**Module 2: Exercise 2**

Table 1: Original data, counts of responses (Yes, Probably, No, Don’t know) and proportion of population exposed

|  |  |  |
| --- | --- | --- |
| Food Item | Count (n) | Proportion (%) |
| Yes | Probably | No | Don't Know | Yes/(Yes+No) | (Yes+Prob)/(Yes+Prob+No) |
| Vegetarian/Vegan | 2 | 0 | 3 | 2 | 40.0 | 40.0 |
| Supplements | 3 | 0 | 4 | 0 | 42.9 | 42.9 |
| Any chicken (not including deli meat) | 3 | 0 | 3 | 1 | 50.0 | 50.0 |
| Any eggs | 2 | 3 | 2 | 0 | 50.0 | 71.4 |
| Any pork (not including deli meat) | 1 | 2 | 3 | 1 | 25.0 | 50.0 |
| Any beef (not including deli meat) | 1 | 1 | 4 | 1 | 20.0 | 33.3 |
| Any dairy (excluding cheese) | 3 | 1 | 3 | 0 | 50.0 | 57.1 |
| Non-dairy milk | 3 | 0 | 3 | 1 | 50.0 | 50.0 |
| Any cheese | 4 | 0 | 3 | 0 | 57.1 | 57.1 |
| Tomatoes | 3 | 1 | 3 | 0 | 50.0 | 57.1 |
| Any lettuce or leafy greens | 4 | 1 | 1 | 1 | 80.0 | 83.3 |
| Iceberg | 0 | 2 | 3 | 2 | 0.0 | 40.0 |
| Romaine | 2 | 1 | 3 | 1 | 40.0 | 50.0 |
| Spinach | 4 | 0 | 1 | 2 | 80.0 | 80.0 |
| Sprouts | 2 | 1 | 4 | 0 | 33.3 | 42.9 |
| Cucumbers | 3 | 2 | 2 | 0 | 60.0 | 71.4 |
| Bell peppers | 4 | 0 | 2 | 1 | 66.7 | 66.7 |
| Broccoli | 3 | 0 | 3 | 1 | 50.0 | 50.0 |
| Cauliflower | 4 | 0 | 3 | 0 | 57.1 | 57.1 |
| Mushrooms | 4 | 0 | 3 | 0 | 57.1 | 57.1 |
| Zucchini | 3 | 1 | 3 | 0 | 50.0 | 57.1 |
| Melons | 3 | 0 | 3 | 1 | 50.0 | 50.0 |
| Apples | 4 | 1 | 2 | 0 | 66.7 | 71.4 |
| Bananas | 4 | 2 | 1 | 0 | 80.0 | 85.7 |
| Citrus fruits | 4 | 0 | 3 | 0 | 57.1 | 57.1 |
| Any berries | 5 | 0 | 2 | 0 | 71.4 | 71.4 |
| Strawberries | 2 | 2 | 2 | 1 | 50.0 | 66.7 |
| Raspberries | 2 | 0 | 3 | 2 | 40.0 | 40.0 |
| Blueberries | 3 | 2 | 2 | 0 | 60.0 | 71.4 |
| Blackberries | 3 | 1 | 3 | 0 | 50.0 | 57.1 |
| Mangoes | 4 | 0 | 3 | 0 | 57.1 | 57.1 |
| Pineapple | 1 | 1 | 5 | 0 | 16.7 | 28.6 |
| Peanuts  | 4 | 0 | 3 | 0 | 57.1 | 57.1 |
| Almonds | 2 | 3 | 1 | 1 | 66.7 | 83.3 |
| Walnuts | 3 | 1 | 2 | 1 | 60.0 | 66.7 |
| Hazelnuts (filberts) | 0 | 0 | 6 | 1 | 0.0 | 0.0 |
| Cashews | 2 | 0 | 1 | 4 | 66.7 | 66.7 |
| Pecans | 2 | 1 | 3 | 1 | 40.0 | 50.0 |
| Pistachios | 0 | 0 | 4 | 3 | 0.0 | 0.0 |
| Other nuts | 1 | 0 | 3 | 3 | 25.0 | 25.0 |
| Peanut butter | 4 | 0 | 3 | 0 | 57.1 | 57.1 |
| Other nut butters/pastes/spreads | 2 | 1 | 3 | 1 | 40.0 | 50.0 |
| Sunflower seeds | 2 | 1 | 3 | 1 | 40.0 | 50.0 |
| Sesame seeds | 2 | 2 | 2 | 1 | 50.0 | 66.7 |
| Chia seeds | 3 | 2 | 2 | 0 | 60.0 | 71.4 |
| Flax seeds | 2 | 2 | 2 | 1 | 50.0 | 66.7 |
| Other seeds | 1 | 0 | 3 | 3 | 25.0 | 25.0 |
| Cold cereals | 2 | 0 | 4 | 1 | 33.3 | 33.3 |
| Hot cereals | 2 | 0 | 2 | 3 | 50.0 | 50.0 |

Table 2: Exposures with reference values

|  |  |  |  |
| --- | --- | --- | --- |
| Food Item | Confirmed Cases |   | Reference |
| Yes | Prob | No | DK | %Y+P | Foodbook Canada\* |
| Vegetarian/Vegan | 2 | 0 | 3 | 2 | 40.0 | No data  |
| Supplements | 3 | 0 | 4 | 0 | 42.9 | 28.2 |
| Any chicken (not including deli meat) | 3 | 0 | 3 | 1 | 50.0 | 85.6 |
| Any eggs | 2 | 3 | 2 | 0 | 71.4 | 80.7 |
| Any pork (not including deli meat) | 1 | 2 | 3 | 1 | 50.0 | 55.1 |
| Any beef (not including deli meat) | 1 | 1 | 4 | 1 | 33.3 | 78.4 |
| Any dairy (excluding cheese) | 3 | 1 | 3 | 0 | 57.1 | 84.6 |
| Non-dairy milk | 3 | 0 | 3 | 1 | 50.0 | 15.9 |
| Any cheese | 4 | 0 | 3 | 0 | 57.1 | 88.8 |
| Tomatoes | 3 | 1 | 3 | 0 | 57.1 | 72.9 |
| Any lettuce or leafy greens | 4 | 1 | 1 | 1 | 83.3 | 82.4 |
| Iceberg | 0 | 2 | 3 | 2 | 40.0 | 41.1 |
| Romaine | 2 | 1 | 3 | 1 | 50.0 | 48.8 |
| Spinach | 4 | 0 | 1 | 2 | 80.0 | 28.4 |
| Sprouts | 2 | 1 | 4 | 0 | 42.9 | 12.9 |
| Cucumbers | 3 | 2 | 2 | 0 | 71.4 | 62.9 |
| Bell peppers | 4 | 0 | 2 | 1 | 66.7 | 63.6 |
| Broccoli | 3 | 0 | 3 | 1 | 50.0 | 55.5 |
| Cauliflower | 4 | 0 | 3 | 0 | 57.1 | 33.0 |
| Mushrooms | 4 | 0 | 3 | 0 | 57.1 | 50.0 |
| Zucchini | 3 | 1 | 3 | 0 | 57.1 | 21.1 |
| Melons | 3 | 0 | 3 | 1 | 50.0 | 39.7 |
| Apples | 4 | 1 | 2 | 0 | 71.4 | 72.3 |
| Bananas | 4 | 2 | 1 | 0 | 85.7 | 76.7 |
| Citrus fruits | 4 | 0 | 3 | 0 | 57.1 | 65.0 |
| Any berries | 5 | 0 | 2 | 0 | 71.4 | 65.2 |
| Strawberries | 2 | 2 | 2 | 1 | 66.7 | 49.6 |
| Raspberries | 2 | 0 | 3 | 2 | 40.0 | 27.5 |
| Blueberries | 3 | 2 | 2 | 0 | 71.4 | 31.3 |
| Blackberries | 3 | 1 | 3 | 0 | 57.1 | 10.5 |
| Mangoes | 4 | 0 | 3 | 0 | 57.1 | 15.7 |
| Pineapple | 1 | 1 | 5 | 0 | 28.6 | 30.0 |
| Peanuts  | 4 | 0 | 3 | 0 | 57.1 | 33.6 |
| Almonds | 2 | 3 | 1 | 1 | 83.3 | 41.0 |
| Walnuts | 3 | 1 | 2 | 1 | 66.7 | 18.5 |
| Hazelnuts (filberts) | 0 | 0 | 6 | 1 | 0.0 | 10.1 |
| Cashews | 2 | 0 | 1 | 4 | 66.7 | 26.8 |
| Pecans | 2 | 1 | 3 | 1 | 50.0 | 12.9 |
| Pistachios | 0 | 0 | 4 | 3 | 0.0 | No data |
| Other nuts | 1 | 0 | 3 | 3 | 25.0 | No data |
| Peanut butter | 4 | 0 | 3 | 0 | 57.1 | 55.0 |
| Other nut butters/pastes/spreads | 2 | 1 | 3 | 1 | 50.0 | 18.3 |
| Sunflower seeds | 2 | 1 | 3 | 1 | 50.0 | 18.3 |
| Sesame seeds | 2 | 2 | 2 | 1 | 66.7 | 17.1 |
| Chia seeds | 3 | 2 | 2 | 0 | 71.4 | No data |
| Flax seeds | 2 | 2 | 2 | 1 | 66.7 | No data |
| Other seeds | 1 | 0 | 3 | 3 | 25.0 | No data |
| Cold cereals | 2 | 0 | 4 | 1 | 33.3 | 54.3 |
| Hot cereals | 2 | 0 | 2 | 3 | 50.0 | 28.5 |
| \*Based on the Foodbook Survey, 2015, Public Health Agency of Canada |  |  |

Table 3: Binomial probability calculations for exposures and reference population

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Food Item | Confirmed Cases |   | Reference | Binomial Probability |
| Yes | Prob | No | DK | %Y+P | Foodbook Canada\* | p-value |
| MEATS |
| Any chicken (not including deli meat) | 3 | 0 | 3 | 1 | 50.0 | 85.6 | 0.0375 |
| Any pork (not including deli meat) | 1 | 2 | 3 | 1 | 50.0 | 55.1 | 0.3028 |
| Any beef (not including deli meat) | 1 | 1 | 4 | 1 | 33.3 | 78.4 | 0.0201 |
| EGGS |
| Any eggs | 2 | 3 | 2 | 0 | 71.4 | 80.7 | 0.2677 |
| DAIRY PRODUCTS |
| Any dairy (excluding cheese) | 3 | 1 | 3 | 0 | 57.1 | 84.6 | 0.0655 |
| Non-dairy milk | 3 | 0 | 3 | 1 | 50.0 | No data | No data |
| Any cheese | 4 | 0 | 3 | 0 | 57.1 | 88.8 | 0.00306 |
| VEGETABLES |
| Tomatoes | 3 | 1 | 3 | 0 | 57.1 | 72.9 | 0.1967 |
| Any lettuce or leafy greens | 4 | 1 | 1 | 1 | 83.3 | 82.4 | 0.4011 |
| Iceberg | 0 | 2 | 3 | 2 | 40.0 | 41.1 | 0.3452 |
| Romaine | 2 | 1 | 3 | 1 | 50.0 | 48.8 | 0.312 |
| Spinach | 4 | 0 | 1 | 2 | 80.0 | 28.4 | 0.0233 |
| Sprouts | 2 | 1 | 4 | 0 | 42.9 | 12.9 | 0.0432 |
| Cucumbers | 3 | 2 | 2 | 0 | 71.4 | 62.9 | 0.2846 |
| Bell peppers | 4 | 0 | 2 | 1 | 66.7 | 63.6 | 0.3252 |
| Broccoli | 3 | 0 | 3 | 1 | 50.0 | 55.5 | 0.3013 |
| Cauliflower | 4 | 0 | 3 | 0 | 57.1 | 33.0 | 0.1248 |
| Mushrooms | 4 | 0 | 3 | 0 | 57.1 | 50.0 | 0.2734 |
| Zucchini | 3 | 1 | 3 | 0 | 57.1 | 21.1 | 0.0341 |
| FRUITS |
| Melons | 3 | 0 | 3 | 1 | 50.0 | 39.7 | 0.2744 |
| Apples | 4 | 1 | 2 | 0 | 71.4 | 72.3 | 0.3183 |
| Bananas | 4 | 2 | 1 | 0 | 85.7 | 76.7 | 0.3321 |
| Citrus fruits | 4 | 0 | 3 | 0 | 57.1 | 65.0 | 0.2679 |
| Any berries | 5 | 0 | 2 | 0 | 71.4 | 65.2 | 0.2997 |
| Strawberries | 2 | 2 | 2 | 1 | 66.7 | 49.6 | 0.2306 |
| Raspberries | 2 | 0 | 3 | 2 | 40.0 | 27.5 | 0.2882 |
| Blueberries | 3 | 2 | 2 | 0 | 71.4 | 31.3 | 0.0298 |
| Blackberries | 3 | 1 | 3 | 0 | 57.1 | 10.5 | 0.003 |
| Mangoes | 4 | 0 | 3 | 0 | 57.1 | 15.7 | 0.0127 |
| Pineapple | 1 | 1 | 5 | 0 | 28.6 | 30.0 | 0.3177 |
| NUTS & SEEDS |
| Peanuts  | 4 | 0 | 3 | 0 | 57.1 | 33.6 | 0.1306 |
| Almonds | 2 | 3 | 1 | 1 | 83.3 | 41.0 | 0.041 |
| Walnuts | 3 | 1 | 2 | 1 | 66.7 | 18.5 | 0.0117 |
| Hazelnuts (filberts) | 0 | 0 | 6 | 1 | 0.0 | 10.1 | 0.5279 |
| Cashews | 2 | 0 | 1 | 4 | 66.7 | 26.8 | 0.1577 |
| Pecans | 2 | 1 | 3 | 1 | 50.0 | 12.9 | 0.0284 |
| Pistachios | 0 | 0 | 4 | 3 | 0.0 | No data | No data |
| Other nuts | 1 | 0 | 3 | 3 | 25.0 | No data | No data |
| Peanut butter | 4 | 0 | 3 | 0 | 57.1 | 55.0 | 0.2918 |
| Other nut butters/pastes/spreads | 2 | 1 | 3 | 1 | 50.0 | 18.3 | 0.0668 |
| Sunflower seeds | 2 | 1 | 3 | 1 | 50.0 | 18.3 | 0.0668 |
| Sesame seeds | 2 | 2 | 2 | 1 | 66.7 | 17.1 | 0.0088 |
| Chia seeds | 3 | 2 | 2 | 0 | 71.4 | No data | No data |
| Flax seeds | 2 | 2 | 2 | 1 | 66.7 | No data | No data |
| Other seeds | 1 | 0 | 3 | 3 | 25.0 | No data | No data |
| OTHER |
| Cold cereals | 2 | 0 | 4 | 1 | 33.3 | 54.3 | 0.1929 |
| Hot cereals | 2 | 0 | 2 | 3 | 50.0 | 28.5 | 0.2491 |
| Vegetarian/Vegan | 2 | 0 | 3 | 2 | 40.0 | No data  | No data |
| Supplements | 3 | 0 | 4 | 0 | 42.9 | 28.2 | 0.2086 |

\*Based on the Foodbook Survey, 2015, Public Health Agency of Canada