

Chapter 10

Sustainable Seafood Consumption: A Matter of Individual Choice or Global Market? A Window into Dublin's Seafood Scene



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Abstract Seafood consumption is considered a key element for food security and for nutrition related policies. However, seafood is often not easily accessible or perceived as a popular option even by those living in close proximity to the sea, especially in the western world. Common culprits are usually identified as a lack of specialized shops, culinary knowledge or as the disconnection with local coastal cultural heritage. This is, for instance, the case in Ireland: Irish waters provide a great diversity of seafood and yet, its domestic consumption remains unusually low for an island nation. Most of Ireland's seafood is exported to other countries, whilst the Irish stick to the popular salmon, cod and tuna; a consumption habit that has obvious sustainability externalities. This contribution aims to unpack the issues connected to seafood consumption in Ireland's coastal capital Dublin and offers a window into the city's seafood scene. Data presented were gained within Food Smart Dublin, a multidisciplinary research project designed to encourage a behavioural shift of consumption towards more sustainable local seafood. The project's purpose was to reconnect Dublin's society with their tangible and intangible coastal cultural heritage by rediscovering and adapting historical recipes. The paper thus connects past, present, and future perspectives on the topic. First, the past is explored by delineating the potential of marine historical heritage in stimulating sustainable seafood consumption with the reintroduction of traditional Irish recipes. The present offers a data snapshot on consumption patterns towards seafood gathered from

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structured online questionnaires results from the Food Smart Dublin project. Respondents offered insights into their relationship with the sea, on the frequency with which they consume seafood and the obstacles they see in consuming more of it. Finally, these perspectives delineate possible future scenarios and recommended governance actions to support policymakers in designing a better and more sustainable seafood system.

10.1 Introduction

10.1.1 *The Irish Context*

Ireland is an island nation with an extensive, indented coastline of over 7000 km, and 10 times more territory under the sea than on land. This provides ideal habitats for great coastal biodiversity and creates a vast range of seafood. Ireland's fishing grounds are among the richest in Europe and yet seafood is often overlooked in shaping the country's modern culinary identity. In the past, seafood played a pivotal role for the inhabitants of the island. There is evidence that shellfish such as oysters, scallops and cockles, fish like cod, whiting, wrasse and ling and all kinds of seaweed were consumed by the hunter-gatherers that first arrived and settled at Irish shores over 10,000 years ago (O'Sullivan and Breen 2007). These are species that can still be found in the Irish waters today and that are commercially exploited. With the advent of farming in the Neolithic period, Irish ancestors turned away from the sea and seafood became less essential food for survival. With different invasions and trades came different food cultures and seafood saw a rise and fall through the centuries with the arrival of the Beaker people, the Celts, the Vikings, the Normans and the English (O'Sullivan and Breen 2007; McMahon 2020).

In present day Ireland, people consume seafood just below the average European amount which is surprising given the richness of seafood at the doorstep. Some call this phenomenon the "sea blindness" of the Irish as the diversity of marine food does not seem much appreciated. Instead seafood like salmon, cod and tuna, top predators that could be regarded as the tigers and lions of the sea, are the regular items of the Irish seafood diet. These predators occupy the top trophic level of the marine food web and are heavily overfished while most of Ireland's treasures, such as lobster, herring and mussels are exported to other European and Asian countries who seem to have more appreciation of these local products.

Before March 2020, when the COVID-19 pandemic forced the gastronomy sector in Ireland to its knees and when restaurants were operating normally, over half of the seafood consumption took place outside the domestic setting. Reasons for not cooking seafood at home were often the lack of recipes and restricted availability (Scherer and Holm 2020). But alternative seafood to the traditional fish'n'chips

such as mussels, seaweed or less-known fish were also considered unpalatable and a certain lack of knowledge led to insecurity around cooking a delicious seafood meal at home.

Indeed, knowledge amongst the Irish public on local and seasonal fish and seafoods from lower trophic levels is limited and incomplete. The sustainability of the fisheries is confusing and highly complex and without unifying certificates many consumers as well as hospitality professionals feel unsupported and discouraged from buying sustainable seafood. This seafood illiteracy was not always so severe in Ireland. The island nation has hundreds of years of experience in sourcing and cultivating food from the sea. Only in the nineteenth century local knowledge seemed to slip away when conflict, political indifference and economic abandonment led to a decline and neglect in coastal activity (O'Sullivan and Breen 2007). The Great Famine marked a key event of change in Irish food. Due to the massive reduction in population, the workforce and the knowledge was not available to produce food locally. Consequently, less food was grown on Irish fields and more was imported from abroad. This led to great changes in produce and therefore consumption with a strong influence of the world market and increased commercialisation (Clarkson and Crawford 2001).

In the last couple of decades or so, an appreciation of diverse seafood is gently resurging due to celebrity chefs introducing novel, healthy trends. These celebrity chefs promote the preparation of seafood on TV cooking shows and give workshops on sourcing and purchasing fresh local and sustainable seafood across the country. This strengthens the confidence of Ireland's citizens in past seafood knowledge and spurs curiosity. The recent COVID-19 pandemic also seems to have contributed to the incentive to appreciate local products, cook at home and reconnect with a more territorial, local cuisine, grounded in coastal habitats.

This contribution explores and presents findings of the multidisciplinary research project Food Smart Dublin. The project was designed to revive Ireland's sustainable seafood practices in an innovative dialogue between past knowledge, present palates and future interaction with Irish waters focusing on Ireland's coastal capital Dublin. This article's main objective is to investigate whether the rediscovery of cultural/culinary heritage could incentivise sustainable seafood consumption by Dublin's society. At the same time, it explores if there are obstacles that prevent citizens who live in such close proximity to the sea to eat more locally-sourced, sustainable seafood.

To this backdrop data are presented from structured online questionnaires on consumption patterns of seafood among Dublin's society and the participants' relationship with their surrounding sea. The results are discussed from the perspective if and how the rediscovery of historical seafood recipes can help with Dublin's image as a sustainable seafood city. The chapter concludes with recommendations on governance actions to support policymakers in designing a better and more sustainable seafood system on Ireland's East coast.

10.1.2 Seafood and Its Environmental Agency

Fishing arguably remains the oldest means of food gathering humans still practice on a global scale today. For centuries, the ocean was a distant place for many and the human-ocean relationship was not thought about in great detail (Brennan et al. 2019). Over the last one and a half centuries, anthropogenic use of the oceans increased dramatically with the exploitation for its oil and gas, wind and wave power, increased transport, recreation and of course intensified fisheries. Given the preference for certain seafood species and the industrialisation of fishing, stocks of the most commercially valuable species have become seriously depleted in the early twenty-first century (Pauly et al. 1998, 2002, 2003).

This is not without reason. Seafood provides important sources of employment and nutrition, especially in low-income countries, and is highly traded, both globally (Gephart and Pace 2015) and regionally (Belton et al. 2018). Hundreds of millions of people rely on seafood for their livelihood, culture, and food and nutrition security (FAO 2018). And yet, the real value of seafood is not well understood, protected or integrated into global food security and nutrition policy considerations (e.g. Béné et al. 2015). Moreover, food sourcing from the ocean in the last decades has mostly focused on exploiting top predators such as salmon, tuna, cod and haddock. The vast amounts of potential food at lower trophic levels such as filter feeders and algae are not as popular, despite being already harvested as economically viable and nutritious products.

The Food from the Oceans report (EU 2017), which was subsequently endorsed by the EU Group of Chief Scientific Advisors as the foundation for a range of recommendations posed a central question: *'How can more food and biomass be obtained from the oceans in a way that does not deprive future generations of their benefits?'* The scientific evidence in answering this question clearly points to act sustainably by increasing seafood production and consumption at lower trophic levels as a way to bring about such an increase in biomass. Moreover, the greatest and most feasible potential for expansion globally identified in The Food from the Oceans report lies in mariculture of herbivore filter feeders such as mussels and oysters and cultivated algae/seaweed for direct human consumption – or for a more ecologically-efficient source of feed for farmed marine carnivores (such as salmon). Another point addressed in the same report is that ocean-derived protein should play an increasingly important role globally to fulfil the UN Framework Convention on Climate Change. The challenge we are facing is a shift in consumption habits.

10.1.3 Food Systems and Consumption Behaviour

Food is a highly complex system, with social, economic and ecological components. It contributes significantly to greenhouse gas emissions and plays a key role in driving climate change. Our behaviour towards food, what we eat, how we eat it,

and how we dispose of it too influences our health, food security, soil degradation and water quality. Around one third of global greenhouse emissions comes from the food system. The UN's Food and Agriculture Organisation estimates the annual financial cost of wasted food to be €900 billion in economic costs and an additional €800 billion in social costs (FAO 2018).

Food insecurity and sustainability are among the most significant global challenges faced by humanity in the twenty-first century. Ensuring safe, nutritious and sufficient food for a growing global population of close to ten billion people is a challenge exacerbated by increasing urbanisation and political instability that requires an interdisciplinary approach locally, nationally and regionally. The future of planet Earth is determined by our actions, our behaviour as consumers and as citizens (Holm 2014). The lasting COVID-19 pandemic has highlighted the necessity to study impacts and identify vulnerabilities within the food system and has provided opportunities for governments, international bodies, industries, small-scale actors, and civil society to respond, adapt, and build resilience to future shocks to the food system. Investing in food-based solutions while interlinked with agriculture, specifically targets the food supply chain that is highly dependent on individual behaviour change (IPCC 2014). To change how our society consumes food, we must first change people's routines, habits and norms.

Many people from countries with a developed economy in the global north have changed their attitude towards food during pandemic related lockdown and recent peer-reviewed publications show shifts in consumer behaviour (Kaiser et al. 2021; Lam 2021; Love et al. 2021). Some of these results are positive indeed – Love and co-authors (2021) reported more home cooking and from scratch while food waste decreased and grow-your-own food increased substantially. This shows scope for a changing attitude towards food and consumption behaviour.

While the literature on theoretical models of consumer behaviour is large and complex (Jackson 2005), environmental education emerged as one of the primary strategies to effect behaviour change (Williamson et al. 2018) although the authors point out that evidence suggests it is less effective alone than paired with other techniques. Within educational approaches, it is important to distinguish between different types of knowledge that may be useful in an intervention, such as the what, why, and how related to a behaviour (Kaiser and Fuhrer 2003). Against this backdrop the seminal work of Shove (2010) has vocally criticised the over-attention and public investment on individual consumer behaviour rather than on the economic structures and policies that would allow sustainable living.

In principle, humans find it extremely difficult to change established behaviour, even though we know the negative consequences that await us if this change is not taking place. One point that can help with keeping these good habits is to re-introduce the totemic value that food had before modern mass-production reduced it to its economic value. The ecosystem's agency needs to take centre stage when dealing with the planet's resources as human preferences. This means that practices and actions are the main drivers of global environmental change in the twenty-first century. But this cannot come solely from the bottom up, i.e. society, it must also be implemented in government policies. It is crucial, therefore, to promote

pro-environmental behaviour throughout. Holm and co-authors (2015) argue that in order to accomplish this, we need to move beyond rational choice and behavioural decision theories, which do not capture the full range of commitments, assumptions, imaginaries, and belief systems that drive those preferences and actions. Disciplines of the humanities such as history, anthropology, psychology, and philosophy can provide deep insights into human motivations, values, and choices.

To this end Holm et al. (2013) developed the Global Change Research (GCR), a framework aimed at an integrated conception of human agency and the planetary environment combining different knowledges for a “radical interdisciplinarity”. Within this framework, the humanities are seen as an ally of the natural sciences meaning that greater attention is paid to the bio-geophysical dimensions of the social sciences and to ecological approaches in the humanities, while developing concepts, theories and research that aim to form fields enabling transnational studies.

Food studies lend themselves perfectly to such approaches. Within those, seafood can play an important role in building sustainable lifestyles and circular, fair food systems, creating a more resilient global system against climate change, helping to improve biodiversity and reduce pollution (Olson et al. 2014). This can be achieved not only by providing important sources of employment and nutrition across the globe, but also through increased ocean literacy (Tran et al. 2010) which is defined as ‘...an understanding of the ocean’s influence on you – and your influence on the ocean’ according to the most popular definition by the National Oceanic and Atmospheric Administration (2013). An ocean literate person has knowledge on how the oceans work, the anthropogenic impact on them, is able to develop critical attitudes towards topics such as unsustainable and sustainable fisheries and the generally human-ocean relationship (Brennan et al. 2019). At the same time, it is important to remember that beyond individual attitudes the current food system is fully embedded in the global economy, in what has been defined as a Corporate Food Regime (McMichael 2005). As any other kinds of commodities food prices and markets are now established internationally, whilst food often travels around the globe following capitalistic dynamics. Per contra, the concept of Food Sovereignty “is at once a slogan, a paradigm, a mix of practical policies, a movement and a utopian aspiration” (Edelman 2014, p. 960), which aims to contrast such corporate system by fighting for equal redistribution of food, land and water.

10.2 Methods

This section presents data from the Food Smart Dublin research project, including historical information from archival data, as well as seafood consumption data gathered from a structured online questionnaire. It details the methodologies applied to the archival research, the basis on how historical recipes were selected and how the online questionnaire was constructed. Participants taking the online questionnaire offered their perspectives on their relationship with the sea, on the frequency with

which they consume seafood and the obstacles they see in consuming more of it. On the basis of these perspectives possible future scenarios are discussed and recommended governance actions to support policymakers in designing a better and more sustainable seafood consumption system are explored.

10.2.1 Food Smart Dublin

The Food Smart Dublin project¹ was based on a multidisciplinary and trans-sectoral approach that applied methodologies in the humanities and natural sciences. This was to integrate and intertwine insights from history, social sciences, food policy and marine ecology and to apply a trans-sectoral concept of knowledge exchange involving academia, businesses, NGOs and the general public. In a wider context, the project implements ideas of the ‘Humanities for the Environment’ approach (Holm et al. 2015) in a transactional effort to increase sustainable seafood consumption of locally sourced food from lower trophic levels. Specifically, the framework builds on archival and folkloristic research of historical, local seafood recipes of the Dublin coastal communities to document the city’s forgotten knowledge of local seafood. A selection of ten historical recipes, following the seasons through the year, were cooked in an appetising, innovative way by professional chefs. The old and new recipes were published on the project’s website and promoted on social media with a link to a structured online questionnaire to respond to. An effort was also made to ensure the selected recipes were from a time prior to the Great Famine for reasons given in 1.1.

10.2.2 Data Collection

Historical, local seafood recipes were searched for engaging general search engines such as Google and Wikipedia. More specific software and internal search engines were used to search the archives of national institutions like the National Library Ireland Archives, the National Folklore Collection, The School Collection at Dúchas.ie. Several specialised websites dealing with local maritime and food history of Dublin and Dublin Bay Biosphere were also utilized. Keywords included ‘fish’, ‘fishing’, ‘seafood’, ‘Irish boats’, ‘coastal living’, ‘Irish diets’, ‘Dublin Bay’, ‘catch’, ‘dinner’, ‘coastal activity’, ‘shellfish’. More specific words around seafood included ‘lobster’, ‘salmon’, ‘cod’, ‘limpets’. A total of just over 190 seafood recipes were found from seven main sources providing suitable material. These consisted of actual printed cookbooks, observations of the natural history of Dublin,

¹Food Smart Dublin was funded by the Irish Research Council and carried out at the Trinity Centre for Environmental Humanities in Trinity College, Dublin between 2019 and 2021.

handwritten manuscripts and letters from family and estate papers. All sources were written in English. The majority of the recipes were on salmon, cod, oysters and lobster. Lamprey, turbot and eel were also prominent. Less common were recipes on ray, weaver and limpets. All seafood recipes originated from a time period between the early 1690s and mid-1840s (Box 10.1).

Box 10.1: List of Main Sources of Historical, Local Seafood Recipes and References

Source name	Document type	Author	Publisher	Year	Reference
Mary Cannon's Commonplace Book – an Irish kitchen in the 1700s	Printed book	Marjorie Quarton	Lilliput Press	1700–1707	https://www.lilliputpress.ie/product/mary-cannon-commonplace-book-an-irish-kitchen-in-the-1700s
The Townley Hall papers	Handwritten manuscripts	Ce Bradell; Jane Bury	National Library Ireland	c.1840, 1702	Ms 16,844 – 16,846; Ms 9563
The Art of Cookery made plain and Easy	Scanned e-book	Hannah Glasse	Internet archive – public domain	1777 2nd edition	https://archive.org/details/TheArtOfCookery
The Lady's companion: or, Accomplish'd Director in the whole art of Cookery	Scanned e-book	A Lady 'Ceres'	National Library of Australia	1767	https://catalogue.nla.gov.au/Record/3197172
Smythe Family of Barbavilla, Collingstown, Co. Westmeath XXVI Recipes and Miscellaneous	Handwritten manuscripts	Several authors	National Library of Ireland	c. 1690	MS 41,603/2/1-2
A new system of domestic cookery	Scanned e-book	Maria E. Rundell	Internet archive – public domain	1807	https://archive.org/details/newsystemofdomes01rund/page/n4
An essay towards a natural history of the county of Dublin	Scanned e-book	John Ruttly	Google books – public domain	1772	https://play.google.com/books/reader?id=u3FbAAAAQAAJ&pg=GBS.PP1&hl=en

Once organised, transcribed and logged, the recipes were selected in a collaborative manner between the researchers and chefs in constant dialogue around the concepts of *suitability*, *seasonality* and *sustainability*, explained in detail in the next paragraphs.

These following concepts are merely a methodology we adopted to select the appropriate seafood and recipes. Respondents of the structured online questionnaire were presented with the recipes and seafood chosen on the basis of these indicators and were thus not asked to provide feedback on them.

Suitability

The suitability of the dish/seafood was concerned primarily with the history of the marine creature in Irish tradition (e.g. lobster, oyster or hake), and also with the level of difficulty in making the dish, i.e. it required no special skills to be cooked in the domestic setting with ordinary kitchen tools and average cooking skills. Affordability was an additional element considered under suitability, i.e. aimed for participants to be able to comfortably incorporate the dish into their weekly diet based on an average Irish income and time availability.

Seasonality

Recipes were selected utilizing different perspectives and viewpoints of seasonality. For instance, avoiding certain seafood during spawning season was not the only aspect considered, also because it is not always a straightforward choice. Many chefs and fishmongers would agree that some seafood is only available during spawning season as that is when they become more active, and are accessible for the boats that catch them, or when they taste better. Moreover, when the seafood is landed in higher numbers, it usually also goes down in price and is, therefore, more affordable. Some seafood is seen as a delicacy when in roe and preferred by some such as the opaque scallop with its orange ‘coral’. Sometimes the ethical imperative to avoid seafood during their spawning season is in contrast with their availability, affordability and taste. With the recipes selected for the Food Smart Dublin project, the seafood was generally not considered for a certain month when they were known to be spawning or when they were known to be ‘spent’. This is a term used for seafood that just spent all their fat and protein content into egg production during spawning season which makes their flesh watery and soft.

Sustainability

Sustainability is not a concept, but rather an on-going process with three core elements that are intrinsically linked: economic growth, social inclusion and environmental protection (Purvis et al. 2019). We argue that the dimension of ethics is the fourth element crucial to harmonise the other three (in agreement with Suhonen and Sutinen 2014). This implies that a commitment to sustainability in and of itself does not prescribe a unique fixed future state of the world but leaves a dynamic leeway of options. The path to sustainable development is value-based and multi-dimensional (Kaiser 1997), often accompanied by trade-offs between basic values, affecting all other dimensions. Ultimately, there are many different definitions of sustainability, depending on what perspective one looks at it.

Likewise, the sustainability of seafood can vary significantly depending on how and where the seafood has been caught or farmed. Many single species are caught or farmed in different ways and by different methods. The recipes for the Food Smart Dublin project were chosen based on current data at the time of the project, knowledge and sustainability advice (2019–2021). The choice may have been different if the project would have been in the UK or another country or carried out at a different time. Key elements that were considered under the sustainability aspect were the harvesting methods of Irish fishing boats and the overall health of the respective stock and their resilience to other factors such as climate change.

From May 2020, when the archival research was complete and appropriate recipes were identified, the Food Smart Dublin team published a total of ten recipes on their website and one per calendar month until May 2021 (except from July 2020 and January 2021). The recipes were advertised through a variety of channels, including the project's Twitter, Facebook and Instagram accounts and a Mailchimp newsletter advertising every new recipe. The University's communications office helped to produce a short video clip for each recipe which was also published on the project's website and advertised on YouTube.² When the first recipe was published to kick off this part of the research, a press release was given and a piece about the collaborative work between the chefs and researchers was published in both, a national and a local newspaper. The initial plan also incorporated feedback on the historical seafood recipes via in-person tastings events in the seafood restaurant owned by the lead-chef involved. The surveys were planned to be conducted face to face during these events in order to engage with as many people as possible. However, with the COVID-19 pandemic and lockdown restrictions, the project had to be completely reconfigured to be carried out remotely with the transfer of all outreach and recipe promotion to an interactive online format. The recipes were advertised up to three times a week via the project's social media channels and participants were incentivised to engage with the online questionnaire by offering the chance to win a seafood voucher from the project's sustainable fishmonger partner each month. The structured online questionnaire was aimed at social media users from all backgrounds and ages. To try and engage people without an interest in seafood consumption fun facts and nutritional benefits gained by consuming food from the sea were also posted.

10.2.3 Structured Online Questionnaires

The data for the present research were collected as part of the structured online questionnaires conducted in connection with the historical recipes between May 2020 and May 2021. The structured online questionnaires focused on the respondents' experience with the specific recipes, as well as offering insights into

²<https://bit.ly/3tS7XLN>

consumption patterns regarding seafood, each participant's relationship with the sea and on suggestions to further improve sustainable seafood availability. The structured online questionnaire was built around three main blocks of information. In the first section respondents were presented with seven questions about their age, profession, income, gender, nationality, residency in Ireland and education. In the second section three questions investigated the respondents' relationship with seafood by asking about the frequency in consumption, the main obstacles for consuming more, and how they perceived their relationship with the sea. In the last sections, respondents could leave detailed feedback on the monthly recipe (therefore this last section was readapted each month) by answering seven questions regarding the sourcing of the seafood, rating the difficulty and taste of the recipe, for whom they had cooked it, the likeness of cooking it again, two final open questions on the pros and cons of the recipe and a last open comment box.

The pandemic and consequential lockdown affected the number and quality of responses, due to survey and screen fatigue. Nevertheless, structured online questionnaires were designed and delivered online using Google Form with the option for respondents to contribute even if they did not cook the recipes. In this case, the questionnaire consisted of only one multiple choice question aimed at understanding the reasons for why participants did not cook the recipe. The given choices for this were the following: "I could not find [seafood of the month] in shops"; "the recipe looked too complicated to cook"; "I did not want to kill animals"; "I am allergic to some of the ingredients used in the recipe"; "[seafood of the month] is too expensive"; "cooking the recipe would have taken too much of my time"; "other" (open answer).

10.3 Results

In total, 33 online questionnaires were completed. Eighteen of these were completed by participants who had cooked the dish and responded to the whole block of questions outlined in Sect. 2.3, while 15 responded to the question related to not having cooked the recipes. Among the reasons indicated by the latter group not having cooked the historical recipes the open responses included: "It is a bit oil rich" (with two entries), or "I did not know how it would taste". These open responses indicated a variety of reasons behind the choice of not cooking seafood. The structured online questionnaires from respondents who cooked the recipes constitute a more in-depth observation of participants' behaviour and attitude towards seafood. First of all, an equal representation of females (50%) and males (50%) were given with 72% residing in Dublin, 21% in Antrim and 7% in Cork. Respondents also indicated working in a wide variety of different professions, including radiochemist, software engineer, IT manager, company secretary, homemaker etc. The most represented category of respondents were chefs with 16% of the total responses.

Respondents were generally very positive with their feedback in rating the recipes (Fig. 10.1). The majority responded with "very good" and "excellent" when

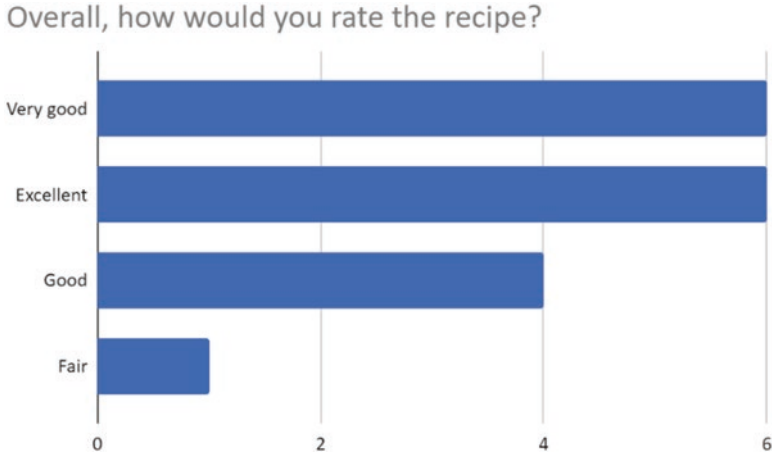


Fig. 10.1 Overall recipe ratings

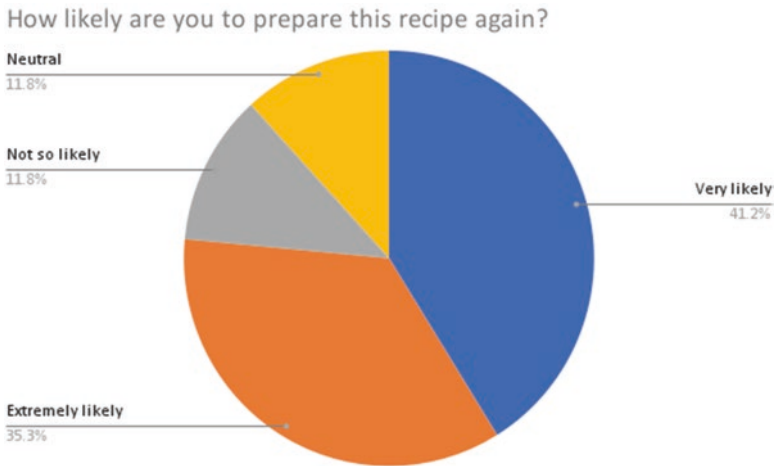


Fig. 10.2 Likelihood of repeated purchase

asked about their cooking experience. There were no negative responses. Likewise, in Fig. 10.2, the question “How likely are you to cook the recipe again” was responded to in a positive manner. More than 75% of respondents indicated that it would be “extremely” or “very likely” that they would cook the recipe again. This suggests a general enthusiasm for their cooking experience. Interestingly, almost 90% of participants sourced their seafood from fishmongers: in Fig. 10.3. “SSI” stands for “sustainable seafood Ireland” a local fishmonger owned by Food Smart Dublin’s official partner chef who gave a 20% discount on the prevailing seafood. Only 6% of respondents purchased their seafood in supermarkets. This low number could potentially be explained by the different seafood types advertised in

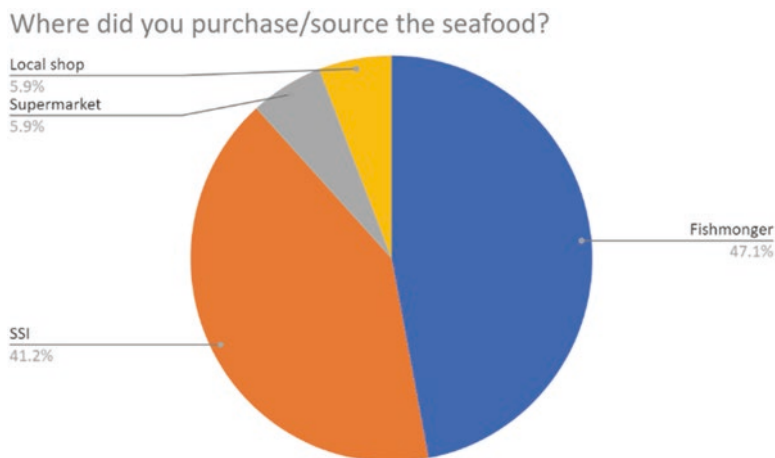


Fig. 10.3 Seafood sources by purchase location

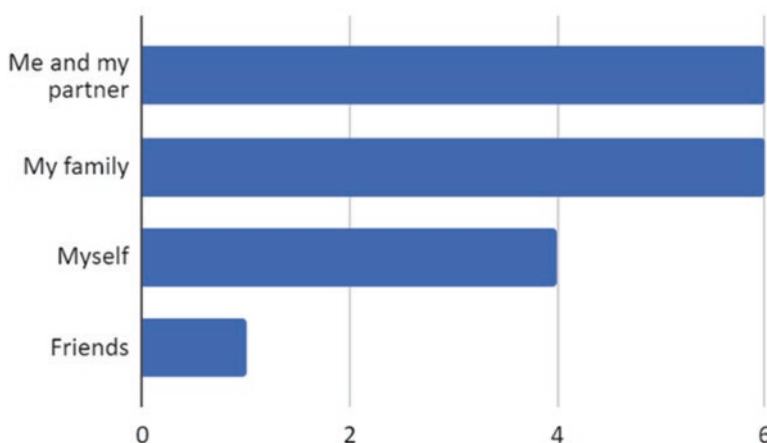


Fig. 10.4 Response regarding cooking partner

the Food Smart Dublin recipes that were not so common, and thus not necessarily accessible in supermarkets where seafood is limited to a few standard options.

When looking at whom the participants cooked the dish for (Fig. 10.4), only one respondent had cooked the recipe for friends, whilst others cooked it for themselves, family or partners. This is likely a consequence of the COVID-19 pandemic and associated lockdown in 2020 but also shows how home cooking encompasses a wide variety of family status. The questionnaire also investigated how strongly respondents felt connected to the sea. Figure 10.5 shows that most participants seem to have a strong connection with their marine surroundings, although 14.2% felt neutral about it or not very much connected. Respondents also proved to be

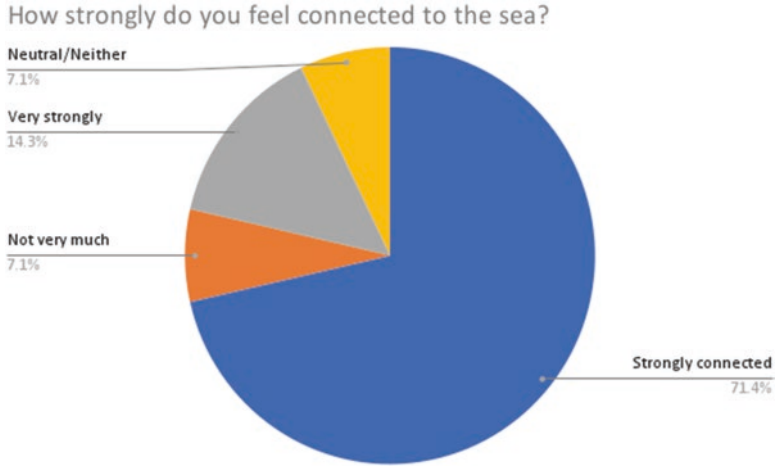


Fig. 10.5 Responses on connection to the sea

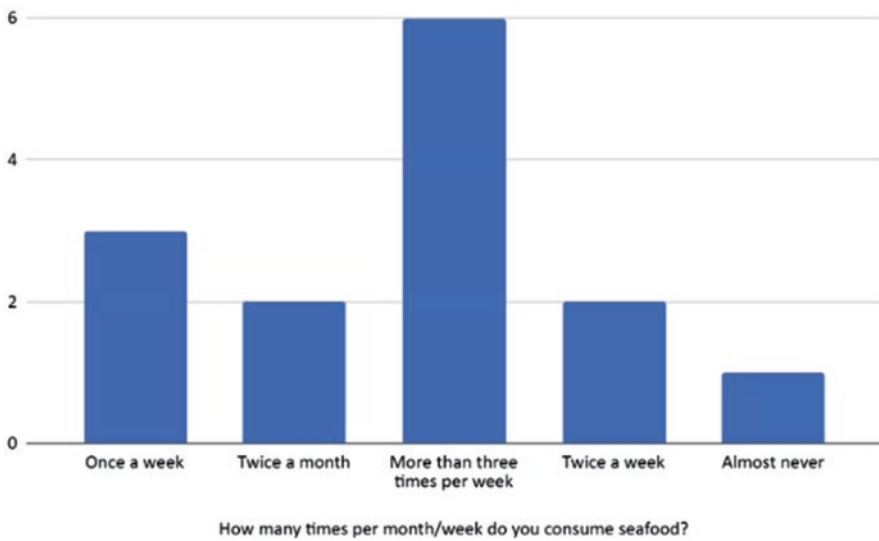


Fig. 10.6 Responses on the frequency of seafood consumption

enthusiastic about seafood: most of them consume seafood more than three times a week, or at least two or one time per week as shown in Fig. 10.6. Finally, although most respondents did not see obstacles in consuming more seafood (Fig. 10.7), some indicated a lack of knowledge and a lack of specialised shops as main bottlenecks in allowing them to consume seafood more regularly.

What are the main obstacles for you in consuming more seafood?

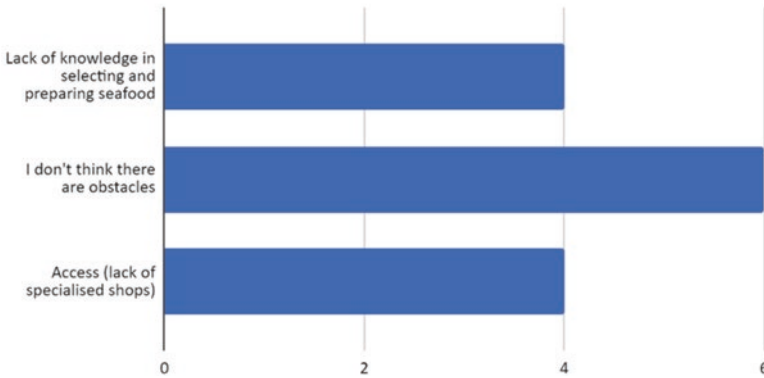


Fig. 10.7 Main obstacles for seafood consumption

10.4 Discussion

Although the number of responses is small, the results of the structured online questionnaires can still highlight important and novel insight into the participants' consumption patterns of seafood and their relationship with their surrounding sea. For instance, the outlined responses highlight two relevant points to encourage a more widespread consumption of seafood in Dublin. Firstly, people from Dublin often do not have the knowledge and skills when it comes to cooking seafood but the results of the project's structured online questionnaires demonstrate that they are eager to learn and that there is an interest. At the same time, this interest encompasses a wide variety of social, family, and gender status.

Instead, rather than a lack of skills, the main obstacle to a more sustainable seafood consumption is the actual inaccessibility to the varied seafood Irish waters have to offer. The questionnaire on the recipe with megrim, a deep-water flatfish, common in Irish waters, but not a traditional Irish fish *per se* demonstrates that only a few respondents were able to find the fish in their local fishmongers, not to mention the complete absence of it in supermarket chains. This is in contrast to Irish fishers who are well familiar with the fish as it is one of the most valuable fish exports.

Megrin is not an exception in this disconnection between Irish fisheries and local seafood consumers. Herring once brought wealth and fortune to Ireland, yet this traditional fish deeply rooted in Ireland's history, is rarely found at the fishmongers counter nowadays and completely absent from the fish counter at supermarkets. It is still fished, but since there is no local demand most catches are exported most profitable to the French market.

Interestingly, almost 90% of the participants sourced their seafood from local fishmongers or specialized shops, partly, because the local seafood in the recipes is simply not available in supermarkets. However, given that supermarkets constitute the main source of food for Irish consumers, we argue that actions to increase access to local seafood should be taken in this direction without creating obstacles for local fishmongers. One alternative route here could be to establish a supply link between the local fishmonger and the fresh counter in supermarkets so that access to locally sourced, sustainable seafood, is more readily available. Another point worth contemplating on is whether a push in the direction of high quality local, sustainable seafood is needed rather than just higher fish consumption overall. This however, would make seafood an elite food and would defeat the purpose of affordable locally sourced alternative protein available for people across demographic levels. Arguably, this indicates that the focus on individual consumption behaviour may be a misplaced effort if the overall structure obstructs the possibility for consumers to purchase sustainable seafood options. This echoes Shove's argument (2010) discussed in the introduction, describing how, the research into changing individual behaviour has become the main driver in public policy design around environmental sustainability. Shifting the focus to the market and the policies which sustain it could be a more effective strategy to achieve sustainable food systems.

10.5 Conclusions and Policy Recommendations

New insights across economics, anthropology, political science, humanities and natural sciences, have transformed global understandings of human behaviour and decision-making. Public, private, and non-governmental sectors are changing as a result. Policy is improved by commissioned 'behavioural insights teams' or 'nudge units' to apply novel insight into human decision making (OECD 2017). Product marketers are upgrading their approaches to pipeline development, advertising, and sales. All of these efforts are clearly not leading to real change if the market is still structured to consider food as a mere commodity. We believe, that in Ireland and particularly in its capital Dublin, the lack of access to specialized shops contributes to the "sea blindness" its society suffers.

Food political economists have long criticised the corporate-driven system which has transformed food into a simple commodity (McMichael 2005) where prices are established and imposed internationally. Our analysis shows how seafood is also increasingly exposed to the same dynamics on the island of Ireland, to the point that entire species, once popular seafood choices, disappear from local markets.

The concept of Food Sovereignty aims to contrast such mechanism with more culturally adapted control of food production and distribution (Rosset 2008). The re-introduction of the totemic value that food had before modern mass-production reduced it to its economic value could potentially help with this aim. However, such a vision has to be coordinated at multiple levels of governance and involve a range of actors from the bottom-up and on the individual level, but also from the top-down

with governmental coordination. Consumer behaviour change is best effected with joined-up actions, addressing society as a whole and its structures rather than individuals. Taxation and legislation are key ways to drive change, while European policies in agriculture and fisheries can offer great opportunities for developing robustness and sustainability in food production.

Public policies can play a determinant role in shaping the future of seafood in Ireland: they can support small-scale fisheries, improve access to seafood in public spaces (such as markets and supermarkets), promote healthy and sustainable seafood options via public procurement in places like hospitals or governmental offices; and even increase seafood literacy by supporting appropriate actions in schools and other educational institutions. All of these potential actions however have to deal with the profit over people attitude, which often diverts policies towards highly competitive and overexploited forms of fishing and farming, leaving no space for a more humanistic, people centred, approach to local resources.

The Food Smart Dublin project used the radical transdisciplinarity approach for environmental education in which humanities and natural sciences are intertwined to pay greater attention to the history and coastal cultural heritage of seafood and its value in Ireland while not losing sight of the ecological and bio-geophysical dimensions. The identification of historical seafood recipes to encourage the (re)-discovery of the rich and diverse seafood from local Irish waters, accompanied by the ecological, historical and sustainability information seems to have appealed to people in supporting to change their consumption patterns towards more sustainable seafood ways. However, this humanistic, people centred approach needs to be spread wider and more holistically included in policy design.

The COVID-19 pandemic has changed society, including how we view, value and utilise the natural world around us. Examining the effects of the global crisis and the subsequent ‘lockdown’ on the natural world gives us the chance to examine the role of food resources in (re-)building healthy and sustainable communities. A post COVID-19 world cannot remain “business as usual”. Facing the emergency status that we put our planet in, it is now more important than ever to co-create policies that promote healthy, culturally appropriate sustainable food systems.

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