nombre

Last Name



Apellido	
Date of Birth	
Fecha de nacimiento	
Sex	○ Male○ Female
Sexo	 Masculino Femenino
Phone #	
Número de teléfono	
E-mail Address	
Correo electrÃ ³ nico	
Home Address	
Direccion de casa	
City	
Ciudad	
Zip	
Código Postal	
County	
PaÃ-s	
State	

REDCap

Estado		
Do you handle food as part of your job?	○ Yes ○ No	
Maneja alimentos como parte de su trabajo?	⊖ SÃ- ⊖ No	
What is your food handling responsibility at D.C. Cobb's Please select all that apply	in McHenry?	
 ☐ Hostess ☐ Server ☐ Bartender ☐ Prop.line.staff 		

Prep line staff
 Cookline staff

Ware wash staff

Busser

Manager
Other

Cuál es su responsabilidad en el manejo de alimentos en D.C Cobb's en McHenry? Por favor seleccione todas las resupuestas válidas?

Anfitriona
Servidor Servidor
🗌 Barman
🗌 LÃ-nea de preparaciÃ ³ n
🗌 LÃ-nea de cocina
Personal de lavado de vajilla
Busser
Gerente
🗌 Otro

Please describe your other food handling responsibilities

Describa sus otras responsabilidades de manejo de alimentos

What are the usual hours that you are scheduled to work?

CuÃiles son las horas habituales en las que trabaja?

What days did you work between August 29 and today?



Qué dÃ-as trabajÃ3 entre el 29 de Agosto y hoy?

What is the illness reporting policy that you are instructed to follow?

CuÃil es la polÃ-tica de notificaciÃ3n de enfermedades que se le indica que siga?

While at work, are you encouraged to wash your hands?	○ Yes ○ No
Mientras estÃi en el trabajo, se anima a lavarse las manos?	⊖ SÃ- ⊖ No
Are handwashing practices monitored by management?	<pre> Yes No</pre>
Las practices de lavado de manos son monitoreadas por la gerencia?	⊖ SÃ- ⊖ No
How often do you wash your hands during your shift?	 1 time 2 times 3 times 4 times 5 times 6 times 7 times 8 times 9 times 10 or more times
Con qué frecuencia se lava las manos durante su turno?	 1 vez 2 veces 3 veces 4 veces 5 veces 6 veces 7 veces 8 veces 9 veces 10 o mas veces

When do you wash your hands during your shift?

CuÃindo se lava las manos durante su turno?



Where yo	u do no	ormally v	wash yo	our hands?
----------	---------	-----------	---------	------------

Are the hand sinks supplied with soap and paper towels at all times for you to utilize?	○ Yes ○ No
Los lavamanos cuentan con jabÃ ³ n y toallas de papel en todo momento para su uso?	⊖ SÃ- ⊖ No
If soap and/or paper towels are not available, how do you proceed with washing your hands?	
Si no dispone de jabón y/o toallas de papel, como procede con el lavado de manos?	
Are the hand sinks supplied with tempered water during use?	○ Yes ○ No
Se alimentan los lavamanos con agua templada durante se uso?	⊖ SÃ- ⊖ No
If tempered water is not available, what is the procedure for reporting this to management for correction?	
Si el agua templada no estÃi disponible, cuÃil es el procedimiento para informar esto a la gerencia para arreglarlo?	
When eating or drinking on your break or during your shift, where is this done within the facility?	
Cuando come o bebe en su descanso o durante su turno, dÃ ³ nde se hace esto dentro del edificio?	
Do you handle ready-to-eat foods?	○ Yes ○ No
Maneja alimentos listos para comer?	⊖ SÃ- ⊖ No
Are utensils or barriers (deli tissue, toothpicks, etc.) utilized when handling ready-to-eat foods?	○ Yes ○ No



Se utilizan utensilios o barreras (pañuelos para fiambres, palillos de dientes, etc) cuando se manipulan alimentos listos para comer?	⊖ SÃ- ⊖ No
Do you hold certification for a Food Protection Manager?	○ Yes ○ No
Tiene certificaciÃ ³ n de Gerente de ProtecciÃ ³ n de Alimentos?	⊖ SÃ- ⊖ No
Do you hold certification for a food handler?	○ Yes ○ No
Tiene certificaciÃ ³ n de ser trabajador de alimentos?	⊖ SÃ- ⊖ No
Do you work at any other food establishments or facilities that handle food?	○ Yes ○ No
Trabaja en cualquier otro establecimiento o lugar donde trabaja con alimentos?	⊖ SÃ- ⊖ No
How many other food establishment jobs do you have outside of D.C. Cobb's?	○ 1 ○ 2 ○ 3
CuÃintos otros trabajos de establecimiento de alimentos tiene fuera de D.C. Cobb's?	○ 1 ○ 2 ○ 3
Location 1	
Ubicación 1	
What is the name of the business?	
CuÃil es el nombre del negocio?	
Address	
Dirección	
City	
Ciudad	
Zip Code	



CÃ ³ digo postal	
State	
Estado	
What is your food handling responsibility at the other place of employment? Please select all that apply	 Hostess Server Bartender Prep line staff Cookline staff Ware wash staff Busser Manager Other
Cuál es su responsabilidad en el manejo de alimentos en D.C Cobb's en McHenry? Por favor seleccione todas las resupuestas válidas	 Anfitriona Servidor Barman LÃ-nea de preparaciÃ³n LÃ-nea de cocina Personal de lavado de vajilla Busser Gerente Otro
Please describe your other responsibilities	
Describa sus otras responsabilidades de manejo de alimentos	
Location 2	
Ubicación 2	
What is the name of the business?	
Cuál es el nombre del negocio?	
Address	
Dirección	
City	



Ciudad	
Zip Code	
CÃ ³ digo postal	
State	
Estado	
What is your food handling responsibility at this place of employment? Please select all that apply	 Hostess Server Bartender Prep line staff Cookline staff Ware wash staff Busser Manager Other
Cuál es su responsabilidad en el manejo de alimentos en D.C Cobb's en McHenry? Por favor seleccione todas las resupuestas válidas?	 ☐ Anfitriona ☐ Servidor ☐ Barman ☐ LÃ-nea de preparaciÃ³n ☐ LÃ-nea de cocina ☐ Personal de lavado de vajilla ☐ Busser ☐ Gerente ☐ Otro
Please describe your other responsibilities	
Describa sus otras responsabilidades de manejo de alimentos	
Location 3	
Ubicación 3	
What is the name of the business?	
CuÃil es el nombre del negocio?	
Address	



Dirección	
City	
Ciudad	
Zip Code	
CÃ ³ digo postal	
State	
Estado	
What is your food handling responsibility at this other place of employment? Please select all that apply	 Hostess Server Bartender Prep line staff Cookline staff Ware wash staff Busser Manager Other
Cuál es su responsabilidad en el manejo de alimentos en D.C Cobb's en McHenry? Por favor seleccione todas las resupuestas válidas	 Anfitriona Servidor Barman LÃ-nea de preparaciÃ³n LÃ-nea de cocina Personal de lavado de vajilla Busser Gerente Otro
Please describe your other responsibility	
Describa sus otras responsabilidades de manejo de alimentos	
Have you been sick with vomiting or diarrhea?	<pre>○ Yes ○ No</pre>
Ha estado enfermo con vÃ ³ mitos o diarrea?	⊖ SÃ- ⊖ No

Which of the following symptoms have you had?



CuÃil de los siguientes sÃ-ntomas ha te	enido?		
	Yes	No	Unknown
Nausea	\bigcirc	\bigcirc	\bigcirc
Vomiting	\bigcirc	\bigcirc	\bigcirc
If Yes to vomiting, did you have 2 or more instances in any 24-hour period?	0	0	0
Myalgia (muscle aches)	0	0	0
Abdominal (stomach, belly) cramps	0	0	0
Unusual fatigue (feeling tired)	\bigcirc	\bigcirc	0
Fever (If Yes, enter temp below)	\bigcirc	\bigcirc	0
Shaking chills	\bigcirc	\bigcirc	\bigcirc
Any diarrhea or loose stools	\bigcirc	\bigcirc	0
If Yes to diarrhea, did you have 3 or more loose stools in any 24- hour period?	0	0	0
Any blood in stools	\bigcirc	0	0
Headache	\bigcirc	\bigcirc	0
Other Symptoms:	0	\bigcirc	\bigcirc
~	SÃ-	No	No se
NÃjusea	0	0	0
Vómito	0	0	0
En caso de que sÃ- a los vómitos, ¿tuvo 2 o más casos en un perÃ-odo de 24 horas?	0	0	0
Mialgia (dolores musculares)	0	0	0
Calambres abdominales (estómago)	0	0	0
Fatiga inusual (sensación de cansancio)	0	0	0
Fiebre (en caso de que sÃ-, marque la temperatura a continuación)	0	0	0
EscalofrÃ-os agitados	0	0	0
Cualquier diarrea o heces sueltas	\bigcirc	\bigcirc	0
En caso de que sÃ- a la diarrea, ¿tuvo 3 o más heces sueltas en un perÃ-odo de 24 horas?	0	0	0



Confidential

Cualquier sangre en las heces?	0	0	0
Dolor de cabeza	\bigcirc	0	\bigcirc
Otros sÃ-ntomas	0	0	0
Other Symptoms (specify)			
Otros sÃ-ntomas (especificar)			
What was your Highest Temperature?			
CuÃil fue su temperatura mÃis alta?			
On what date did you first feel sick?			
		((mm/dd/year))	
¿En qué fecha se sintiÃ3 enfermo por p	rimera vez?		
		((mes/dÃ-a/año))	
At what time did you first feel sick?			
		(HH:MM)	
A qué hora se sintiÃ ³ enfermo por primer	a vez?		
		(Hora:minuto)	
Are you still having any vomiting or diarrhea	a now?	○ Yes ○ No	
TodavÃ-a tiene vÃ ³ mitos o diarrea ahora?		⊖ SÃ- ⊖ No	
How many hours did the vomiting/diarrhea	last?		
		((hours))	
CuÃintas horas duraron los vÃ3mitos/diarre	ea?		
		((horas))	
Did you report your illness to D.C. Cobb's N	lanagement?	○ Yes ○ No	
ReportÃ ³ su enfermedad a la Gerencia de l	D.C. Cobb's?	⊖ SÃ- ⊖ No	
Did you get admitted to the hospital overnig	ght?	○ Yes ○ No	



Fue internado al hospital por la noche?	⊖ SÃ- ⊖ No
Where were you admitted?	
DÃ ³ nde fue internado?	
What was the date of admission?	
	((mm/dd/year))
Qué fecha fue internado?	
	((mes/dÃ-a/año))
What was the date of discharge?	
	((mm/dd/year))
Qué fecha fue dado de alta?	
	((mes/dÃ-a/año))
We've had a recent outbreak at Landmark Elementary located a are investigating any connection between the illnesses at Land We would appreciate if you would answer the questions below re Hemos tenido un brote reciente en la escuela primaria Landmar Como tal, estamos investigando cualquier conexiÃ ³ n entre las er	mark Elementary and D.C. Cobb's located in McHenry. garding Landmark Elementary. rk ubicada en 3614 Waukegan Rd, McHenry, IL 60050.
Cobb's ubicados en McHenry. AgradecerÃ-amos si respondier Primaria Landmark.	
Do you have school age children who attend Landmark Elementary or live with someone who is employed or volunteers at Landmark Elementary?	○ Yes ○ No
Tiene niños en edad escolar que asisten a Landmark o viven con alguien que trabaja o es voluntario en Landmark?	⊖ SÃ- ⊖ No
Has that individual been sick with vomiting and/or diarrhea on or after 8/3/2022?	<pre>○ Yes ○ No</pre>
Esa persona ha estado enferma con v \tilde{A}^3 mitos y / o diarrea en o despu \tilde{A} ©s 8/3/2022?	⊖ SÃ- ⊖ No
What date did they first feel sick?	
	(MM-DD-YYYY)
En qué fecha se sintieron enfermos por primera vez?	
	(mes/dÃ-a/año)



What date did they stop feeling sick?

(MM-DD-YYYY)

En qué fecha dejaron de sentirse enfermos?

(mes/dÃ-a/año)



Appendix D Follow-Up Questionnaire Confidential

DC Cobb's McHenry Follow-Up

Thank you for completing the survey for the Illness Investigation Associated with DC Cobb's McHenry. You are receiving this follow-up survey as we have several follow-up questions. This 5 question survey is very short and should only take a few minutes to complete. For any question that pertains to symptoms you experienced, please answer with regards to the symptoms you reported on your initial survey. We thank you for your assistance with our investigation.

	*Must Provide Answer		
1.	First Name*		
2.	Last Name*		
3.	Date of Birth*		
4.	Email Address*		
5.	Have the symptoms you indicated on your initial survey ended?*	○ Yes ○ No	
5a.	What date did your vomiting and/or diarrhea symptoms end?*		
5b.	What time did your vomiting and/or diarrhea end?*		



Appendix E Epidemiological Findings

Category	Number	Percent
Ill (i.e., case)	173	38.5%
Patrons	168	37.4%
Employees	5	1.1%
Well (i.e., non-case)	275	61.2%
Unknown	1	0.2%
Excluded*	71	-

Table 1. Number of People Completing Case History Interview

*Excluded from the investigation based on incubation period, because they experienced gastrointestinal symptoms prior to eating food from D.C. Cobb's, or because they indicated other potential illness exposures that could not be ruled out

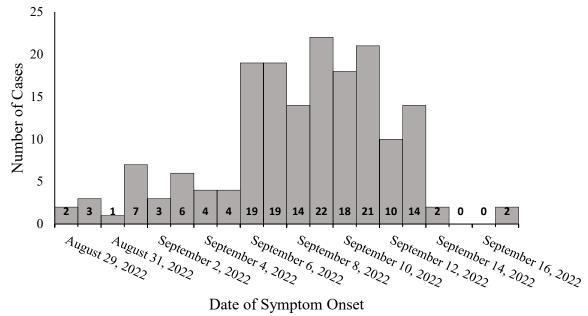


Figure 1. Date of Symptom Onset Among Cases

Date of Symptom Onset

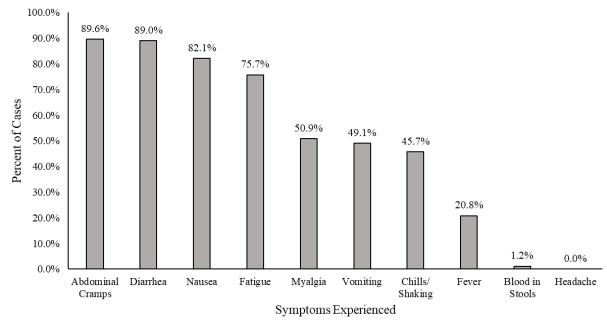
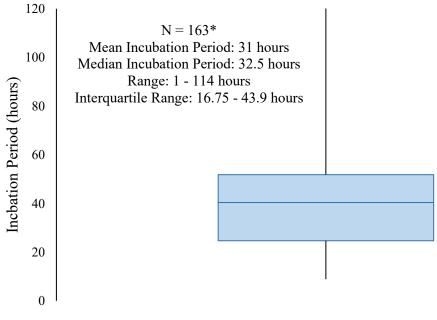
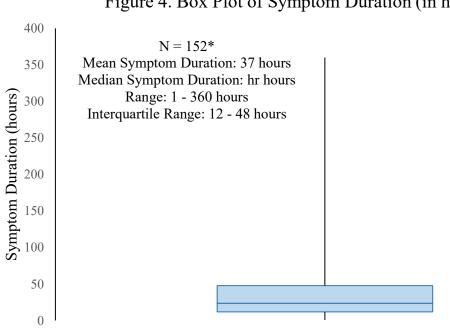


Figure 2. Distribution of Symptoms Experienced by Cases

Figure 3. Box Plot of Incubation Period



*Incubation period could not be determined for 10 cases



*Symptom duration could not be determined for 21 cases

Table 2. Possibl	e Etiologic Age	nts Responsible	for Foodborne Illness at	D.C. Cobb's
Agent	Incubation Period	Duration	Symptoms	Food Involved
Norovirus	24 – 48 hours	24 – 48 hours	Nausea; abdominal cramps; diarrhea (primarily in adults); headache; myalgia; low- grade fever; vomiting (primarily in children)	Any food contaminated with fecal material
Shigella	1 – 3 days	4 – 7 days	Fever; abdominal cramps; bloody diarrhea	Water; milk
Salmonella	5 – 72 hours	Several days	Diarrhea; abdominal pain; headache; chills; fever; vomiting; anorexia; malaise	Meat; poultry; eggs; coconut; yeast; smoked fish; melon; milk
Campylobacter	2 – 5 days	2 – 10 days	Diarrhea (may be bloody); cramps; fever; vomiting	Milk; contaminated water

Figure 4. Box Plot of Symptom Duration (in hours)

Table 3. Multiple Regression Analysis for Dishes, $\alpha < 0.05$ (Wald $p = 0.0001$)					
Dish	Wald p- value	Odds Ratio (OR)	95% CI		
All Salads	0.0019	2.179	(1.333, 3.562)		
Southwest Chicken Wrap	0.007	3.471	(1.404, 8.581)		
Fried Pickeles with Cobb's Southwest Sauce	0.0119	2.722	(1.248, 5.939)		

Table 4. Multiple Regression Analysis for Dishes, α < 0.1 (Wald p < 0.0001)					
Dish	Wald <i>p</i> - value	Odds Ratio (OR)	90% CI		
All Salads	0.0017	2.229	(1.333, 3.562)		
Southwest Chicken Wrap	0.0083	3.438	(1.404, 8.581)		
Fried Pickles with Cobb's Southwest Sauce	0.0247	2.511	(1.280, 4.928)		
Burger with Grass-fed Beef Patty	0.036	0.389	(0.185, 0.816)		
Cobb's Nachos	0.0741	2.324	(1.069, 5.051)		
Dynamite Shrimp	0.0498	3.345	(1.215, 9.204)		
Vampire Tacos with Bacon	0.0342	3.539	(1.326, 9.446)		

Table 5. Multiple Regression Analysis for Ingredients, $\alpha < 0.05$ (Wald $p < 0.0001$)						
Wald p- IngredientWald p- valueOdds Ratio (OR)95% CI						
Lettuce	< 0.0001	2.374	(1.587, 3.550)			
Green Onion	0.0411	3.260	(1.049, 10.132)			

Table 6. Multiple Regression Analysis for Ingredients, $\alpha < 0.1$ (Wald $p < 0.0001$)					
Wald p- IngredientOdds Ratio (OR)90%					
Lettuce	0.0002	2.182	(1.548, 3.075)		
Grass Fed Beef	0.0607	0.434	(0.209, 0.902)		
Green Onion	0.0295	3.687	(1.376, 9.882)		
Jalapeño	0.0677	1.483	(1.040, 2.116)		

Appendix F

Laboratory Results

Specimen	Collection Date	Result Date	Result
1	9/19/2022	9/20/2022	G1 Norovirus RNA Detected
2	9/19/2022	9/20/2022	G1 Norovirus RNA Detected
3	9/20/2022	9/21/2022	G1 Norovirus RNA Detected
4	9/20/2022	9/21/2022	G1 Norovirus RNA Detected
5	9/7/2022	9/8/2022	G1/G2 Norovirus RNA Detected

Table 1. Specimens Positive for Norovirus



OFFICE: McHenry County Admin. Bldg. 667 Ware Road, Suite 110, Woodstock, Illinois MAIL: 2200 N. Seminary Avenue Woodstock, Illinois 60098 EMA/L: Health@McHenryCountylL.gov P: 815-334-4585, F: 815-334-4637

Board of Health

Cindy Galfney President Marengo, illinois

Kyle Marcussen Treasurer Crystal Lake, Illinois

Juliana Morawski, B.S.N., R.N. Secretary Crystal Leke, Illinois

Lori Parrish County Lialson Crystal Lake, liEnols

Barbara Amsler, M.D. Huntley, Illinols

Ceclia Carman, B.S.N., R.N. Lake in the Hills, litinois

Joseph Clarke Marengo, Illinois

Jay Gulati Leke in the Hills

Kristen Maguire, M.D. Crystal Lake, Illinois

Melissa H. Adamson, M.P.H. Public Health Administrator Source Address: 1204 N GREEN ST MCHENRY IL 60050

Date/Time Collected: 09/15/22 12:58 PM Collected By: C ROHR

Date/Time Received: 09/15/22 2:56 PM

DC COBBS 1204 N GREEN ST MCHENRY IL 60050

LAB NO - 107734

ANALYTICAL REPORT

ILLINOIS DEPARTMENT OF PUBLIC HEALTH REGISTRY NUMBER 17539

	Result	Opinion	Date/Time Analyzed	Method	Sample <u>Volume mL</u>
TOTAL COLIFORM	NOT PRESENT	SATISFACTORY	09/15/22 3:15 PM	Collert P/A	100
E COLI	NOT PRESENT	SATISFACTORY	09/15/22 3:15 PM	Collert P/A	100
CHEMICAL ANALYSIS Parameter	<u>Result</u>		Date Analyzed	Method	

REPORTED OUT BY:

Mullinda

Date Reported Out: 9/16/2022

Kathi Walkington (Laboratory Specialist



OFFICE: McHenry County Admin. Bldg. 667 Ware Road, Suite 110, Woodstock, Illinois MAIL: 2200 N. Seminary Avenue Woodstock, Illinois 60098 *EMAIL:* Health@McHenryCountylL.gov *P*: 815-334-4585, *F*: 815-334-4637

Board of Health

Cindy Galiney President Marengo, lilinois

Kyle Marcussen Treasurer Crystal Lake, Illinois

Juliana Morawski, B.S.N., R.N. Secrelary Crystal Lake, lilinois

Lori Partish County Liaison Crystal Lake, Illinois

Barbara Amsler, M.D. Huntlay, Ilfinois

Cecifia Carman, B.S.N., R.N. Lake in the Hills, Illinois

Joseph Clarke Marengo, illinois

Jay Gulati Lake in the Hills

Kristen Maguire, M.D. Crystal Lake, illinois

Melissa H. Adamson, M.P.H. Publio Health Administrator Source Address: 1204 N GREEN ST MCHENRY IL 60050

Date/Time Collected: 09/15/22 1:01 PM Collected By: C ROHR

Date/Time Received: 09/15/22 2:56 PM DC COBBS 1204 N GREEN ST MCHENRY IL 60050

LAB NO - 107735

ANALYTICAL REPORT

ILLINOIS DEPARTMENT OF PUBLIC HEALTH REGISTRY NUMBER 17539

Parameter	Result	Opinion	Date/Time Analyzed	Method	Sample <u>Volume m</u> L
TOTAL COLIFORM	NOT PRESENT	SATISFACTORY	09/15/22 3:15 PM	Colilert P/A	100
E COLI	NOT PRESENT	SATISFACTORY	09/15/22 3:15 PM	Colliert P/A	100

CHEMICAL ANALYSIS				_		
Parameter	<u>Result</u>	Unit	OPINION	Date Analyzed	Method	

<u>Remarks</u>

KITCHEN THREE COMPARTMENT SINK

FOR LAB USE ONLY

REPORTED OUT BY:

SR - FB - - - (ATY - TYP) - RNKW - RDKW

Mally

Date Reported Out: 9/16/2022

Kathi Walkington, Laboratory Specialist



OFFICE: McHenry County Admin. Bldg. 667 Ware Road, Suite 110, Woodstock, Illinois

MAIL: 2200 N. Seminary Avenue Woodstock, Illinois 60098 EMAIL: Health@McHenryCountyIL.gov P: 815-334-4585, F: 815-334-4637

Board of Health

Cindy Gatiney President Marengo, Illinois

Kyle Marcussen Treasurer Crystal Lake, illinois

Juliana Morawski, B.S.N., R.N. Secretary Crystal Lake, illinois

Lori Parrish County Liaison Crystal Lake, illinois

Barbara Amsler, M.D. Hunlley, Illinois

Cecifia Carman, B.S.N., R.N. Lake in the Hills, Illinois

Joseph Clarke Marengo, lišnois

Jay Gulati Lake in the Hills

Kristen Maguire, M.D. Crystal Lake, illinois

Melissa H. Adamson, M.P.H. Public Health Administrator Source Address: 1204 N GREEN ST MCHENRY IL 60050

Date/Time Collected: 09/15/22 1:19 PM Collected By: C ROHR

Date/Time Received: 09/15/22 2:56 PM DC COBBS 1204 N GREEN ST MCHENRY IL 60050

LAB NO - 107736

ANALYTICAL REPORT

ILLINOIS DEPARTMENT OF PUBLIC HEALTH REGISTRY NUMBER 17539

Parameter	Result	<u>Opinion</u>	Date/Time Analyzed	Method	Sampie <u>Volume mL</u>
TOTAL COLIFORM	NOT PRESENT	SATISFACTORY	09/15/22 3:15 PM	Colilert P/A	100
E COLI	NOT PRESENT	SATISFACTORY	09/15/22 3:15 PM	Colilert P/A	100
CHEMICAL ANALYSIS					

OPINION

<u>Parameter</u>

Unit

Date Analyzed Method

<u>Remarks</u>

BAR DUMP SINK

FOR LAB USE ONLY

SR - FB - - - - (ATY - TYP) - RNKW - RDKW

REPORTED OUT BY:

Malk LL Kathi Walkington, Laboratory Specialist

Result

Date Reported Out: 9/16/2022



OFFICE: McHenry County Admin. Bldg. 667 Ware Road, Suite 110, Woodstock, Illinois

MAIL; 2200 N. Seminary Avenue Woodstock, Illinois 60098

EMAIL: Health@McHenryCountylL.gov P: 815-334-4585, F: 815-334-4637

Board of Health

Cindy Galfney President Marengo, Illinois

Kyle Marcussen Treasurer Crystal Lake, Illinois

Juliana Morawski, B.S.N., R.N. Secretary Crystal Lake, Illinois

Lorl Parrish County Liaison Crystai Lake, Illinois

Barbara Amsler, M.D. Hunlley, lifnois

Cecilia Carman, B.S.N., R.N. Lake in the Hills, Illinois

Joseph Clarke Marengo, Winols

Jay Gulati Lake in the Hills

Kristen Maguire, M.D. Crystal Leke, lilinois

Melissa H. Adamson, M.P.H. Public Health Administrator

Source Address: 1204 N GREEN ST MCHENRY IL 60050

Date/Time Collected: 09/15/22 1:14 PM **Collected By:** C ROHR

Date/Time Received: 09/15/22 2:56 PM DC COBBS 1204 N GREEN ST MCHENRY IL 60050

LAB NO - 107737

ANALYTICAL REPORT

ILLINOIS DEPARTMENT OF PUBLIC HEALTH REGISTRY NUMBER 17539

<u>Parameter</u>	<u>Result</u>	Opinion	Date/Time Analyzed	Method	Sample <u>Volume mL</u>
TOTAL COLIFORM	NOT PRESENT	SATISFACTORY	09/15/22 3:15 PM	Colliert P/A	100
E COLI	NOT PRESENT	SATISFACTORY	09/15/22 3:15 PM	Colilert P/A	100

CHEMICAL ANALYSIS					
<u>Parameter</u>	<u>Result</u>	<u>Unit</u>	OPINION	Date Analyzed	Method

Remarks BAR WEST HANDSINK

FOR LAB USE ONLY

SR - FB - - - - (ATY - TYP) - RNKW - RDKW

REPORTED OUT BY:

Malker

Date Reported Out: 9/16/2022

Kathi Walkington, Laberatory Specialist



OFFICE: McHenry County Admin. Bldg. 667 Ware Road, Suite 110, Woodstock, Illinois

MAIL: 2200 N. Seminary Avenue Woodslock, Illinois 60098 <u>
 mental Healtn www.mcdh.infc</u> *EMAIL*: Health@McHenryCountylL.gov P: 815-334-4585, F: 815-334-4637

Board of Health

Cindy Galfney President Marengo, Illinois

Kyle Marcussen Treasurer Crystal Laxe, Illinols

Juliana Morawski, B.S.N., R.N. Secretary Crystal Lake, lifinois

Lori Parrish County Llaison Crystal Lake, Illinois

Barbara Amsler, M.D. Hundey, Itänois

Cecilia Carman, B.S.N., R.N. Lake in the Hills, Illinois

Joseph Clarke Marengo, ližnois

Jay Gulati Lake in the Hills

Kristen Magutre, M.D. Crystal Leke, Illinois

Melissa H. Adamson, M.P.H. Public Health Administrator

Source Address: 1204 N GREEN ST MCHENRY IL 60050

Date/Time Collected: 09/15/22 1:09 PM Collected By:

C ROHR

Date/Time Received: 09/15/22 2:56 PM DC COBBS 1204 N GREEN ST MCHENRY IL 60050

LAB NO - 107738

ANALYTICAL REPORT

ILLINOIS DEPARTMENT OF PUBLIC HEALTH REGISTRY NUMBER 17539

Descourse	D!#	0		M-Abad	Sample
<u>Parameter</u>	<u>Result</u>	Opinion	Date/Time Analyzed	Methoa	<u>Volume mL</u>
TOTAL COLIFORM	NOT PRESENT	SATISFACTORY	09/15/22	Colliert P/A	100
			3:15 PM		
E COLI	NOT PRESENT	SATISFACTORY	09/15/22	Colllert P/A	100
			3:15 PM		

CHEMICAL ANALYSIS						
Parameter	Result	Unit	OPINION	Date Analyzed	Method	

Remarks BAR ICE BIN - BOTTOM

FOR LAB USE ONLY

REPORTED OUT BY:

SR - FB - - - - (ATY - TYP) - RNKW - RDKW

Malkikilor

Date Reported Out: 9/16/2022

Kathi Walkington, Laboratory Specialist



OFFICE: McHenry County Admin. Bldg. 667 Ware Road, Suite 110, Woodstock, Illinois MAIL: 2200 N. Seminary Avenue Woodstock, Illinois 60098 *EMAIL:* Health@McHenryCountylL.gov *P:* 815-334-4585, *F:* 815-334-4637

Board of Health

Cindy Gaffney President Marengo, Illinois

Kyle Marcussen Treasurer Crystal Lake, Illinols

Juliana Morawski, B.S.N., R.N. Secretary Crystal Leke, Illinois

Lori Parrish County Liaison Crystal Lake, illinois

Barbara Amsler, M.D. Huntley, Illinols

Cecilia Carman, B.S.N., R.N. Lake in the Hills, Illinois

Joseph Clarke Marengo, Illinois

Jay Gulati Lake in the Hills

Kristen Maguire, M.D. Crystal Lake, illinois

Melissa H. Adamson, M.P.H. Public Health Administrator Source Address: 1204 N GREEN ST MCHENRY IL 60050

Date/Time Collected: 09/15/22 1:06 PM Collected By: C ROHR

Date/Time Received: 09/15/22 2:56 PM DC COBBS 1204 N GREEN ST MCHENRY IL 60050

LAB NO - 107739

ANALYTICAL REPORT

ILLINOIS DEPARTMENT OF PUBLIC HEALTH REGISTRY NUMBER 17539

Parameter	Result	Opinion	Date/Time Analyzed	Method	Sample <u>Volume mL</u>
TOTAL COLIFORM	NOT PRESENT	SATISFACTORY	09/15/22	Colilert P/A	100
			3:15 PM		
E COLI	NOT PRESENT	SATISFACTORY	09/15/22	Colliert P/A	100
			3:15 PM		

CHEMICAL ANALYSIS					
Parameter	<u>Result</u>	<u>Unit</u>	OPINION	Date Analyzed	Method

Remarks

BAR ICE BIN - TOP

FOR LAB USE ONLY

SR - FB - - - - (ATY - TYP) - RNKW - RDKW

REPORTED OUT BY:

1 Wealk Kh

Date Reported Out: 9/16/2022

Kathi Walkington, Laboratory Specialist



OFFICE: McHenry County Admin. Bldg. 667 Ware Road, Suite 110, Woodstock, Illinois MAIL: 2200 N. Seminary Avenue Woodstock, Illinois 60098 *EMAIL:* Health@McHenryCountylL.gov *P:* 815-334-4585, *F:* 815-334-4637

Board of Health

Cindy Gaffney President Marengo, Illinois

Kyle Marcussen Treasurer Crystal Leke, Illinois

Juliana Morawski, B.S.N., R.N. Secretary Crystal Lake, Illinois

Lori Parrish County Lialson Crystal Lake, illinols

Barbara Amsler, M.D. Huntley, Ilinois

Cecifa Carman, B.S.N., R.N. Lake in the Hills, Illinois

Joseph Clarke Marengo, Illinois

Jay Gulati Lake in the Hills

Kristen Maguire, M.D. Crystal Lake, Illinois

Melissa H. Adamson, M.P.H. Public Health Administrator

Source Address: 1204 N GREEN ST MCHENRY IL 60050

Date/Time Collected: 09/15/22 12:52 PM Collected By: C ROHR

Date/Time Received: 09/15/22 2:56 PM

DC COBBS 1204 N GREEN ST MCHENRY IL 60050

LAB NO - 107740

ANALYTICAL REPORT

ILLINOIS DEPARTMENT OF PUBLIC HEALTH REGISTRY NUMBER 17539

Parameter	Result	Opinion	Date/Time Analyze	d Method	Sample <u>Volume mL</u>
TOTAL COLIFORM	NOT PRESENT	SATISFACTORY	09/15/22 3:15 PM	Colilert P/A	100
E COLI	NOT PRESENT	SATISFACTORY	09/15/22 3:15 PM	Colilert P/A	100

CHEMICAL ANALYSIS						
Parameter	Result	<u>Unit</u>	OPINION	Date Analyzed	<u>Method</u>	

Remarks

FOR LAB USE ONLY

SR - FB - - - - (ATY - TYP) - RNKW - RDKW

REPORTED OUT BY:

Malka

Date Reported Out: 9/16/2022

Kathi Walkington, Laboratory Specialist



OFFICE: McHenry County Admin. Bldg. 667 Ware Road, Suite 110, Woodstock, Illinois MAIL: 2200 N. Seminary Avenue Woodstock, Illinois 60098 *EMAIL:* Health@McHenryCountyIL.gov *P:* 815-334-4585, *F:* 815-334-4637

Board of Health

Cindy Gaffney President Marengo, ližnois

Kyle Marcussen Treasurer Crystal Lake, lilinols

Juliana Morawski, B.S.N., R.N. Secretary Crystal Lake, Illinois

Lori Parrish County Lialson Crystal Lake, Illinois

Barbara Amsler, M.D. Hunlley, Illinois

Cecilia Carman, B.S.N., R.N. Lake in the Hills, Illinois

Joseph Clarke Marengo, lliinols

Jay Gulati Lake in the Hills

Kristen Maguire, M.D. Crystal Lake, Winols

Melissa H. Adamson, M.P.H. Public Health Administrator Source Address: 1204 N GREEN ST MCHENRY IL 60050

Date/Time Collected: 09/15/22 12:48 PM Collected By: C ROHR

Date/Time Received: 09/15/22 2:56 PM

DC COBBS 1204 N GREEN ST MCHENRY IL 60050

LAB NO - 107741

ANALYTICAL REPORT

ILLINOIS DEPARTMENT OF PUBLIC HEALTH REGISTRY NUMBER 17539

Parameter	Result		Opinion	Date/Time Analyzed	Method	Sample <u>Volume mL</u>
TOTAL COLIFORM	NOT PRESENT		SATISFACTORY	09/15/22 3:15 PM	Colilert P/A	100
E COLI	NOT PRESENT		SATISFACTORY	09/15/22 3:15 PM	Colilert P/A	100
CHEMICAL ANALYSIS						
Parameter	<u>Result</u>	<u>Unit</u>	OPINION	Date Analyzed	<u>Method</u>	

ICE MACHINE TOP

REPORTED OUT BY:

FOR LAB USE ONLY

SR - FB - - - - (ATY - TYP) - RNKW - RDKW

Malk

Date Reported Out: 9/16/2022

Kathi Walkington, Laboratory Specialist

Appendix G

Environmental Health Findings and Recommendations

DC Cobbs McHenry

Inspections, Observations, Employee Surveys, and Product Flow Evaluations September 12th, September 15th, September 22nd, and September 23rd

Problem 1:

Food employee chewing gum while preparing foods. This is a Core item.

Corrective action:

An employee shall eat, drink, or use any form of tobacco only in designated areas where the contamination of exposed food; clean equipment, utensils, and linens; unwrapped single-service and single-use articles; or other items needing protection cannot result.

Reason:

Proper hygienic practices must be followed by food employees in performing assigned duties to ensure the safety of the food, prevent the introduction of foreign objects into the food, and minimize the possibility of transmitting disease through food. Smoking or eating by employees in food preparation areas is prohibited because of the potential that the hands, food, and food-contact surfaces may become contaminated. Insanitary personal practices such as scratching the head, placing the fingers in or about the mouth or nose, and indiscriminate and uncovered sneezing or coughing may result in food contamination. Poor hygienic practices by employees may also adversely affect consumer confidence in the establishment.

Problem 2:

Food employee, wearing gloves, handled soiled dishes and food debris, wiped hands/ gloves with a soiled rag, and then handled clean dishes without washing hands. **This is a Priority item.**

Corrective action:

Food employees must properly wash hands and exposed portions of their arms with soap and water before starting work, during work, when changing tasks, or as often as is necessary to keep them clean.

Reason:

The hands may become contaminated when the food employee engages in specific activities. The increased risk of contamination and the potential of transmission of foodborne illness, requires handwashing immediately before, during, or after such activities.

Problem 3:

Failure to provide adequate hot water at both food service handwashing sinks in the kitchen. This is a Priority Foundation item.

Corrective action:

A handwashing sink shall be equipped to provide water at a temperature of at least 38°C (100°F) through a mixing valve or combination faucet.

Reason:

Warm water is more effective than cold water in removing the fatty soils encountered in kitchens. An adequate flow of warm water will cause soap to lather and aid in flushing soil quickly from the hands. ASTM Standards for testing the efficacy of handwashing formulations specify a water temperature of 40° C ± 2° C (100 to 108°F).

Problem 4:

Failure to conduct food preparations in approved areas, supplied with hand sinks. Observed a branding iron in the basement break area. Hamburger buns were branded with the "DC" logo in this area. **This is a Priority Foundation item.**

Corrective action:

At least 1 handwashing sink, a number of handwashing sinks necessary for their convenient use by employees, and not fewer than the number of handwashing sinks required by law shall be provided.

Reason:

Because handwashing is such an important intervention in the control of foodborne illness, sufficient handwashing sinks must be available to make handwashing not only possible, but likely to occur at all appropriate times and places.

Problem 5:

Failure to provide disposable paper towels at the dish area kitchen food service handwashing sinks. This is a **Priority Foundation item.**

Corrective action:

Each handwashing sink or group of adjacent handwashing sinks shall be provided with: (a) individual, disposable towels; (b) a continuous towel system that supplies the user with a clean towel; or (c) a heated-air hand drying device; or (d) a hand drying device that employs an air-knife system that delivers high velocity, pressurized air at ambient temperatures.

Reason:

Provisions must be provided for hand drying so that employees will not dry their hands on their clothing or other unclean materials.

Problem 6:

Observed a spoiled red bell pepper in the basement walk-in cooler. This is a Priority item.

Corrective action:

Food shall be safe, unadulterated, and honestly presented.

Reason:

A primary line of defense in ensuring that food meets the requirements of 2017 FDA Food Code Section 3-101.11 is to obtain food from approved sources. It is also critical to monitor food products to ensure that, after harvesting and processing, they do not fall victim to conditions that endanger their safety, make them adulterated, or compromise their honest presentation. The regulatory community, industry, and consumers should exercise vigilance in controlling the conditions to which foods are subjected and be alert to signs of abuse.

Problem 7:

Food employee used a soiled rag to dry hands/ gloves in the dish area. Rag was stored on the dry storage shelf for clean dishes. This is a Priority Foundation item.

Corrective action:

Soiled rags are to be stored in an appropriate manner such as in a collection bag until a time that they can be laundered and not stored on food contact surfaces or among equipment/utensils/food. *Reason:*

The objective of cleaning focuses on the need to remove organic matter from food contact surfaces so that sanitization can occur and to remove soil from nonfood contact surfaces so that pathogenic microorganisms will not be allowed to accumulate, and insects and rodents will not be attracted.

Problem 8:

A container of fried onion strings being maintained at room temperature on the cook line for multiple days. **This is a Priority item.**

Corrective action:

Except during preparation, cooking, or cooling, time/temperature control for safety food shall be maintained at 5°C (41°F) or less.

Reason:

Holding foods at proper temperatures prevent the rapid and progressive growth of disease-causing organisms that are naturally present in foods as well as those introduced through incidental contamination in the operation of a food establishment. Operations requiring heating or cooling of food should be performed rapidly to avoid the possibility of bacterial growth.

Problem 9:

Observed the sanitizer buckets and the bar sanitizer spray bottle in the kitchen to exceed the label maximum of 400 ppm Quaternary Ammonium. **This is a Priority item.**

Corrective action:

When ready for use, the end-use concentration of all quaternary chemicals in solution is not to exceed 400 ppm of active quaternary compound

Reason:

Chemical sanitizers are included with poisonous or toxic materials because they may be toxic if not used in accordance with requirements listed in the Code of Federal Regulations (CFR). Large concentrations of sanitizer in excess of the CFR requirements can be harmful because residues of the materials remain. The CFR reference that is provided lists concentrations of sanitizers that are considered safe.

Problem 10:

Observed dark eyed fruit fly activity in the basement, near the ice machine. Observed house fly activity in the kitchen and the dining room. **This is a Priority Foundation item.**

Corrective action:

The premises shall be maintained free of insects, rodents, and other pests.

Reason:

Insects and other pests are capable of transmitting disease to humans by contaminating food and food-contact surfaces. Effective measures must be taken to eliminate their presence in food establishments.

Problem 11:

The food establishment does not have the appropriate sanitizer test kit(s) to confirm that the chemical sanitizing dish machine is dispensing the appropriate amount of sanitizer and that sanitation buckets contain the appropriate level of sanitizer. **This is a Priority Foundation item.**

Corrective action:

The food facility is required to maintain a test kit with an adequate supply of equipment in order to test the chemical sanitation utilized.

Reason:

Testing devices to measure the concentration of sanitizing solutions are required for 2 reasons: 1. The use of chemical sanitizers requires minimum concentrations of the sanitizer during the final rinse step to ensure sanitization; 2. Too much sanitizer in the final rinse water could be toxic.

Problem 12:

Observed 2 employees preparing food with wrist jewelry on. This is a Core item.

Corrective action:

Except for a plain ring such as a wedding band, while preparing food, food employees may not wear jewelry including medical information jewelry on their arms and hands.

Reason:

Items of jewelry such as rings, bracelets, and watches may collect soil and the construction of the jewelry may hinder routine cleaning. As a result, the jewelry may act as a reservoir of pathogenic organisms transmissible through food.

Problem 13:

Observed one employee handling exposed food while wearing artificial nails. This is a Priority Foundation item. *Corrective action:*

Unless wearing intact gloves in good repair, a food employee may not wear fingernail polish or artificial fingernails when working with exposed food.

Reason:

The requirement for fingernails to be trimmed, filed, and maintained is designed to address both the cleanability of areas beneath the fingernails and the possibility that fingernails or pieces of the fingernails may end up in the food due to breakage.

Problem 14:

Observed dry, soiled wiping cloths stored on prep surfaces/ cutting boards in the kitchen. **This is a Core item.** *Corrective action:*

Cloths in-use for wiping counters and other equipment surfaces shall be: (1) held between uses in a chemical sanitizer solution.

Reason:

Soiled wiping cloths, especially when moist, can become breeding grounds for pathogens that could be transferred to food. Any wiping cloths that are not dry (except those used once and then laundered) must be stored in a sanitizer solution of adequate concentration between uses. Wiping cloths soiled with organic material can overcome the effectiveness of, and neutralize, the sanitizer. The sanitizing solution must be changed as needed to minimize the accumulation of organic material and sustain proper concentration. Proper sanitizer concentration should be ensured by checking the solution periodically with an appropriate chemical test kit.

Problem 15:

Observed a pack of chewing gum stored on a self above the cook line reach in cooler. Observed a cell phone stored on the pass-thru window. Observed an open top shelf employee drink stored directly on the cookline reach in cooler cutting board. **This is a Core item.**

Corrective action:

Lockers or other suitable facilities shall be provided for the orderly storage of employees' personal items. *Reason:*

Street clothing and personal belongings can contaminate food, food equipment, and food-contact surfaces. Proper storage facilities are required for personal items.

Problem 16:

Observed two employees in the bar wash their hands and turn the water off without using a paper towel barrier. This is a Priority item.

Corrective action:

To avoid recontaminating their hands or surrogate prosthetic devices, food employees may use disposable paper towels or similar clean barriers when touching surfaces such as manually operated faucet handles on a handwashing sink or the handle of a restroom door.

Reason:

Every stage in handwashing is equally important and has an additive effect in transient microbial reduction. Therefore, effective handwashing must include scrubbing, rinsing, and drying the hands. When done properly, each stage of handwashing further decreases the transient microbial load on the hands. It is equally important to avoid recontaminating hands by avoiding direct hand contact with heavily contaminated environmental sources, such as manually operated handwashing sink faucets, paper towel dispensers, and rest room door handles after the handwashing procedure. This can be accomplished by obtaining a paper towel from its dispenser before the handwashing procedure, then, after handwashing, using the paper towel to operate the hand sink faucet handles and restroom door handles.

Problem 17:

Sanitizing solution found in the sanitizer buckets in the kitchen exceeded sanitizing concentration that was stipulated for the sanitizing of the establishment. **This is a Priority item.**

Corrective action:

The areas of the establishment are to be sanitized with an Environmental Protection Agency approved disinfectant or a freshly prepared sodium hypochlorite solution. The hypochlorite (bleach) solution should be a 1:50 dilution. *Reason:*

Chemical sanitizers are included with poisonous or toxic materials because they may be toxic if not used in accordance with requirements listed in the Code of Federal Regulations (CFR). Large concentrations of sanitizer in excess of the CFR requirements can be harmful because residues of the materials remain. The CFR reference that is provided lists concentrations of sanitizers that are considered safe.

Problem 18:

Chlorine sanitizing rinse concentration at dish machine not dispensing at adequate measurement to assure proper sanitizing of equipment and utensils. This is a Priority item.

Corrective Action:

A chlorine solution shall have a minimum temperature based on the concentration and pH of the solution as follows: 25 to 49 ppm at temperature of at least 120 degrees F and pH of 10 or less; 50 to 99 at temperature of at least 100 degrees F and pH of 10 or less; 100 ppm at temperature of at least 55 degrees F and pH of 10 or less.

Reason:

Maintaining and cleaning devices used for the on-site generation of sanitizing solutions in accordance with manufacturer's specifications will help to ensure that they continue to generate the sanitizer chemicals in the form and concentration for which their efficacy was assessed. Regular, effective cleaning and sanitizing of equipment and utensils minimize the probability of contaminating food during preparation storage, or service, and the transmission of disease organisms to consumers or employees.

Problem 19:

Food preparation taking place in area that did not have an accessible food service handwashing sink. This is a **Priority item.**

Corrective action:

Food service handwashing sinks shall be located to allow convenient use by employees in all food preparation areas.

Reason:

Hands are a common vehicle for the transmission of pathogens to foods in an establishment. Hands can become soiled with a variety of contaminants during routine operations. The transfer of contaminants can be limited by providing food employees with handwashing sinks that are properly equipped and conveniently located. Facilities must be located in or adjacent to toilet rooms and convenient to the different workstations of the food employee for proper and routine handwashing to prevent contamination of the food and food-contact surfaces.

Problem 20:

The handwashing procedure that is being completed by employees is not being monitored by management. This is a Priority Foundation item.

Corrective Action:

The person in charge shall ensure that employees are effectively cleaning their hands, by routinely monitoring the employees' handwashing.

Reason:

Hands are a common vehicle for the transmission of pathogens to foods in an establishment. Hands can become soiled with a variety of contaminants during routine operations. A primary responsibility of the person in charge is to ensure compliance and is accountable for developing, carrying out, and enforcing procedures aimed at preventing food-borne illness.

Problem 21:

Food employees failed to recognize that their responsibilities included the handling and/or service of ready-to-eat foods. This is a Priority Foundation item.

Corrective Action:

The person in charge shall ensure employees are properly trained in food safety as it relates to their assigned duties.

Reason:

A primary responsibility of the person in charges is to assure the food safety training of employees in order for them to safely perform duties related to food.

Problem 22:

No response was provided by any employee to the question of how to report a lack of tempered water, paper towels, or soap at a food service handwashing sink. **This is a Priority Foundation item.**

Corrective Action:

A handwashing sink shall be equipped to provide water at a temperature of at least 100°F. Each handwashing sink or group of adjacent handwashing sinks shall be provided with: (a) individual, disposable towels; (b) a continuous towel system that supplies the user with a clean towel; or (c) a heated-air hand drying device; or (d) a hand drying device that employs an air-knife system that delivers high velocity, pressurized air at ambient temperatures. Each handwashing sink shall be provided with a supply of hand cleaning liquid, powder, or bar soap. **Reason:**

Warm water is more effective than cold water in removing the fatty soils encountered in kitchens. An adequate flow of warm water will cause soap to lather and aid in flushing soil quickly from the hands. ASTM Standards for testing the efficacy of handwashing formulations specify a water temperature of $40^{\circ}C \pm 2^{\circ}C$ (100 to $108^{\circ}F$). An inadequate flow or temperature of water may lead to poor handwashing practices by food employees. Provisions must be provided for hand drying so that employees will not dry their hands on their clothing or other unclean materials Hand cleanser must always be present to aid in reducing microorganisms and particulate matter found on hands.

Problem 23:

Ill employees returned to work within 24 hours of a gastrointestinal illness. This is a Priority item.

Corrective Action:

The person in charge shall adhere to the conditions of excluding a food employee who was symptomatic, not diagnosed and only reinstate a food employee who is asymptomatic for at least 24 hours.

Reason:

Proper management of a food establishment operation begins with employing healthy people and instituting a system of identifying employees who present a risk of transmitting foodborne pathogens to food or to other employees. The person in charge is responsible for ensuring all food employees and are knowledgeable and understand their responsibility.

Problem 24:

Multiple employees indicated that handwashing takes place either in the bathroom or at a sink that is not designated for hand washing purposes only. **This is a Priority Foundation item.**

Corrective Action:

Food employees shall clean their hands in a designated handwashing sink only.

Reason:

Effective handwashing is essential for minimizing the likelihood of the hands becoming a vehicle of cross contamination. It is important that handwashing be done only at a properly equipped handwashing facility in order to help ensure that food employees effectively clean their hands.

Problem 25:

Failure to provide documentation (such as a cooling log or labels on food products) to confirm that proper cooling is taking place or to demonstrate that proper techniques are taken to cool foods down appropriately within the allowable timeframe. **This is a Priority Foundation item.**

Corrective Action:

The food establishment must demonstrate proper cooling is taking place through observation onsite, verbal instruction and through documentation of cooling times and temperatures by means of a quick chilling log.

Reason:

Safe cooling requires removing heat from food quickly enough to prevent microbial growth. Excessive time for cooling of time/temperature control for safety foods has been consistently identified as one of the leading contributing factors to foodborne illness. During slow cooling, time/temperature control for safety foods are subject to the growth of a variety of pathogenic microorganisms. A longer time near ideal bacterial incubation temperatures, 21°C - 52°C (70°F - 125°F), is to be avoided. If the food is not cooled in accordance with the 2017 Retail Food Code requirement, pathogens may grow to sufficient numbers to cause foodborne illness.

Problem 26:

Limited quality checks are completed upon receipt of food items. This is a Priority Foundation item.

Corrective Action:

The person in charge shall ensure employees are visibly observing foods as they are received to determine that they are delivered at the required temperatures, protected from contamination, unadultered, and accurately presented, by routinely monitoring the employees' observations and periodically evaluating foods upon their receipt.

Reason:

When food and other purchased goods are delivered and placed into designated locations within the food establishment, the Person in Charge must make sure food employees inspect such product and verify that it is from the appropriate supplier, is in the desired condition, and was delivered to a proper storage location.

Problem 27:

Detailed information was not provided regarding who/how the internal temperature of the food product is actually verified. **This is a Priority Foundation item.**

Corrective Action:

All food employees responsible for the cooking of food product are to be knowledgeable in the process of taking temperatures (i.e., where to take the temperature in the food product, the final cooking temperature, etc.).

Reason:

The Person in Charge is to ensure that employees are monitoring food temperatures to verify the critical temperature limits, the likelihood of temperature abuse is reduced. This includes oversight of temperature monitoring to ensure that animal foods are being cooked to the required minimum temperatures to prevent the survival of pathogens that may be present

Problem 28:

No information was provided regarding separation of raw and cooked food products in storage. This is a Priority item.

Corrective Action:

Food shall be protected from cross contamination by separation of raw animal foods during storage, preparation, holding, and display from raw ready-to-eat food, cooked ready-to-eat food, and fruits and/or vegetables before they are washed.

Reason:

It is important to separate foods in a ready-to-eat form from raw animal foods during storage, preparation, holding and display to prevent them from becoming contaminated by pathogens that may be present in or on the raw animal foods.

Problem 29:

No information was provided regarding date and time labeling being completed on products that are being quick chilled. This is a Priority Foundation item.

Corrective Action:

Maintain the records required to confirm that cooling and cold holding refrigeration time/temperature parameters *Reason:*

There are many tools that can be used by industry to provide active managerial control of foodborne illness risk factors. Elements of an effective food safety management system may include standard operating procedures (SOPs) for performing critical operational steps in a food preparation process, such as cooling and monitoring procedures. If food is not cooled in accordance with the 2017 Retail Food Code requirement and monitored, pathogens may grow to sufficient numbers to cause foodborne illness.

Problem 30:

No information was provided regarding the cold holding storage temperatures or cold holding temperatures of food product. **This is a Priority item.**

Corrective Action:

Refrigerated TCS food product shall be at a temperature of 41°F or below. The person in charge shall ensure that employees are properly maintaining temperatures of TCS food product during cold holding through daily oversight of the employees' routine monitoring of food temperatures and cold holding equipment.

Reason:

An important duty of the Person in Charge is to make sure that any required temperatures are achieved or maintained when foods held in a food establishment. By making it a duty of the Person in Charge to ensure that employees are monitoring food temperatures to verify the critical temperature limits, the likelihood of temperature abuse is reduced. This includes oversight of temperature monitoring to ensure that foods that require temperature control for safety are being held at temperatures that adequately prevent pathogen growth and toxin production.

Problem 31:

There was limited information provided regarding the use of gloves while handling ready-to-eat food product. **This is a Priority item.**

Corrective Action:

Food employees may not contact exposed, ready-to-eat food product with their bare hands and shall use suitable utensils, such as deli tissue, spatulas, tongs, single-use gloves, or dispensing equipment.

Reason:

Bare hand contact with ready-to-eat foods can contribute to the transmission of foodborne illness. Research has shown the viral transfer rate from contaminated hands to ready-to-eat food to be about 10% and that proper handwashing will significantly reduce the chance of transmitting pathogenic viruses.

Problem 32:

There was limited information or knowledge provided regarding the use of food grade single use items being utilized during the storage or cooking process. **This is a Priority item.**

Corrective Action:

Materials that are used to make single-service and single-use articles, may not: allow the migration of deleterious substances, or impart colors, odors, or tastes to food product; and shall be safe and clean.

Reason:

The safety and quality of food can be adversely affected through single service and single use articles that are not constructed of acceptable materials. The migration of components of those materials to food they contact could result in chemical contamination and illness to the consumer. In addition, the use of unacceptable materials could adversely affect the quality of the food because of odors, tastes, and colors transferred to the food.

Product Flow Chart – Corn Salsa

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler, the walk-in freezer and dry storage. TCS product to be stored at 41°F or below or frozen. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (frozen items frozen, refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.

Storage

Produce stored in basement walk-in cooler, six inches off the floor and separate from raw meats. Tomato juice stored in basement dry storage, six inches off the floor. Frozen corn stored in upstairs walk-in freezer, six inches off the floor. Refrigeration unit to be maintained at 41°F or below. Freezer unit to maintain frozen foods frozen.



Preparation

Hand washing completed using soap and warm water at the designated food service handwashing sink at the cookline. Gloves are donned. All equipment is cleaned and sanitized prior to utilization. Tomato cored. All produce rinsed within strainer at the 3-compartment sink. The 3-compartment sink to be cleaned and sanitized prior to utilization for dishware cleaning and sanitizing. Hand washing completed using soap and warm water at the designated food service handwashing sink at the cookline. Gloves are donned. Produce diced utilizing commercial vegetable dicer into large food grade container. Wet ingredients mixed with seasonings and added to produce. Mixing to be completed with a barrier (i.e., spoon, gloved hand, etc.). Product placed into containers. A date label containing the preparation date, time, and discard date is placed on the containers. Equipment to be placed in soiled dish area after use.

Cold Holding

Product is placed in upstairs walk-in cooler. As needed batches are taken and placed into cookline reach in cooler. Store six inches off the floor and separate from raw foods. Refrigeration units to be maintained at 41°F or below. Date label container with the original preparation date, time, and discard date.

Product Flow Chart – Southwest Sauce

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement dry storage. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Buttermilk ranch and chipotle peppers in adobo sauce stored in basement dry storage, six inches off the floor.

Preparation

Hand washing completed using soap and warm water at the designated food service handwashing sink. Gloves are donned. Pickle juice obtained with a barrier (i.e., spoon, etc.) from reach-in cooler, mixed with dry ingredients, and blended utilizing a commercial grade immersion blender. Product placed in smaller containers. A date label containing the preparation date, time, and discard date is placed on the containers. Equipment to be placed in soiled dish area after use.



Product placed in upstairs walk-in cooler. As needed batches are transferred with a barrier into cleaned and sanitized food grade squeeze bottles and placed in cookline reach in cooler. Store six inches off the floor and separate from raw foods. Refrigeration unit to be maintained at 41°F or below. Temperature checks to confirm product has been cooled from ambient temperature to 41°F or below within 4 hours, using a calibrated metal stemmed thermometer. Thermometer to be cleaned and sanitized prior to temperature check as well as after. A time/ temperature log shall be maintained during the cooling process. Date labeling of the product is to be completed.

Product Flow Chart – Grilled Chicken

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. TCS product to be stored at 41°F or below or frozen. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.

Storage

Chicken breasts stored in basement walk-in cooler six inches off the floor and separate from ready-to-eat foods. Refrigeration units to be maintained at 41°F or below.

Preparation

All equipment is cleaned and sanitized prior to utilization. Chicken breasts trimmed and butterflied on cutting board. Chicken breasts placed in parchment lined pans. Seasonings mixed with oil and spread over chicken breasts. Equipment to be placed in soiled dish area after use. Preparation table to be cleaned and sanitized after use. Wash hands thoroughly with soap and warm water at the designated food service handwashing sink.

Cooking

Pans placed in oven at 350°F for 1 hour. Chicken breasts cooked until internal temperature reaches 165°F. Verify temperature using a cleaned, sanitized, and calibrated metal stemmed thermometer. Excess juices drained from pan into basin of 3-compartment sink. The 3-compartment sink to be cleaned and sanitized prior to utilization for dishware cleaning and sanitizing.



Pans placed in basement walk-in cooler six inches off the floor and separate from raw foods. Complete temperature checks to confirm product has been cooled appropriately within the specified timeframe (135°F - 70°F in 2 hours, 70°F - 41°F or below in 4 hours) using a cleaned, sanitized, and calibrated metal stemmed thermometer. A time/ temperature log shall be maintained during the cooling process. Date labeling of the product is to be completed. The storage of the item is to be in a refrigeration unit that is to be maintained at 41°F or below



All equipment is cleaned and sanitized prior to utilization. Following day chicken transferred to kitchen, diced, and portioned into food grade bags. Date label portioned bags or container holding portioned bags with the original preparation date, time, and discard date. Equipment to be placed in soiled dish area after use.

Storage

Portioned bags placed into cookline reach in cooler. Excess to be placed in walk-in cooler. Refrigeration unit to be maintained at 41°F or below. Store six inches off the floor and separate from raw foods.

Preparation

Product utilized in multiple menu items. Reheating of product is specific to each item. Reheating to be completed on a cleaned and sanitized, food grade, food contact surface piece of equipment (i.e., plate, etc.) or liner (i.e., parchment paper, etc.).

Product Flow Chart – Pulled Pork

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. TCS product to be stored at 41°F or below. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.

Storage

Pork stored in basement walk-in cooler six inches off the floor and separate from ready-to-eat foods. Refrigeration units to be maintained at 41°F or below.

Preparation

All equipment is cleaned and sanitized prior to utilization. Pork is cut into fourths and placed into pan. Seasonings mixed within bowl and spread over pork. Pans covered with plastic wrap and foil. Equipment to be placed in soiled dish area after use. Wash hands thoroughly with soap and warm water at the designated food service handwashing sink.



All equipment is cleaned and sanitized prior to utilization. Pans placed in preheated oven at 350°F for 3 hours. Pork cooked until internal temperature reaches 155°F (for 15 seconds). Verify temperature using a cleaned, sanitized, and calibrated metal stemmed thermometer. Maintain temperature log. Wash hands thoroughly with soap and warm water at the designated food service handwashing sink. Pork broken apart using tongs. Equipment to be placed in soiled dish area after use.

Cooling

Pans placed in basement walk-in cooler six inches off the floor and separate from raw foods. Complete temperature checks to confirm product has been cooled appropriately within the specified timeframe (135°F - 70°F in 2 hours, 70°F - 41°F or below in 4 hours) using a cleaned, sanitized, and calibrated metal stemmed thermometer. A time/ temperature log shall be maintained during the cooling process. Date labeling of the product is to be completed. The storage of the item is to be in a refrigeration unit that is to be maintained at 41°F or below

₽

Preparation

All equipment is cleaned and sanitized prior to utilization. Following day pork transferred to kitchen, diced, and portioned into food grade bags. Date label portioned bags or container holding portioned bags with the original preparation date, time, and discard date. Equipment to be placed in soiled dish area after use.

Storage

Portioned bags placed into cookline reach in cooler. Excess to be placed in walk-in cooler. Refrigeration unit to be maintained at 41°F or below. Store six inches off the floor and separate from raw foods.

Preparation

Product utilized in multiple menu items. Reheating of product is specific to each item. Reheating to be completed on a cleaned and sanitized, food grade, food contact surface piece of equipment (i.e., plate, etc.) or liner (i.e., parchment paper, etc.).

Product Flow Chart – Green Onion

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. TCS product to be stored at 41°F or below. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.

Storage

Produce stored in basement walk-in cooler six inches off the floor and separate from raw meats. Refrigeration units to be maintained at 41°F or below.



All equipment is cleaned and sanitized prior to utilization. Hand washing completed using soap and warm water at the designated food service handwashing sink. Gloves are donned. Onion rinsed within strainer at the 3-compartment sink and diced utilizing commercial vegetable dicer. The 3-compartment sink to be cleaned and sanitized prior to utilization for dishware cleaning and sanitizing. Preparation table to be cleaned and sanitized after use. Equipment to be placed in soiled dish area after use.



Onion placed in reach-in coolers. Refrigeration unit to be maintained at 41°F or below.

Product Flow Chart – Red Onion

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Produce stored in basement walk-in cooler six inches off the floor and separate from raw meats. Refrigeration unit to be maintained at 41°F or below.



All equipment is cleaned and sanitized prior to utilization. Hand washing completed using soap and warm water at the designated food service handwashing sink. Gloves are donned. Ends of onion cut off. First few layers removed. Wash hands thoroughly with soap and warm water at the designated food service handwashing sink. Utilize barrier to handle onion. Onion diced utilizing commercial vegetable dicer or sliced utilizing commercial slicer. Onion portioned out. Preparation table to be cleaned and sanitized after use. Equipment to be placed in soiled dish area after use.



Onion stored in upstairs walk-in cooler. Store six inches off the floor and separate from raw meats. Refrigeration unit to be maintained at 41°F or below.

Product Flow Chart – Sour Cream

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. TCS product to be stored at 41°F or below. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



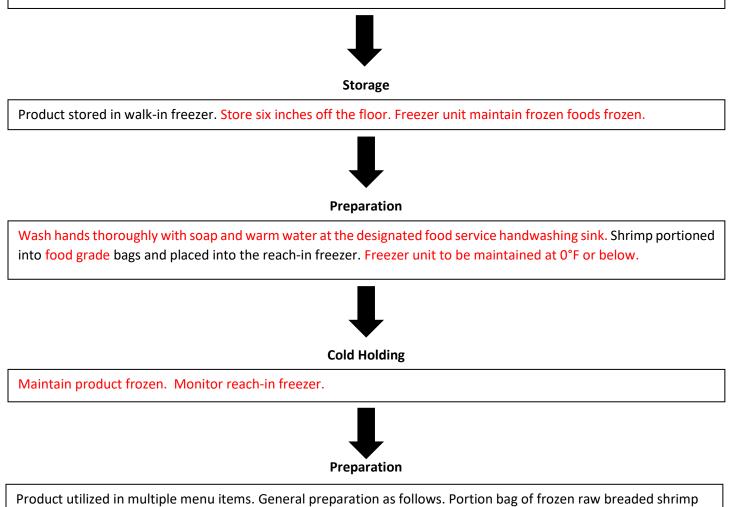
Product stored in reach in cooler. Refrigeration unit to be maintained at 41°F or below. Date label container with the original opened date, time, and discard date. Utilize barrier if portioning into food grade container.

Product Flow Chart – Shrimp

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the walk-in freezer. TCS product to be stored frozen. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (frozen items frozen). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



removed from reach in freezer and emptied into fryer basket. Wash hand thoroughly with soap and warm water at the designated food service handwashing sink. Don new gloves.



Product utilized in multiple menu items. General cooking as follows. Shrimp deep fried at 350°F for 6 minutes. Shrimp fried until internal temperature reaches 145°F (for 15 seconds), utilizing a cleaned, sanitized, and calibrated metal stemmed thermometer.

Product Flow Chart – Salad Mix

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. TCS product to be stored at 41°F or below. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Produce stored in basement walk-in cooler. Store six inches off the floor and separate from raw meats. Refrigeration unit to be maintained at 41°F or below.



Preparation

All equipment is cleaned and sanitized prior to utilization. Hand washing completed using soap and warm water at the designated food service handwashing sink. Produce (romaine, spinach, iceberg lettuce) rinsed in water with vegetable cleaner in food grade container. Produce tossed and rinsed within strainer at the 3-compartment sink. The 3compartment sink to be cleaned and sanitized prior to utilization for dishware cleaning and sanitizing. Wash hands thoroughly with soap and warm water at the designated food service handwashing sink. Utilize barrier to handle produce. Produce chopped and placed in food grade container. Equipment to be placed in soiled dish area after use.



Cold Holding

Product is placed in upstairs walk-in cooler. As needed batches are taken and placed into cookline reach in cooler. Store six inches off the floor and separate from raw foods. Refrigeration units to be maintained at 41°F or below. Date label container with the original preparation date, time, and discard date.

Product Flow Chart – Romaine Leaf (For Burgers)

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. TCS product to be stored at 41°F or below. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Produce stored in basement walk-in cooler. Store six inches off the floor and separate from raw meats. Refrigeration unit to be maintained at 41°F or below.



Preparation

All equipment is cleaned and sanitized prior to utilization. Hand washing completed using soap and warm water at the designated food service handwashing sink. Butt of romaine head cut off. Wash hands thoroughly with soap and warm water at the designated food service handwashing sink. Utilize barrier to handle produce. Remaining romaine peeled. Produce rinsed in water with vegetable cleaner in food grade container. Produce tossed and rinsed within strainer at the 3-compartment sink. The 3-compartment sink to be cleaned and sanitized prior to utilization for dishware cleaning and sanitizing. Equipment to be placed in soiled dish area after use.



Product is placed in upstairs walk-in cooler. As needed batches are taken and placed into cookline reach in cooler. Store six inches off the floor and separate from raw meats. Refrigeration units to be maintained at 41°F or below. Date label container with the original preparation date, time, and discard date.

Product Flow Chart – Sliced Iceberg Lettuce

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. TCS product to be stored at 41°F or below. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.

Storage

Produce stored in basement walk-in cooler. Store six inches off the floor and separate from raw meats. Refrigeration unit to be maintained at 41°F or below.



Preparation

All equipment is cleaned and sanitized prior to utilization. Hand washing completed using soap and warm water at the designated food service handwashing sink. Utilize barrier to handle produce. First few layers removed from the head. Core removed. Head sliced. Produce rinsed in water with vegetable cleaner in food grade container. Produce tossed and rinsed within strainer at the 3-compartment sink. The 3-compartment sink to be cleaned and sanitized prior to utilization for dishware cleaning and sanitizing. Equipment to be placed in soiled dish area after use.



Product is placed in upstairs walk-in cooler. As needed batches are taken and placed into cookline reach in cooler. Store six inches off the floor and separate from raw meats. Refrigeration units to be maintained at 41°F or below. Date label container with the original preparation date, time, and discard date.

Product Flow Chart – Fried Pickles

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. TCS product to be stored at 41°F or below. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.

Storage

Pickle chips stored in reach in cooler. Breading mixture stored in covered food grade container on top of reach in cooler. Refrigeration unit to be maintained at 41°F or below.



Hand washing to be completed using soap and warm water at the designated food service handwashing sink. All equipment is cleaned and sanitized prior to utilization. Pickles are transferred from reach in cooler with a metal scoop and placed in a breading mixture. Pickles coated. Excess breading removed using food grade basket. Remove excess breading over a waste container, not to be reused. Pickles placed info fryer basket. Equipment to be placed in soiled dish area after use.



Cooking

Pickles deep fried at 350°F for 6 minutes and transferred to parchment lined serving tray.



Pickles transferred to window. Portion cup of dressing placed on tray. Tray served by front of house employees. Employees wash hands thoroughly with soap and warm water, at the designated food service handwashing sink, prior to serving food.

Product Flow Chart – Cobbs Nachos

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler, the walk-in freezer and dry storage. TCS product to be stored at 41°F or below or frozen. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (frozen items frozen, refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Storage

Portion bags of proteins stored in reach in cooler. Refrigeration unit to be maintained at 41°F or below.



Cooking

Hand washing to be completed using soap and warm water at the designated food service handwashing sink.

Chicken: Portion bag of cooked chicken microwaved for 45 seconds.

Ground Beef: Portion bag of ground beef microwaved for 1 minute.

Pork: Portion bag of pork microwaved for 1 minute.

Proteins to be microwaved on a cleaned and sanitized, food grade, food contact surface piece of equipment (i.e., plate, etc.) or liner (i.e., parchment paper, etc.)

All equipment is cleaned and sanitized prior to utilization. Tortilla chips placed on parchment lined serving tray and topped with cheese sauce utilizing ladle. Chicken placed on top followed by sour cream, Pico de Gallo, and guacamole utilizing plastic scoops. Cheese sauce to be maintained at 135°F or above and monitored by taking temperature utilizing a cleaned, sanitized, and calibrated metal stemmed thermometer. Equipment to be placed in soiled dish area after use.



Nachos transferred to window and served by front of house employees. Employees wash hands thoroughly with soap and warm water, at the designated food service handwashing sink, prior to serving food.

Product Flow Chart – Dynamite Shrimp

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the walk-in freezer. TCS product to be stored frozen. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (frozen items frozen). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Portion bag of frozen raw breaded shrimp removed from reach in freezer and emptied into fryer basket. Wash hands thoroughly with soap and warm water at the designated food service handwashing sink. Don new gloves.



All equipment to cleaned and sanitized prior to utilization. Shrimp deep fried at 350°F for 6 minutes. Shrimp fried until internal temperature reaches 145°F, utilizing a cleaned, sanitized, and calibrated metal stemmed thermometer. Shrimp transferred to bowl and tossed in dynamite sauce. Shrimp placed on parchment lined serving tray and garnished with sliced green onion (with scoop) and shredded lettuce (with gloved hand). Equipment to be placed in soiled dish area after use.



Shrimp transferred to window and served by front of house employees. Employees wash hands thoroughly with soap and warm water, at the designated food service handwashing sink, prior to serving food.

Product Flow Chart – Chicken Caesar Salad

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler, and dry storage. TCS product to be stored at 41°F or below. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Cooking

All equipment is cleaned and sanitized prior to utilization. Portion bag of cooked chicken removed from reach in cooler and microwaved for 45 seconds. Chicken to be microwaved on a cleaned and sanitized food contact surface piece of equipment (i.e., plate, etc.) or liner (i.e., parchment paper, etc.). Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Chopped lettuce placed in salad bowl (with gloved hand) and topped with cut tomatoes, parmesan cheese, crispy asiago cheese, using plastic scoops, and croutons (with gloved hand). Chicken placed on grill to heat for an additional 45 seconds to 1 minute and placed on salad (with spatula).



Service

Salad bowl and portion cup of dressing transferred to window and served by front of house employees. Employees wash hands thoroughly with soap and warm water, at the designated food service handwashing sink, prior to serving food.

Product Flow Chart – Crispy Asiago Cheese

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. TCS product to be stored at 41°F or below. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Asiago cheese stored in basement walk-in cooler six inches off the floor and separate from raw meats. Refrigeration units to be maintained at 41°F or below.



Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Shredded asiago cheese removed from basement walk-in cooler and placed on parchment lined sheet tray.



Cooking

Cheese baked in oven at 350°F for 12 minutes.



Tray is transferred to basement walk-in cooler, six inches off the floor and separate from raw meats. Temperature checks to confirm product has been cooled appropriately within the specified timeframe $(135^{\circ}F - 70^{\circ}F \text{ in 2 hours}, 70^{\circ}F - 41^{\circ}F$ or below in 4 hours) using a cleaned, sanitized, and calibrated metal stemmed thermometer. A time/ temperature log shall be maintained of the cooling process.



Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Cheese placed in container. Date label container with the original preparation date, time, and discard date.

Cold Holding

Cheese maintained in reach in cooler. Refrigeration unit to be maintained at 41°F or below.

Product Flow Chart – Mediterranean Salad

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler and dry storage. TCS product to be stored at 41°F or below. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Cooking

All equipment is cleaned and sanitized prior to utilization. Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Portion bag of cooked chicken microwaved for 45 seconds. Chopped lettuce placed into salad bowl (with gloved hand) and topped with cut tomatoes, red onion, feta, black olives, using plastic scoops, and sliced hardboiled egg (with gloved hand). Chicken placed on grill to heat for an additional 45 seconds to 1 minute. Chicken placed on salad (with spatula). Equipment to be placed in soiled dish area after use.



Salad bowl and portion cup of dressing transferred to window and served by front of house employees. Employees wash hands thoroughly with soap and warm water, at the designated food service handwashing sink, prior to serving food.

Product Flow Chart – Vampire Tacos with Bacon

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler and the walk-in freezer. TCS product to be stored at 41°F or below or frozen. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (frozen items frozen, refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



All equipment is to be cleaned and sanitized prior to utilization. Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Shredded cheese placed on grill, topped with tortillas, with gloved hand, and cooked for 2 minutes. Tortillas transferred (with spatula) to parchment lined taco holder on tray. Choice of protein added to taco shells and topped with Pico de Gallo, chopped bacon, avocado, chipotle dressing, and cotija cheese with plastic scoops.

Chicken: Portion bag of cooked chicken microwaved for 45 seconds and cooked on grill for an additional 1 minute. Ground Beef: Portion bag of ground beef microwaved for 1 minute and cooked on grill for an additional 1 minute. Pork: Portion bag of pork microwaved for 1 minute and cooked on grill for an additional 1 minute.

Proteins to be microwaved on a cleaned and sanitized food contact surface piece of equipment (i.e., plate, etc.) or liner (i.e., parchment paper, etc.)

Shrimp: Portion bag of frozen raw breaded shrimp removed from reach in freezer and emptied into fryer basket. Shrimp deep fried at 350°F for 6 minutes. Shrimp fried until internal temperature reaches 145°F. Verified utilizing a cleaned, sanitized, and calibrated metal stemmed thermometer. Wash hands thoroughly with soap and warm water at the designated food service handwashing sink. Don new gloves. Equipment to be placed in soiled dish area after use.



Choice of side added to tray. Tray transferred to window and served by front of house employees. Employees wash hands thoroughly with soap and warm water, at the designated food service handwashing sink, prior to serving food.

Product Flow Chart – Ground Beef

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. TCS product to be stored at 41°F. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Ground beef stored in basement walk-in cooler six inches off the floor and separate from ready-to-eat foods. Refrigeration units to be maintained at 41°F or below.

Preparation

All equipment to be cleaned and sanitized prior to utilization. Ground beef added to stock pot with seasonings. Wash hands thoroughly with soap and warm water at the designated food service handwashing sink.



Cooking

Beef cooked over medium high heat for 45 minutes. Beef cooked until internal temperature reaches 155°F. Verified utilizing a cleaned, sanitized, and calibrated metal stemmed thermometer.



Cooling

Beef transferred to sheet tray and placed in basement walk-in cooler, six inches off the floor and separate from raw meats. Temperature checks to confirm product has been cooled appropriately within the specified timeframe (135°F - 70°F in 2 hours, 70°F - 41°F or below in 4 hours) using a cleaned, sanitized, and calibrated metal stemmed thermometer. A time/ temperature log shall be maintained of the cooling process. Equipment to be placed in soiled dish area after use. Date labeling of the product is to be completed. The storage of the item is to be in a refrigeration unit that is to be maintained at 41°F or below

Preparation

Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Beef transferred to kitchen and portioned into food grade bags. Date label portioned bags or container holding portioned bags with the original preparation date, time, and discard date.

Storage

Portion bags stored in upstairs walk-in cooler, six inches off the floor and separate from raw foods. Refrigeration unit to be maintained at 41°F or below.

Preparation

Product utilized in multiple menu items. Reheating of product is specific to each item. Reheating to be completed on a cleaned and sanitized, food grade, food contact surface piece of equipment (i.e., plate, etc.) or liner (i.e., parchment paper, etc.).

Product Flow Chart – Cauliflower Wrap

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler, and dry storage. TCS product to be stored at 41°F or below. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.

Preparation

Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Breaded cooked cauliflower removed from reach in cooler and placed in fryer basket.

Cooking

All equipment to be cleaned and sanitized prior to utilization. Cauliflower deep fried at 350°F for 5 minutes. Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Cauliflower transferred into bowl and tossed in sauce. Tortilla placed directly into microwave and microwaved for 30 seconds. Tortilla to be microwaved on a cleaned and sanitized, food grade, food contact surface piece of equipment (i.e., plate, etc.) or liner (i.e., parchment paper, etc.). Tortilla placed on cutting board and topped with Pico de Gallo, cotija cheese, chipotle mayo, and cauliflower, using barriers. Tortilla is rolled and placed on grill for 1 minute. Wrap transferred to cutting board, cut in half, then transferred to parchment lined serving tray with spatula. Equipment to be placed in soiled dish area after use. Cutting board to be cleaned and sanitized after use



Product Flow Chart – Cauliflower

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Cauliflower stored in basement walk-in cooler six inches off the floor and separate from raw meats. Refrigeration units to be maintained at 41°F or below.



Preparation

All equipment to be cleaned and sanitized prior to utilization. Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Flour, corn starch, baking soda, salt, and water mixed in bowl. Pre-cut cauliflower placed in bowl and coated in batter. Cauliflower placed into fryer basket. Equipment to be placed in soiled dish area after use.



Cauliflower deep fried at 350°F for 5 minutes, drained of excess oil, and placed on parchment lined sheet tray.



Cauliflower transferred to basement walk-in cooler, six inches off the floor and separate from raw meats. Temperature checks to confirm product has been cooled appropriately within the specified timeframe $(135^{\circ}F - 70^{\circ}F \text{ in 2 hours}, 70^{\circ}F - 41^{\circ}F \text{ or below in 4 hours})$ using a cleaned, sanitized, and calibrated metal stemmed thermometer. A time/ temperature log shall be maintained of the cooling process. Date labeling of the product is to be completed. The storage of the item is to be in a refrigeration unit that is to be maintained at 41°F or below



Cauliflower on tray transferred to upstairs reach in cooler Refrigeration unit to be maintained at 41°F or below.

Product Flow Chart – Southwest Chicken Wrap

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler, the walk-in freezer and dry storage. TCS product to be stored at 41°F or below. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Preparation

Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Portion of pre-cooked breaded chicken removed from reach in freezer and placed into fryer basket.



Cooking

All equipment to be cleaned and sanitized prior to utilization. Chicken deep fried at 350°F for 8 minutes. Chicken cooked until internal temperature reaches 165°F. Verified utilizing a cleaned, sanitized, and calibrated metal stemmed thermometer. Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Tortilla placed directly into microwave and microwaved for 30 seconds. Tortilla to be microwaved on a cleaned and sanitized, food grade, food contact surface piece of equipment (i.e., plate, etc.) or liner (i.e., parchment paper, etc.). Chicken chopped on cutting board. Tortilla placed on cutting board and topped with chicken, shredded lettuce, salsa, cheese, red onion, and cilantro lime dressing, using barriers. Tortilla is rolled and placed on grill for 1 minute. Wrap transferred to cutting board, cut in half, then transferred to parchment lined serving tray with spatula. Equipment to be placed in soiled dish area after use.



Product Flow Chart – Thunder Burger

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler and dry storage. TCS product to be stored at 41°F or below. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Cooking

Protein placed on grill and seasoned with salt and pepper. Gloves removed and hands washed using soap and warm water at the designated food service handwashing sink. Beef and bison cooked to customer preference. Temperatures verified using cleaned, sanitized, and calibrated metal stemmed thermometer. Turkey cooked to internal temperature of 165°F. Verified using a cleaned, sanitized, and calibrated metal stemmed thermometer. Gloves donned. Bun placed on grill and heated for 3 minutes. Bun transferred to parchment lined serving tray. Onions cooked on grill for 2 minutes and placed on protein. Protein and onions transferred to bun with spatula. Pub cheese added to top bun with knife.



Product Flow Chart – Build Your Own Burger

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler and dry storage. TCS product to be stored at 41°F or below. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.

Cooking

Protein placed on grill and seasoned with salt and pepper. Gloves removed and hands washed using soap and warm water at the designated food service handwashing sink. Beef and bison cooked to customer preference. Temperatures verified using cleaned, sanitized, and calibrated metal stemmed thermometer. Turkey cooked to internal temperature of 165°F. Verified using a cleaned, sanitized, and calibrated metal stemmed thermometer. Gloves donned. Bun placed on grill and heated for 3 minutes. Bun transferred to parchment lined serving tray. Toppings added per customer preference, utilizing a barrier.



Product Flow Chart – Burger Patties

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler. TCS product to be stored at 41°F or below. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (frozen items frozen, refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Product stored in basement walk in cooler, six inches off the floor and separate from ready to eat foods. Refrigeration unit to be maintained at 41°F or below.



Preparation

All equipment to be cleaned and sanitized prior to utilization. Proteins (grass-fed beef, corn-fed beef, bison, turkey) portioned into patties and placed into containers. Hand washing to be completed using soap and warm water at the designated food service handwashing sink.



Protein placed on grill and seasoned with salt and pepper. Gloves removed and hands washed using soap and warm water at the designated food service handwashing sink. Beef and bison cooked to customer preference. Temperatures verified using cleaned, sanitized, and calibrated metal stemmed thermometer.



Patties transferred to upstairs walk-in cooler, six inches off the floor and separate from ready- to-eat foods. As needed batches are taken and placed into cookline reach in cooler. Refrigeration unit to be maintained at 41°F or below.

Product Flow Chart – Pub Cheese

DC Cobbs, McHenry

Receiving

Managers accept deliveries. Item delivered verified and brought to the basement walk-in cooler and dry storage. TCS product to be stored at 41°F or below. Non-TCS product to be stored in a safe and secure manner. Quality checks are completed. Inspect product for wholesomeness (compromised packaging, odors, discoloration, etc.). The temperature of the box truck is noted on the invoice. Complete temperature checks of product (refrigerated items 41°F or below). Unacceptable product is marked as "return to vendor" and placed into designated area. "Return to vendor" item returned to the vendor at next delivery.



Preparation

All equipment to be cleaned and sanitized prior to utilization. Hand washing to be completed using soap and warm water at the designated food service handwashing sink. Cream cheese mixed with salt, pepper, and truffle oil in bowl.



Cold Holding

Cheese transferred to container and maintained in reach in cooler. Refrigeration units to be maintained at 41°F or below. Equipment to be placed in soiled dish area after use. Hand washing to be completed using soap and warm water at the designated food service handwashing sink.

Appendix H

Bivariate Food Item Analysis for Dishes

Ар	pendix G. Biv	variate Foo	od Item Ai	nalysis f	or Dish		
Dish	Test for Association			<i>4</i> тн	# Well	Odds Ratio (OR)	050/ CI
DISI	Association	p-value	Ate Item	# III		(0K)	95% CI
Chicken Caesar Salad**	Fisher's Exact Test	0.043	Yes	7	3	4.106	(1.047, 16.109)
	Exact Test		No	154	271		
Southwest Chicken Wrap**	Chi-Square	0.008	Yes	14	8	3.167	(1.298, 7.724)
Southwest Chicken with	eni square	0.000	No	147	266	5.107	(1.290, 7.721)
Fried Pickles with Cobb's	Chi Sayara	0.013	Yes	17	12	2 578	(1 109 5 547)
Southwest Sauce**	Chi-Square	0.015	No	144	262	2.578	(1.198, 5.547)
	C1 : C	0.050	Yes	12	9	2 271	(0.077.5.750)
Cobb's Nachos**	Chi-Square	0.050	No	149	265	2.371	(0.977, 5.759)
	61 · 6	0.004	Yes	42	41	• • • • •	
All Salads**	Chi-Square	0.004	No	119	233	2.006	(1.237, 3.253)
Burger with Grass Fed Beef	61 · 6	0.020	Yes	6	27	0.345	
Chi-	Chi-Square	0.020	No	155	247		(0.143, 0.877)
	Fisher's	0.020	Yes	1	11	0.149	(0.010, 1.1(0)
The Thunder Burger**	Exact Test	0.038	No	160	263		(0.019, 1.168)
	Fisher's	0.010	Yes	4	0	OR cannot be	OR cannot be
Elotes Burger**	Exact Test	0.018	No	157	274	computed	computed
Build Your Own Burger with	Fisher's	0.010	Yes	4	0	OR cannot be	OR cannot be
Avocado**	Exact Test	0.018	No	157	274	computed	computed
	Fisher's	0.001	Yes	8	5	a 01 a	
Dynamite Shrimp*	Exact Test	0.081	No	153	269	2.813	(0.904, 8.751)
	Fisher's	0.001	Yes	8	5	2 012	
Vampire Tacos with Bacon*	Exact Test	0.081	No	153	269	2.813	(0.904, 8.751)
			Yes	46	57		
Wraps*	Chi-Square	0.066	No	115	217	1.523	(0.972, 2.387)
			Yes	15	16		
Mozzarella Wedges	Chi-Square	0.175	No	146	258	1.657	(0.796, 3.448)

******Significant at $\alpha < 0.05$

*Significant at $\alpha < 0.1$

Ар	pendix G. Biv	variate Fo	od Item Ai	nalysis f	or Dishe		
Dish	Test for Association	p-value	Ate Item	# 111	# Well	Odds Ratio (OR)	95% CI
Cobb's Southwest Sauce on		p-value	Yes	6 # m	11	(011)	7570 CI
Mozzarella Wedges	Chi-Square	0.881	No	155	263	0.926	(0.336, 2.552)
			Yes	13	14		
Hart's Marinara Sauce on Mozzarella Wedges	Chi-Square	0.216	No	148	260	1.631	(0.747, 3.564)
			Yes	6	11		
Garlic Aioli on Mozzarella Wedges	Chi-Square	0.881	No	155	263	0.926	(0.336, 2.552)
No Sauce on Mozzarella Wedges	Fisher's Exact Test	1.000	Yes	1	2	0.850	(0.077, 0.945)
			No	160	272		
Pretzel Sticks	Chi-Square	0.660	Yes	13	19	1.179	(0.566, 2.456)
			No	148	255		
Cobb's Logger Cheese Dip	Chi-Square	0.286	Yes	13	15	1.517	(0.703, 3.275)
			No	148	259		(
Chicken Bacon Ranch	Fisher's Exact Test	1.000	Yes	3	6	0.848	(0.209, 3.439)
Quesadilla			No	158	268		(0.209, 5.459)
Pico de Gallo on Chicken	Fisher's	1.000	Yes	1	3	0.565	(0.059.5.474)
Bacon Ranch Quesadilla	Exact Test	1.000	No	160	271	0.363	(0.058, 5.474)
Guacamole on Chicken Bacon	Fisher's	1.000	Yes	2	5	0.677	(0.1202.520)
Ranch Quesadilla	Exact Test	1.000	No	159	269	0.677	(0.130, 3.529)
No Pico de Gallo or	Fisher's		Yes	1	1		
Guacamole on Chicken Bacon Ranch Quesadilla	Exact Test	1.000	No	160	273	1.706	(0.106, 27.467)
Pico de Gallo on Cobb's			Yes	1	8		
Nachos	Chi-Square	2.77	No	151	266	2.202	(0.851, 5.699)
			Yes	10	9		
Sour Cream on Cobb's Nachos	Chi-Square	0.149	No	151	265	1.95	(0.775, 4.905)
			Yes	9	8		
Guacamole on Cobb's Nachos	amole on Cobb's Nachos Chi-Square	0.165	No	152	266	1.969	(0.744, 5.209)
	Fighteria		Yes	1	2		
Sliders	Fisher's Exact Test	0.442	No	160	272	0.85	(0.077, 9.449)
			110	100	212		

Ар	pendix G. Biv	variate Foo	od Item Aı	nalysis f	or Dishe		
Dish	Test for Association	p-value	Ate Item	# 111	# Well	Odds Ratio (OR)	95% CI
2.01	Fisher's	p value	Yes	0	1	OR cannot be	
Corn-fed Beef Sliders	Exact Test	1.000	No	161	273	computed	computed
	Fisher's		Yes	1	2		
Grass-fed Beef Sliders	Exact Test	1.000	No	160	272	0.85	(0.077, 9.449)
			Yes	20	19		
Fried Pickles	Chi-Square	3.742	No	141	255	1.904	(0.983, 3.686)
	Fisher's		Yes	4	3		
Dynamite Sauce with Shrimp	Exact Test	0.432	No	157	271	2.302	(0.509, 10.416)
	Fisher's		Yes	3	5		
Buffalo Cauliflower	Exact Test	1.000	No	158	269	1.022	(0.241, 4.332)
Buffalo Sauce on Buffalo	Fisher's	1	Yes	2	4		
Cauliflower	Exact Test	1.000	No	159	270	0.849	(0.154, 4.688)
Honey Sriracha Sauce on	Fisher's	0.250	Yes	1	2	OR cannot be computed	OR cannot be computed
Buffalo Cauliflower	Exact Test	0.370	No	160	274		
No Sauce on Buffalo	Fisher's	1.000	Yes	0	1	OR cannot be	OR cannot be
Cauliflower	Exact Test	1.000	No	161	273	computed	computed
Buffalo Cauliflower with	Fisher's	0.126	Yes	2	0	OR cannot be	OR cannot be
Ranch Dressing	Exact Test	0.136	No	159	274	computed	computed
L.L. D. M. M.	Fisher's	0.722	Yes	4	5	1 271	(0.2(2.5.190)
Jalapeno Poppers	Exact Test	0.732	No	157	269	1.371	(0.363, 5.180)
Southwest Sauce on Jalapeno	Fisher's	0 (5(Yes	1	4	0.422	(0.047.2.909)
Poppers	Exact Test	0.656	No	16	270	0.422	(0.047, 3.808)
Cable Tatabas	Fisher's	0.224	Yes	2	10	0.222	(0.072, 1.525)
Cobb's Totchos	Exact Test	0.224	No	159	264	0.332	(0.072, 1.535)
Pico de Gallo on Cobb's	Fisher's	0.225	Yes	2	8	0.419	(0.022, 1.004)
Totchos	Exact Test	0.335	No	159	266	0.418	(0.088, 1.994)
Sour Croom on Cable Total	Fisher's	0.225	Yes	2	8	0.419	(0.000 1.004)
Sour Cream on Cobb's Totchos	Exact Test	0.335	No	159	266	0.418	(0.088, 1.994)

Ар	pendix G. Biv	variate Fo	od Item A	nalysis f	or Dishe		
Dish	Test for Association	n voluo	Ate Item	# 111	# Well	Odds Ratio (OR)	050/ CI
Disil		p-value	Yes	# III 2	8		95% CI
Guacamole on Cobb's Totchos	Fisher's Exact Test	0.335				0.418	(0.088, 1.994)
No Pico de Gallo, Sour Cream,			No	159	266		
or Guacamole on Cobb's	Fisher's Exact Test	1.000	Yes	0	1	OR cannot be computed	
Totchos	Exact Test		No	161	273	computed	computed
Spinach and Artichoke Dip	Fisher's	1.000	Yes	5	8	1.066	(0.344, 3.315)
opinion and mitonoice Dip	Exact Test	1.000	No	156	266	11000	(0.5 1 1, 5.5 10)
Chielton Wines	Fisher's	0.432	Yes	4	3	2.302	(0.500, 10.416)
Chicken Wings	Exact Test	0.432	No	157	271	2.302	(0.509, 10.416)
Buffalo Sauce on Chicken	Fisher's	0.044	Yes	3	2		
Wings	Exact Test	0.364	No	158	272	2.582	(0.427, 15.620)
	Fisher's		Yes	2	1		
BBQ Sauce on Chicken Wings	Exact Test	0.558	No	159	273	3.434	(0.309, 2.618)
Mango Habenero Sauce on	Fisher's		Yes	1	0	OR cannot be computed	OR cannot be computed
Chicken Wings	Fisher's Exact Test	0.370	No	160	274		
Honey Sriracha Sauce on	Fisher's		Yes	1	0	OR cannot be	OR cannot be
Chicken Wings	Exact Test	0.370	No	160	274	computed	computed
Bleu Cheese Dressing on	Fisher's		Yes	1	0	OR cannot be	OR cannot be
Chicken Wings	Exact Test	0.370	No	160	274	computed	computed
	Fisher's		Yes	3	3		
Ranch Dressing with Wings	Exact Test	0.675	No	158	271	1.715	(0.342, 8.600)
	Fisher's		Yes	1	0	OR cannot be	OR cannot be
No Dressing with Wings	Exact Test	0.370	No	160	274	computed	computed
	Fisher's		Yes	6	4		
Elote Dip with Chips	Exact Test	0.183	No	155	270	2.613	(0.726, 9.402)
	Eish aula		Yes	4	4		
Elote Fritters	Fisher's Exact Test	0.476	No	157	270	1.720	(0.424, 6.973)
			Yes	35	77		
Soda or Brewed Tea	Chi-Square	0.143	No	126	197	0.711	(0.450, 1.123)
			INO	120	19/		

Α	ppendix G. Biv	variate Fo	od Item Ai	nalysis f	or Dishe		
Dish	Test for Association	p-value	Ate Item	# 111	# Well	Odds Ratio (OR)	95% CI
		p-value	Yes	7	8	(011)	7570 CI
Lemonade Shake-Ups	Chi-Square	0.431	No	154	266	1.511	(0.538, 4.249)
			Yes	3	200		
Flavored Iced Tea	Chi-Square	0.284	No	158	272	2.582	(0.427, 15.620)
				5			
Avocado Egg Roll	Chi-Square	0.919	Yes	-	9	0.943	(0.311, 2.867)
			No	156	265		
Southwest Egg Roll	Chi-Square	0.311	Yes	4	12	0.556	(0.176, 1.755)
			No	157	262		
Bison Egg Roll	Fisher's	1.000	Yes	2	5	0.677	(0.130, 3.529)
	Exact Test	1.000	No	159	269	0.077	(01100,0102))
Italian Doof Egg Doll	Chi Squara	0.919	Yes	5	9	0.943	(0.211. 2.867)
Italian Beef Egg Roll	Chi-Square	0.919	No	156	265	0.943	(0.311, 2.867)
	C1 : C	0.500	Yes	4	10	0.(72	(0.000.0.101)
Bowls	Chi-Square	0.506	No	157	264	0.673	(0.208, 2.181)
Cable David	Fisher's	1 000	Yes	1	2	0.950	(0.077.0.440)
Cobb's Bowl	Exact Test	1.000	No	160	272	0.850	(0.077, 9.449)
	Fisher's	1 000	Yes	2	5	0 (77	(0.120, 2.520)
Southwest Bowl	Exact Test	1.000	No	159	269	0.677	(0.130, 3.529)
	Fisher's		Yes	0	1	OR cannot be	OR cannot be
Buffalo Bowl	Exact Test	1.000	No	161	273	computed	computed
	Fisher's		Yes	1	0	OR cannot be	OR cannot be
Shrimp Bowl	Exact Test	0.370	No	160	274	computed	computed
			Yes	13	15		
Cobb's Cobb	Chi-Square	0.286	No	148	259	1.517	(0.703, 3.275)
	Fisher's		Yes	4	5		
Apple Pecan Salad	Exact Test	0.732	No	157	269	1.371	(0.363, 5.180)
	Fisher's		Yes	4	5		
Southwest Chicken Salad	Fisher's Exact Test	0.732	No	157	269	1.371	(0.363, 5.180)
			110	137	209		

Ар	pendix G. Biv	variate Fo	od Item Ai	nalysis f	or Dishe		
Dish	Test for Association	p-value	Ate Item	# 111	# Well	Odds Ratio (OR)	95% CI
	Fisher's	p-value	Yes	3	1	(011)	7570 CI
Mediterranean Salad	Exact Test	0.145	No	158	273	5.183	(0.535, 50.256)
	Fisher's		Yes	1	0	OR cannot be	OR cannot be
Wedge Salad	Exact Test	0.370	No	160	274	computed	computed
	Fisher's		Yes	1	6		
Pulled Pork Sandwich	Exact Test	0.268	No	160	268	0.279	(0.033, 2.340)
			Yes	8	9		
Vampire Tacos	Chi-Square	0.381	No	153	265	1.540	(0.582, 4.073)
	Fisher's		Yes	2	1		
Spicy Chorizo Vampire Tacos	Exact Test	0.558	No	159	273	3.434	(0.309, 38.173)
Buffalo Cauliflower Vampire	Fisher's		Yes	1	1		
Tacos	Exact Test	1.000	No	160	273	1.706	(0.106, 27.467)
	Fisher's		Yes	1	3	0.565	
Chicken Vampire Tacos	Exact Test	1.000	No	160	271		(0.058, 5.474)
	Fisher's		Yes	1	2		
Shrimp Vampire Tacos	Exact Test	1.000	No	160	272	0.850	(0.077, 9.445)
	Fisher's		Yes	2	1		<i></i>
Beef Vampire Tacos	Exact Test	0.558	No	159	273	3.434	(0.309, 38.173)
	Fisher's		Yes	1	1		
Pulled Pork Vampire Tacos	Exact Test	1.000	No	160	273	1.706	(0.106, 27.467)
	c1 · c	0.550	Yes	7	9	1	
Avocado on Vampire Tacos	Chi-Square	0.570	No	154	265	1.338	(0.489, 3.666)
Pico de Gallo on Vampire	~1 · ~	0.647	Yes	6	8	1 205	
Tacos	Chi-Square	0.645	No	155	266	1.287	(0.439, 3.778)
Chipotle Cream Sauce on	~1 · ~	0.404	Yes	7	8		
Vampire Tacos	Chi-Square	0.431	No	154	266	- 1.511	(0.538, 4.249)
Cotija Cheese on Vampire	Fisher's	0.572	Yes	6	7	1 477	(0.400.4.472)
Tacos	Exact Test	0.563	No	155	267	1.477	(0.488, 4.472)

Ар	Appendix G. Bivariate Food Item Analysis for Dishes										
Dish	Test for Association	p-value	Ate Item	# I11	# Well	Odds Ratio (OR)	95% CI				
	Fisher's	p-value	Yes	3 [#]	5 [#]	(OR)	7570 CI				
Loaded Rice with Vampire Tacos	Exact Test	1.000	No	158	269	1.022	(0.241, 4.332)				
	E' 1 1		Yes	2	7						
Italian Beef Sandwich	Fisher's Exact Test	0.495	No	159	267	0.480	(0.099, 2.338)				
			Yes	2	6						
Honey Sriracha Chicken Sandwhich	Fisher's Exact Test	0.716	No	161	268	0.562	(0.112, 2.817)				
Adult Grilled Cheese	Fisher's Exact Test	0.716	Yes	2	6	0.562	(0.112, 2.817)				
			No	161	268						
Cobb's BLT	Fisher's	1.000	Yes	4	6	1.138	(0.316, 4.095)				
	Exact Test		No	157	268						
Elote Quesadilla	Fisher's	0.753	Yes	3	8	0.631	(0.165, 2.415)				
Liote Quesadina	Exact Test	0.755	No	158	266		(0.105, 2.115)				
Sheimen Tanaa	Fisher's	1.000	Yes	1	1	1.706	(0.106.27.467)				
Shrimp Tacos	Exact Test	1.000	No	160	273	1.706	(0.106, 27.467)				
	cl : c	0.500	Yes	15	30	0.926	(0.425.1.(05)				
Mac & Cheese	Chi-Square	0.589	No	146	244	0.836	(0.435, 1.605)				
Chicken Bacon Ranch Mac &	Fisher's	0.126	Yes	2	0	OR cannot be	OR cannot be				
Cheese	Exact Test	0.136	No	159	274	computed	computed				
	Fisher's		Yes	1	2		(0.0 0.440)				
Buffalo Chicken Mac	Exact Test	1.000	No	160	272	0.850	(0.077, 9.449)				
	Fisher's		Yes	0	2	OR cannot be	OR cannot be				
Chicago Mac	Exact Test	0.533	No	161	272	computed	computed				
	Fisher's		Yes	2	9						
Pork Mac	Exact Test	0.225	No	159	265	0.370	(0.079, 1.736)				
Build Your Own Mac &	Fisher's		Yes	1	4						
Cheese	Fisher's Exact Test	0.656	No	160	270	0.422	(0.047, 3.801)				
Play Chasse on Dwild Verre	Fisheria		Yes	0	1		OR constat				
Bleu Cheese on Build Your Own Mac & Cheese	Fisher's Exact Test	1.000	No	161	273	OR cannot be computed	OR cannot be computed				
			110	101	215	-	-				

Ар	pendix G. Biv	variate Foo	od Item Ai	nalysis f	or Dish		
Dish	Test for Association	p-value	Ate Item	# III	# Well	Odds Ratio (OR)	95% CI
Spinach on Build Your Own	Fisher's	p value	Yes	0	1	. , ,	OR cannot be
Mac & Cheese	Exact Test	1.000	No	161	273	computed	computed
Egg on Build Your Own Mag	Fisher's		Yes	0	1	OR cannot be	OR cannot be
Egg on Build Your Own Mac & Cheese	Exact Test	1.000	No	161	273	computed	computed
Bacon on Build Your Own	Fisher's		Yes	0	1	OP connot he	OR cannot be
Mac & Cheese	Exact Test	1.000	No	161	273	computed	computed
Nacho Cheese on Build Your	Fisher's		Yes	1	0	OR cannot be	OR cannot be
Own Mac & Cheese	Exact Test	0.370	No	160	274	computed	computed
Basil on Build Your Own Mac	Fisher's		Yes	0	1	OR cannot be	OR cannot be
& Cheese	Exact Test	1.000	No	161	273	computed	computed
Mushrooms on Build Your	Fisher's		Yes	0	2	OR cannot be	OR cannot be
Own Mac & Cheese	Exact Test	0.533	No	161	272	computed	computed
Sun Dried Tomatoes on Build	Fisher's		Yes	0	1	OR cannot be computed	OR cannot be
Your Own Mac & Cheese	Exact Test	1.000	No	161	273		computed
Chicken on Build Your Own	Fisher's		Yes	0	2	OR cannot be	OR cannot be
Mac & Cheese	Exact Test	0.533	No	161	272	computed	computed
	Fisher's		Yes	5	4		
Elote Mac & Cheese	Exact Test	0.301	No	156	270	2.164	(0.573, 8.176)
	Fisher's		Yes	1	0	OR cannot be	OR cannot be
Ropa Vieja Mac & Cheese	Exact Test	0.370	No	160	274	computed	computed
			Yes	4	10		
Chicken BLT Wrap	Chi-Square	0.506	No	157	264	0.673	(0.208, 2.181)
			Yes	3	8		
Buffalo Mac Wrap	Chi-Square	0.499	No	158	266	0.631	(0.165, 2.414)
			Yes	1	3		
Italian Beef Wrap	Chi-Square	0.617	No	160	271	0.565	(0.058, 5.473)
			Yes	12	14		
Asiago Chicken Wrap	Chi-Square	0.319	No	149	260	1.496	(0.674, 3.312)

Ар	pendix G. Biv	variate Fo	od Item Ai	nalysis f	or Dish		
Dish	Test for Association	p-value	Ate Item	# 111	# Well	Odds Ratio (OR)	95% CI
DIGH	11550014000	p-value	Yes	6 # m	5	(011)	J 570 CI
Dynamite Shrimp Wrap	Chi-Square	1.488	No	155	269	2.083	(0.625, 6.936)
	T ' 1 1		Yes	100	5		
Mediterranean Salad	Fisher's Exact Test	0.420	No	160	269	0.336	(0.039, 2.904)
			Yes	2	209		
Cauliflower Wrap	Fisher's Exact Test	0.629				1.710	(0.239, 12.263)
			No	159	272		
Chicken Elotes Wrap	Fisher's Exact Test	0.200	Yes	4	2	3.465	(0.628, 19.133)
	Exact Test		No	157	272		
Burrito (Includes Multiple	Fisher's	0.432	Yes	4	3	2.302	(0.509, 10.416)
Types)	Exact Test		No	157	271		
Fish Fry	Fisher's	0.629	Yes	2	2	1.711	(0.239, 12.263)
11511 11 y	Exact Test	0.029	No	159	272		(0.239, 12.203)
	Fisher's		Yes	1	2	0.85	(0.055.0.440)
French Fries with Fish Fry	Exact Test	1.000	No	160	272	0.85	(0.077, 9.449)
	Fisher's	1 000	Yes	1	2	0.95	(0.077.0.440)
Coleslaw with Fish Fry	Exact Test	1.000	No	160	272	0.85	(0.077, 9.449)
Homemade Tartar Sauce with	Fisher's	0.(20)	Yes	2	2	1 711	(0.000, 10.0(0)
Fish Fry	Exact Test	0.629	No	159	272	1.711	(0.239, 12.263)
	c1 · c	0.460	Yes	44	84	0.051	(0.552, 1.200)
Burger	Chi-Square	0.462	No	117	190	0.851	(0.553, 1.309)
	Fisher's		Yes	1	1		
Ricky Bobby Burger	Exact Test	1.000	No	160	273	1.706	(0.106, 27.467)
	Fisher's		Yes	2	2		
Hart Attack Burger	Exact Test	0.629	No	159	272	1.711	(0.239, 12.263)
	Fisher's		Yes	0	1	OR cannot be	OR cannot be
The Courthouse Burger	Exact Test	0.370	No	161	273	computed	computed
	Fisher's		Yes	3	3		
The Stompanato Burger	Exact Test	0.675	No	158	271	1.715	(0.342, 8.600)

Ар	pendix G. Biv	variate Fo	od Item Ai	nalysis f	or Dishe		
Dish	Test for Association	p-value	Ate Item	# I11	# Well	Odds Ratio (OR)	95% CI
	Fisher's	-	Yes	0	1		OR cannot be
The Windy City Burger	Exact Test	1.000	No	161	273	computed	computed
	~ 1 1 ~		Yes	5	15		
The DC Cobb Burger	Chi-Square	0.553	No	156	259	0.553	(0.197, 1.552)
	Fisher's	1 000	Yes	1	3	0.565	(0.050.5.474)
The Jailhouse Burger	Exact Test	1.000	No	160	271	0.565	(0.058, 5.474)
The Deceler Decer	Fisher's	1.000	Yes	0	1	OR cannot be	OR cannot be
The Peasley Burger	Exact Test	1.000	No	161	273	computed	computed
The Delitician Durger	Fisher's	0.629	Yes	2	2	1.711	(0, 220, 12, 262)
The Politician Burger	Exact Test	0.629	No	159	272	1./11	(0.239, 12.263)
The Woodsteels Dynasa	Fisher's	1.000	Yes	2	3	1.136	(0, 100, 6, 072)
The Woodstock Burger	Exact Test	1.000	No	159	271	1.130	(0.188, 6.873)
The Demotio Duncon	Fisher's	0.713	Yes	3	4	1.282	(0.282.5.800)
The Popeye Burger	Exact Test	0.715	No	158	270		(0.283, 5.800)
The Dive Street Durger	Fisher's	1.000	Yes	0	1	OR cannot be	OR cannot be
The Blue Streak Burger	Exact Test	1.000	No	161	273	computed	computed
The Groundhog Burger	Fisher's	1.000	Yes	3	6	0.848	(0.209, 3.439)
The Groundhog Burger	Exact Test	1.000	No	158	268	0.848	(0.209, 3.439)
The Humisone Duncer	Fisher's	0.268	Yes	1	6	0.279	(0.022.2.240)
The Hurricane Burger	Exact Test	0.208	No	160	268	0.279	(0.033, 2.340)
The DEM Durger	Fisher's	0.716	Yes	2	6	0.562	(0, 112, 2, 917)
The BFM Burger	Exact Test	0.710	No	159	268	0.362	(0.112, 2.817)
Oil and Winasan Drassing	Fisher's	0.270	Yes	1	0	OR cannot be	OR cannot be
Oil and Vinegar Dressing	Exact Test	0.370	No	160	274	computed	computed
Palasmia Drossin a	Fisher's	0.126	Yes	2	0	OR cannot be	OR cannot be
Balasmic Dressing	Exact Test	0.136	No	159	274	computed	computed
1000 Island Drossin -	Fisher's	1 000	Yes	0	1	OR cannot be	e OR cannot be
1000 Island Dressing	Exact Test	1.000	No	161	273	computed	computed

Appendix G. Bivariate Food Item Analysis for Dishes										
Dish	Test for Association	p-value	Ate Item	# I11	# Well	Odds Ratio (OR)	95% CI			
DIGH	1155001111011	p-value	Yes	1 <i>#</i> m	2	(011)	J370 C1			
Veggie Black Bean Burger	Chi-Square	0.897	No	160	272	0.850	(0.077, 9.449)			
	Fisher's		Yes	0	4	OR cannot be	OR cannot be			
Impossible Burger	Exact Test	0.302	No	161	270	computed	computed			
	Fisher's		Yes	1	2					
Turkey Burger	Exact Test	1.000	No	160	272	0.850	(0.077, 9.449)			
Burger with Corn Fed Beef			Yes	29	42					
Patty	Chi-Square	0.465	No	132	232	1.214	(0.722, 2.040)			
			Yes	5	5					
Burger with Bison Patty	Chi-Square	0.389	No	156	269	1.724	(0.492, 6.050)			
	Fisher's		Yes	1	2					
Spicy Chorizo Totchos	Exact Test	1.000	No	160	272	0.850	(0.077, 9.449)			
	Fisher's		Yes	0	1	OR cannot be computed	OR cannot be			
Pulled Pork Totchos	Exact Test	1.000	No	161	273		computed			
	Fisher's		Yes	0	3	OR cannot be	OR cannot be			
Chicken Totchos	Exact Test	0.299	No	161	271	computed	computed			
	Fisher's		Yes	1	4					
Beef Totchos	Exact Test	0.656	No	160	270	0.422	(0.047, 3.808)			
	Fisher's		Yes	1	1		(0.106,			
Spicy Chorizo Nachos	Exact Test	1.000	No	160	273	1.706	27.467)			
	Fisher's		Yes	5	2		(0.836,			
Pulled Pork Nachos	Exact Test	0.107	No	156	272	4.359	22.733)			
	Fisher's		Yes	2	3					
Chicken Nachos	Exact Test	1.000	No	159	274	1.136	(0.188, 6.873)			
	Fisher's	0	Yes	3	3					
Beef Nachos	Exact Test	0.675	No	158	271	1.715	(0.342, 8.600)			
	Fisher's		Yes	0	3	OR cannot be	e OR cannot be			
Corn Chowder	Exact Test	0.299	No	161	271	computed	computed			

Ар	pendix G. Biv	variate Foo	od Item Aı	nalysis f	or Dishe		
Dish	Test for Association	p-value	Ate Item	# III	# Well	Odds Ratio (OR)	95% CI
		p-value	Yes	4 # III	3	(OR)	
Elotes Street Corn	Fisher's Exact Test	0.432	No	157	271	2.302	(0.509, 10.416)
			Yes	2	1		
Chocolate Lava Cake	Fisher's Exact Test	0.558	No			3.434	(0.309, 38.173)
				159	273		
Homemade Twix Bar	Fisher's Exact Test	1.000	Yes	1	1	1.706	(0.106, 27.467)
	Exact Test		No	160	273		27.407)
Apple Pie Egg Roll	Fisher's	1.000	Yes	1	2	0.850	(0.077, 9.449)
	Exact Test		No	160	272		, , , , , , , , , , , , , , , , , , ,
Side of Bacon Cheese Fries	Fisher's	0.751	Yes	3	7	0.724	(0.185, 2.841)
	Exact Test	0.751	No	158	267	0.721	(0.105, 2.011)
Side of Chasse Curds	Fisher's	0 775	Yes	4	9	0.750	(0.227.2.476)
Side of Cheese Curds	Exact Test	0.775	No	157	265	- 0.750	(0.227, 2.476)
	~1.1.~		Yes	7	7		
Side of Mac & Cheese	Chi-Square	0.306	No	154	267	1.734	(0.597, 5.036)
Side of Totay Tota		0.920	Yes	8	15	0.002	(0.274, 2.170)
Side of Tater Tots	Chi-Square	0.820	No	153	259	0.903	(0.374, 2.179)
Side of Pickles	Chi-Square	0.508	Yes	5	12	0.700	(0.242.2.024)
Side of Fickles	CIII-Square	0.308	No	156	262	0.700	(0.242, 2.024)
	c1 · c	0.040	Yes	7	13	0.010	(0.25(.2.227)
Side of Parmesan Truffle Fries	Chi-Square	0.849	No	154	261	0.913	(0.356, 2.337)
			Yes	22	36		
Side of Sweet Potato Fries	Chi-Square	0.876	No	139	238	1.046	(0.592, 1.851)
			Yes	7	13		
Side of Soup	Chi-Square	0.849	No	154	261	0.913	(0.356, 2.337)
			Yes	38	67		
Side of Fries	Chi-Square	0.841	No	123	207	0.955	(0.605, 1.504)
No Topping Added to BYO	01.10	0.764	Yes	5	10	0.047	(0.284, 2.521)
Burger	Chi-Square	0.764	No	156	264	0.846	(0.284, 2.521)

Appendix G. Bivariate Food Item Analysis for Dishes									
Dish	Test for Association	p-value	Ate Item	# I11	# Well	Odds Ratio (OR)	95% CI		
		p-value	Yes	2 # III	0				
Fried Egg Added to BYO Burger	Fisher's Exact Test	0.136	No	159	274	OR cannot be computed	OR cannot be computed		
			Yes				*		
Guacamole Added to BYO Burger	Fisher's Exact Test	1.000		0	1	OR cannot be computed	OR cannot be computed		
	EAddt Test		No	161	273	computed			
Hash Browns Added to BYO	Fisher's	1.000	Yes	0	1		OR cannot be		
Burger	Exact Test		No	161	273	computed	computed		
Bacon Added to BYO Burger	Fisher's	1.000	Yes	4	6	1.138	(0.316, 4.095)		
Daton Added to D10 Durger	Exact Test	1.000	No	157	268	1.150	(0.510, 4.095)		
Mac & Cheese Added to BYO	Fisher's	1 000	Yes	0	1	OR cannot be	OR cannot be computed		
Burger	Exact Test	1.000	No	161	273	computed			
No Veggies Added to BYO Burger	Fisher's Exact Test	1.000	Yes	5	8		(0.343, 3.315)		
			No	156	266	1.066			
Onion Strings Added to BYO	Fisher's Exact Test	1.000	Yes	0	1	OR cannot be computed	OR cannot be computed		
Burger			No	161	273				
Sun Dried Tomatoes Added to	Fisher's	0.370	Yes	1	0	OR cannot be	OR cannot be computed		
BYO Burger	Exact Test		No	160	274	computed			
Mushrooms Added to BYO	Fisher's Exact Test	0.533	Yes	0	2	OR cannot be	OR cannot be computed		
Burger			No	161	272	computed			
Jalapeño Added to BYO	Fisher's		Yes	2	1		(0.309,		
Burger	Exact Test	0.558	No	159	273	3.434	38.173)		
Sauteed Onion Added to BYO	Fisher's	0.495	Yes	2	7		(0.099, 2.338)		
Burger	Exact Test		No	159	267	0.480			
Spinach Added to BYO	Fisher's	1.000	Yes	0	1	OR cannot be	OR cannot be computed		
Burger	Exact Test		No	161	273	computed			
No Cheese Added to BYO	Fisher's Exact Test	1.000	Yes	1	1		(0.106,		
Burger			No	160	273	1.706	27.467)		
Pepperjack Cheese Added to	Fisher's		Yes	4	2	2.1/5	(0.628,		
BYO Burger	Exact Test	0.200	No	157	272	3.465	19.133)		

Appendix G. Bivariate Food Item Analysis for Dishes									
Dish	Test for Association	p-value	Ate Item	# III	# Well	Odds Ratio (OR)	95% CI		
Fresh Mozzarella Cheese	Fisher's	0.370	Yes	1	0	OR cannot be computed	OR cannot be computed		
Added to BYO Burger	Exact Test	0.370	No	160	274				
American Cheese Added to	Fisher's Exact Test	0.153	Yes	5	3	2.895	(0.683, 12.280)		
BYO Burger			No	156	271				
Swiss Cheese Added to BYO	Fisher's	0.656	Yes	1	4	0.422	(0.047, 3.808)		
Burger	Exact Test	0.020	No	160	270	01122			
Cheddar Cheese Added to	Fisher's	0.751	Yes	3	7	0.724	(0.185, 2.841)		
BYO Burger	Exact Test	0.731	No	158	267	0.724	(0.165, 2.641)		

Appendix I

Bivariate Food Item Analysis for Individual Ingredients

Appendix H. Bivariate Food Item					Analysis for Ingredients				
	Test for					Odds Ratio			
Ingredient	Association	p-value	Ate Item	# Ill	# Well	(OR)	95% CI		
Green Onion**	Chi-Square	0.032	Yes	9	5	3.186	(1.049, 9.678)		
Oreen Onion	CIII-Square	0.032	No	152	269	5.180	(1.049, 9.078)		
Romaine	Chi-Square	< 0.0001	Yes	84	88	2.306	(1.546, 3.440)		
Lettuce**	Cin-Square	<0.0001	No	77	186	2.500			
Iceberg	Chi-Square	< 0.0001	Yes	77	79	2.263	(1.509, 3.392)		
Lettuce**	em square	\$0.0001	No	84	195	2.205	(1.50), 5.572)		
Shrimp**	Chi-Square	0.036	Yes	16	13	2.215	(1.037, 4.735)		
Similip	em square	0.050	No	145	261	2.210	(1.057, 1.755)		
Corn Salsa**	Chi-Square	0.037	Yes	20	18	2.017	(1.033, 3.939)		
Com Suisa	em square	0.057	No	141	256	2.017	(1.055, 5.959)		
Sour Cream**	Chi-Square	0.028	Yes	29	29	1.856	(1.064, 3.238)		
Sour cream	em square	0.020	No	132	245	1.050	(1.001, 5.250)		
Red Onion**	Chi-Square	0.026	Yes	65	82	1.585	(1.055, 2.383)		
	em square	0.020	No	96	192	1.505	(1.055, 2.505)		
Jalapeño**	Chi-Square	0.036	Yes	64	82	1.545	(1.027, 2.323)		
Jalapeno	Chi-5quare	0.050	No	97	192	1.545	(1.027, 2.323)		
Pulled Pork**	Chi-Square	0.006	Yes	12	21	0.970	(0.464, 2.029)		
	Chi-5quare	0.000	No	149	253	0.970	(0.404, 2.027)		
Grass Fed	Chi-Square	0.023	Yes	7	29	0.384	(0.164, 0.898)		
Beef**	Chi-5quare	0.025	No	154	245				
Caesar	Fisher's Exact	0.064	Yes	8	4	3.529	(1.046, 11.913)		
Dressing*	Test	0.004	No	153	270	5.527			
Ranch	Chi-Square	0.055	Yes	55	70	1.512	(0.990, 2.311)		
Dressing*	em square	0.000	No	106	204	1.512	(0.990, 2.911)		
Fresh Tomato*	Chi-Square	0.064	Yes	90	128	1.446	(0.978, 2.138)		
	Chi-Bquare	0.004	No	71	146		(0.976, 2.196)		
Chicken*	Chi-Square	0.096	Yes	82	117	1.393	(0.942, 2.059)		
Chicken	Chi-Bquare	0.090	No	79	157		(0.942, 2.059)		
Cream Cheese	Chi-Square	0.335	Yes	22	29	1.337	(0.740, 2.417)		
	em square	0.555	No	139	245	1.557	(0.740, 2.417)		
Southwest	Chi-Square	0.378	Yes	28	39	1.269	(0.747, 2.155)		
Sauce	Cini-Square	0.570	No	133	235		(0.747, 2.155)		
Spicy Dynamite	Chi-Square	0.339	Yes	9	10	1.563	(0.622, 3.938)		
Sauce	Chi-Square	0.557	No	152	264		(0.022, 3.938)		
Barbeque Sauce	Chi-Square	0.191	Yes	11	29	0.620	(0.301, 1.277)		
-	Cin-Square		No	150	245				
Honey Sriracha	Chi-Square	0.286	Yes	8	17	0.791	(0.333, 1.875)		
Sauce			No	153	257				
Buffalo Sauce	Chi-Square	0.497	Yes	8	18	0.744	(0.316, 1.751)		
**Significant at o	1		No	153	256				

**Significant at α < 0.05 *Significant at α < 0.1

	Appendix H.	Bivariate	Food Item	Analys	sis for In	gredients	
	Test for					Odds Ratio	
Ingredient	Association	p-value	Ate Item	# III	# Well	(OR)	95% CI
Garlic Aioli	Chi Squara	0.123	Yes	12	18	1.145	(0, 527, 2, 444)
Garne Alon	Chi-Square	0.125	No	149	256	1.145	(0.537, 2.444)
Pico de Gallo	Chi-Square	0.490	Yes	30	44	1 107	(0.719, 1.006)
r ico de Gallo	Chi-Square	0.490	No	131	230	1.197	(0.718, 1.996)
Guacamole	Chi-Square	0.490	Yes	30	44	1.197	(0.718, 1.996)
(Commerical)	Chi-Square	0.490	No	131	230	1.197	(0.718, 1.990)
Salsa Verde	Chi-Square	0.919	Yes	5	9	0.944	(0.311, 2.866)
Saisa verde	em square	0.917	No	156	265	0.744	(0.511, 2.000)
Rice Blend	Chi-Square	0.701	Yes	8	16	0.843	(0.353, 2.016)
	em square	0.701	No	153	258	0.045	(0.555, 2.010)
Chipotle Mayo	Chi-Square	0.564	Yes	11	15	1.266	(0.567, 2.828)
Chipotic Mayo	Chi-5quare	0.504	No	150	259	1.200	(0.307, 2.828)
Chipotle Cream	Chi-Square	0.725	Yes	12	18	1.145	(0.537, 2.444)
Chipotic Cream	Cin-Square	0.725	No	149	256	1.145	(0.337, 2.44)
Bison	Chi-Square	0.717	Yes	7	10	1.200	(0.448, 3.217)
DISOII	Chi-Square	0.717	No	154	264	1.200	(0.440, 5.217)
Corn Fed Beef	Chi Sayara	0.606	Yes	32	49	1.139	(0.694, 1.869)
Com red Beel Chi	Chi-Square		No	129	25	1.139	
Spicy Chariza	Chi-Square	0.185	Yes	17	19	1.584	(0.798, 3.145)
Spicy Chorizo Cl	Chi-Square		No	144	255		
Italian Beef	Chi-Square	0.224	Yes	8	22	0.599	(0.260, 1.379)
Italiali Deel	Chi-Square		No	153	252		
Bacon	Chi Squara	0.875	Yes	79	132	1.036	(0.702, 1.530)
Dacoli	Chi-Square		No	82	142		
Spinach	Chi-Square	0.121	Yes	51	68	1.405	(0.913, 2.160)
Spinaen	Chi-Square	0.121	No	110	206		
Avocado	Chi-Square	0.290	Yes	31	42	1.317	(0.790, 2.197)
Avocado	Chi-Square	0.290	No	130	232		
Canned Tomato	Chi-Square	0.701	Yes	8	16	0.843	(0.353, 2.016)
Calified Tolliato	Chi-Square	0.701	No	153	258		
Spanish Onion		0.890	Yes	39	68	0.968	(0.616, 1.523)
Spanish Onion	Chi-Square	0.890	No	122	206		
Onion Strings	Chi-Square	0.100	Yes	6	21	0.466	(0.184 1.181)
Onion Sumgs			No	155	253		(0.184, 1.181)
Black Beans	Chi-Square	0.250	Yes	27	35	1.376	(0.798, 2.372)
			No	134	239		
Sweet Corn	Chi-Square	0.248	Yes	29	38	1.364	(0.805, 2.314)
			No	132	236		
Roasted Red	Chi Sayara	0.124	Yes	32	39	1.495	(0.804, 2.500)
Peppers	Chi-Square		No	129	235		(0.894, 2.500)
Spicy	Chi Square	0 407	Yes	8	18	0.744	(0.316, 1.751)
Giardiniera	Chi-Square	0.497	No	153	256	0.744	

Appendix H. Bivariate Food Item Analysis for Ingredients								
	Test for					Odds Ratio		
Ingredient	Association	p-value	Ate Item	# Ill	# Well	(OR)	95% CI	
Faa		0.227	Yes	23	33	1.407	(0.807, 2.451)	
Egg	Chi-Square	0.227	No	135	241	1.407		
Cheddar Cheese	Chi-Square	0.179	Yes	52	72	1.338	(0.874, 2.049)	
Cheddal Cheese	Cili-Square	0.179	No	109	202			
Pepperjack	Chi-Square	0.911	Yes	17	28	1.037	(0.549, 1.961)	
Cheese	Cili-Square	0.911	No	144	246	1.037		
Bleu Cheese	Chi Squara	0.777	Yes	8	12	1.142	(0,457, 2,855)	
Crumbles	Chi-Square	0.///	No	153	262	1.142	(0.457, 2.855)	
Mozzarella		0.822	Yes	28	50	0.943	(0.566, 1.571)	
Cheese	Chi-Square		No	133	224			
Bleu Cheese	Fisher's Exact	1.000	Yes	2	3	1.136	(0.188, 6.873)	
Dressing	Test		No	159	271			
Honey Pecan	Fisher's Exact		Yes	3	9			
Vinaigrette	Test	0.548			-	0.559	(0.149, 2.096)	
Dressing	1051		No	158	265			
Mayonnaise	Chi-Square	0.168	Yes	56	78	1.340	(0.883, 2.034)	
			No	105	196			