Food Insecurity: Hunger Amongst Senior Citizens in Our Community

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HONR 499: Honors Capstone

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Abstract

The Honors Capstone course, Honors 499, has been taught approximately every other year for the past six years. The course focuses on ways to help fight food insecurity among people in our community. Each class chooses to address a specific aspect of food insecurity (see Table 1). The Spring 2020 class, in particular, chose to focus on food insecurity among senior citizens. After a decade of decline, hunger is a growing problem in specific sectors of America due to the increasing income gap between service sector jobs and skilled labor, higher birth rates among the lowest compared to the highest income groups and increasing proportion of the population age 55 and above. It can be seen in any community, including Billings, Montana. This paper examines the risk factors of senior food insecurity, the physical and economic consequences of inadequate food intake, and local and federal aid programs aimed at reducing food insecurity amongst older residents. It also includes our plans to fight food insecurity by partnering college students with local food security non-profits, spreading awareness, and sharing resources through advertising, healthy recipes, and a press conference.

Table 1: History of HONORS 499

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
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<tbody>
<tr>
<td>2014</td>
<td>Researched prevalence of food insecurity in YSC and created a detailed map of local and federal food insecurity interventions.</td>
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<tr>
<td>2016</td>
<td>Examined how to divert surplus food sold in convenience marts and restaurants from landfill to charitable food distribution agencies. Urged formation of a pantry for food insecure college students, which was launched 18 months later.</td>
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<tr>
<td>2018</td>
<td>Completed food waste studies in the MSUB dining hall, and in the food preparation area. Surveyed food insecurity amongst MSUB students.</td>
</tr>
<tr>
<td>2020</td>
<td>Examined the needs of seniors in the community and planned a press conference highlighting the issues and resources that can be shared to help those in need. Developed a volunteer service to aid in the construction of Senior Food Boxes distributed by Family Service.</td>
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Food Insecurity: Hunger Among Senior Citizens in Our Community

Throughout Billings, there have been many instances where people struggled with food insecurity. This is especially true of older adults who have limited incomes. Feeding America defines food insecurity as “a household’s inability to provide enough food for every person to live an active, healthy life” (2020). There are three ways to categorize the struggle with hunger, including: food insecurity, marginalized food insecurity, and very low food security. It is important to note that quality, culturally desirable food is part of food security. Within a community, food needs to be available, sustainable, healthy and adequate.

It is key that communities understand the needs of their most vulnerable members surrounding food insecurity, to create a better sense of well-being. Malnutrition and food insecurity are associated with higher mortality rates and poorer and more costly clinical outcomes. This is due to the prevalence of insecurity among people who are ill, low-income, or elderly. Food insecurity is identified through need and an income basis within communities. While local areas work to alleviate food insecurity, they must consider these four pillars: availability, access, utilization, and stability.
Pillars of food security (Mermel, 2020).

**History of Honors 499**

The Honors 499 Capstone class was formed in 2014 and its mission from the beginning was to focus on ending food insecurity in Yellowstone County. Since this was the first year the Honors 499 class was available, this class did a lot of the background work on food insecurity issues in Yellowstone county and nationally. This allowed not only our class, but every class that succeeded them to build off of the information that they provided. The next Honors 499 class was not held until 2016 where the class began to implement programs to help support the information that the previous class found. This helped shine a light on the food insecurities of college students and the need for a food pantry at the collegiate level. This was eventually created 18 months later. They also looked deeply into the waste that was created by grocery stores in Yellowstone county and identified ways to use that waste in the community. Finally, our direct predecessor, the 2018 class, focused on how much the MSU-Billings campus wastes on food each day. They conducted plate waste studies by weight and were able to give a detailed report to help the school minimize its food waste. Furthermore, they surveyed the MSU-Billings’
students on their food insecurities in order to help provide the school and the food pantry with a better picture of what percentage of students suffer from food insecurity.

**Risk Factors for senior food insecurity.**

Although the poverty rate for seniors has dropped from almost 30% in 1966 to about 9% in 2018, from the present research, it is apparent that food insecurity has remained an unwelcome presence among millions of American senior citizens. At 7.7% of the United States senior population facing hunger in 2017, there was little-to-no change in the rate since 2016 (Strayer, 2019). However, as the number of seniors continues to grow, organizations are working even harder to prevent the hunger rate from rising as well. One way to help forestall this problem is to consider the risk factors.

Feeding America conducted a study in 2017 which found that seniors living in southern states are more likely to be food insecure (Ziliak & Gundersen, 2019). The reason behind this is not entirely clear, and no attempts at an explanation were offered in the study. Owing to the strong association of food insecurity with poverty, the most likely explanation for the observed geographical pattern is that 8 of the 10 states with the highest poverty rate are in the southern United States (US News 2018 Census Dept. estimates). Putting things into a regional perspective, the study showed Louisiana ranking at the top of the list with 12.3% while Minnesota ranked the lowest with 2.8%; Montana sat near the lower end of the range at 5.2% (Ziliak & Gundersen, 2019).

The 2017 Feeding America study also made note of a new, more nuanced way to look at the food insecurity risk factors related to geography: “A new addition to this year’s report are estimates of food insecurity and VLFS [very low food secure] rates by large metropolitan areas. . For food insecurity, the highest rate, in the Memphis metro area, is almost six times higher than
the lowest rate, in Minneapolis-St. Paul” (Ziliak & Gundersen, 2019). The fact that Tennessee was not listed in the top ten states for senior food insecurity, yet Memphis its second largest city, ranked as a high senior food insecurity site illustrates the value of this new geographical data-analysis approach is providing accurate depictions of senior hunger rates across America.

*The association between geography and chronic disease/poverty/food insecurity is so strong, public health experts say, “Tell me your zip code and I can tell you your social determinants of health.”*

Maia Dickerson, Community Health Specialist, RiverStone Health

Beside geography and low income, there have been several other identified risk factors for senior food insecurity. These include having grandchildren present in the household, renting instead of owning a home, and lower education levels (Strayer, 2019; Aging, 2020). Considering all the demographic changes older adults may experience, they can also be more likely to go through income-related adjustments. Other demographic characteristics associated with a high risk of senior food insecurity include single marital status (widowed, divorced, or never married), being disabled, being between 60 and 64 years old, being female, and being a person of color (Ziliak & Gundersen, 2019). Another professional weighed in on the present research, stating, “Because of population size, the majority of food-insecure senior population is white, but African American and Hispanic seniors are disproportionately affected by food insecurity” (Strayer, 2019).

There is also a difference in senior food insecurity rates by gender: about 60% of food-insecure seniors are women (Ziliak & Gundersen, 2019). Liz Seegert, an editor for the
Association of Health Care Journalists, describes the struggle with poverty that many women face: “The Census Bureau’s Supplemental Poverty Measure (SPM) estimates that 16 percent of women age 65 and older live at or below the poverty line. In comparison, 12 percent of men over 65 live at or below the poverty line” (Seegert, 2019). The origins behind this disparity between men and women were recently studied in relation to structural inequities found in modern American society (see Table 2).

**Table 2: Why are women more likely to live in poverty than men?**

*Structural inequities as contributors.*

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Caregiving responsibilities</td>
<td>Women are often expected to take on the responsibility of primary caregiver in the home, and so are more likely to fluctuate in and out of the workforce.</td>
</tr>
<tr>
<td>Higher health care costs</td>
<td>Women have higher life expectancies and often have additional healthcare costs due to pregnancy and postpartum care.</td>
</tr>
<tr>
<td>Wage gap/low-wage work</td>
<td>Women tend to earn less per dollar than men earn, across the board. As commonly designated primary caregivers, they are more likely to seek out jobs with flexible hours, which are lower-paying positions.</td>
</tr>
<tr>
<td>Death of a spouse/divorce</td>
<td>Married women do better in terms of finances compared to single women. Because women usually live longer than men, the percentage of single women increase with age.</td>
</tr>
<tr>
<td>Discrimination</td>
<td>Beside the wage gap and caregiving duties, older women of color and LGBTQ older women face greater risk of poverty.</td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>Women are more likely to experience domestic violence than men, which is seen to contribute to poverty.</td>
</tr>
</tbody>
</table>

Table 2. Information from the Association of Health Care Journalists (Seegert, 2019).
Family Service Executive Director, Stacy Brown reported many seniors throughout Montana, especially women, who were formerly low-income earners or homemakers, try to subsist on as little as $400 per month in Social Security benefits, plus Medicare and a Commodity Supplemental Food Program box, more commonly known as a Senior Food Box or Senior Box Program. Even those individuals living in subsidized senior housing are cash strapped, as one-third of their income must be spent on their housing, leaving little for food and Medicare copays including those copays tied to prescription drugs. Stacy noted many low-income seniors living in subsidized housing are notably thin because they are forced to ration what foods they do get. She opined, “clearly more than just food interventions are needed to help these seniors live better retirements.”

**Incidence of Senior Food Insecurity in Montana**

According to the Montana Food Bank Network 2018 Client survey, ‘participation in the senior nutrition programs [is] surprisingly limited.’ The following expert from MFBN’s latest client survey provides additional information:

**SENIOR FOOD AND NUTRITION PROGRAMS**

- Our survey found participation in the senior nutrition programs surprisingly limited. Of the 75 households with at least one senior age 60+, just 29% reported receiving food through the federal Commodity Supplemental Food Program (CSFP, commonly called Senior Commodities).
- Participation in other senior food programs was even lower. Just 1% of senior households received food through Meals on Wheels, and 20% participated in meals at congregate feeding sites, such as senior centers.

Improving participation in the senior food programs is critical given the health risks associated with food insecurity among seniors, including lower cognitive functioning, an increased chance of hospitalization, poor mental health, a weakened immune system, and reduced physical activity.
The 30th edition of America’s Health Rankings Report, using 2019 data collected from people aged 60 years and older, found 14% of U.S. seniors and 11.0% of Montana seniors were food insecure. (United Health Foundation 2019).

Newly released data from the 2020 Community Health Assessment, conducted for Yellowstone County Health Alliance by an outside survey team during June 2019, found that 11.9% of seniors in Yellowstone County self-identified as food insecure.

**Consequences of Senior Food Insecurity**

Unfortunately, 5.5 million senior citizens, roughly one in twelve, fall into a category of food insecurity, which then begs the question, “What problems arise if you do not have enough food?” (Ziliak & Gundersen, 2019). Seniors experiencing food insecurity are not only going hungry, but also facing additional ramifications beyond the dinner table. Some of these consequences vary depending on the other demographics under which the senior falls. The two that are described in this section are physical and economic. These challenges can cause health issues such as ailments, development delays, and other mental and physical health issues. On the other hand, these same challenges can cause economic issues surrounding poverty, health plans for seniors, and tax payouts.

**Physical consequences**

Varying levels of food insecurity can lead to and/or exacerbate physical health problems. Older adults who are unable to get the correct nutritional food or that have a lack of food are more likely to have diseases such as diabetes, heart disease, and cancer. Additionally, people who are in this same category are much more likely to struggle with so-called paradoxical obesity. The paradox being that though they lack appropriate food, which society at large
typically associates with hunger and thinness, the food insecure are often heavy due to reliance on relatively inexpensive, highly processed foods like chips, noodles, sweets, and sweetened beverages to stave off physical hunger. Not only can obesity have further negative effects on one’s physical health as far as diseases go, but one can also begin to struggle from mental health issues such as depression and anxiety. One may also begin to struggle with asthma and high blood pressure (WebMD, 2019).

Children who suffer from food insecurity tend to get sick more often than their peers. They will have a longer recovery times from infectious diseases and injuries than those who have access to an adequate quantity of quality food and are at risk for early onset chronic health conditions like high blood pressure, heart disease, and lung diseases, that are typically associated with aging. In addition, they will also experience an increase in hospital visits and less time in school, which will begin to affect their education and cause developmental delays. Lifestyle-related diseases and developmental delays can follow the individuals throughout their lives. These factors, in turn, further the problems seniors experience with food insecurity since they enter their retirement years having lived a life of poverty shaped by early developmental and physical delays. In retirement they are still unable to get the food they need (WebMD, 2019).

Food insecurity is a physical and emotional problem that follows people throughout their life, so many of these issues seen in children can also be seen in seniors.

Feeding America states that children who go hungry are more likely to repeat a grade in elementary school, have disciplinary problems, and have developmental delays in language and fine motor skills. These development issues cause limited education leading issues later in life such as; being unable to get good-paying jobs, early onset of costly chronic health conditions, dependence on private or governmental social service programs, and perpetuating the cycle of
generational poverty during adulthood. One way to combat these consequences is by feeding children and their families. Feeding America stated that each hungry family needs approximately 35 extra meals a month and 84% of low-income households say that they buy the cheaper, more processed food instead of the costlier alternative healthy food.

**Economic consequences**

Studies show that lack of food can drive seniors to nursing facilities early (Mermel, 2020). This becomes an economic problem both for the person in need of nursing care, and for society at large, as nursing facilities, even when paid for at the reduced Medicaid rates, can be very costly. Food is a relatively inexpensive but highly effective way to address many common physical and emotional (hunger related stress and depression) illnesses (Mermel, 2020). The Meals on Wheels program has commented saying, “It costs less to provide seniors Meals on Wheels for an entire year than it costs to spend one day in the hospital or six days in the nursing home” (Resiman, 2016). Feeding programs for low-income seniors saves billions of dollars in health expenses currently paid for with taxpayer dollars. These savings allow the opportunity to use tax dollars in ways that are more beneficial to the seniors and to community efforts aimed at making sure that senior citizens are provided with enough food. Not only will better resource management ensure that senior citizens will be able to live the healthiest and most productive life they are able to, it would also be helping the economy by decreasing the amount of money spent on health plan expenses. Money that could be directed at other social needs like expanded early childhood education, affordable housing programs, etc. (Mermel, 2020. Considerations for Reauthorization of the Older Americans Act).

Not only is food insecurity a large problem in America, it prevails as an international problem as well. The United Nations Food and Agriculture Organization (FAO) identifies five
levels of food insecurity, ranging from the highest level, which is generally food secure, to the lowest level which is famine/humanitarian catastrophe. The FAO has also identified specific indicators to take into account when trying to determine which level of food security a specific country fall into. These include crude mortality rate, access to water, types of coping mechanisms, malnutrition, and diversity of diets. The same organization created a chart that showed what happens when someone cannot get out of the cycle of food insecurity. Poverty leads to food insecurity and lack of resources, which then leads to poor physical and cognitive development, which leads to low productivity, and then the cycle starts again with poverty.

Cycle of poverty and food insecurity (Mermel, 2020).

Existing Food Insecurity Programs

During the past 10-years, Montana Food Bank Network, a Feeding America partner, with over 240 partner agencies across the state, has worked to improve food security for all Montanans, through cross organizational effort known as a Collaborative Impact Model. Some but there are some tailored to the population of senior citizens. Such programs are offered at the local and federal level to help seniors obtain food. Not only do these programs help the elderly
obtain food, they also provide them with information to understand healthy food choices and preparation methods. Senior citizens are advised to eat certain foods to help maintain bone strength and heart health to increase their life expectancy and quality of life. For most seniors the DASH (Dietary Approaches to Stop Hypertension) designed as the best diet for all Americans by researchers supported by the National Institutes of Health, provides the right mix of foods and food groups to improve and maintain their health.

Low-income seniors, however, report two key problems with DASH. The most common is that the cost of produce and lean proteins that DASH is based on are hard to afford and if they have any other special diet needs, the required specialty foods are hard to find in the typical food pantry. For example, specialized diet requirements of people with kidney disease, insulin-dependent diabetes, dysphagia (trouble swallowing) or significant dental problems, are not easily met with the typical food pantry items. (Montana Food Bank Network 2018 Client Survey)

Local Programs

One program local to Billings that is tailored to senior citizens is Big Sky Senior Services. Big Sky Senior Services offers specialized sub-programs such as Senior Helping Hands which is meant to help low-income seniors with limited physical mobility or mental challenges. They offer health care services such as in-home nursing, care and homemaking/household management support. Other nonmedical services include safety checks, disaster planning, and socialization opportunities. Big Sky Senior Services’ Homemaking program helps seniors with light housekeeping, laundry, meal preparation, companion care, and grocery shopping (Armstrong, 2018) and in so doing, reduces food insecurity. Many seniors have limited mobility, so grocery shopping and meal preparation assistance are vital for their food security. Like the national non-profit program Meals on Wheels, Big Sky Senior Services can save taxpayer dollars
and improve quality of life for low-income seniors by providing in-home care including meal preparation.

Adult Resource Alliance of Yellowstone County (2020) is another local program that works toward providing “a comprehensive range of services that promote the overall well-being of younger, healthier and more active seniors and support and assist the older adult population to remain independent and live in their own homes as long as possible”. Their services consist of transportation, resource assistance (Medicare and food program enrollment assistance, long-term care planning, etc.), nutrition programs (Meals on Wheels and an onsite congregate dining program), and volunteering opportunities for seniors who wish to stay active in the community. Adult Resource Alliance focuses on healthy eating, as well as being physically and socially active to help improve the lives of seniors in the Billings community.

Many local programs provide food-related services to people of all ages. Billings Family Service, a 113-yearold non-profit social-safety-net provider does this and so much more for the elderly population. Billings Family Services’ (2020) mission is to “prevent hunger, homelessness, and poverty in Yellowstone County and surrounding areas through community involvement”. In an interview with Executive Staff member Stacy Brown, she informed the class of the necessity to make and individually deliver over 700 food boxes per month as a part of the federally funded Commodity Supplemental Food Program. The goal of this program is to supplement the food very-low-income seniors (130% of poverty line or below) purchase with surplus commodity foods, free of charge, to help them make nutritious meals. However, many seniors use solely these foods, which is not their intended use. These boxes are meant as a supplement to the seniors' other food resources, including items from the Family Service food pantry and other local or federal food resources.
There are a variety of other senior care programs offered in Yellowstone County that address various needs, like transportation, home healthcare and hygiene assistance. Examples of these programs are Volunteers of America – Northern Rockies, Homecare Services LLC, Synergy Home Care, and Visiting Angels. The goal of these programs is to support seniors so that they may stay in their homes. Synergy Home Care and Visiting Angels provide healthcare services and personal care, like assistance with bathing. Volunteers of America- Northern Rockies offers in-home services like housekeeping or transportation to services such as grocery shopping, medical appointments, etc. The library regularly sends its Book Mobile to senior living facilities and community centers like The Adult Resource Alliance.

**Federal Programs**

Though there are federally subsidized food security programs available to seniors, the Supplemental Nutrition Assistance Program or SNAP, which theoretically, should be the most helpful program, frequently falls far short of many senior citizens' actual needs. Many receive as little as $16 a month in SNAP benefits due to antiquated cost of living estimates and other inaccuracies programmed into the SNAP benefit calculation algorithm. Higher benefit allotments, easier access to and utilization of federal nutrition programs such as SNAP have the potential to help older adults afford more food as well as better understand food budgeting, the necessity of consuming healthy foods, and how to eat to minimize specific health conditions. Another advantage of SNAP is its flexibility. It can, “be used to purchase food at grocery stores, convenience stores, and some farmers' markets and co-op food programs” (Project Bread, n.d.). Benefits are received through a debit-like plastic card, making for simple tracking compared to coupons used previously. Compared to other states, “Overall, Montana has high participation in SNAP (87%), but 2 out of 3 likely eligible seniors don’t participate”
(Mermel, 2020, personal communication with Montana Food Bank Network data analysis staff). Though SNAP is helpful, it does not cover the full monthly cost of meals. SNAP provides an average of $1.31 per meal which covers almost half of the $3.02 needed for a standard meal according to the USDA (Mermel, 2020). The congress is currently considering doubling the SNAP allotment for low-income seniors as part of the next Covid-19 response bill.

**Teaching healthy diets**

Outside of the help from programs that provide food and/or shopping support, seniors are also receiving education regarding what constitutes a healthy diet. Creating a healthy diet starts with ample access to fruits and vegetables, regardless if they are fresh, frozen, or canned. To get the most nutrition out of limited food dollars, seniors should look for “more dark green vegetables such as leafy greens or broccoli, and orange vegetables such as carrots and sweet potatoes” which contain the most nutrients and are the smartest options (Ellis, 2019). Another healthy dietary practice is to consume low-fat or fat-free dairy found in milk, yogurt, or cheese. In addition to calcium, milk, some cheeses, and often times yogurt, contains high amounts of Vitamin D that helps to maintain strength in bones (Ellis, 2019). Other good dietary sources of Vitamin D are vitamin fortified cereals, fortified orange juice, egg yolk, and fatty fish (e.g.; salmon, sardines, and tuna). It is important to have healthy bones as we age to prevent osteomalacia (softening of the bones) and delay osteoporosis (brittle porous bones subject to fracturing).

Most people have a general understanding of their nutrition needs, even if they do not practice good nutrition. Except for noting that they can-not consume as many calories as they did during their younger years, most adults are unaware that their nutritional needs change as they age. The decline in metabolic rate decreases the efficiency of food digestion and nutrient
utilization, meaning that older people need to eat more nutritionally dense and low-calorie diets than they did in their younger years. Other suggestions for healthy eating for the elderly, while limiting intake, include varying the sources of protein efficient foods such as fish, beans, and peas while also eating “at least three ounces of whole-grain cereals, bread, crackers, rice or pasta” (Ellis, 2019). Consuming more plant proteins and whole grains helps control food costs while boosting nutritional intake.

Why is it important to eat healthy? Paturel (2008) offers some perspective on what good nutrition and a healthy diet can mean for one’s well-being. She offers insight surrounding the perspective of healthy intake: “Think of your body as an engine — a machine. The higher the octane of the fuel you put into it, the better it's going to run.” Putting it simply, human bodies age. As more maintenance and upkeep are needed the best way to stay healthy is to work from the inside out. Nutrition is the easiest way to accomplish this. A study of over 2,000 participants aged 70 to 79-years-olds discovered that, “Those who ate more ‘high fat’ foods were 40% more likely to die over 10 years than those who chose to eat ‘healthy foods’” (Association, 2019). Healthy foods, such as those mentioned above, are the best way to achieve a longer and healthier life.

**Honors Capstone Plan**

The 2020 Honors 499 class considered a variety of ways help local older adults live healthier lives by improving their food security. Based on an initial written communication from Stacy Brown, Executive Director of Family Services, and recognizing that the majority of community members are not aware that many seniors struggle with hunger, the students developed a multi-pronged approach to address senior food insecurity. This included a volunteer program partnering college students with seniors in need of food deliveries, a press conference to
increase community awareness of senior food insecurity, advertising to recruit food-delivery volunteers as well as seniors in need of this service, and potentially generate community connections and additional transportation options through increased community awareness.

Volunteer programs offer individuals the opportunity to give back to the community and to foster an investment in improving the community in which they live. The potential volunteer pool chosen for this project was college students, particularly athletes and honors students. Both the athletic department and honors program requires their members complete a certain number of volunteer hours each year. College students also benefit from this opportunity as well as the seniors, studies have shown that both parties benefit from the social interactions. Press conferences are a great way to not only share the resources available but also to grow awareness of our volunteer program. Another decision was to reach out and make connections with programs and businesses in the community. Our main focus became Walmart and Family Service, but we also considered other key community stakeholders.

**Volunteer Program Options**

One of the initial interventions the class explored was implementation of a volunteer program surrounding the issue of senior food insecurity in Billings, MT. After we learned that an annual food drive on campus, “Cans Around McMullen,” was created by a previous Honors 499 capstone class, and that it provides food for the on-campus student pantry as well as Family Service, class members became motivated to create an event or program that would have a similar lasting positive impact on the campus and community. Initially, we were interested in creating a grocery delivery system involving Montana State University Billings (MSUB) college
students in collaboration with Walmart. The concept was for seniors to order food online from Walmart that would be picked up and delivered to them by student volunteers. The students would also spend 15-20 minutes visiting with the seniors when they dropped off their food order. During an in-person discussion with Stacy Brown, it became apparent that the time needed to develop such a program, with all of the necessary security considerations in place, would exceed the time afforded by a one-semester course. Through further discussion, Stacy Brown revealed there was a greater opportunity for volunteers to pack supplemental food boxes for the seniors utilizing the Family Service run Senior Commodity Food Box Program.

The Honors 499 class members met with Peter Buchanan, Civic Engagement Coordinator at MSUB, and Shayla Brown, Experiential Education Coordinator at Rocky Mountain College (RMC), to investigate the potential involvement of student volunteers from each campus as well as the sustainability of this program. After further review, it was determined that MSUB could offer support through online volunteer sign-ups, while RMC was more interested in getting students interested in developing incentives for student involvement in the program. The possibility of partnering with student athletes was discussed, and we believe the MSUB athletics department would benefit from the opportunity because of student athletes’ need for volunteer hours. A trial run of the supplemental food box volunteer system was scheduled for March 17, but due to the COVID-19 pandemic, was canceled. Regardless, our plan was to experience the volunteer project ourselves before promoting it as a biweekly service program.

**Press Conference**

Class members decided to hold a press conference in early April to acquaint both the community at large and key community stakeholders with the issues of senior food insecurity in Yellowstone County. To maximize its impact, the press conference was to include a
food/monetary donation area, volunteer sign-up opportunities, sample advertising /PSA posters, and recipe cards featuring healthy, low-cost dishes.

Key stakeholders identified for this project were residents and business owners in Yellowstone County, executives with local firms, county and state representatives, education specialists, healthcare providers and executives, public health planners, non-profit and federal food program service providers, senior service program representatives, media, and those affected the most. Food insecurity affects many people throughout Montana due to the rural nature of the state and an economy largely dependent on agriculture lower-wage service sector jobs.

With all the opportunities the class created, we hoped to give back to the local programs, as well as those programs at the schools. The donation area was intended to provide food to the pantries located on both local colleges’ campuses as well as Family Services. These food donations would have been an ‘entrance fee’ for those participating in the press conference. Alongside the donations, recipe cards were meant to offer ideas for the food insecure to make creative and healthy meals from the supplemental boxes and other supplies they receive from the Family Services’ food pantry.

**Test Run**

A visit to Family Promise Client Choice Food Pantry was scheduled for March 17th so that HON 499 class members could see what foods were available and what additional foods or food types may be needed. That same evening, the class was going to conduct a test run of the Commodity Supplemental Food Program box assembly process to make sure it was an activity student volunteers could successfully complete in two-hours of volunteer time. However, the
site-visit was cancelled due to COVID-19. Aside from those offerings, volunteer sign-ups would allow for Family Services to contribute more needed boxes into the community by utilizing volunteer time rather than the staff of two who currently handle the program. These volunteers would work alongside Family Services representatives once every two weeks in filling boxes with the necessary food. After planning what we wanted to include in our press conference, and testing the food box creation volunteer system, creating and distributing advertisements was the next step of the process.

Advertisements & PSA

Holding a press conference and starting a volunteer service requires many initial steps, including the commitment to advertise. It was determined that posters, which can be reformatted into slides for electronic display boards, are the easiest way to spread the message because they can be hung around campuses and within the community (Appendix A, Fig. A-1 and A-3). Community areas on the MSUB campus have electronic monitors running slideshows emphasizing student program advertisements offering opportunities for engagement and community involvement. The monitors are good resources for targeting the advertisements to students, staff, and faculty (Appendix A, Fig. A-2 and A-4). Aside from our adventures of the press conference and volunteer service, educational posters will also be used throughout the advertising process to highlight food security resources and healthy eating/lifestyle suggestions. The resource posters can be hung around grocery stores, hospitals, medical clinics, physicians’ offices, senior centers, and places such as Family Services with correct verification and approval (Appendix A, Fig. A-5). Educational health posters containing information on how to be healthy can be shared with the community when placed in visible locations such as grocery stores, campuses, and food banks (Appendix A, Fig. A-6).
Connections and Transportation

Since the class decided to focus on food insecurity within the senior population, many of who no longer drive, the need for a grocery delivery system was explored. The class chose Walmart as the grocery provider because it features good prices on a wide variety of food, household, and cleaning products. Plus, it has an online ordering system and a delivery service. Two major problems with the existing Walmart system were quickly identified; Walmart charges a delivery fee, which is an obstacle for low-income seniors and a person must know how to use technology to complete the order. The very elderly and/or low-income seniors may have difficulty accessing and utilizing the required technology. A third problem was later identified. SNAP benefits cannot yet be used online, which would have hurt some of the low-income seniors the delivery program was targeting (there is talk of changing this due to the ongoing COVID-19 stay at home order for senior citizens).

The proposed workaround was to ask Walmart’s online grocery pickup manager, Dana Pierce, if a new service could be created that would allow seniors to list the items they need for grocery pickup, then college student volunteer could create orders online and pick up items ordered to bring to the senior. This partnership would allow students to gain volunteer hours, as well as benefit seniors needing food they might otherwise go without. This was something that Walmart thought was fairly feasible, but when we contacted Family Services to see if there was a need in the community, we learned that Adult Resource Alliance already has a delivery service in place and there may not be a need for another service similar. More data was needed to confirm this is the case. Since it was uncertain if an additional delivery service was necessary at this time, Stacy Brown thought it would be more beneficial to look into Walmart’s ability to donate needed foods. The team got in contact with the west end Walmart’s store manager, Scott
Nash, to discuss this possibility. Scott originally agreed to donate foods such as peanut butter and canned fruits, but with the COVID-19 outbreak, the supply of foods changed rapidly. Therefore, Walmart was unable to fill the donation request. Due to time restrictions and the lack of resources available at this time, we decided to leave the concepts of a student-led grocery shopping and delivery service, as well as Walmart donating specific food items each month for future classes to explore rather than focusing on providing these services.

Complications and Reflection

The week before our volunteer program was supposed to begin, the COVID-19 pandemic started closing things down. This made it difficult to not only meet as a class but also put volunteer services on hold. Because of COVID-19 many non-profit organizations, like Family Service, are accepting only cash donations. People who wish to donate their time or even food are being politely declined, to prevent the spread of the virus. With the detailed plans our class developed, it will be easy for the next honors capstone class to pick up where we left off. Even though we made strides, we became a bit disheartened with the reality that our plans would not come to fruition this semester.

Alyssa Dawes

Personally, I was frustrated that all of the time and effort we put into helping senior citizens in the community had to be put on hold. I was specifically excited to help volunteer at Family Services so we could really get a look into what type of insecurities elderly people are really facing. In addition, we would also be able to help start a volunteer service so others could also experience the same thing. Throughout this project, I was struggling internally because there was so much more, I wanted to do to help senior citizens who have food insecurities but with time restraints and restraints that we found in the projects themselves, it just wasn’t all able to be
done. So now to add that to the virus, causes an even larger frustration. I do appreciate that this virus has really opened up the eyes of individuals, the community, and legislation on how food insecure people really are and what would be done if people couldn’t access food during this time. I specifically found inspiring that the schools reacted so quickly to help get children food that they needed during the times that they could not go to school.

Overall, I have seen more articles and research being done that asks the question, “What happens when we cannot access food?” Finding information for food insecurity actually got quite a bit easier as we went further into the lockdown. Specifically, because we are seeing more food and supply shortages that researchers have begun to focus on. Personally, I have seen more articles about senior food insecurity now than I ever had before. I feel that our group has gotten a more detailed and in-depth look at what food insecurity looks like as a whole by taking this class during a pandemic. I was not only provided information about resources available to the public that I wasn’t aware of before, but I was also able to see what happens to those in a community during a pandemic when they are already struggling with food insecurity. It is eye-opening to see what happens at a deeper level in our community than we normally see. The biggest take-away for myself is that there are things I could do personally to help assist the organizations that are out there, as well as things I can do to help the community myself so that those who are food insecure can be better-taken care of, with or without a pandemic.

Taylor Kurkoski

Throughout the first half of the semester, there was a lot of work done surrounding the press conference and putting together the list of key stakeholders. With this work along with in-person meetings with key project partners and putting together the ideas surrounding a partnering program between the two colleges, the group was busy. Family Services set a date for the Honor
499 class members to visit, tour the facility, and voluntarily pack Senior Commodity Food Boxes. We are all deeply involved in the parts that we volunteered to complete when COVID-19 began to hit Montana. I was the first person in class affected by this due to being exposed to someone who tested positive at the spring Regents meeting. Being quarantined two weeks prior to the stay-home order made it more difficult to join the team on the work they were completing. Starting in mid-March, various community events began to be put on hold, and it was decided that the press conference and food drive were not achievable.

Thankfully, there is always research that can be done. As the team shifted gears, we discovered more information linking to issues around the nation with seniors and food insecurity. The hope is that with the progress this cohort made in the short months that we worked together, the next group will build off what we have done or follow through with our plans of a press conference, food drive, and volunteer sign-ups. Looking to the future, I hope that other groups can continue to make as much progress on campus and within the community. I am honestly so proud of all the things that this group has overcome and accomplished even with all the curves.

Kimber Mook

I was able to get all the advertisements made up but before we could go advertise our planned program COVID-19 started shutting things down and canceling our events. It made it difficult to get things done and put a pause on what we had planned. A lot of the research needed to make the advertisements and learn what interventions were needed to reduce senior hunger, were acquired by meeting with Stacy Brown from Family Services. She gave a lot of insight into what type of help was needed, challenges her organization faces putting together the Senior Commodity Food Boxes, and letting us know what services are available for food insecure college students as well as seniors. A lot of the other research done were articles supported by
scientific resources. Eating healthy and the reasons for eating healthy were found using this method. Overall, a lot of information can be found to help support senior citizens' food insecurities, the issue that needs to be addressed is getting the information out to those that need it.

*Sari Robertus*

The COVID-19 pandemic disrupted not only our ability to carry out a new MSUB/Family Services volunteer program and press release plans but also our ability to interact with the very same community members we looked forward to serving. When I enrolled in this course, I was excited to learn about and make an impact in the world of food insecurity. While it is disappointing to put plans on hold, I believe the current, tragic circumstances are also offering us a rare outlook on life and the opportunity to help others in even more unique ways. It is inspiring to see college students from all over the country stepping up and delivering meals to food-insecure people through programs such as Meals on Wheels; in areas where that is not an option, others are donating to local charities online to help their communities.

This class has made me more aware of the hardships that seniors face with food insecurity. Beyond researching the issue, I gained valuable knowledge just by talking with various leaders, such as Stacy Brown (Family Services) and Shayla Brown (Rocky Mountain College). I appreciate a hands-on method of learning, and I felt like this course gave us the freedom to pursue that. After learning that the annual “Cans Around McMullen” food drive was started by a previous HONR 499 class, I was particularly eager for our class to start one of our own with Family Services and RMC. Perhaps this program could be implemented once life resumes as normal. Overall, I am proud of the research and effort that was put forth in the face of the difficult online transition. It is eye-opening to learn about the food insecurity of seniors in
America, Montana, and in our Billings community. There are so many wonderful organizations in place to alleviate the issue, but there are a lot of opportunities for people to get involved at the community level. This is especially true since, as the world population continues to grow, food insecurity will likely become a more pressing concern.

*With COVID-19*

With our efforts placed on hold, food insecurity still needs to be addressed, especially during this national pandemic. The Yellowstone County Organizations, Agencies, and Departments (YCOAD) has been meeting to work on this issue. Stacy Brown and Dr. Virginia Mermel are two members that have shared their thoughts. Stacy Brown shared with the YCOAD that a big issue lies with the gathering of shelf-stable food for those with low income that need to self-isolate. This became harder when service sector jobs closed, laying off many low-income workers (Yellowstone County Organizations, Agencies and Departments, 2020). Senior citizens were left to find their own ways to the store by walking or taking the bus; hesitation to venture out due to their high-risk demographic resulted in seniors missing out on more affordable foods after others panic-bought groceries. With volunteer networks limiting what they can do, low-income seniors and low-income disabled people are unable to get the foods needed for their highly specialized diets (YCOAD, 2020).

Networks such as Family Services are doing their best to reach all the people they can in the safest possible ways. Family Service is providing its existing 700 participating families with food boxes each month in addition to its 700 Senior Commodity Food Boxes. And it has a drive-through food box distribution program that is currently providing about 100 TFAP (Temporarily Food Assistance Program—this is a federal program) food boxes to newly unemployed and underemployed persons (YCOAD, 2020). Another network that is doing its best to continue to
fight hunger is the Billings Public School Food Service. They are working to provide “freshly prepared breakfast and lunch 5-days a week and distributing shelf-stable weekend meals to several thousand students via 5 school-based curbside pickup sites, 22 mobile food delivery sites, special drop-offs at hotels where homeless families are temporarily housed and to homes where families have special needs and no way to get to food” (YCOAD, 2020).

Dr. Mermel shared that the YCOAD looked into where the food shortage is stemming form. They first noted that 50% of food is consumed in restaurants, with restaurants closing their doors many people are flooding grocery stores to stock up on ingredients to make their own meals. The problem here is the packing and distribution system cannot accommodate this problem easily. Acres of salad greens, much grown for restaurants, are being under plowed under because the farmers have no way to sell to restaurants causing a lack of funds to harvest them (YCOAD, 2020). Meat and poultry processing plants are also shutting down due to COVID-19 outbreaks, limiting the amount of meat products available (YCOAD, 2020). There are a lot of things to consider when it comes to food shortage and the YCOAD is working towards getting those foods to people of low-income. Until COVID-19 slows, the classes plans will be placed on hold but that does not mean nothing can be done. Many organizations are taking cash donations and YCOAD is working to find other ways to help.

Those students who enroll in the next Honors 499 class will need to consider the lessons learned about maintaining food security during the COVID-19 crisis when developing and implementing a class project.
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**Yellowstone County Organizations, Agencies, and Departments** AKA YCOAD

emergency response team. (2020, April)


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Appendix A

Figure A-1. Press release poster.

Figure A-2. Press release TV slide promotion.
Figure A-3. Volunteer program poster.

Figure A-4. Volunteer TV slide promotion.
Figure A-5. Food assistance poster.
Figure A-6. Healthy eating poster.