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Shopping, Eating, and Dietary Behaviors of Maine Adults as a Result of COVID-19:

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A Focus on Older Adults

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Introduction

Most American adults do not meet current dietary recommendations for fruits and vegetables.¹ Conversely, most adults meet recommendations for protein foods, with higher amounts of protein coming from meat, poultry, and cured or processed meats.¹ The 2020-2025 Dietary Guidelines for Americans provides recommendations for food groups based on sex, age and physical activity level.² Daily recommendations for fruits range from 1 ½ to 2 ½ cups and 2 to 4 cups of vegetables per day. Protein recommendations range between 5 to 7 ounces per day from a combination of animal and plant foods such as poultry, nuts, seeds and legumes, and seafood, while limiting higher-fat red meats and processed meats.² Stressful situations, such as a global pandemic, can impact eating behaviors. Stress and emotional eating have the potential to increase consumption of empty-calorie foods and reduce consumption of lower-calorie, nutrient-rich foods.³ In addition to the stress of COVID-19, older adult populations over the age of 60 years may be at greater risk for food insecurity and resulting poor diet quality.⁴ Dietary quality of Maine's older adult population is of concern as 20.6% of the 2018 adult population was age 65 years and older.⁵

Through a survey conducted in 2020, we investigated changes in eating, shopping, and dietary behaviors of Maine adults by age group before COVID-19 (prior to March 2020) and during COVID-19 (August/September 2020). This investigation was part of a larger investigation to assess food security, access, and food systems during COVID-19.⁶ The survey was conducted in Maine between August and September 2020 and illustrates responses from a sample of 618 Maine adults aged 18 years and older.

Key Findings

1. Respondents who were 55 years and older were less likely to reduce fruit, vegetable and seafood consumption during COVID-19.
2. Respondents in all age groups reported eating less processed and red meat during COVID-19 compared to before COVID-19.
3. Respondents who were over 55 years of age were less likely to turn to food to cope with the stress of COVID-19.
4. Respondents who were 55 years and older were more likely than respondents in other age groups to purchase local foods both prior to COVID-19 and since the onset of the pandemic. However, self-reported purchased local foods decreased since COVID-19 began.
5. Respondents across all age groups that were more likely to choose vegetarian meals prior to the pandemic were more likely to continue to do so since the pandemic started.

Changes in Diet

Survey respondents were asked to self-report their current consumption of fruits, vegetables, processed and red meats and seafood. Respondents in all age groups reported eating less processed and red meat during COVID-19. While most respondents 55 years and older reported no change in eating processed and red meat during COVID-19, the respondents in this age group were less likely to report eating processed meats before COVID-19.

Fruit, vegetable and seafood consumption decreased less during COVID-19 among respondents 55 years and older (16.6% of respondents) compared to the two younger age groups (32.8% for 35–54-year-old and 32.3% for 18–34-year-old respondents). The older age group (55+ years and older) were also more likely to eat fruits and vegetables during COVID-19 compared to the 18 to 34-year-old and 35 to 54-year-old groups. Figure 1 shows reported changes in fruits and vegetables, processed and red meats, and seafood.

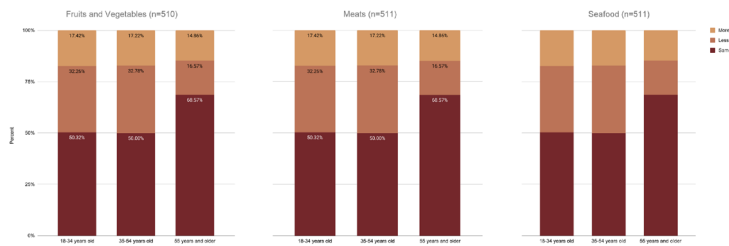


Figure 1. Changes in fruits and vegetables, processed and red meats, and seafood consumption in the past month compared to before COVID-19.

In all age groups, the median self-reported vegetable and fruit consumption was 1 to 2 cups per day in each food category. The median fruit consumption reported is closer to daily fruit recommendations from the current Dietary Guidelines for Americans, while median vegetable consumption is lower than recommendations for all age groups.²

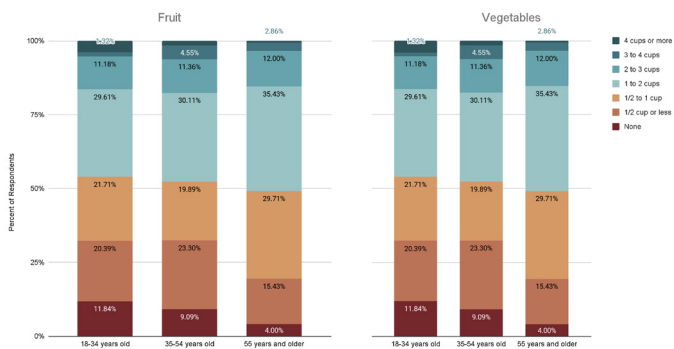


Figure 2. Cups of fruits and vegetables consumed each day.

Eating and Shopping Behaviors

Researchers have found that stress and negative emotions (such as anxiety and sadness) can increase unhealthy eating behaviors.³ To assess Maine residents' eating behaviors, survey respondents were asked to rate their level of agreement to statements about eating during COVID-19 when they were feeling emotional, eating when lonely and eating when feeling stressed.

Respondents over 55 years of age less frequently turned to food to cope with stressful situations related to COVID-19 than those in younger age groups. However, there were still a large proportion of respondents in all age groups who *agreed* and *strongly agreed* to using eating to cope with negative emotions, loneliness, or stress.

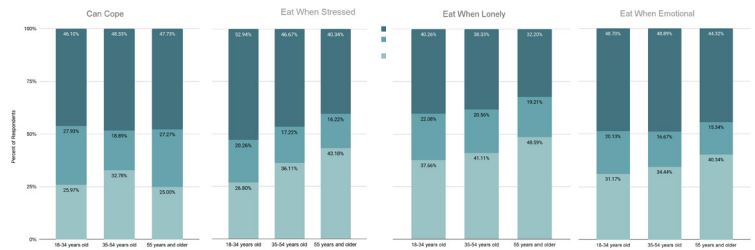


Figure 3. Coping with stressful situations through food during COVID-19.

Shopping Behaviors and Food Choice

Shopping behaviors and food choices were assessed to identify the consistency with purchasing local foods, sustainably raised meats, and dietary-pattern choice before and during COVID-19. At the start of COVID-19, local resources were developed in Maine to support local farmers and food producers to promote their products directly to consumers when commercial or wholesale outlets were closed. The foods distributed through these networks tended to be produce, seafood, and meats. Local food availability in the form of fruits and vegetables are also commonly found in local food pantries and might not be labeled or promoted as such.

Even with increased networks for local food producers in Maine, respondents over 55 years reported choosing local products less often since COVID-19, but the same age group was also more likely to choose local products when compared to the other two age groups both before and since COVID-19. More respondents aged 18 to 34 reported never choosing local products since COVID-19 than before COVID-19 when compared to respondents in the other two age groups (Figure 4). While the older age group was more likely to choose local food products, respondents in the age group of 18 to 34 were more likely than other age groups to report choosing animal products with sustainability labels, both before and since COVID-19.

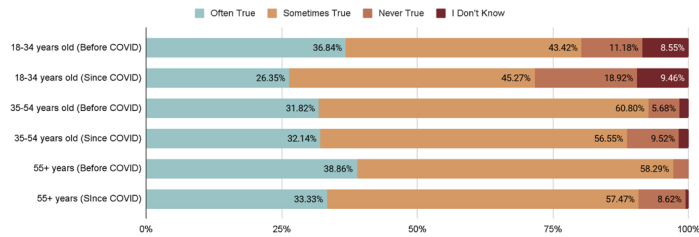


Figure 4. Tendency to choose local foods prior to COVID-19 compared to since COVID-19.

The proportion of 18-34-year-olds who reported often choosing vegetarian over meat-based meals increased since the onset of the pandemic. However, the proportion who reported that they never chose vegetarian over meat-based options did not noticeably change. Respondents who were likely to sometimes choose vegetarian meals before COVID-19 were more likely to often choose vegetarian meals during COVID-19.

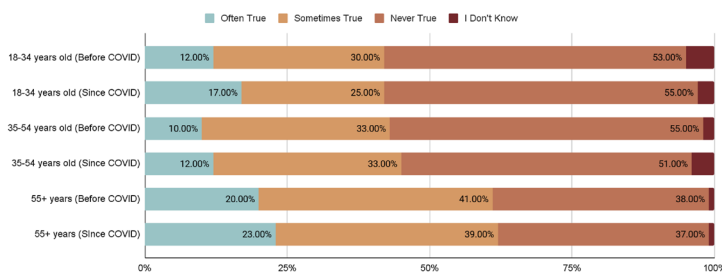


Figure 5. Preference to choose vegetarian meals over meat-based meals prior to COVID-19 compared to since COVID-19.

Conclusions

As the oldest state in the nation, one-fifth of Maine's adult population⁵ may be at risk of poor diet quality. Surprisingly, the eating, shopping, and dietary behaviors of Maine survey respondents over the age of 55 years did not change in a negative manner as was suspected. Continued assessment of diet quality for at-risk populations is important to identify opportunities to intervene in order to improve and maintain the health of Maine's adult population.

Acknowledgements

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About NFACT

This research is conducted as part of the National Food Access and COVID Research Team (NFACT). NFACT is a national collaboration of researchers committed to rigorous, comparative, and timely food access research during the time of COVID-19. We do this through collaborative, open access research that prioritizes communication to key decision-makers while building our scientific understanding of food system behaviors and policies. To learn more visit www.nfactresearch.org.

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