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Changes in consumer preferences for seafood products due to the COVID-19 pandemic: Summary of Prince George County, MD 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 Price George County, Maryland. Survey respondents were asked about seafood purchases prior to (2019) and during (2020) the COVID-19 pandemic.

There were 151 usable responses from participants living within Prince George County, Maryland. Respondent location was self-reported via zip code. The greatest percentages of respondents completed a 4-year college degree (39%) or and advanced college degree (graduate degree) (35%) (Figure 1). The majority of respondents (97%) self-reported as “White”, with the remaining respondents (3%) self-reporting as “Hispanic”. Male and female genders accounted for 97% and 3% of respondents, respectively. Twenty-six percent of respondents reported being 66 years old or older. This was followed by 25% being 36 to 45 years old, 21% being 35 years old or younger, 18% being 56 to 65 years old, and 11% 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 had household incomes of $50,000 to $99,999 (30% in 2019, 29% in 2020), or $100,000 to $149,999 (30% in 2019, 28% in 2020).

When asked about frequency of seafood consumption during the pandemic (2020), the largest percentage of respondents (53%) indicated they ate about the same as they did in 2019 (Figure 3). This was followed by 31% who indicated they ate seafood less frequently in 2020, and 17% who indicated they ate seafood more frequently in 2020.

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

Regarding method of preparations, respondents indicated they preferred grilled finfish products and fried mollusk products when purchasing as takeout from a restaurant or delivered to home as a prepared meal in 2019 and 2020 (Figures 4 & 5). Respondents indicated they preferred grilled crustacean products and seaweed products in 2019. However, preferred preparation method for these two types of products changed in 2020, as participants indicated they preferred broiled crustacean products and raw seaweed products in 2020.

The preferred method of preparation changed for certain products when purchased at a restaurant (Figures 6 & 7). Grilled finfish products and fried mollusk products were still preferred in 2019 and 2020. However, respondents indicated they preferred broiled crustacean products when purchasing at a restaurant in 2019, and preferred grilled crustacean products in 2020. Participants indicated they preferred grilled seaweed products when purchasing from a restaurant in 2019, and preferred baked seaweed products in 2020.

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 (68%) and 2020 (75%) 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 (84%) and 2020 (87%) indicated they purchased 10 pounds or less of seafood products per shopping trip.

In 2019, prior to the COVID-19 pandemic, half of respondents (50%) indicated they ate more seafood during a particular season of the year (Figure 10). Forty-nine percent indicated summer was the preferred season. In 2020, during the pandemic, 36% indicated they ate more seafood during a particular season, indicating a shift away from seasonal consumption with the majority of respondents in 2020 (64%) not eating more seafood during a particular season of the year.

Regarding advertisement methods, seafood counter clerk or waitstaff was found to be the most important methods of advertisement, as the largest percentage of participants (30%) indicated this to be a very important method (Table 2). The greatest percentages of respondents found word of mouth (26%) and in-store cards/tabletops (27%) to be moderately important. 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). Fifty percent of respondents in 2019 and 49% in 2020 indicated they purchased more than 50% of seafood products for home preparation at supermarkets or grocery stores. This was followed by 36% in 2019 and 35% in 2020 that purchased 10% or less of seafood products for home preparation at supermarkets or grocery stores. Fifteen percent of respondents in 2019 and 16% 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 79% or more of respondents in 2019 and 80% 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

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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

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Appendix

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

Summary of Prince George County, MD results

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Jonathan van Senten, Virginia Tech

Michael Ciaramella, Cornell Cooperative Extension

Matt Parker, Maryland Sea Grant Extension

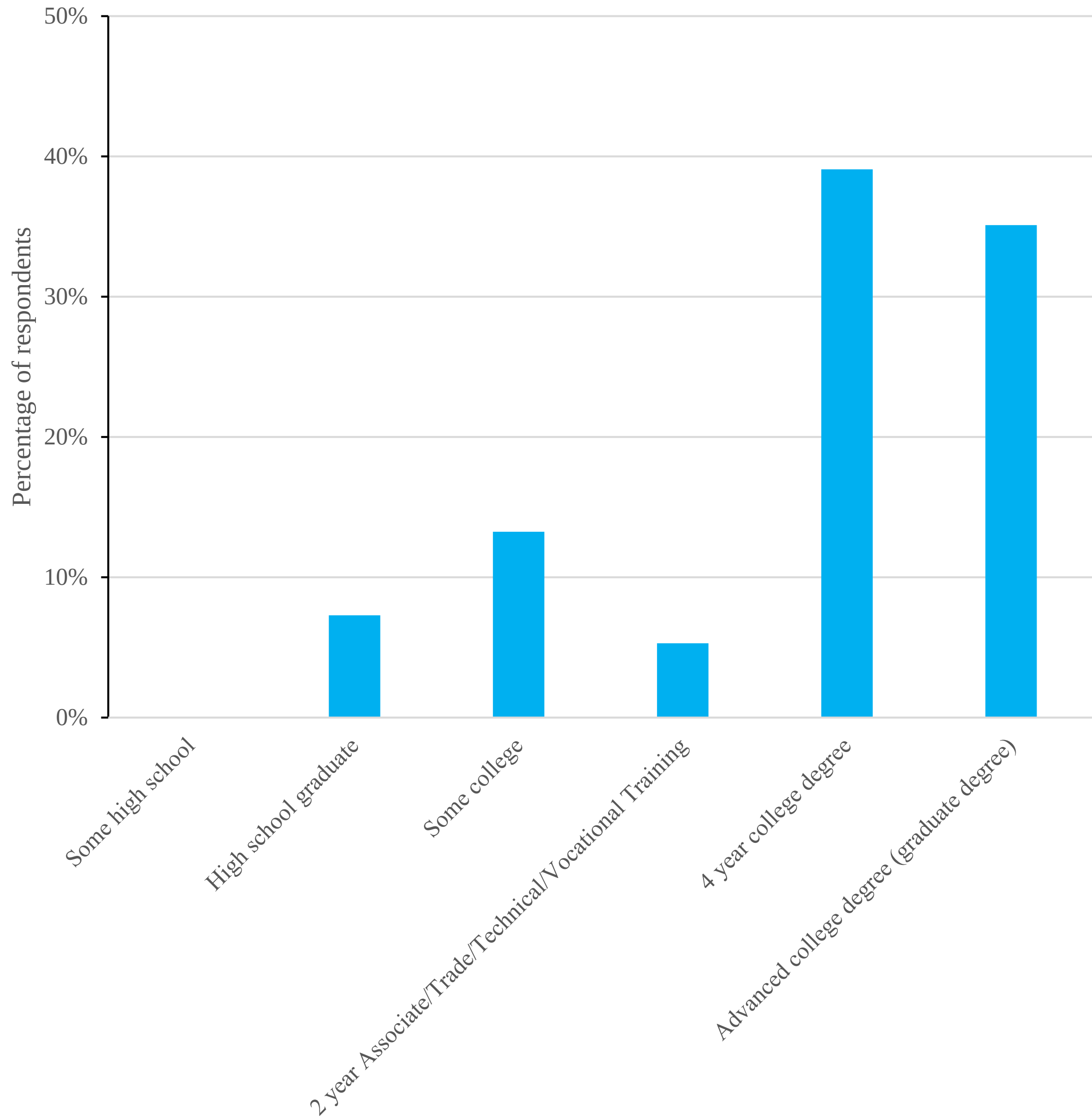

Figure 1. Level of education completed by survey respondents.

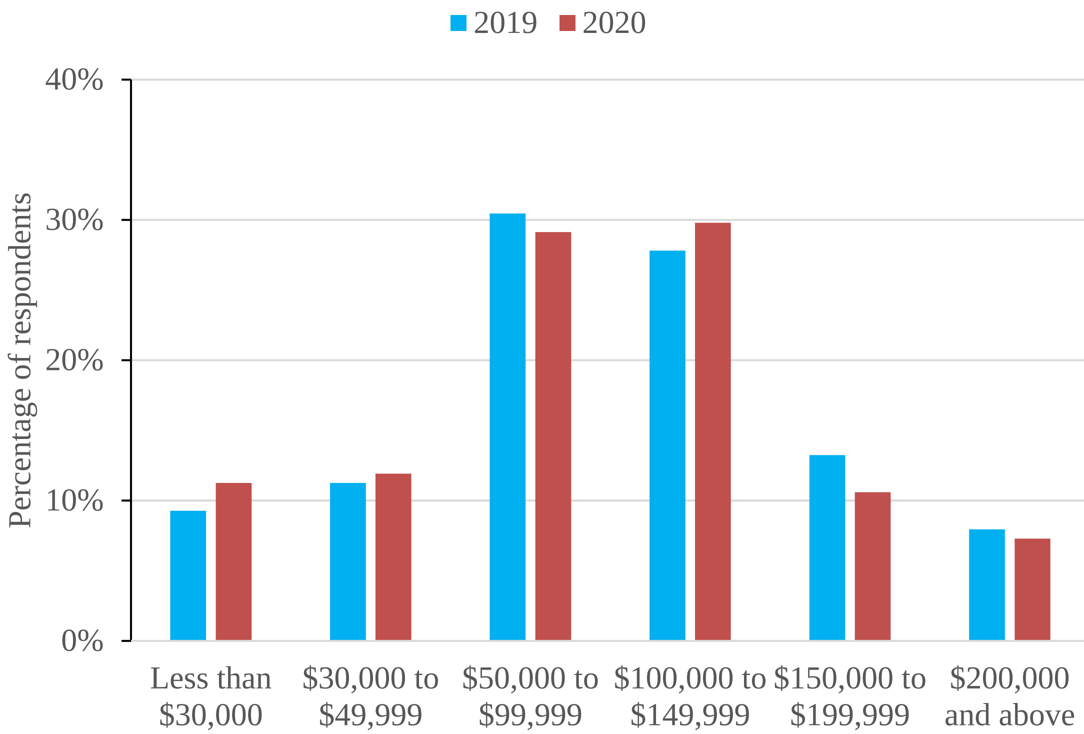

Figure 2. Household income of survey respondents in 2019 and 2020.

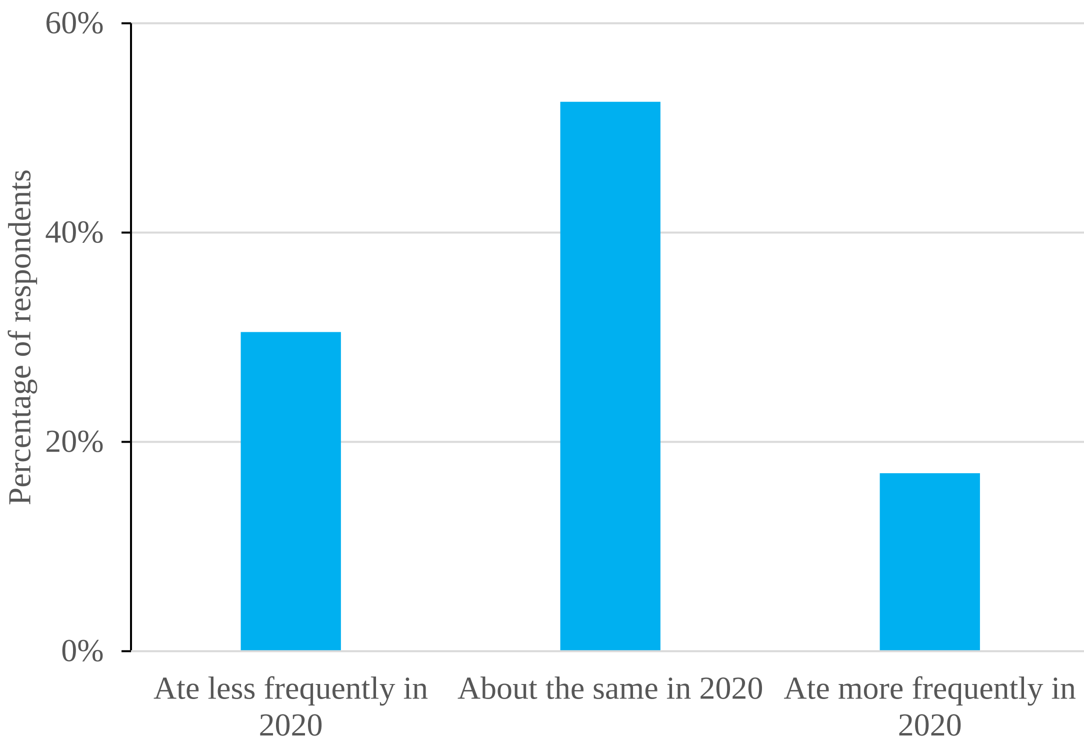

Figure 3. Frequency of seafood consumption of seafood products in 2020, with respect to seafood consumption in 2019.

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

Methods of consumption	2019	2020
Prepared at home	36%	41%
Takeout from a restaurant	18%	15%
Delivered to home as a prepared meal	6%	9%
At a restaurant	21%	10%
Other	3%	1%
Did not consume	17%	24%

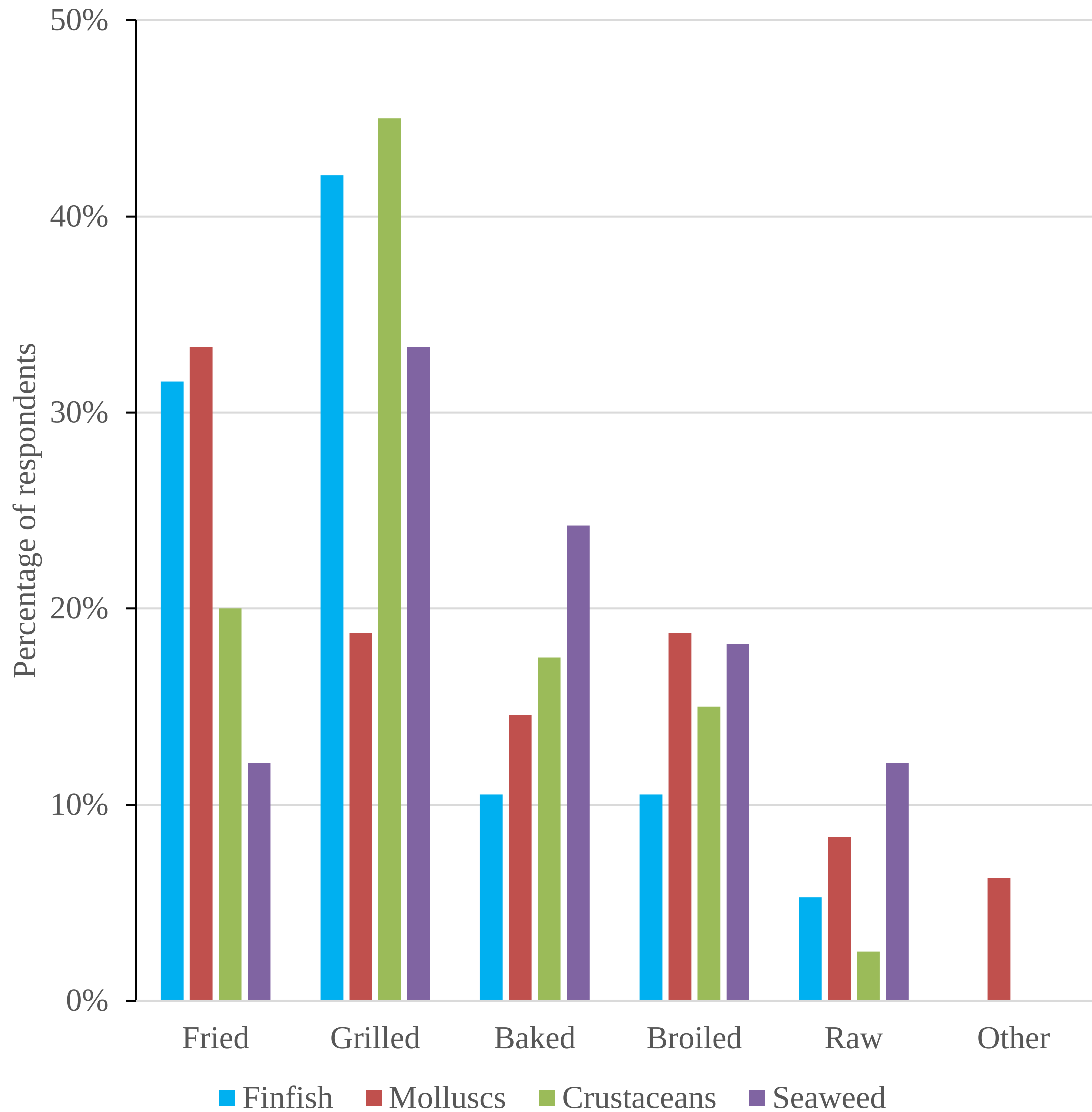

Figure 4. Preferred method of preparation of seafood products purchased as takeout from a restaurant or delivered to home as a prepared meal reported in 2019.

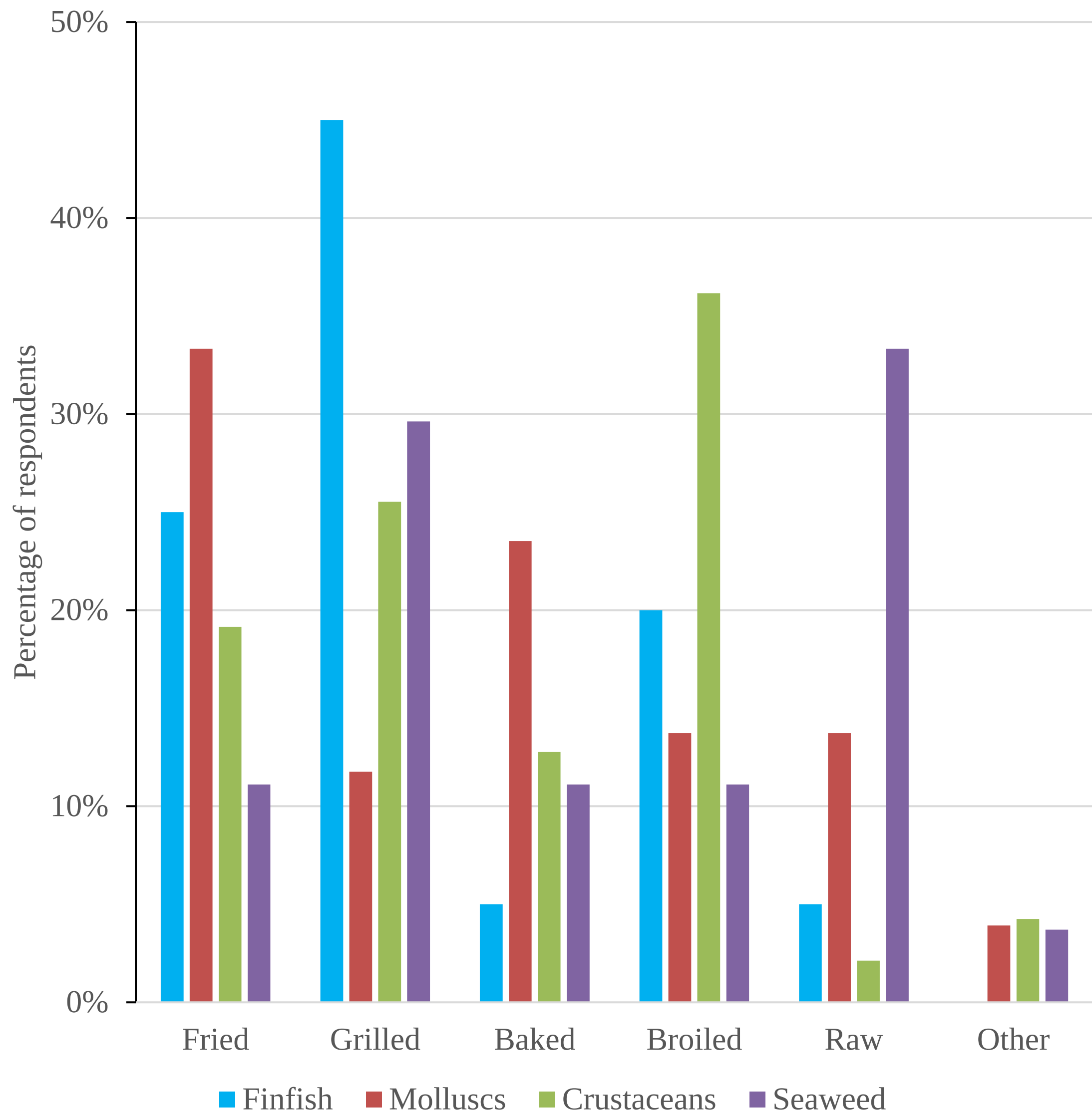

Figure 5. Preferred method of preparation of seafood products purchased as takeout from a restaurant or delivered to home as a prepared meal reported in 2020.

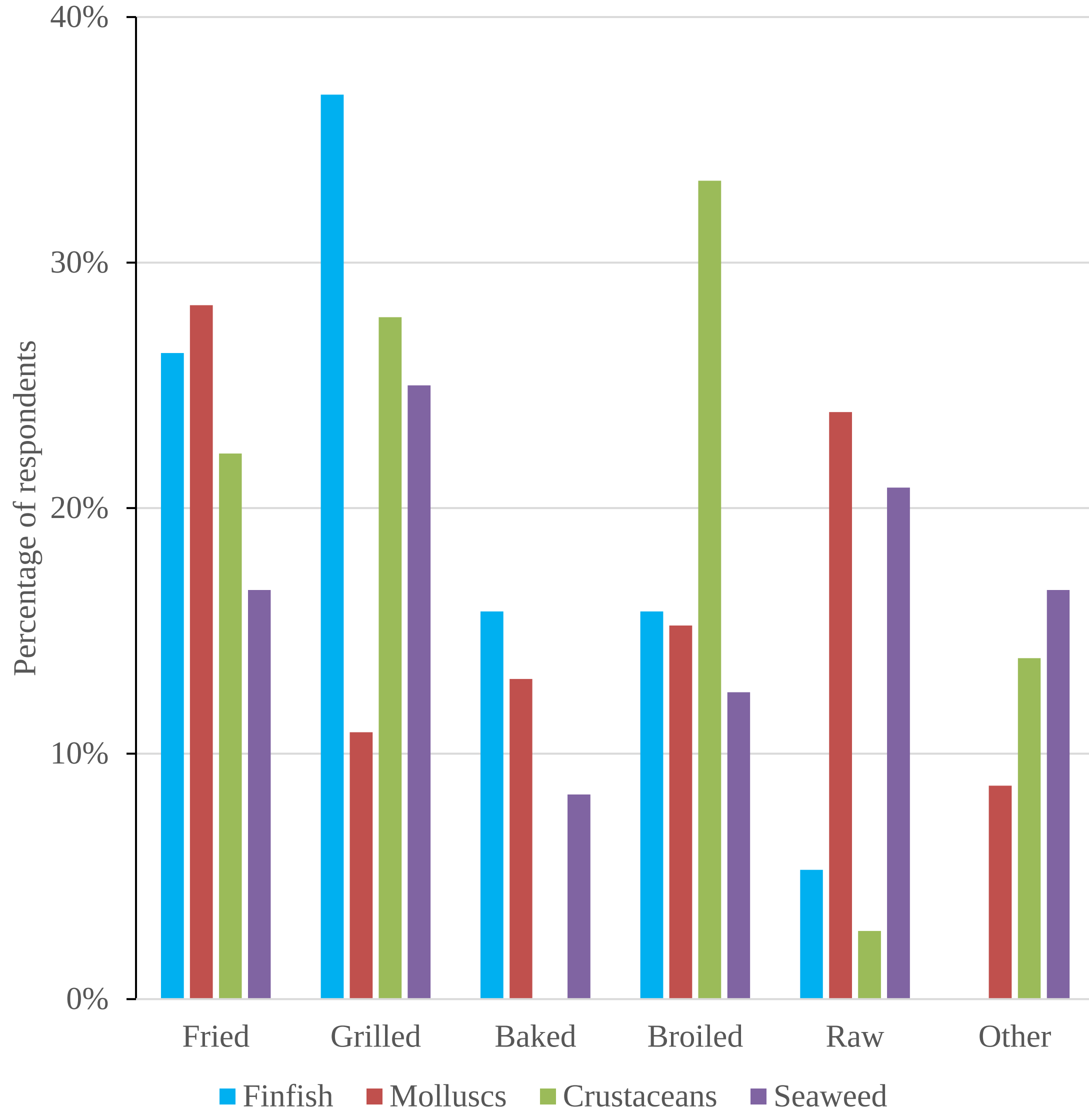

Figure 6. Preferred method of preparation of seafood products purchased at a restaurant reported in 2019.

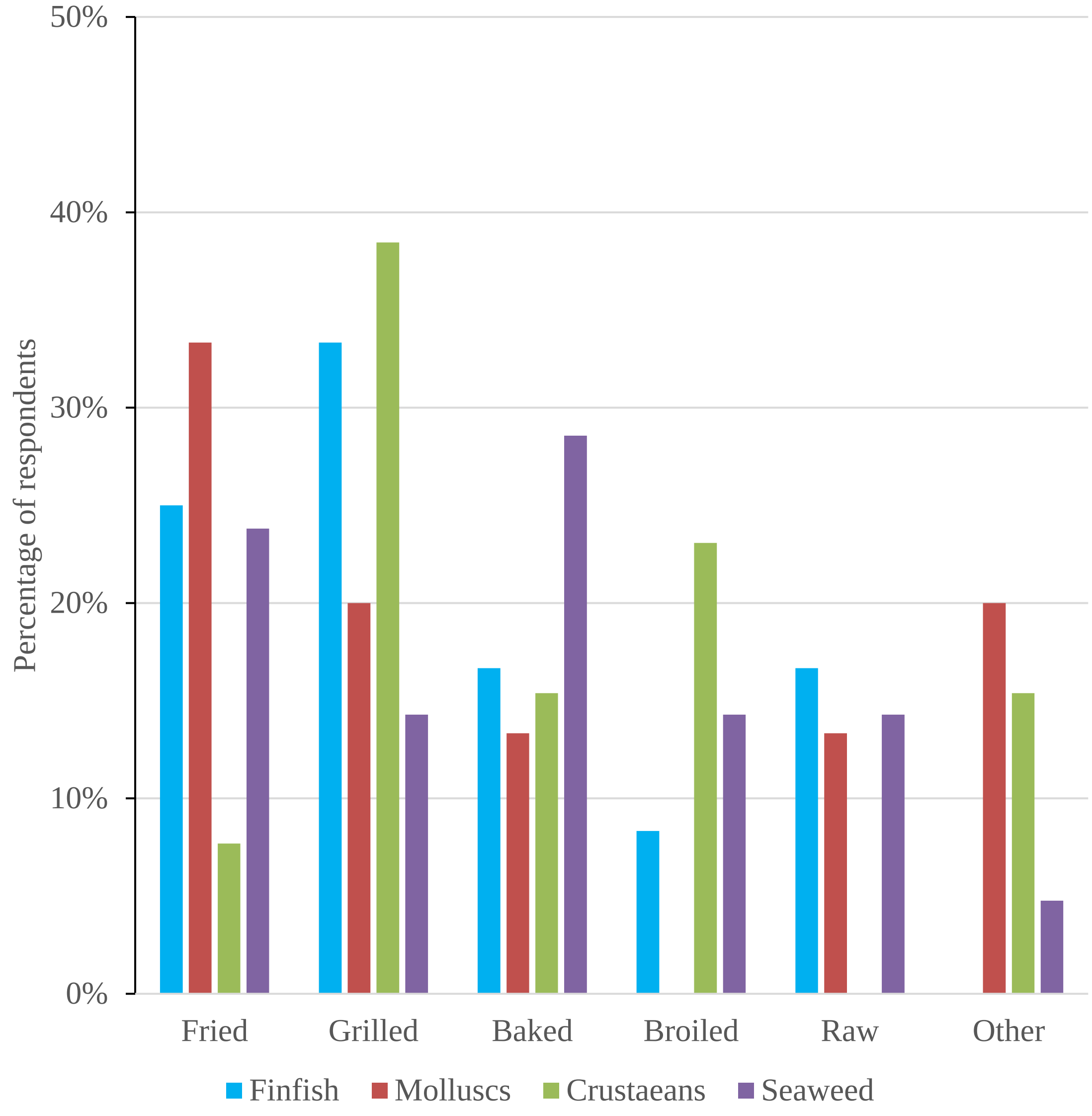

Figure 7. Preferred method of preparation of seafood products purchased at a restaurant reported in 2020.

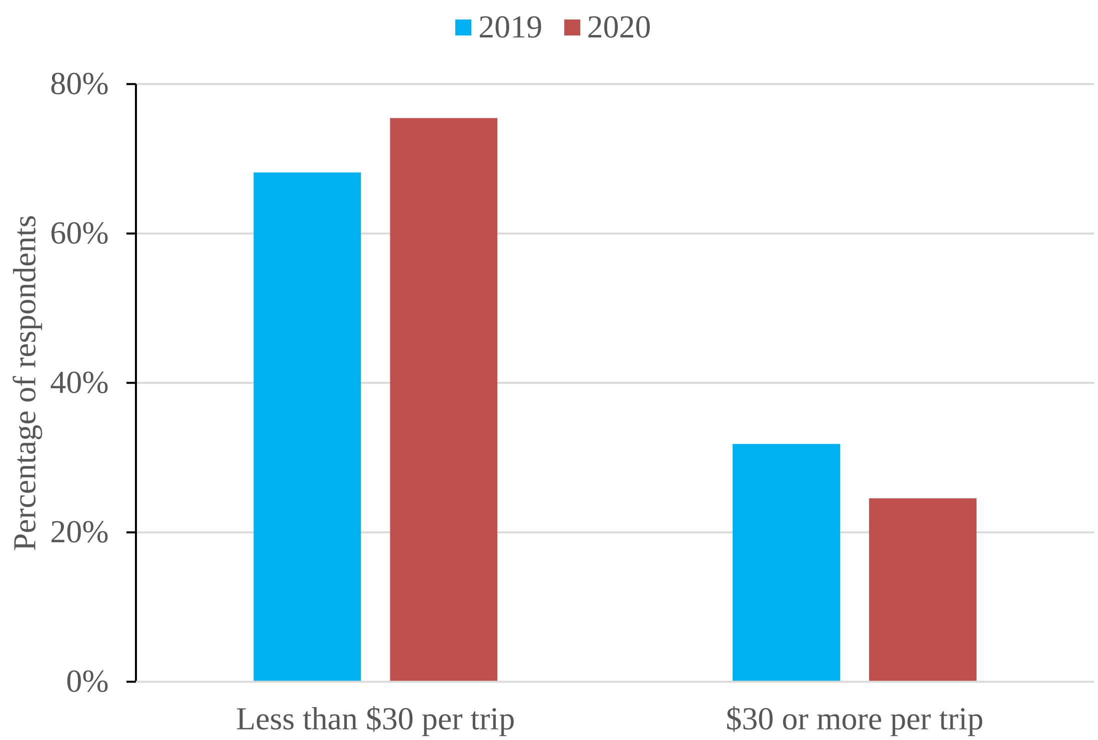

Figure 8. Amounts spent per shopping trip on seafood products for home preparation reported in 2019 and 2020.

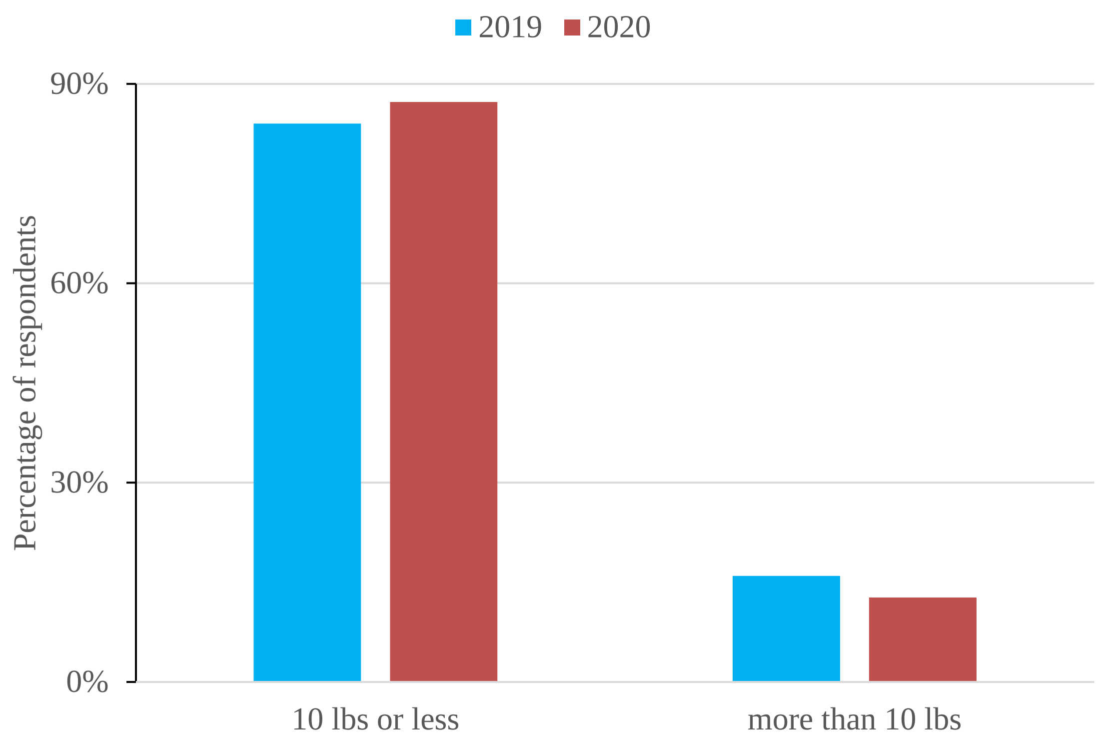

Figure 9. Quantities of seafood products purchased per shopping trip for home preparation reported in 2019 and 2020.

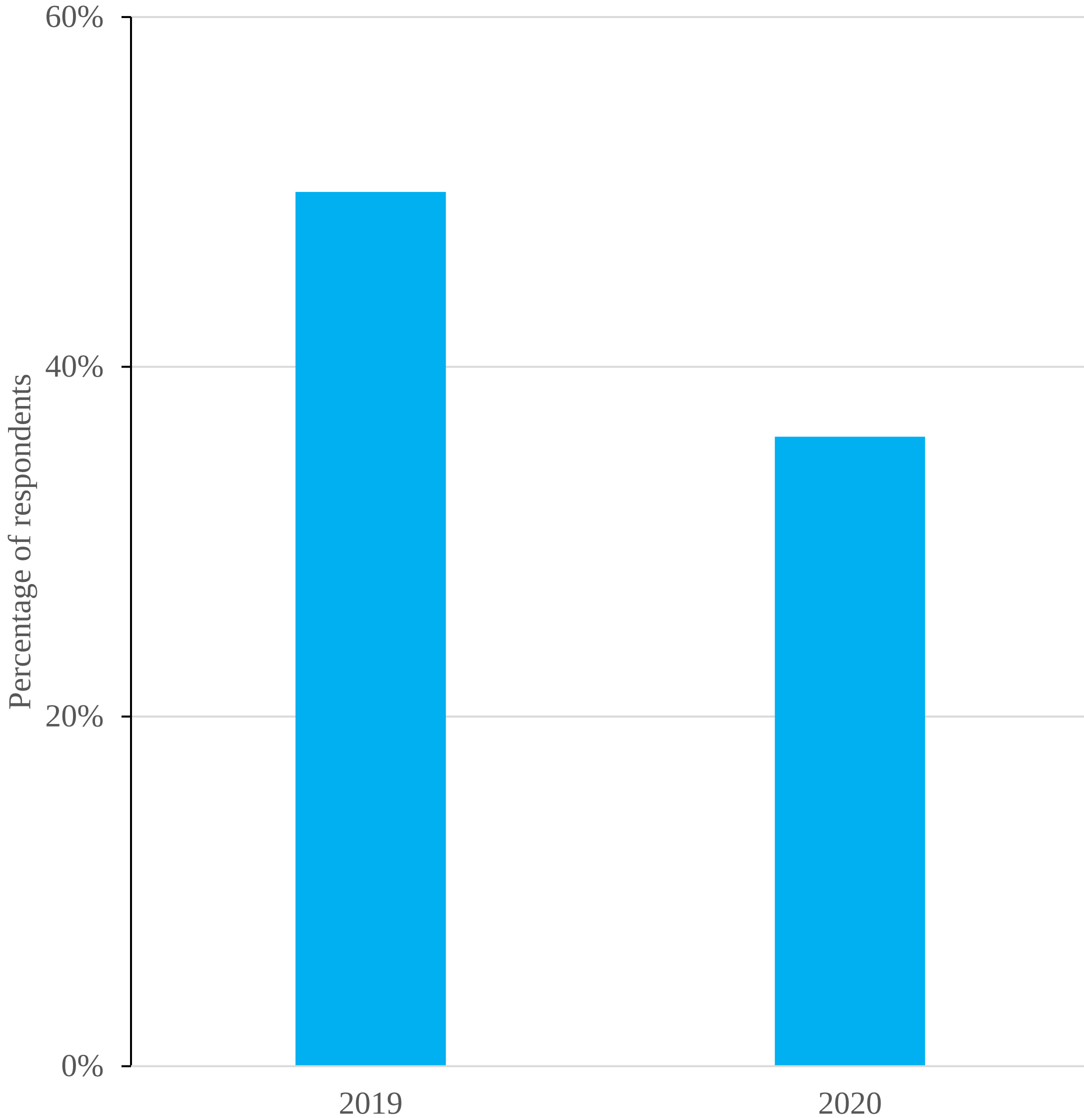

Figure 10. Percentage of respondents who consumed more seafood during a particular season in 2019, prior to the pandemic, and 2020, during the pandemic.

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	38%*	16%	15%	14%	17%
E-mail	34%*	16%	19%	21%	11%
Text message	41%*	15%	13%	20%	12%
Facebook posting	46%*	11%	13%	18%	11%
Twitter posting	52%*	9%	11%	18%	11%
In-store cards, table tops	22%	16%	27%*	25%	11%
In-store notifications, text	34%*	15%	19%	14%	19%
QR code	41%*	13%	16%	21%	9%
Word of mouth	18%	12%	26%*	24%	20%
Seafood counter clerk or waitstaff	12%	13%	23%	30%*	23%
Other	53%*	9%	19%	11%	9%

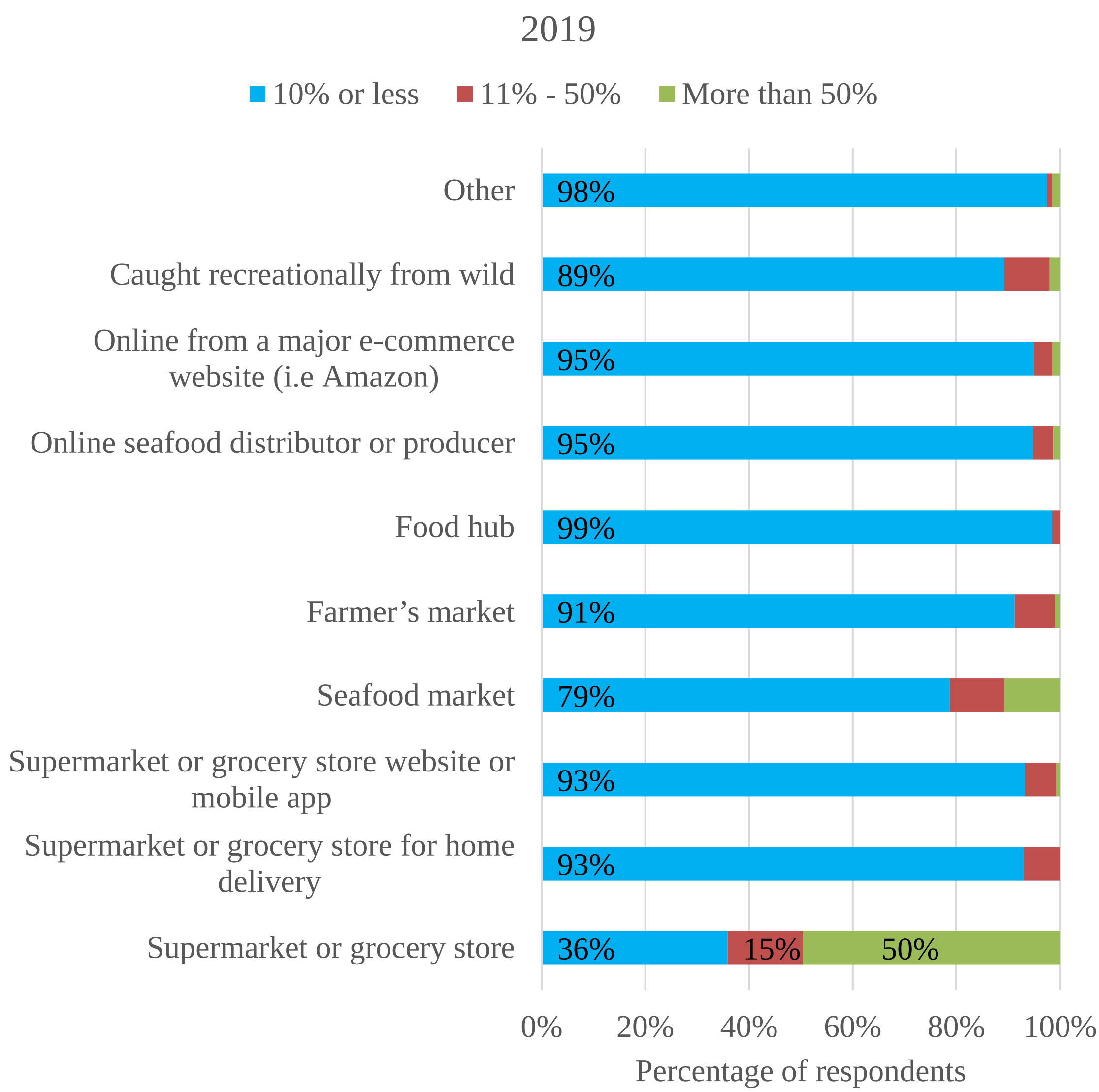

Figure 11. Percentage of seafood products purchased at varying establishments in 2019.

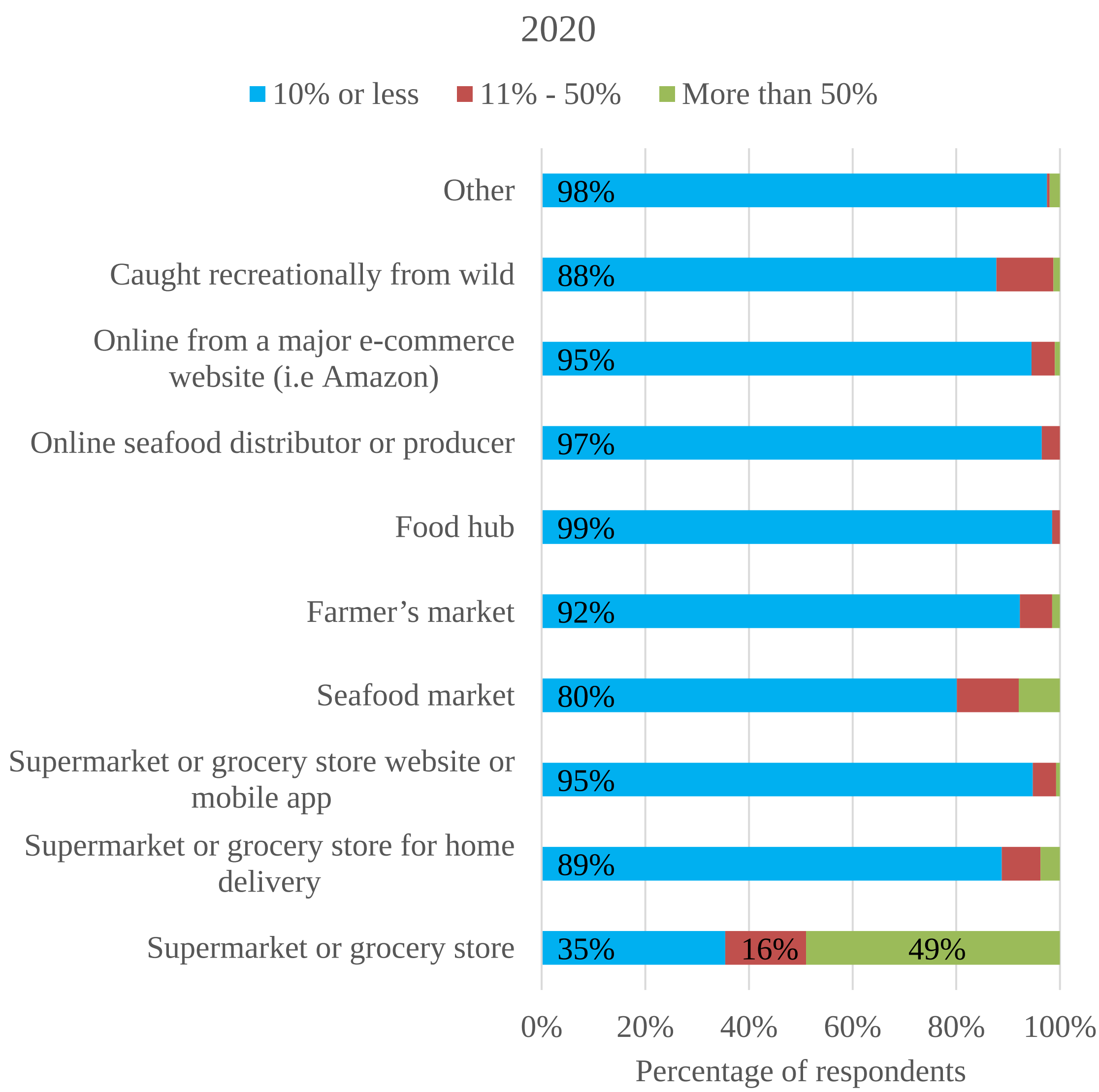

Figure 12. Percentage of seafood products purchased at varying establishments in 2020.