



Changes in consumer preferences for seafood products due to the COVID-19 pandemic: Summary of New York City results

Authored by Charles Clark, Research Specialist Virginia Seafood AREC, Virginia Tech; Jonathan van Senten, Assistant Professor and Extension Specialist Virginia Seafood AREC, Department of Agricultural and Applied Economics, Center for Coastal Studies Affiliate Faculty, Virginia Tech; Michael Ciaramella, Seafood Safety and Technology Specialist New York Sea Grant, Cornell Cooperative Extension; Matt Parker, Aquaculture Business Specialist Maryland Sea Grant Extension, University of Maryland.

Summary

The health crisis created by the COVID-19 pandemic led to the shutdown of restaurants and nonessential businesses throughout the United States. With the majority (68%) of seafood products purchased at food service establishments, this has resulted in an unparalleled shock to U.S. fisheries and aquaculture producers (NOAA 2018). Furthermore, the USDA Census of Aquaculture reported that for shellfish farms only 4% of their first point of sales were direct to consumers (USDA 2019). As farms and businesses attempt to respond to the loss of revenue from traditional marketing channels and establish direct to consumer channels, a key question concerned the extent of changes in consumer demand and preferences for seafood products. Thus, the goal of this project was to gather market information on changes in how, when, and where consumers purchase seafood in response to the COVID-19 pandemic.

This report summarizes the results of information specific to responses related to seafood purchases at households within the New York City borough of Manhattan. Survey respondents were asked about seafood purchases prior to (2019) and during (2020) the COVID-19 pandemic.

There were 375 usable responses from participants living within Manhattan, NY. Respondent location was self-reported via zip code. The greatest percentages of respondents had completed a 4-year college degree (29%) or Advanced college degree (24%) (Figure 1). The greatest percentage of respondents self-reported as “Black or African American” (41.6%), followed by 22.9% who self-reported as “White”, 18.4% “Hispanic”, and 9.1% “Asian”. Female and male genders accounted for 60.5% and 39.2% of respondents, respectively. Fifty-nine percent of respondents reported being 35 years old or younger. This was followed by 16% who reported being 36-45 years old, 10% being 66 years old or older, 8% being 46-55 years old, and 7% being 56-65 years old. Figure 2 illustrates the proportion of respondents by income prior to and during the COVID-19 pandemic. In general, the greatest percentages of respondents had household incomes of \$50,000 to \$99,999 (30% in 2019, 29% in 2020).

When asked about frequency of seafood consumption during the pandemic (2020), the largest percentages of respondents (46%) indicated they ate about the same as they did in 2019 (Figure 3). This was followed by 35% who indicated they ate seafood less frequently in 2020, and 19% who indicated they ate seafood more frequently in 2020.

Between 2019 and 2020, consumers reported increased consumption of seafood products prepared at home, takeout from restaurants, and delivered to home as a prepared meal (Table 1). Conversely, consumers reported decreased consumption of seafood products at restaurants. The percentage of respondents who did not consume seafood products increased between 2019 and 2020.

Regarding method of preparation, respondents indicated they preferred grilled seafood products when purchasing as takeout from a restaurant or delivered to home as a prepared meal. This was observed both prior to (2019) and during the pandemic (2020) (Figures 4 & 5). The next most preferred method of preparation was fried. Interestingly, preferred method of preparation changed when asked about seafood products purchased at a restaurant (Figures 6 & 7). Grilled finfish was still preferred in 2019 and 2020, however, respondents indicated they preferred baked mollusks when purchasing at a restaurant. Similarly, respondents indicated they preferred broiled crustaceans when purchasing at a restaurant in 2019 and 2020. In 2019, the majority of respondents indicated they preferred broiled or raw seaweed products purchased at a restaurant. In 2020, the preferred method of preparation of seaweed products purchased at a restaurant was baked.

Survey participants were asked about the amount spent per shopping trip on seafood products for home preparation in 2019 and 2020 (Figure 8). The majority of respondents in both 2019 (64%) and 2020 (73%) indicated they purchased less than \$30 worth of seafood products per shopping trip. Similarly, survey participants were asked about the quantity (in pounds) purchased per shopping trip or home preparation (Figure 9). The majority of participants in both 2019 (77%) and 2020 (82%) indicated they purchased 10 pounds or less of seafood products per shopping trip. In 2019, prior to the COVID-19 pandemic, the majority of respondents (59%) indicated they ate more seafood during a particular season of the year (Figure 10). Forty-eight percent indicated summer was the preferred season. In 2020, during the pandemic, 45% indicated they ate more seafood during a particular season, indicating a shift away from seasonal consumption with the majority of

respondents in 2020 (55%) not eating more seafood during a particular season of the year.

Regarding advertisement methods, the greatest percentages of respondents indicated methods such as text message (26%), Facebook posting (32%), Twitter posting (32%), and QR code (26%) were not important at all (Table 2). The greatest percentages of respondents found methods such as E-mail (26%), In-store cards/tabletops (29%), In-store notifications/texts (24%), and seafood counter clerk or waitstaff (30%) to be moderately important. Word of mouth was found to be the most important method of advertisement, as the largest percentage of participants (30%) indicated this to be a very important method.

Respondents were asked to identify establishments from which they purchased seafood products for home preparation in 2019 and 2020 (Figures 11 & 12). Forty-three percent of respondents in 2019 and 38% in 2020 indicated they purchased more than 50% of seafood products for home preparation at supermarkets or grocery stores. This was followed by 23% in 2019 and 38% in 2020 that purchased 11% to 50%, and 33% in both 2019 and 2020 that purchased 10% or less of seafood products for home preparation at supermarkets or grocery stores. Purchases from all other establishments were uncommon in 2019 and 2020, with 80% or more of respondents in 2019 and 74% or more of respondents in 2020 indicating 10% or less of seafood purchases being made at all other establishments (seafood market, farmer's market, food hub, online seafood distributor or producer, etc.). Overall, supermarkets or grocery stores were the most common establishment from which to purchase of seafood products for home consumption in 2019 and 2020. Regarding preferred establishments from which purchase seafood products for home preparation, minimal change was observed between 2019 and 2020 (pre-pandemic vs. pandemic).

References

National Marine Fisheries Service. 2018. Fisheries of the United States, 2017. U.S. Department of Commerce, NOAA Current Fishery Statistics No. 2017 Available at:

<https://www.fisheries.noaa.gov/resource/document/fisheries-united-states-2017-report>

United States Department of Agriculture. 2019. 2018 Census of Aquaculture. Volume 3. Special Studies. Part 2. AC-17-SS-2. Available at: https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/Aquaculture/Aqua.pdf

Visit Virginia Cooperative Extension: ext.vt.edu

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg.

2022

AAEC-312NP
VSG-23-6



Virginia Cooperative Extension

Virginia Tech • Virginia State University

www.ext.vt.edu

Appendix

Changes in consumer preferences for seafood products due to the COVID-19 pandemic:

Summary of New York City results

Charles Clark, Virginia Tech

Jonathan van Senten, Virginia Tech

Michael Ciaramella, Cornell Cooperative Extension

Matt Parker, Maryland Sea Grant Extension

Figure 1. Level of education completed by survey respondents.....	3
Figure 2. Household income of survey respondents in 2019 and 2020	4
Figure 3. Frequency of seafood consumption of seafood products in 2020, with respect to seafood consumption in 2019	4
Table 1. Methods of consumption of seafood products reported in 2019 and 2020	5
Figure 4. Preferred method of preparation of seafood products purchased as takeout from a restaurant or delivered to home as a prepared meal reported in 2019.....	5
Figure 5. Preferred method of preparation of seafood products purchased as takeout from a restaurant or delivered to home as a prepared meal reported in 2020.....	6
Figure 6. Preferred method of preparation of seafood products purchased at a restaurant reported in 2019	7
Figure 7. Preferred method of preparation of seafood products purchased at a restaurant reported in 2020	8
Figure 8. Amounts spent per shopping trip on seafood products for home preparation reported in 2019 and 2020.....	9
Figure 9. Quantities of seafood products purchased per shopping trip for home preparation reported in 2019 and 2020.....	9
Figure 10. Percentage of respondents who consumed more seafood during a particular season in 2019, prior to the pandemic, and 2020, during the pandemic	10
Table 2. Ranked importance of options to receive advertising information about seafood, according to survey responses in 2020.....	Error! Bookmark not defined.
Figure 11. Percent of seafood products purchased at varying establishments in 2019.....	Error! Bookmark not defined.
Figure 12. Percent of seafood products purchased at varying establishments in 2020.....	Error! Bookmark not defined.

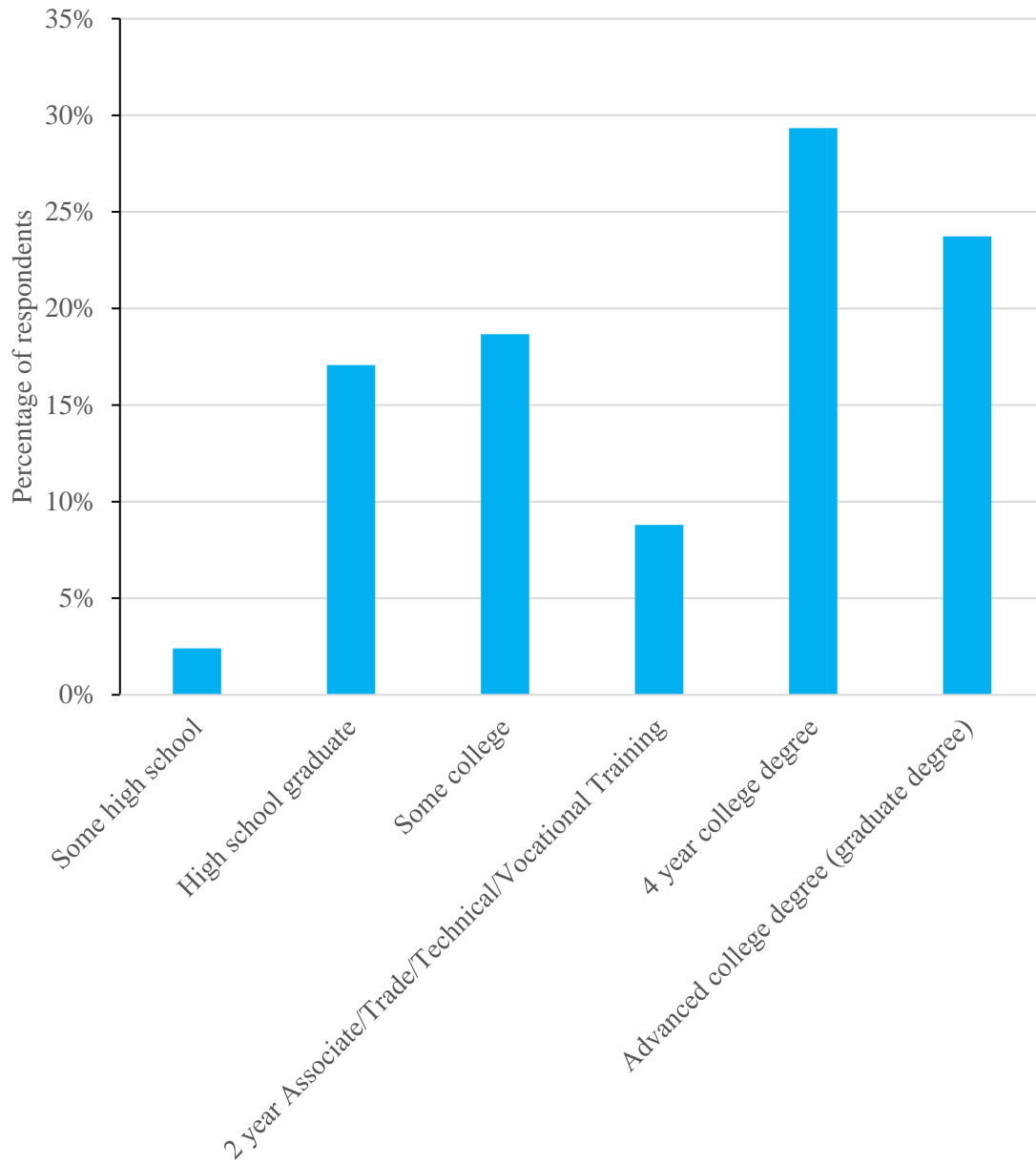


Figure 1. Level of education completed by survey respondents.

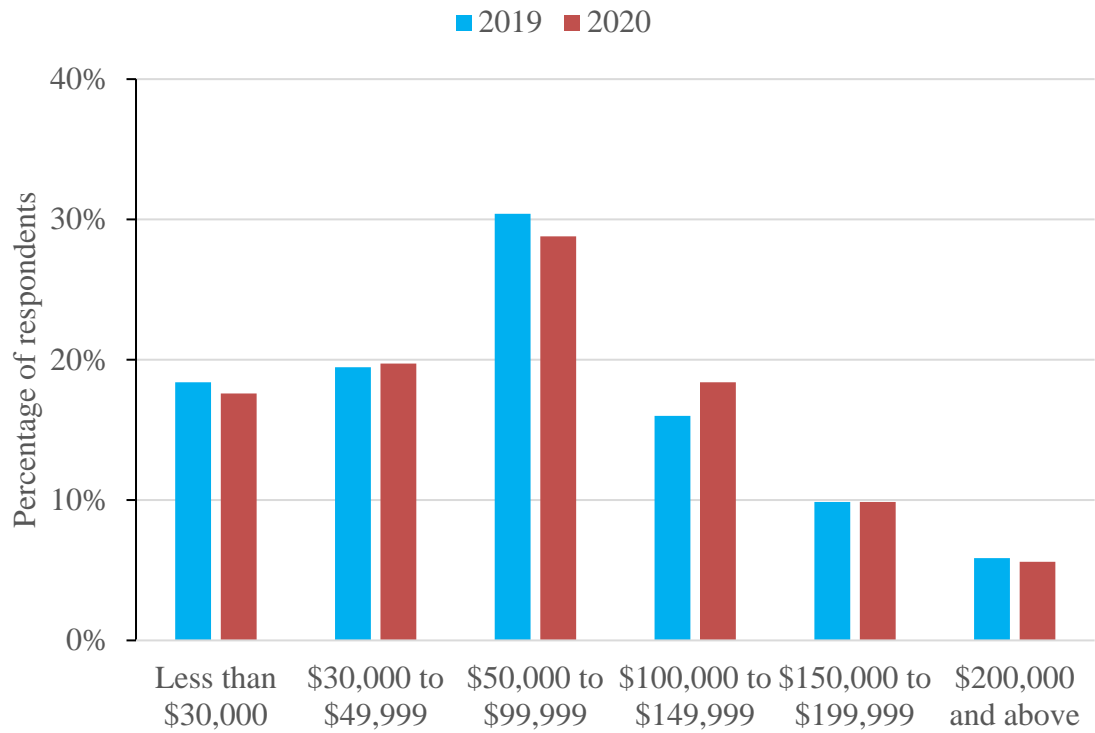


Figure 2. Household income of survey respondents in 2019 and 2020.

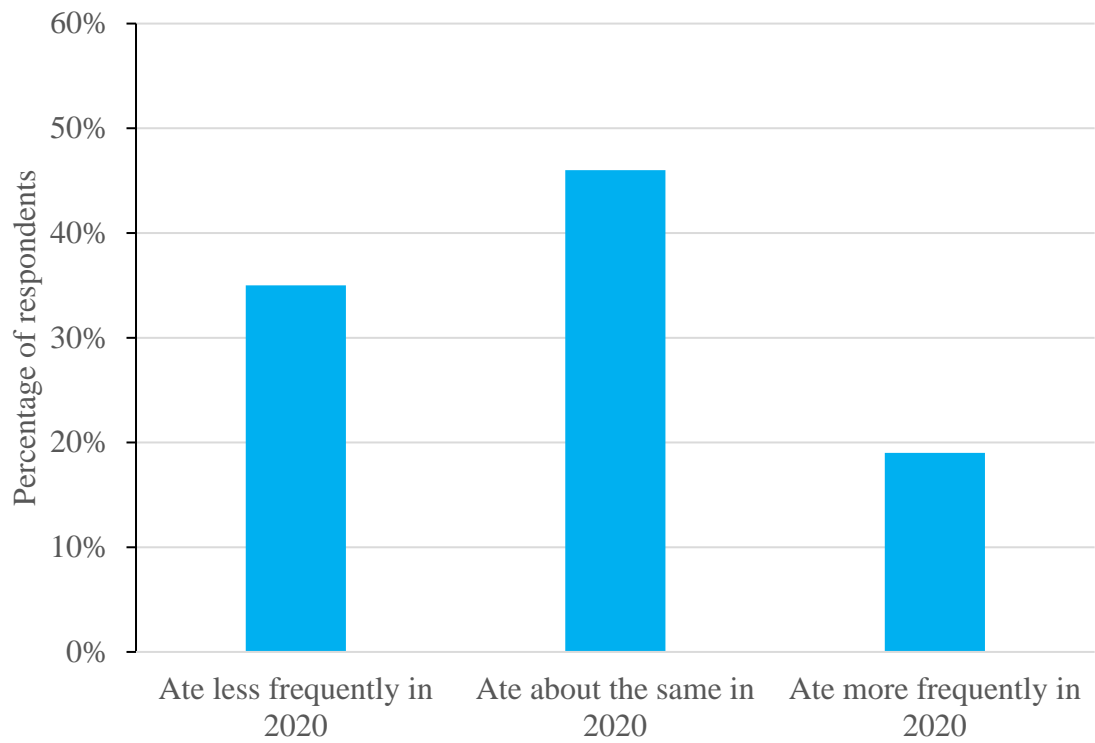


Figure 3. Frequency of seafood consumption of seafood products in 2020, with respect to seafood consumption in 2019.

Table 1. Methods of consumption of seafood products reported in 2019 and 2020.

Methods of consumption	2019	2020
Prepared at home	32.3%	34.7%
Takeout from a restaurant	19.7%	20.0%
Delivered to home as a prepared meal	11.4%	15.7%
At a restaurant	20.9%	11.7%
Other	2.0%	1.7%
Did not consume	13.7%	16.2%

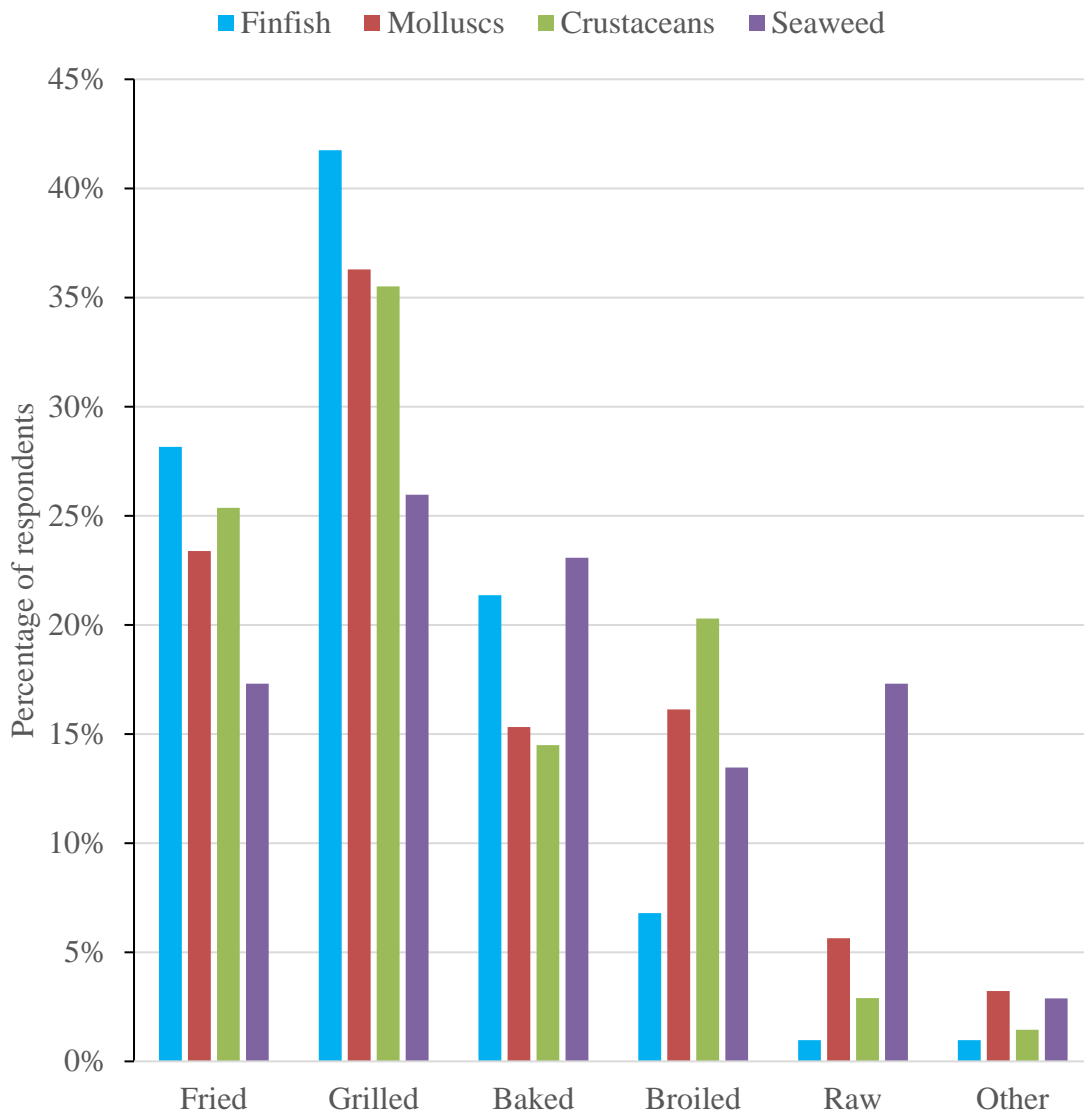


Figure 4. Preferred method of preparation of seafood products purchased as takeout from a restaurant or delivered to home as a prepared meal reported in 2019.

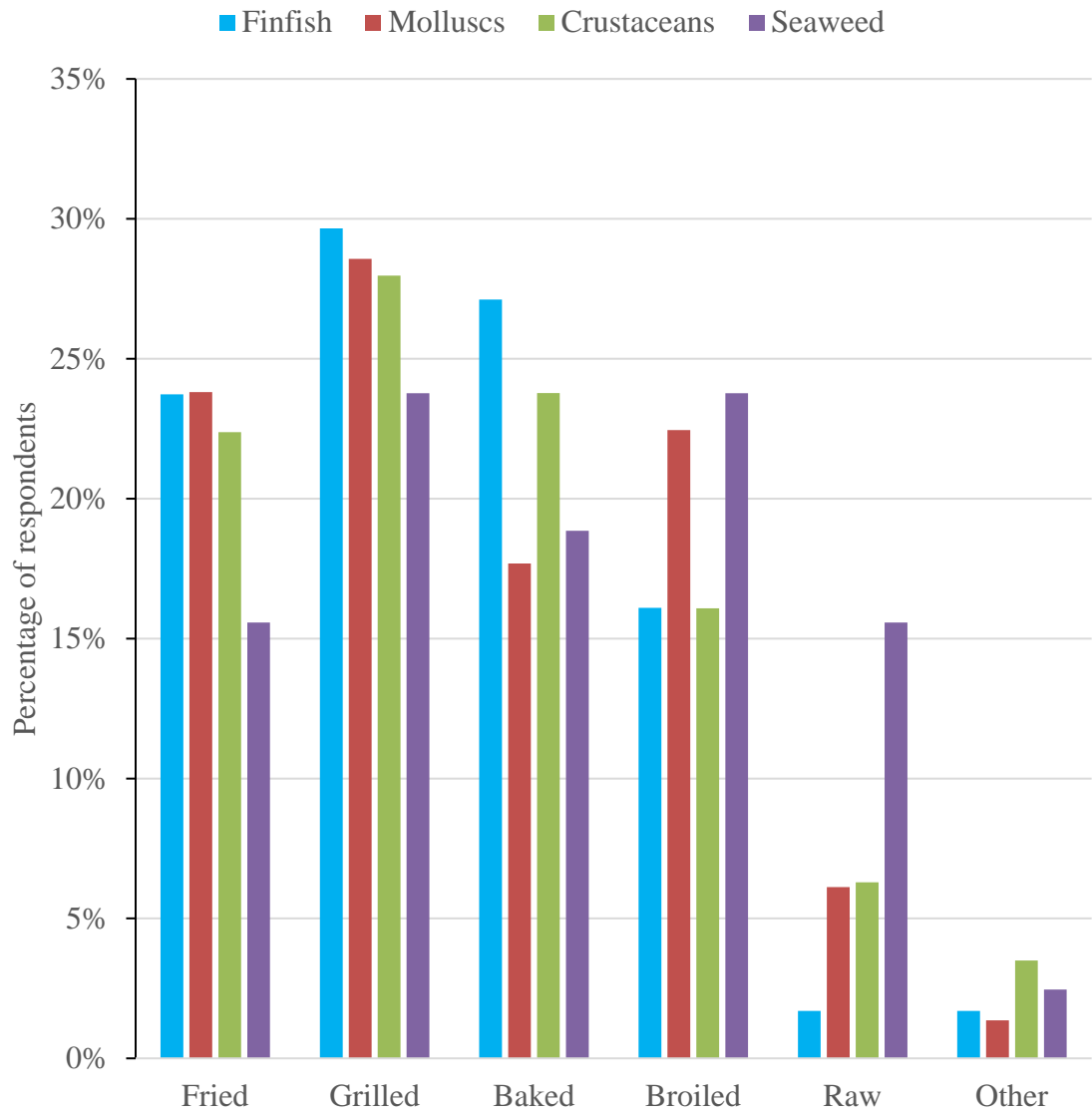


Figure 5. Preferred method of preparation of seafood products purchased as takeout from a restaurant or delivered to home as a prepared meal reported in 2020.

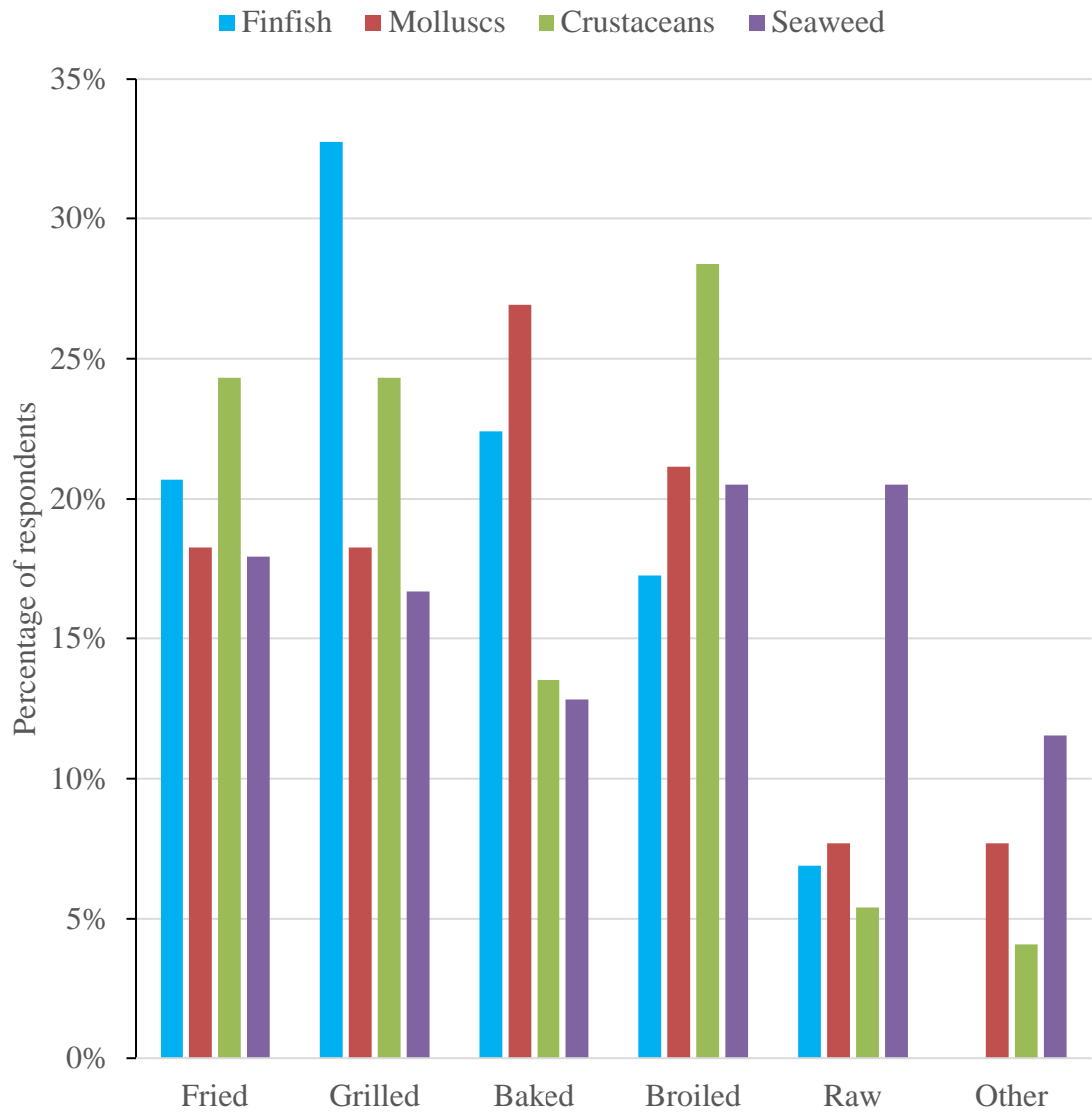


Figure 6. Preferred method of preparation of seafood products purchased at a restaurant reported in 2019.

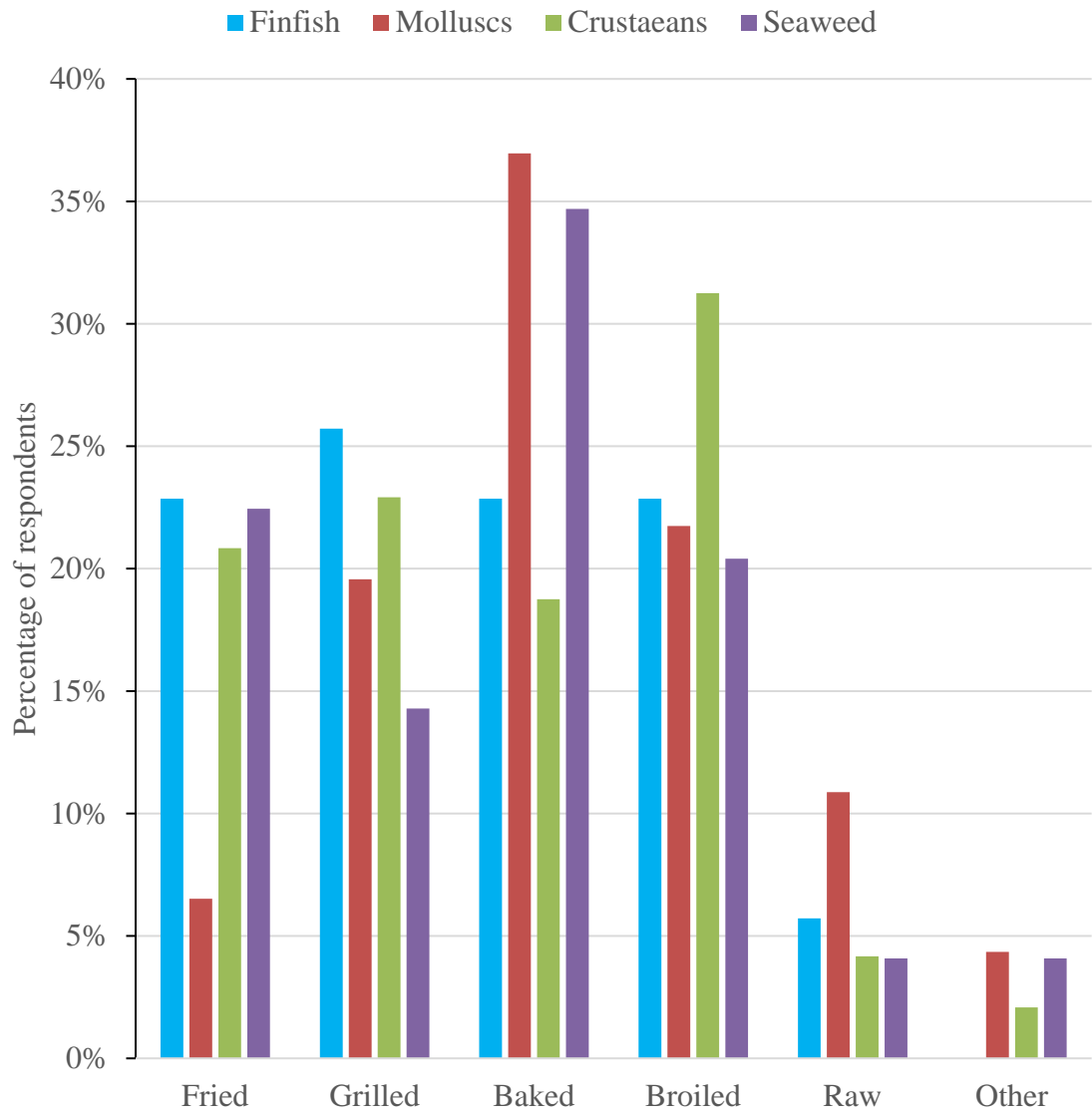


Figure 7. Preferred method of preparation of seafood products purchased at a restaurant reported in 2020.

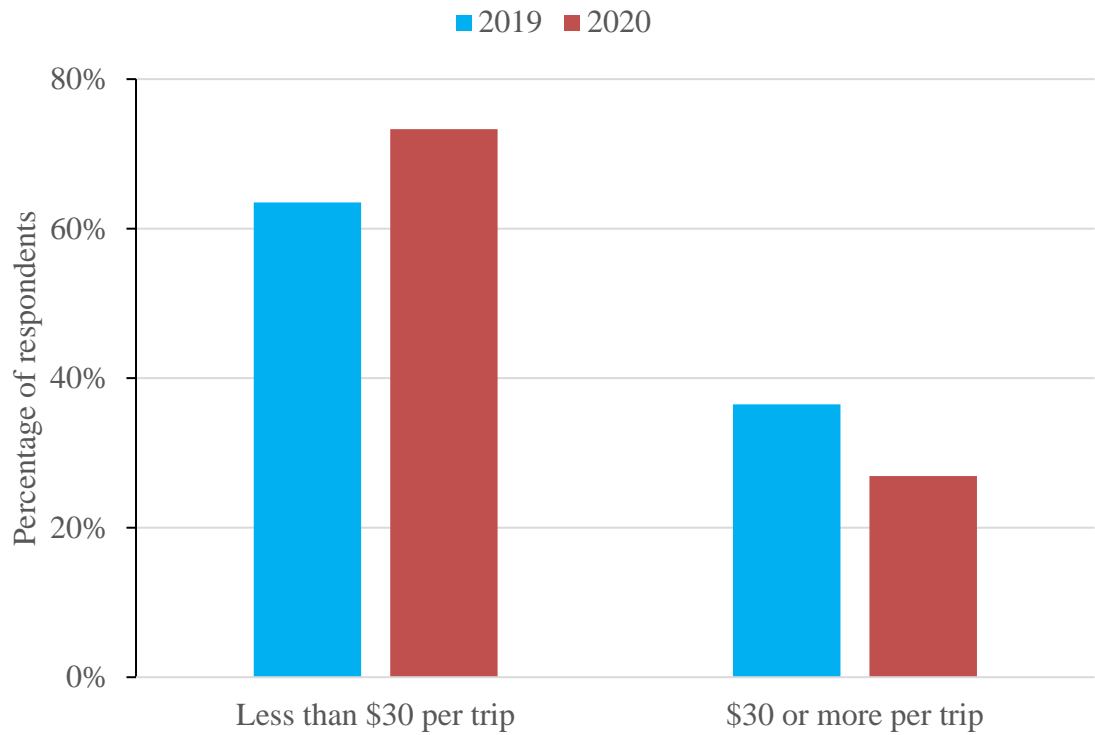


Figure 8. Amounts spent per shopping trip on seafood products for home preparation reported in 2019 and 2020.

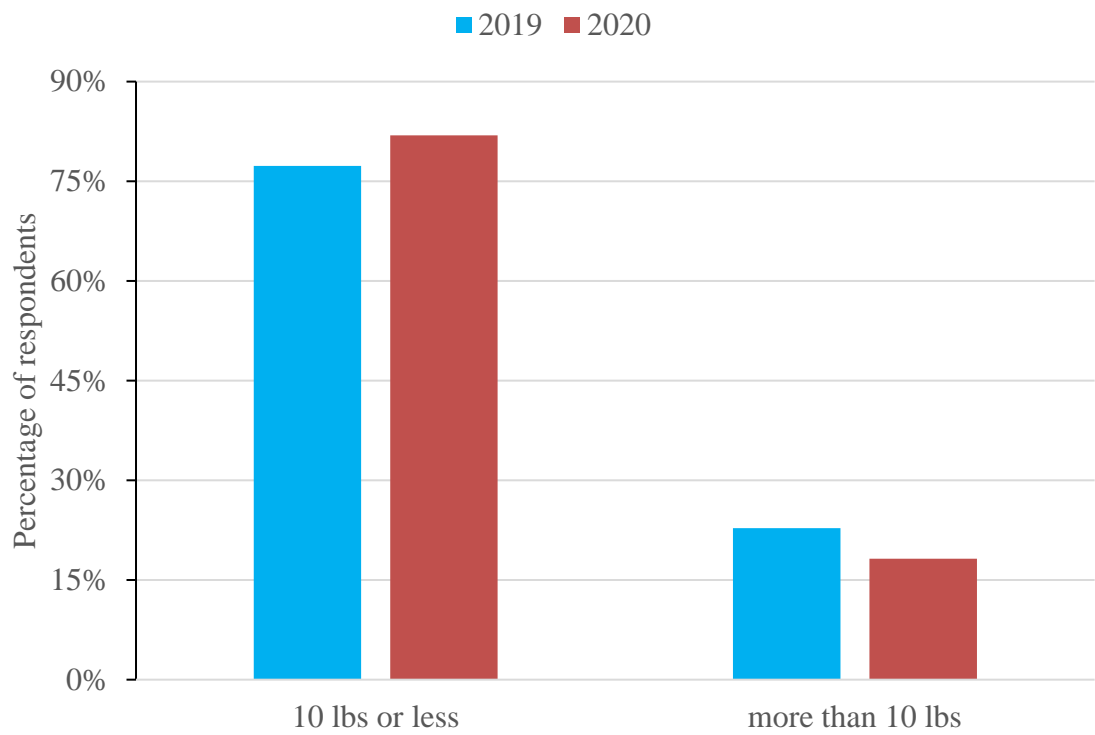


Figure 9. Quantities of seafood products purchased per shopping trip for home preparation reported in 2019 and 2020.

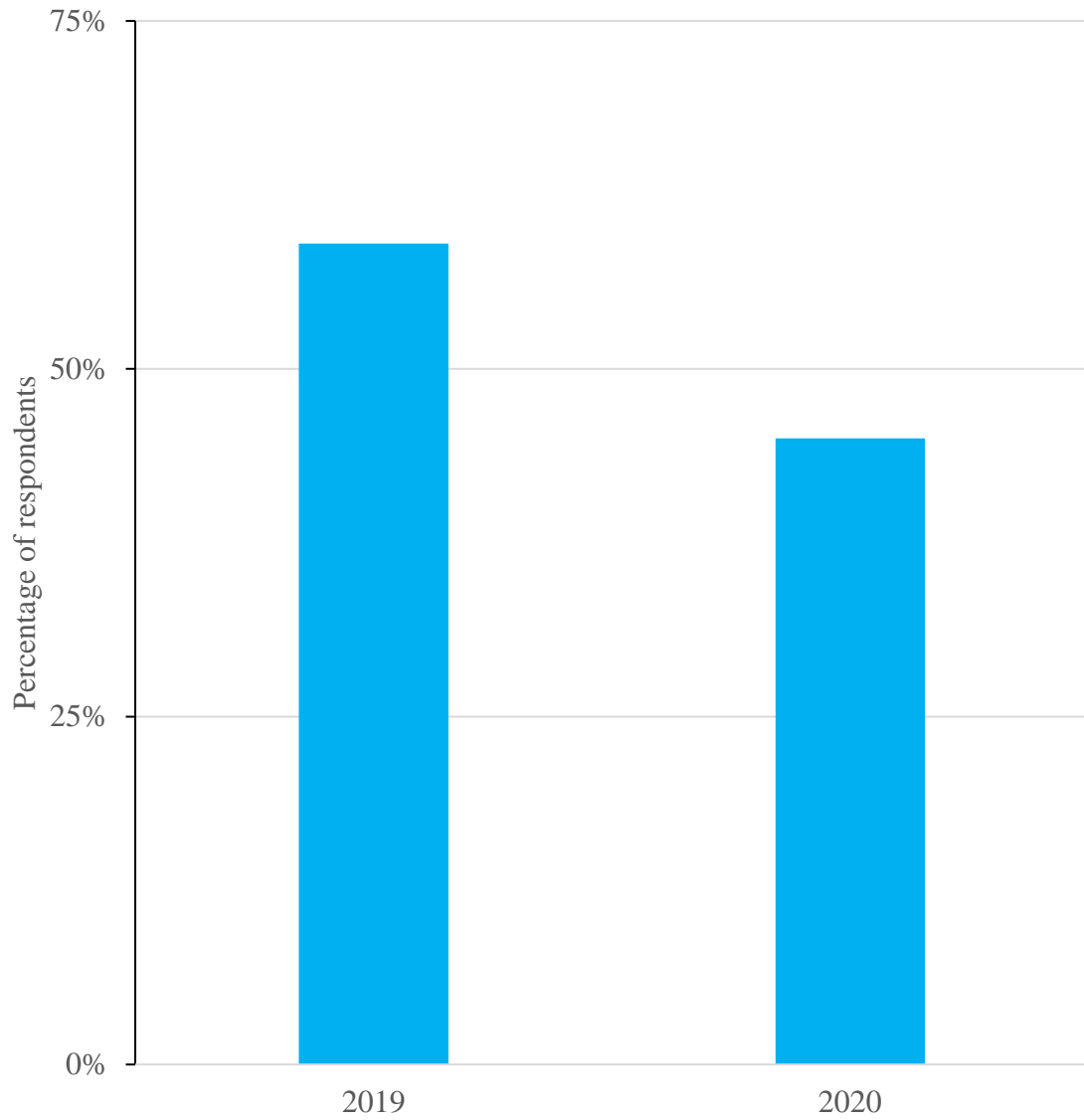


Figure 10. Percentage of respondents who consumed more seafood during a particular season in 2019, prior to the pandemic, and 2020, during the pandemic.

Table 2. Ranked importance of options to receive advertising information about seafood, according to survey responses in 2020 (* indicates greatest percentage).

	1 (not important at all)	2 (slightly important)	3 (moderately important)	4 (very important)	5 (extremely important)
Mailed flyer	23%	19%	23%*	19%	16%
E-mail	21%	15%	26%*	21%	17%
Text message	26%*	13%	25%	21%	15%
Facebook posting	32%*	13%	20%	20%	15%
Twitter posting	32%*	13%	18%	21%	16%
In-store cards, table tops	16%	15%	29%*	23%	17%
In-store notifications, text	22%	15%	24%*	21%	18%
QR code	26%*	14%	25%	18%	16%
Word of mouth	11%	12%	27%	30%*	19%
Seafood counter clerk or waitstaff	10%	15%	30%*	27%	18%
Other	41%*	11%	22%	15%	12%

2019

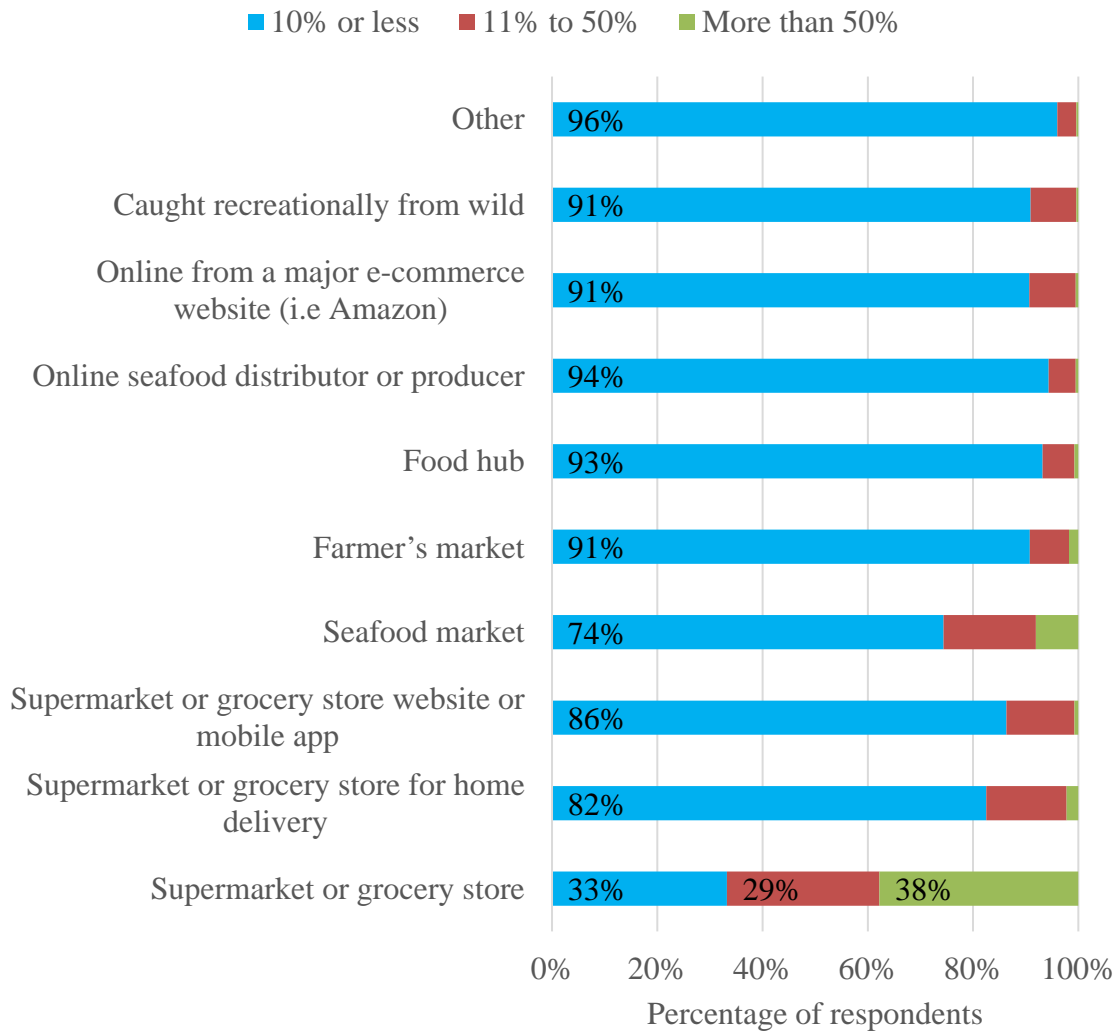


Figure 11. Percentage of seafood products purchased at varying establishments in 2019.

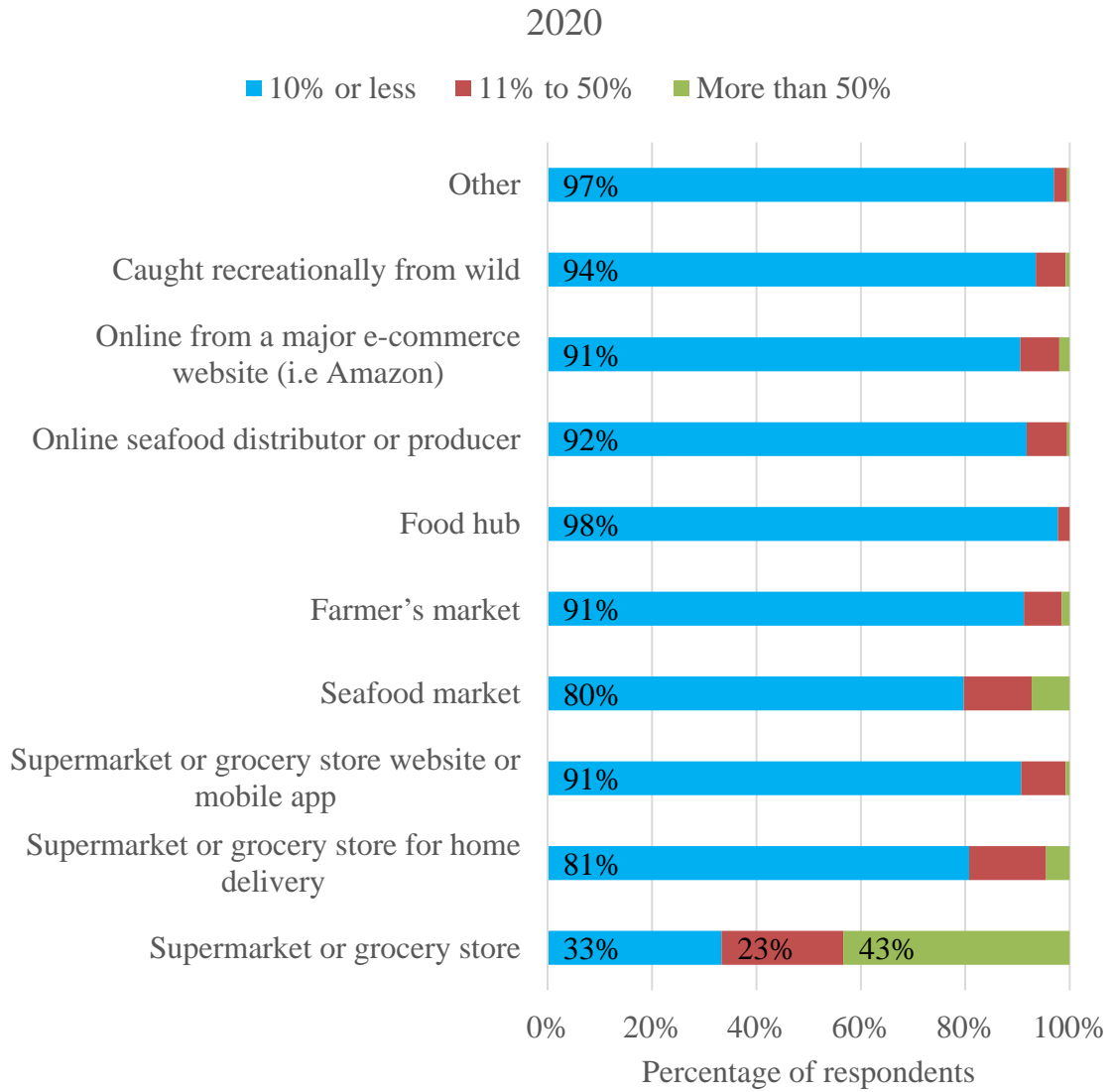


Figure 12. Percentage of seafood products purchased at varying establishments in 2020.