FOOD INSECURITY:
HUNGER AMONG SENIOR CITIZENS IN YELLOWSTONE VALLEY

Alyssa Dawes, Taylor Kurkoski, Kimber Mook, Sari Robertus
Honors Department, Montana State University-Billings
HONR 499: Honors Capstone
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HON 499 has been taught every-other-year for 6 years. It focuses on food insecurity interventions in Yellowstone County (YSC). Each class tackles a specific aspect of local food insecurity. 2014: Researched and mapped the scope of food insecurity and food security intervention programs in YSC. 2016: Explored repurposing surplus food from conveniences marts, initiated the annual Cans Around McMullen Campus-wide Food Drive, and urged formation of an on-campus pantry for food-insecure college students and low-income campus support staff, which opened in 2017. 2018: Conducted food waste studies in the campus kitchen, dining hall, and coffee shops. Completed student food insecurity survey. Proposed meal plan improvements.
• After reviewing community-wide gaps in food security, the Spring 2020 students developed a multipronged approach to reducing the 12% incidence of food insecurity amongst YSC senior citizens. The plan featured a publicity campaign, including a press conference for selected stakeholders to increase community awareness of the issue and kick-off a food drive; targeted poster advertisements seeking volunteers and food source infographics for at risk seniors; created a joint Rocky Mountain College /MSU, Billings student volunteer program to produce the 700-plus monthly Senior Commodity Food Boxes; applied for ongoing donations from Walmart, a local Feeding America corporate partner, of highly desirable foods like nut butters and extra canned fruits; solicited easy, affordable recipes featuring foods included in the Senior Commodity Food Boxes.
The Covid-19 pandemic derailed implementation of these plans. These plans are ready to be executed by a future class, pending any modifications suggested by food security lessons learned during the Covid-19 crisis.
<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
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<tbody>
<tr>
<td>2014</td>
<td>Mapped Food Insecurity &amp; Emergency Food Progs in YSC. Highlighted collaborative opportunities</td>
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<tr>
<td>2016</td>
<td>Studied repurposing surplus convenience mart &amp; restaurant food for Food Pantries. Promoted campus pantry for college students (estb 2017 by campus staff), launched annual Cans Around McMullen Food Drive, Created Breakfast Matters PSA video for MT No Kid Hungry</td>
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<tr>
<td>2018</td>
<td>Studied food waste in campus dining hall, kitchen &amp; coffee bars. Conducted student food insecurity survey. Suggested meal plan changes</td>
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<td>2020</td>
<td>Examined Senior Food Insecurity in YSC. Planned press conference, food drive, student volunteer group to create bi-monthly senior food boxes</td>
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FOOD INSECURITY vs HUNGER

- **Hunger** refers to a personal, physical sensation of discomfort.
- **Food Insecurity** refers to a lack of available financial resources for food at the household level; it can progress to hunger.

<table>
<thead>
<tr>
<th>Mild food insecurity</th>
<th>Moderate food insecurity</th>
<th>Severe food insecurity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worrying about ability to obtain food</td>
<td>Compromising quality and variety of food</td>
<td>Reducing quantities, skipping meals</td>
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Source: Scale from The Food and Agriculture Organisation of the United Nations³³
FOOD INSECURE MT SENIORS- 2019
FOOD INSECURE YSC SENIORS - 2019
RISK FACTORS for SENIOR FOOD INSECURITY

- Low Income
- Geography (rural or inner city)
- Limited Education
- Disability (learning and/or physical)
- Grandchildren in household
- Being a Renter
- Female Gender
- Marital Status (single)
- Race/Ethnicity (non-white)
STRUCUTRAL INEQUITIES $\Rightarrow$ WOMEN MORE LIKELY to be POOR & FOOD INSECURE

• Caregiving Responsibilities
• Wage Gap (20% < men w/ same job)
• Lower-wage Work- pink color jobs pay less, including teaching & nursing
• Moving in & out of workforce for caregiver roles
• Lower retirement savings and SS contributions
• Higher Lifetime Healthcare Costs (due to PG/ childbirth)
• Widowed or divorced
• Domestic Violence
“Low income senior citizens in Montana, may receive as little as $400 per month in Social Security and $16 per month in SNAP benefits.

Even those seniors in subsidized housing must spend 1/3 of their income on rent ($133.33). Other expenses including medication copays or over-the-counter medications, toiletries and additional food must be paid for out of the remaining $266.66.”

This predicament is especially common for MT women, who have worked very low pay jobs or have been homemakers most of their lives

These people are often notably lean because the ration food or go hungry.”
POVERTY OBESITY PARADOX:
Masks Food Insecurity

Poverty, Obesity, and Malnutrition:
sciedirect.com
ADVERSE IMPACT of FOOD INSECURITY on HEALTH MAY START YEARS BEFORE RETIREMENT
CHILDREN CONCEIVED IN POVERTY/FOOD INSECURITY CARRY LIFELONG NUTRITIONAL DEFICITS

THE CYCLE OF HUNGER

There are many ways hunger can trap people in a cycle of poverty and need. Here is how it can burden someone for a lifetime, and pass it on to the next generation.

**CHILDREN**
Poor nutrition stunts physical and mental development

**FAMILY**
Poor health during pregnancy leads to an undernourished child—*starting the cycle again*

**POOR NUTRITION**

**HEALTH PROBLEMS**

**UNHEALTHY PREGNANCIES**

**INABILITY TO WORK**

**YOUTH**
Chronic health problems keep kids out of school

**ADULTS**
A lack of education limits the ability to work
POVERTY FOOD INSECURITY CYCLE: Easy to Fall Into, Hard to Break
SOCIAL DETERMINANTS of HEALTH

<table>
<thead>
<tr>
<th>Economic Stability</th>
<th>Neighborhood and Physical Environment</th>
<th>Education</th>
<th>Food</th>
<th>Community and Social Context</th>
<th>Health Care System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Housing</td>
<td>Literacy</td>
<td>Hunger</td>
<td>Social integration</td>
<td>Health coverage</td>
</tr>
<tr>
<td>Income</td>
<td>Transportation</td>
<td>Language</td>
<td>Access to healthy options</td>
<td>Support systems</td>
<td>Provider availability</td>
</tr>
<tr>
<td>Expenses</td>
<td>Safety</td>
<td>Early childhood education</td>
<td></td>
<td>Community engagement</td>
<td>Provider linguistic and cultural competency</td>
</tr>
<tr>
<td>Debt</td>
<td>Parks</td>
<td>Vocational training</td>
<td></td>
<td>Discrimination</td>
<td>Quality of care</td>
</tr>
<tr>
<td>Medical bills</td>
<td>Playgrounds</td>
<td>Higher education</td>
<td></td>
<td>Stress</td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>Walkability</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Zip code / geography</td>
<td></td>
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</tbody>
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Health Outcomes:
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations
Several programs support seniors’ independence and bring dignity to older age.

BIG SKY SENIOR SERVICES: *Helping Hands* provides homecare and homemaking services including housekeeping, grocery shopping and meal preparation.

*Friends Volunteer Program*: daily phone calls and a weekly visit.

ADULT RESOURCE ALLIANCE: transportation, resource assistance (Medicare and food program enrollment assistance, long-term care planning, etc) nutrition programs (*Meals on Wheels*; onsite congregate dining), and volunteering opportunities for seniors who wish to stay active in the community.

VOLUNTEERS OF AMERICA: shopping, cleaning, gardening, transportation.

SYNERGY HOME CARE, VISITING ANGELS provide in-home hygiene and healthcare assistance.
Family Service, a 113-year-old social service non-profit program in Billings, has evolved into the Feeding America partner. In this role, it administers federal programs like SNAP and Commodity Food Boxes.

**SNAP** (Supplemental Nutrition Assistance Program- formerly known as Food Stamps)
Only 42% of eligible seniors use this program, perhaps because the benefit is often low, just $16/month for many seniors, and the challenges of signing up and maintaining eligibility can be daunting.
SENIOR COMMODITY FOOD PROGRAM: (AKA: the Senior Box Program or Senior Commodity Program) Provides a monthly box of commodity foods to seniors living at or below the poverty line (roughly $15,300/year for a single individual). The intent of the program is to provide nutritious foods to supplement seniors’ diets.

Too often, it is the main source of food for low-income seniors.
• The Meals on Wheels Program states: “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).

• Home delivery and/or congregate feeding programs for low-income seniors can save billions of dollars in health expenses currently paid for with taxpayer dollars.

• These programs improve seniors’ health and wellbeing leading to satisfying ‘golden’ years.
Explored initiating a student volunteer food delivery & visiting program with Walmart

Rejected Idea due to lack of:
- Time to recruit and vet student delivery drivers
- Unfamiliarity of low-income seniors with online food ordering process
- Ability to use SNAP EBT cards for online food purchases

ALYSSA:
ALYSSA:

Also ID’ed existing free food delivery service provided by Big Sky Senior Services.

The amount of time left in semester didn’t allow for a survey to determine if another food delivery program is needed.
Walmart Food Donation Inquiry

Explored possibility of Walmart- a Feeding America Corporate Partner- donating nut butter and canned fruit to the Senior Box Program

Walmart was unable to assist because:

Covid-19 Virus shopping sprees emptied stores of these and other shelf-stable products
KIMBER

Explored holding a game night in the college pool to incentivize students to volunteer for the Senior Food project.

Used CANVA platform to create:
- Recruiting posters advertising volunteer opportunity to students
- PSA informational posters

Planned to design recipe cards using Canva with content provided by retired County Extension Agent Bernice Mason.
KIMBER

- Explored holding a game night in the college pool to incentivize students to volunteer for the Senior Food project.
- Used CANVA platform to create:
  - Recruiting posters advertising volunteer opportunity to students
  - PSA informational posters

Learn More About Ending Hunger
APRIL 3rd at 3:00
@First Interstate Bank Operations Center

Press release TV/Monitor slide Prom
KIMBER

Volunteer TV slide promotion.

Volunteer program poster.
Need Help with Food? Check these out

1. Family Services
   (406) 259-2269
   billingsfamilyservice.org
   3927 1st Ave S
   Billings, MT 59101

2. SNAP
   800-332-2272
   apply.mt.gov
   111 N 31st St
   Billings, MT 59101

3. Adult Resource Alliance
   (406) 259-9666
   allianceyc.org
   1505 Avenue B
   Billings, MT 59102

4. Big Sky Senior Services
   (406) 250-3111
   bigskyseniorservices.org
   935 Lake Elmo Dr Suite B
   Billings, MT 59105

STAY HEALTHY
Developed concept of Press Conference

Outlined press conference agenda

Identified community stakeholders to invite

Explored venues for press event
TAYLOR

- Served as class note taker
- Created GOST for project
Investigated how to recruit college students as volunteers for production of Senior Commodity Food Boxes

Organized meeting for HON 499 students with Peter Buchanan, Civic Engagement Coordinator at MSUB & Shayla Fox Brown, Experiential Education Coordinator at Rocky Mountain College (RMC), re: creation of cross-campus student volunteer force
MSUB could offer online volunteer sign-up tool, while RMC would develop incentives for student involvement.

Students from each college would volunteer 1 night per month.
COVID-19 FOOD CHALLENGES and LESSONS

• Unanticipated shortages of affordable shelf-stable foods. due to people stocking up for confinement, rapidly strained the charitable food system, which relies on donations of these products.

• Finding food for seniors’ specialized diets, always a challenge via food donations, became especially difficult during the initial Covid-19 period.

• Unanticipated closures of meat and poultry processing plants due to worker illness will lead to some shortages of these products down the line and cut off surplus used for food donations.

• 50% of food grown in US is for restaurant and cafeteria use. It is not easy to repackage this food into family- or single- sized servings and reroute it to markets, thus food is being wasted rather than used.
• The Senior Food Security Intervention Plan developed by the HON 499 2020 class is complete and ready to be implemented by students in the future. The plan should first be reviewed and adjusted to accommodate any applicable lessons from the COVID-19 experience.