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# Changes in consumer preferences for seafood products due to the COVID-19 pandemic: Summary of Washington D.C. results

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## 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 Washington D.C. Survey respondents were asked about seafood purchases prior to (2019) and during (2020) the COVID-19 pandemic.

There were 170 usable responses from participants living within Washington D.C. Respondent location was self-reported via zip code. The greatest percentages of respondents were high school graduates (36%) or had completed a 4-year college degree (24%) (Figure 1). The majority of respondents (60%) self-reported as “White”. This was followed by 20% who self-reported as “Hispanic”, 16% who self-reported as “Black or African American”, and 4% self-reporting as “Asian”.  Female and male genders accounted for 59% and 41% of respondents, respectively. Fifty-six percent of respondents reported being 35 years old or younger. This was followed by 18% being 36 to 45 years old, 12% being 66 years old or older, 9% being 56 to 55 years old, and 5% being 46 to 55 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 reported household incomes of $50,000 to $99,999 (25% in 2019, 23% in 2020), less than $30,000 (23% in 2019, 21% in 2020), and $100,000 to $149,999 (19% in 2019, 22% in 2020).

When asked about frequency of seafood consumption during the pandemic (2020), 44% of respondents indicated they ate seafood less frequently in 2020 (Figure 3). Likewise, 44% indicated they ate about the same as they did in

2019. Twelve percent of respondents 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 of seafood products purchased as takeout from a restaurant or delivered to home as a prepared meal, the greatest percentages of respondents indicated they preferred grilled finfish products, fried mollusk products, fried or broiled crustacean products, and fried seaweed products in 2019 (Figure 4). These preferences changed when purchasing at a restaurant in 2019 (Figure 5). Fried crustacean products were still preferred, but respondents indicated they preferred fried finfish products, broiled mollusk products, and raw seaweed products when purchasing from a restaurant in 2019. In 2020, respondents indicated they preferred fried finfish products, baked mollusk products, fried or grilled crustacean products, and grilled seaweed products when purchasing as takeout from a restaurant or delivered to home as a prepared meal (Figure 6). These preferences remained the same when purchasing at a restaurant in 2020 (Figure 7), except for seaweed products (raw preferred).

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 (76%) and 2020 (77%) 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 (86%) and 2020 (80%) 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 (65%) indicated they ate more seafood during a particular season of the year (Figure 10). Fifty-one percent indicated summer was the preferred season. In 2020, during the pandemic, 47% indicated they ate more seafood during a particular season, indicating a shift away from seasonal consumption with the majority of respondents in 2020 (53%) not eating more seafood during a particular season of the year.

Regarding advertisement methods, word of mouth was found to be the most important method, as the largest percentage of participants (28%) indicated this to be an extremely important method (Table 2). In-store cards/tabletops and seafood counter clerk or waitstaff were found to be very important by the greatest percentages of respondents (25% for in-store cards/tabletops, 27% for seafood counter clerk or waitstaff). Greater percentages of respondents found all other methods (Mailed flyer, E-mail, text message, social media posting, etc.) to be not important at all.
Respondents were asked to identify establishments from which they purchased seafood products for home preparation in 2019 and 2020 (Figures 11 & 12). Forty-five percent of respondents in 2019 and 48% in 2020 indicated they purchased more than 50% of seafood products for home preparation at supermarkets or grocery stores. This was followed by 34% in 2019 and 30% in 2020 that purchased 10% or less of seafood products for home preparation at supermarkets or grocery stores. Twenty-two percent of respondents in 2019 and 23% in 2020 indicated they purchased 11% to 50% of seafood products for home preparation at supermarkets or grocery stores. Purchases from all other establishments were uncommon in 2019 and 2020, with 76% or more of respondents in 2019 and 81% 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).

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# Appendix

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

## Summary of Washington D.C. results

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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 11
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.**

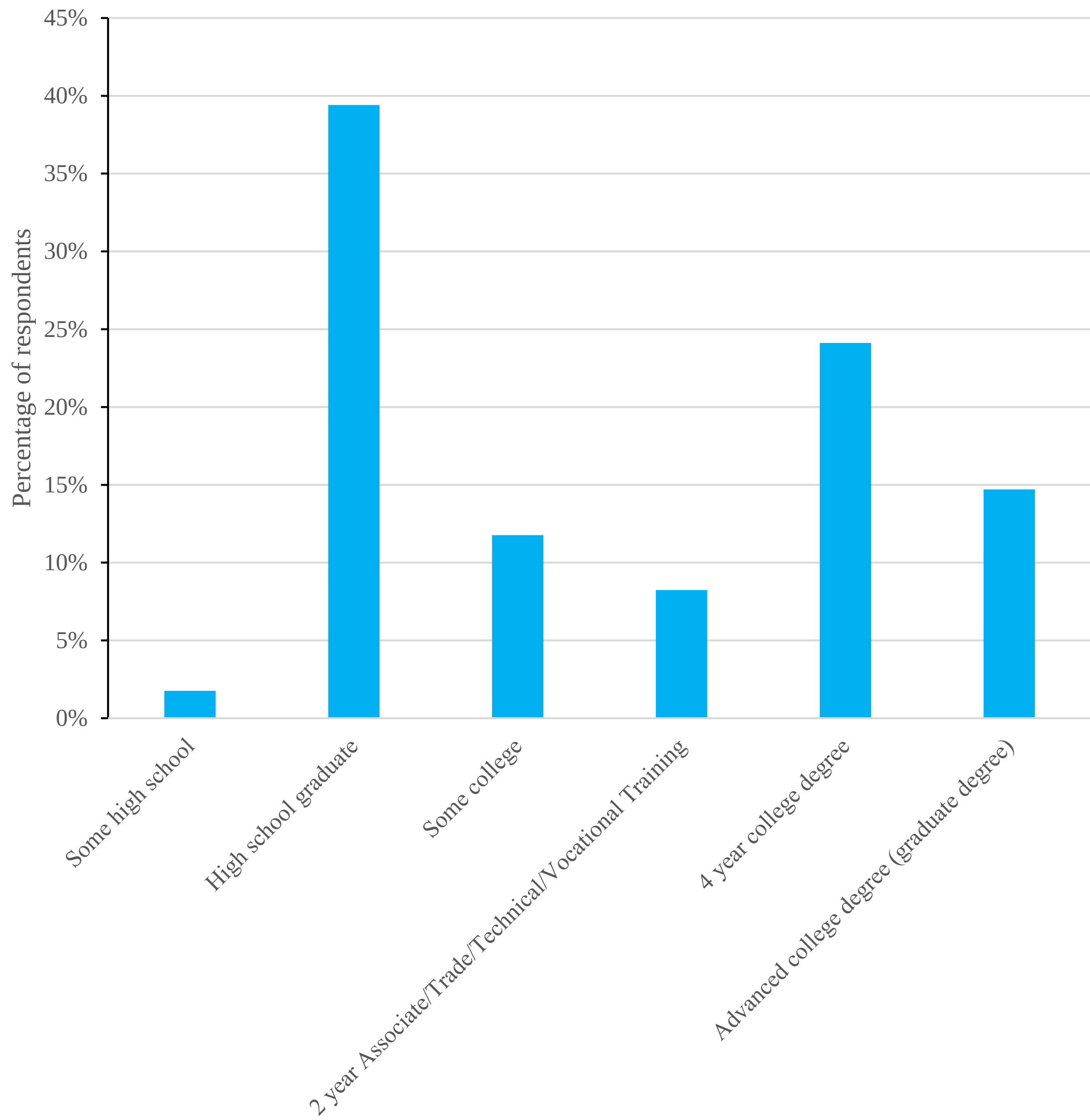


Figure 1. Level of education completed by ssurvey respondents.

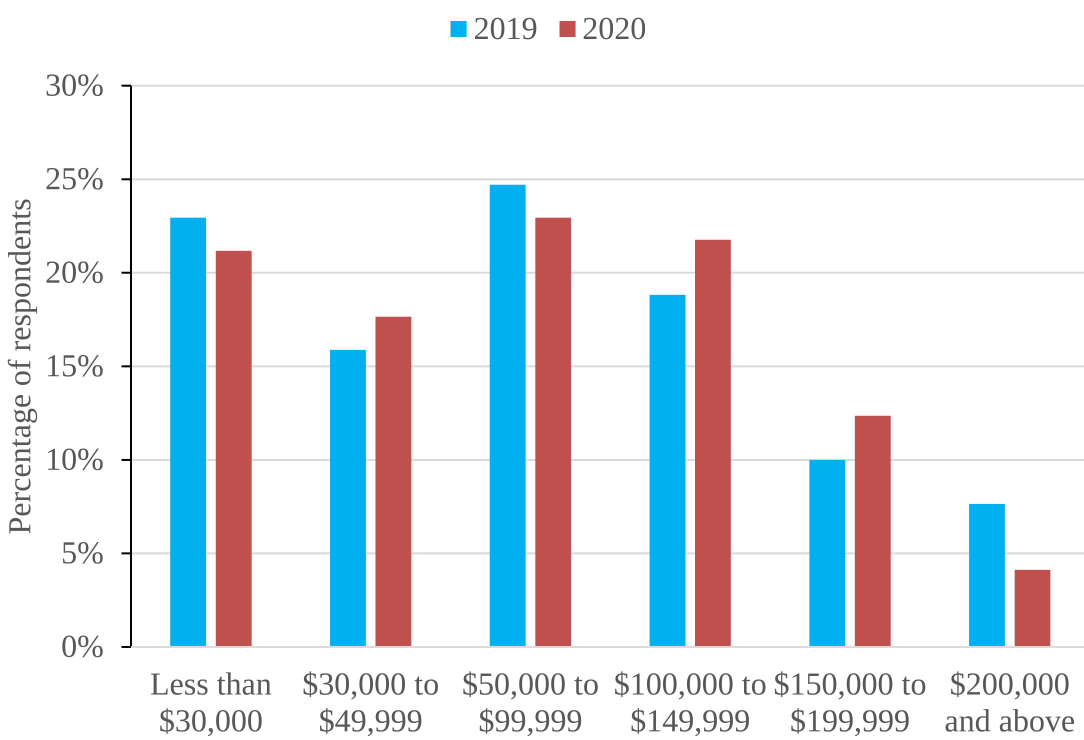


Figure 2. Household income of survey respondents in 2019 and 2020.

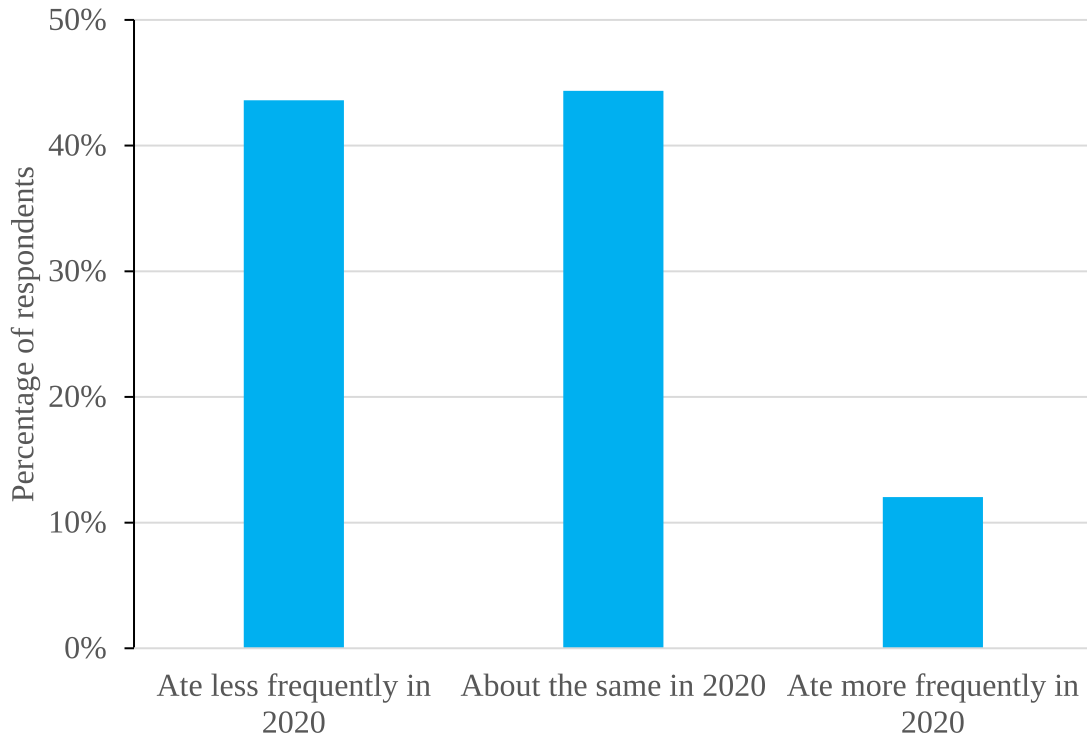


Figure 3. Frequency of seafood consumption of seafood products in 2020, with respect to seafood consumption in 2019.

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

| Methods of consumption | 2019 | 2020 |
|---|---|---|
| Prepared at home | 36% | 40% |
| Takeout from a restaurant | 16% | 21% |
| Delivered to home as a prepared meal | 9% | 10% |
| At a restaurant | 24% | 10% |
| Other | 1% | 1% |
| Did not consume | 15% | 17% |

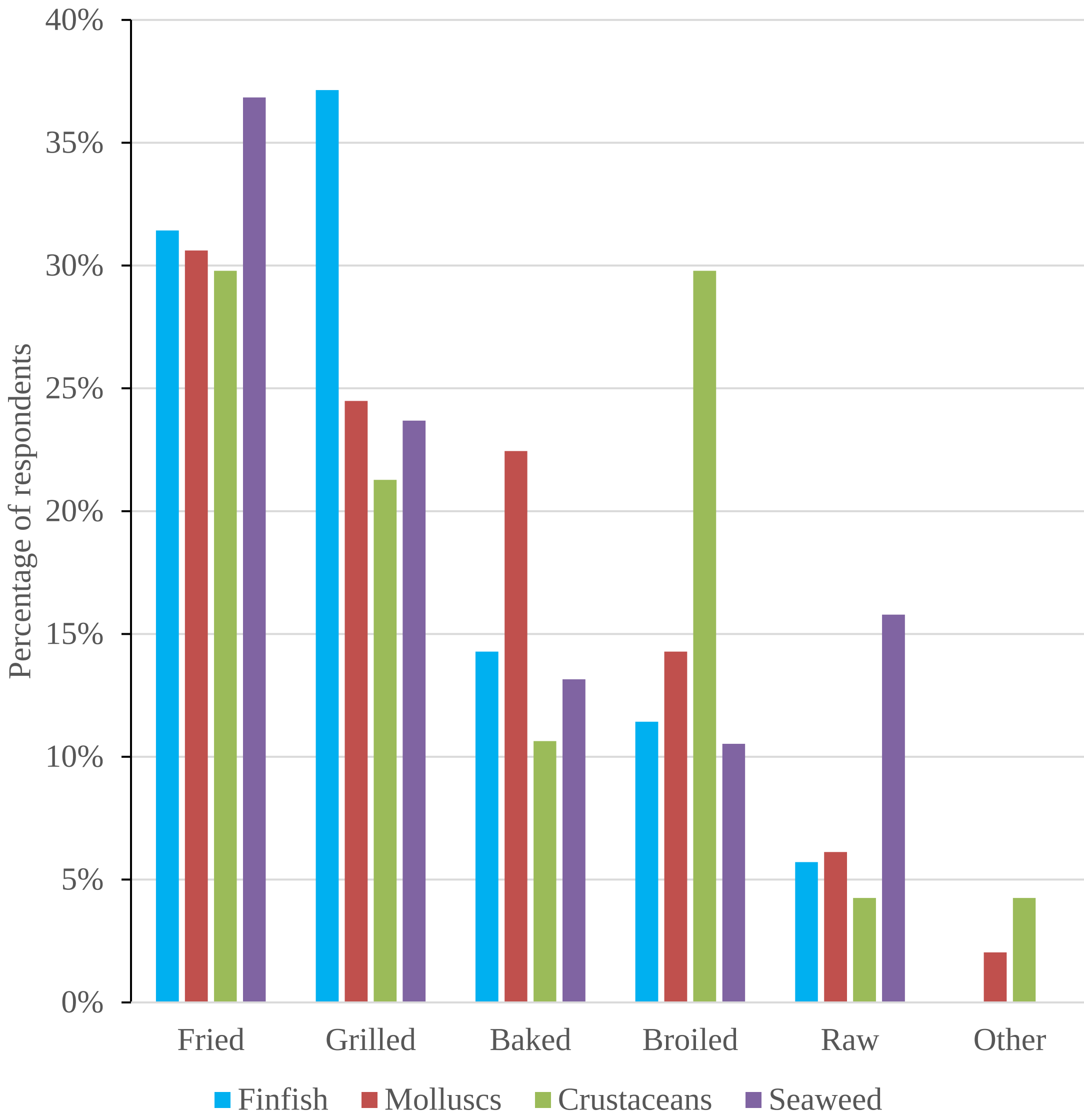


Figure 4. Preferred method of preparation of seafood products purchased as takeout from a restaurant or delivered to home as a prepared meal reported in 2019.

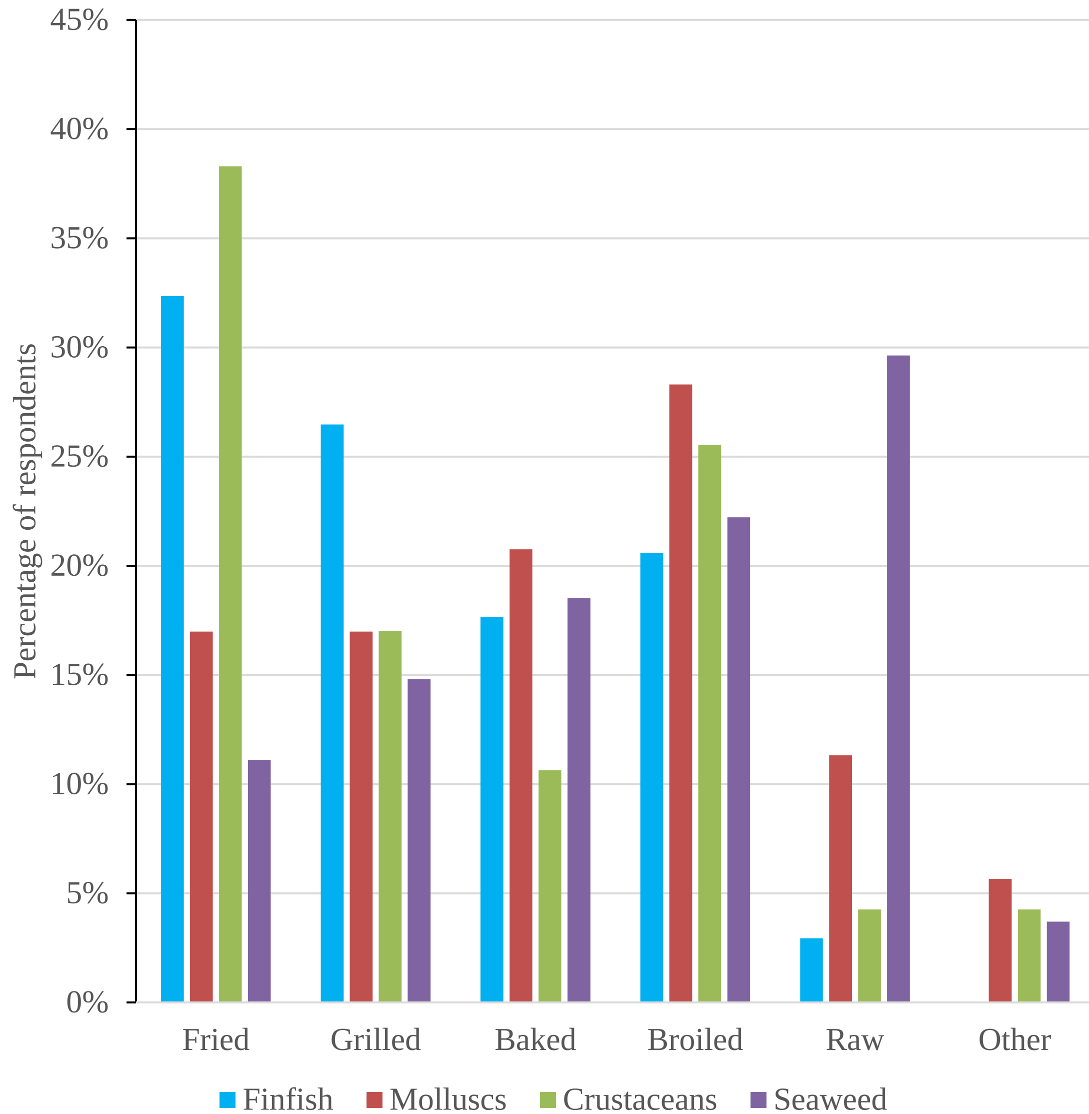


Figure 5. Preferred method of preparation of seafood products purchased at a restaurant reported in 2019.

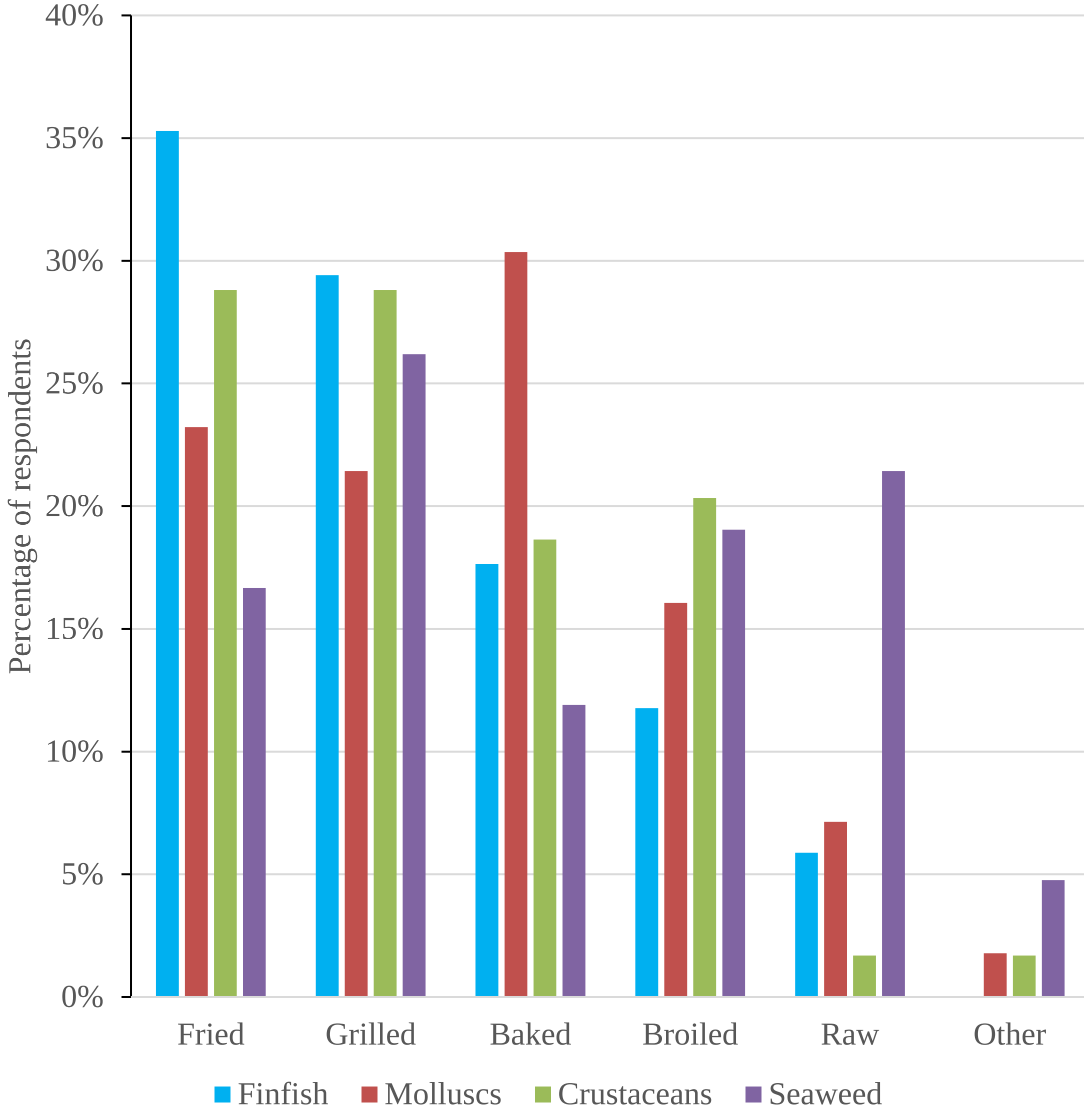


Figure 6. Preferred method of preparation of seafood products purchased as takeout from a restaurant or delivered to home as a prepared meal reported in 2020.

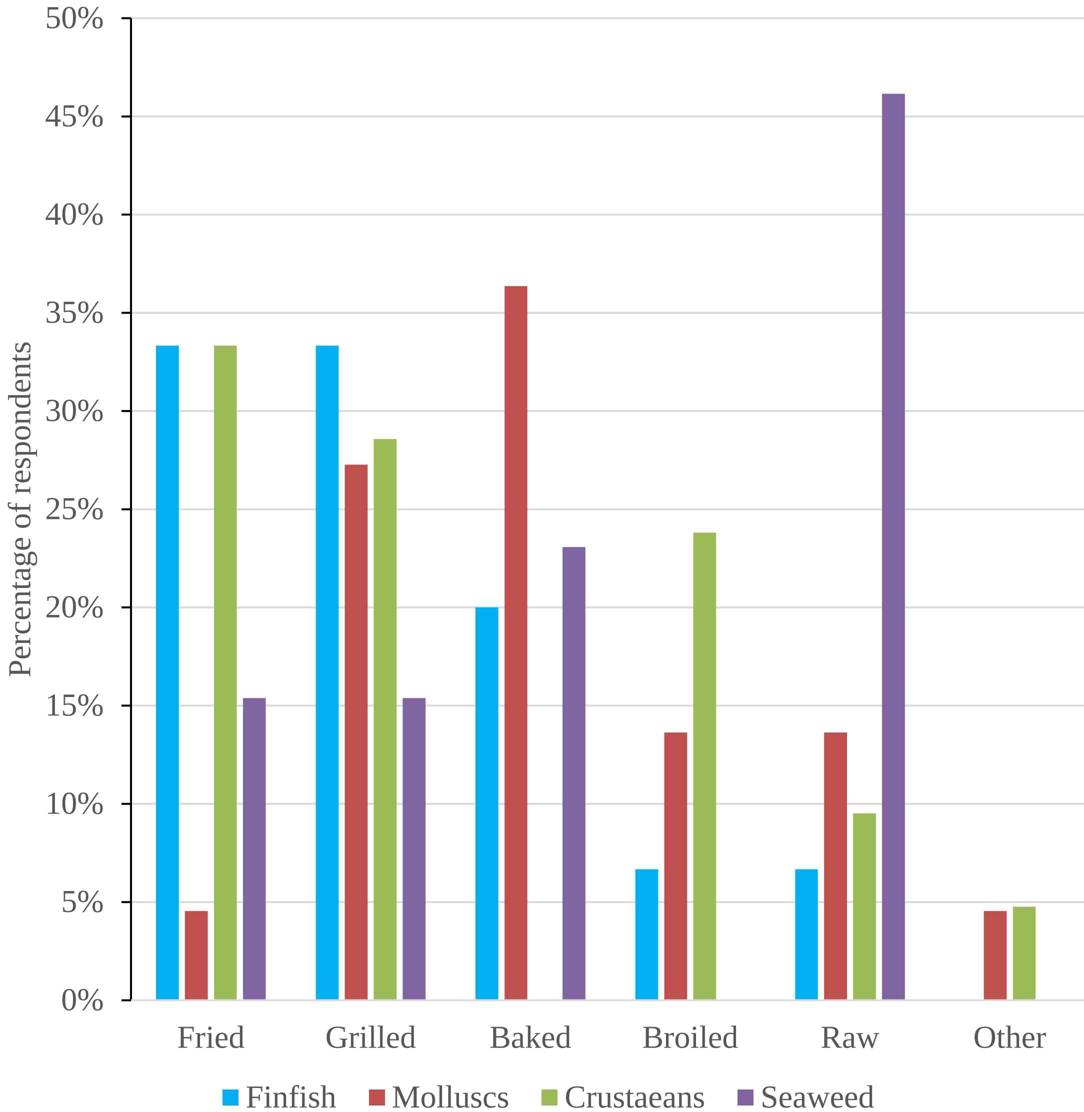


Figure 7. Preferred method of preparation of seafood products purchased at a restaurant reported in 2020.

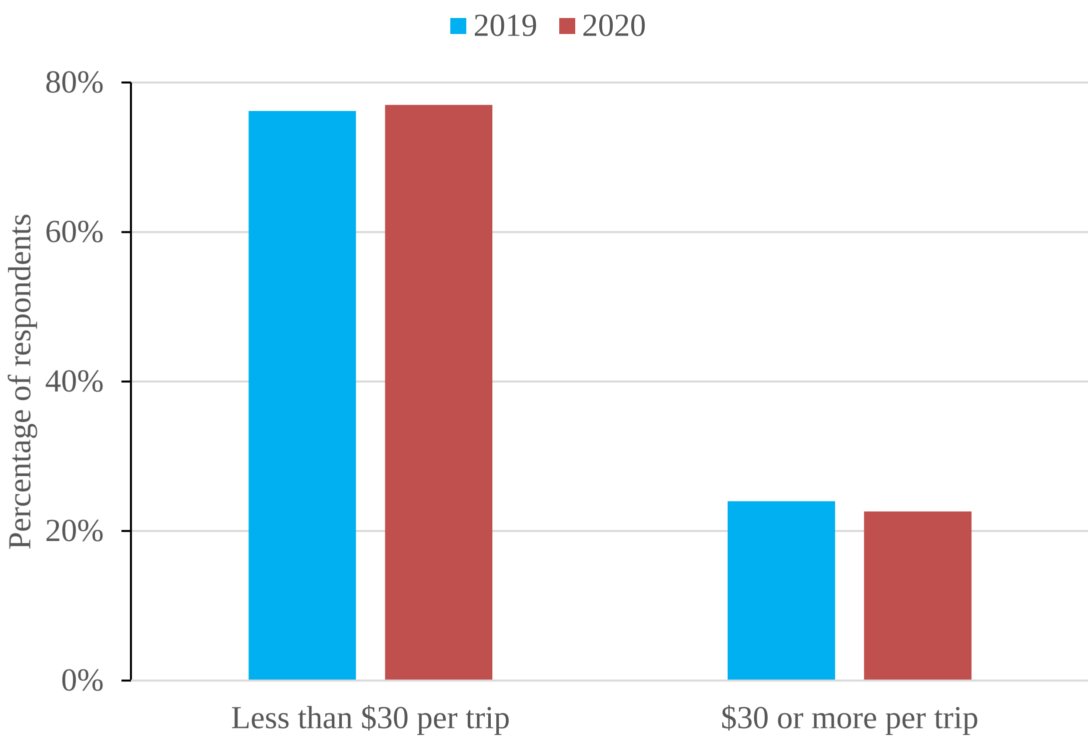


Figure 8. Amounts spent per shopping trip on seafood products for home preparation reported in 2019 and 2020.

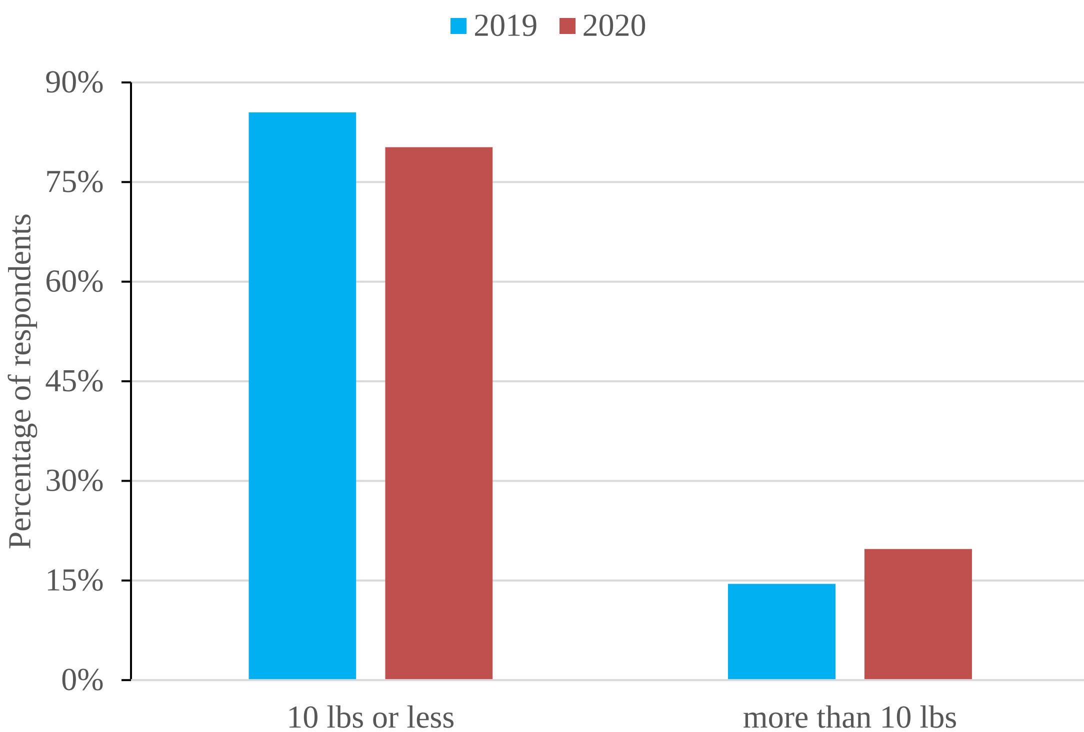


Figure 9. Quantities of seafood products purchased per shopping trip for home preparation reported in 2019 and 2020.

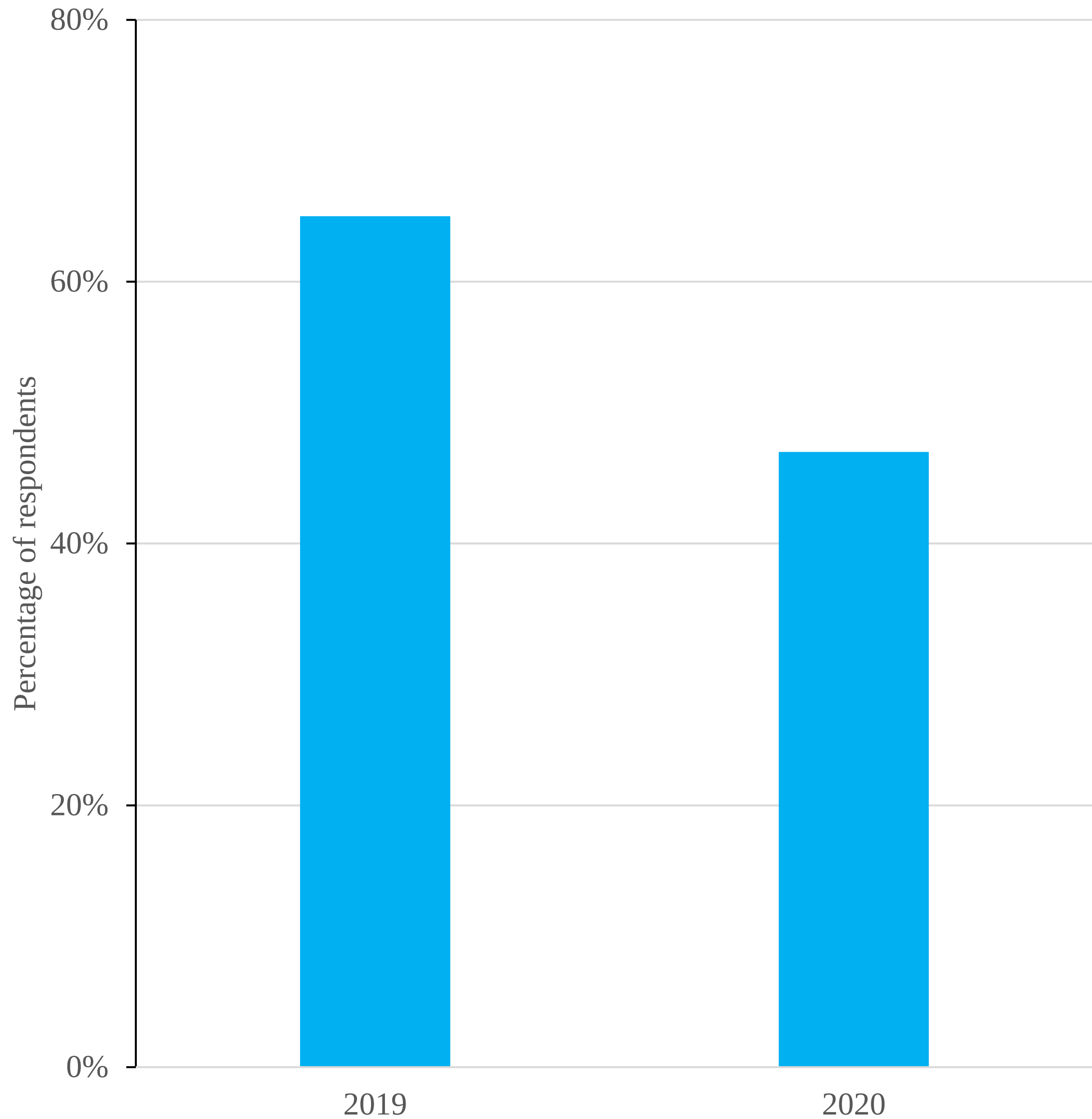


Figure 10. Percentage of respondents who consumed more seafood during a particular season in 2019, prior to the pandemic, and 2020, during the pandemic.

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 | 32%* | 12% | 18% | 19% | 19% |
| E-mail | 24%* | 16% | 23% | 19% | 18% |
| Text message | 37%* | 12% | 19% | 15% | 17% |
| Facebook posting | 30%* | 16% | 24% | 16% | 14% |
| Twitter posting | 38%* | 8% | 21% | 15% | 18% |
| In-store cards, table tops | 21% | 14% | 20% | 25%* | 19% |
| In-store notifications, text | 29%* | 14% | 21% | 15% | 21% |
| QR code | 31%* | 13% | 19% | 16% | 22% |
| Word of mouth | 12% | 14% | 22% | 24% | 28%* |
| Seafood counter clerk or waitstaff | 12% | 11% | 27% | 27%* | 22% |
| Other | 41%* | 14% | 19% | 11% | 15% |

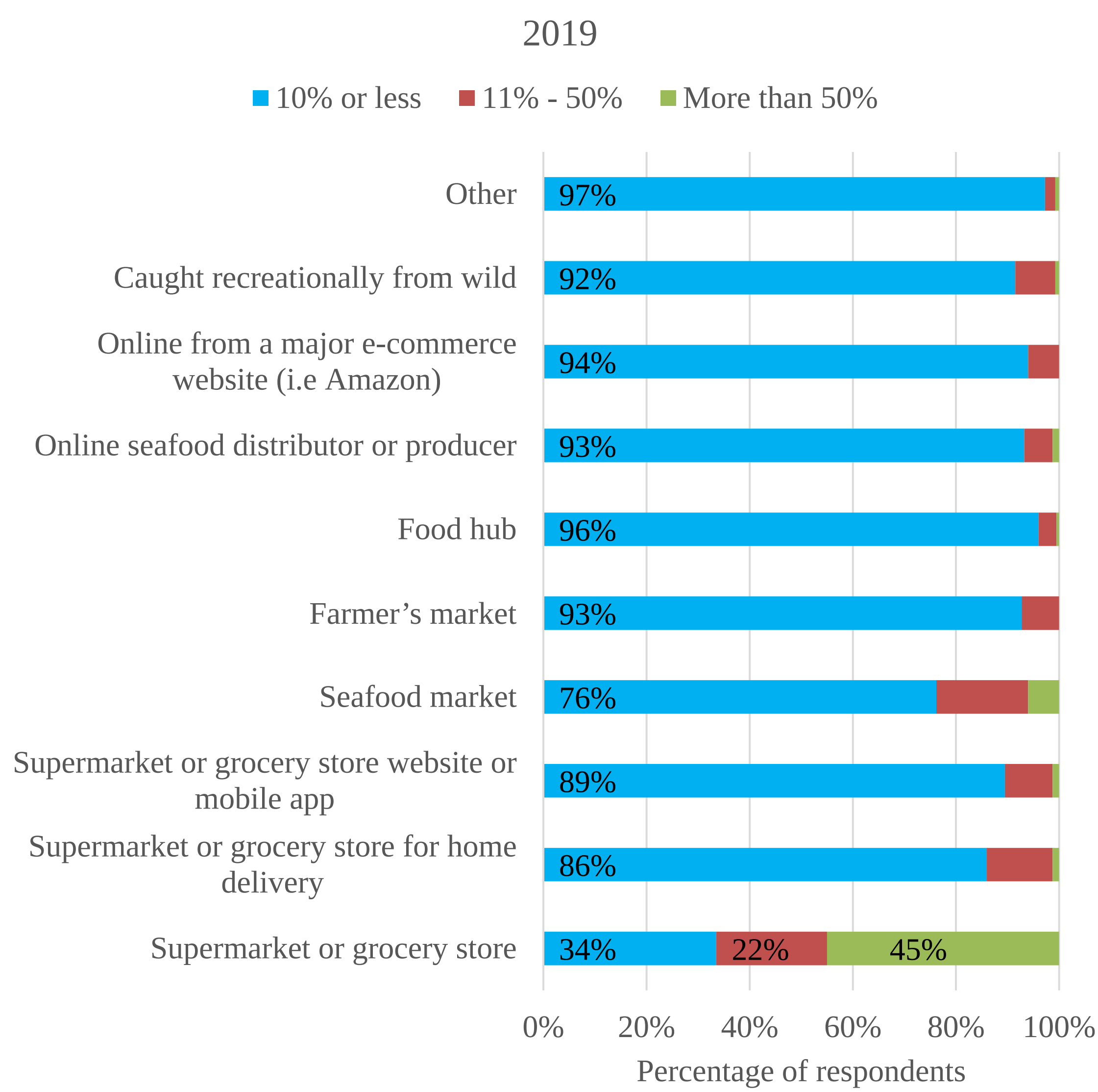


Figure 11. Percentage of seafood products purchased at varying establishments in 2019.

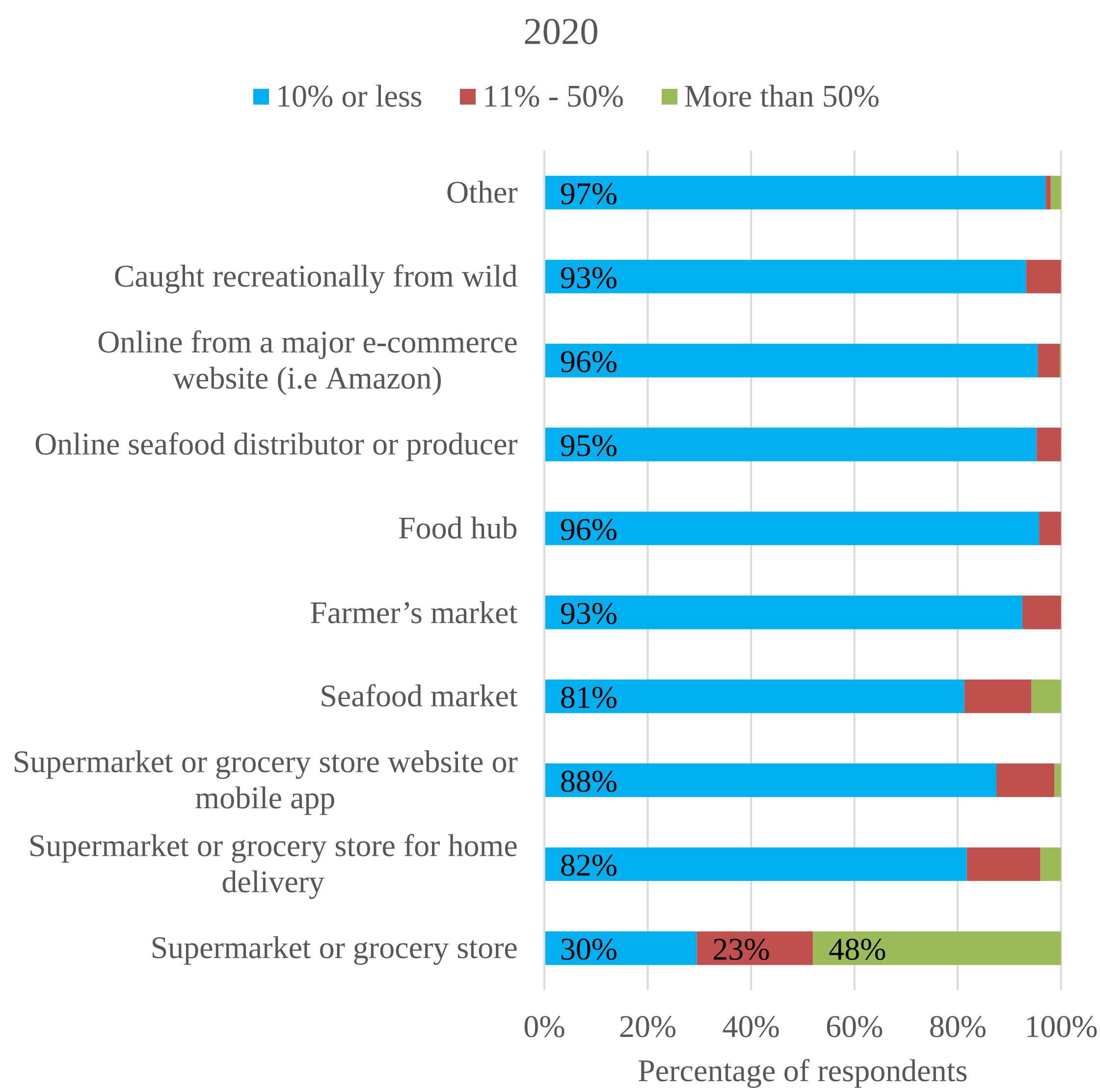


Figure 12. Percentage of seafood products purchased at varying establishments in 2020.