

# WELCOME



## One Year of Irish Seafood Book Launch and End of Project Event 17 June 2021



IRISH RESEARCH COUNCIL  
An Chomhairle um Thaighde in Éirinn



Trinity College Dublin  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin



@foodsmartdublin



@foodsmartdublin19



## Food Smart Dublin 2019-2021

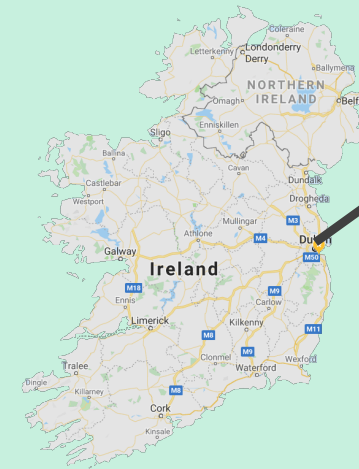
We reconnect consumers with their coastal cultural heritage by providing historical Irish seafood recipes and tapping into local marine resources from lower down the food web.



Our coasts around us and within us all



**IRISH RESEARCH COUNCIL**  
An Chomhairle um Thaighde in Éirinn





# Food Smart Dublin



Did you know that **Ireland has 10 acres of land under the sea for every 1 acre of land?** It has the richest seas in Europe and yet our island nation doesn't seem to value this incredible resource fully.

1. Archival work and selection of historical seafood recipes



2. Food industry partner adapts selected recipes to modern taste

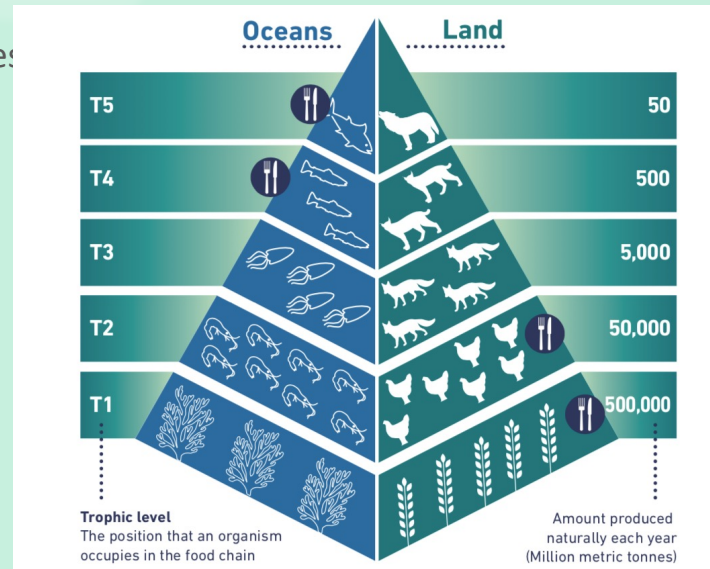


3. Participants try monthly recipes at home

The main seafood consumed by our society are **top predators** like tuna, salmon and cod – the tigers and lions of the sea. This is **unsustainable** and we have to change our **eating habits** towards **seafood** from **lower** down the food web.



6. Cookbook publication as project flagship



5. Interactive workshops with Eco-Unesco on sustainable seafood



4. Participants complete our online questionnaire

# NATURAL HISTORY

OF THE

## COUNTY of DUBLIN,

Accommodated to the

Noble DESIGNS of the

DUBLIN SOCIETY;

Affording a summary View

- I. Of its Vegetables, with their mechanical and  
economical Uses, and as Food for Men  
and Cattle; a Catalogue of our Vegetable  
Grafts; and a Botanical Kalendar, ex-  
hibiting the respective Months in which



No. 6 page 1  
A excellent fish sauce.  
1 pint of walnut juice, to the  
anchovies, boiled until diffused,  
strain it off, & add 1<sup>st</sup> cloves,  
brace, black pepper, 1<sup>st</sup> shallots,  
& 1/2 pint of vinegar, - boil all  
this together, strain it well, &  
let it stand to cool, when bottl'd,  
stop it up close, & the longer it  
keeps the better —  
A handful of fig-leaves, &  
a pint of water

By the same in the jelly  
Begin to code place it in a  
basin of hot water the ingredients  
should be stirred till it boils  
but not then —  
56 Butter of oysters  
When oysters are fully so as not to  
cut them lay them in a sauce  
pan with the pepper and trace  
brown then add liquor & when  
done have not enough add —  
as be careful not to  
let them as boiling  
then they keep  
long in bottle

## 1. Archival work

7 main sources with over 190 recipes

For one head of garlic  
use salt to every gallon of salley and  
if reduced away and skim & very  
but for use and it will keep a long time  
Walnuts white  
For French walnuts pare them until they  
white appear but take great care you  
too deep it will make them full of holes  
salt and water as you pare them on they  
h when you have pared them all  
sauce than well tinned full of

of fleam and  
very small, turn  
put & stuffing in  
put it on a tin & the  
butter it and score it  
outer side, and it over  
the yolk of one egg, shred par  
and crumbs of bread, put  
a few bits of butter in the  
secret side, 1 hour will bake  
a salmon of 7 or 8 lbs weight  
To Pickle Salmon,  
Cut a good Salmon into thin  
slices, wash the blood out  
very well, then boil it in  
strong pickle of salt and





## 2. Chefs cooking



# 3. Calling Participants to cook recipes

<https://www.tcd.ie/tceh/projects/foodsmartdublin/>

tcd.ie/tceh/projects/foodsmartdublin/recipes/Sept\_Oyster/ ☆

**Projects**

Climconflict

**Food Smart Dublin**

About

Research

Meet the team

Recipes

April

February

December

November

October

September

August

June

May

Blog

Output

Contact

Digital Literary Atlas of Ireland

View google map of Dublin Fishmongers


Complete our Questionnaire (5-10 mins)

## September recipe: Oysters

Click on the oyster to find out about its history and ecology.

1 2 3 4 5 ? i

Click for oyster sustainability info



**Oyster loaves.**

Take French rolls, cut a little hole on the top as big as half a crown, then take out all the crumbs, but don't break the crust of the loaf, then stew some oysters in their own liquor, with a blade of mace, a little whole pepper, salt and nutmeg, and a little white-wine; skim them very well, thicken them with a piece of butter rolled in flower, then fill the rolls with them and put on the piece again that you cut off; then put your rolls in a mazarine dish, melt butter, pour it into them, then set them into your oven, let it be as hot as if it were for an orange pudding.

Our September recipe is based on a historical oyster loaves recipe by Ceres from 1769 out of her cookbook "A Lady's companion: or accomplish'd director of the whole art of cookery".

The recipe we give you here was reimagined and adjusted to the modern taste by the talented Cian O'Leary. It's the perfect dish to impress your family and friends with. One great thing about this recipes is that you can cut corners in some places (like Ceres did herself in her recipe), for example, if you don't want to make the bread buns from scratch, you can just buy "French bread" or some buns to your taste. And

if you feel that the Kinsale mead in the oyster soup is just a wee bit too expensive you can swap it with Guinness.



Food Smart Dublin  
@foodsmartdublin

**#MondayMotivation** Watch our video with @Agnese\_Cretella & cook up oysters this month! **#Oysters** are packed with minerals & vitamins, you can enjoy them raw or cook our reinvented historical **#recipe** from the 1770s. It's **#oysterseason**, let's eat more oysters!



September recipe: oysters

The Food Smart Dublin project is an Irish Research Council funded project (COALESCE/2019/97). This recipe is based ...  
youtube.com



@foodsmartdublin



@foodsmartdublin19



# 4. Recipes surveys

- 10 recipes with 10 surveys once a month since May 2020
- The Covid-19 pandemic affected the number and quality of responses – survey and screen fatigue

## Projects

### Climconflict

### Food Smart Dublin

About

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April

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September

August

The two latter, cockles and mussels, must be washed in several waters, to clean them from the grit, put them in a stew-pan by themselves; cover them close, and when they are open, pick them out of the shells and strain the liquor.

## Pickled Cockles & Mussels w/ horseradish butter

by Niall Sabongi & Muireann Mc Colgan

🕒 prep: 15-20mins; 🕒 cook: 7mins; cooling time: 30mins; difficulty level: easy; starter serves 2

### Ingredients

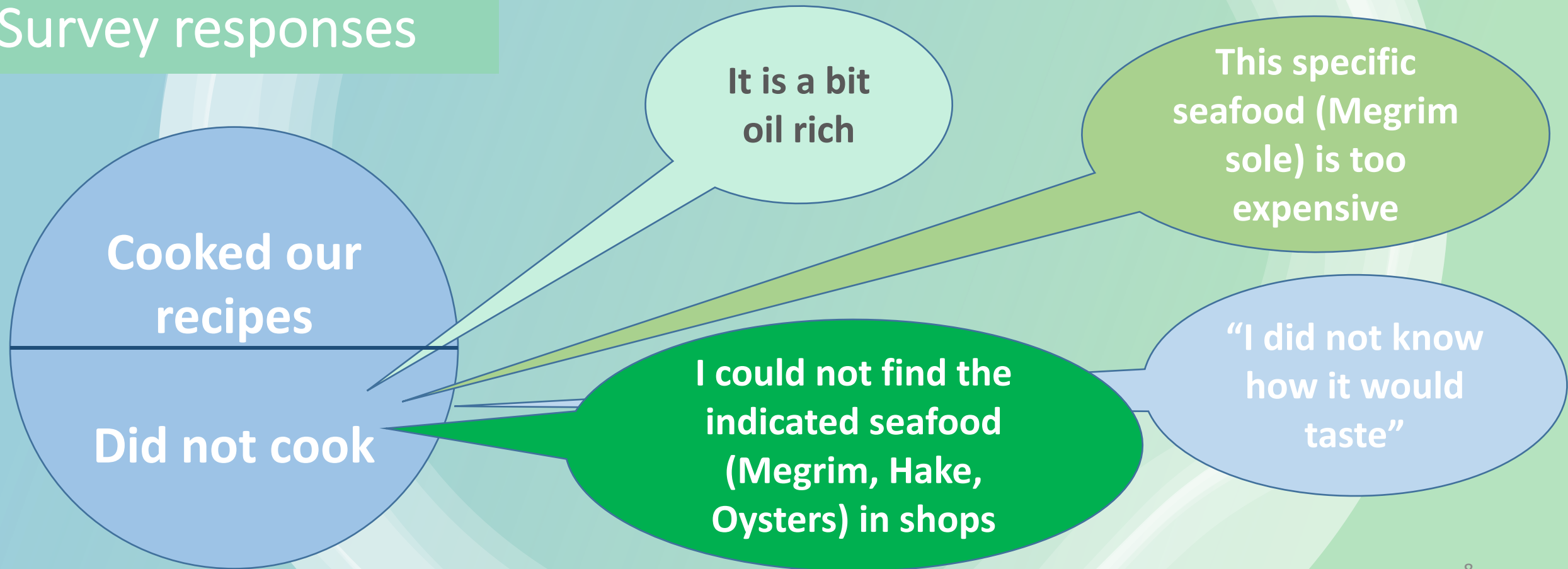
- 2 kg of cockles & mussels in the shell (or 1 kg each)
- 200 ml white wine
- 100 ml white wine vinegar
- 100 g sugar
- 1/2 teaspoon black pepper corns
- 2 shallots - finely sliced
- 1 medium carrot - peeled & finely sliced



### Method

## WHO RESPONDED?

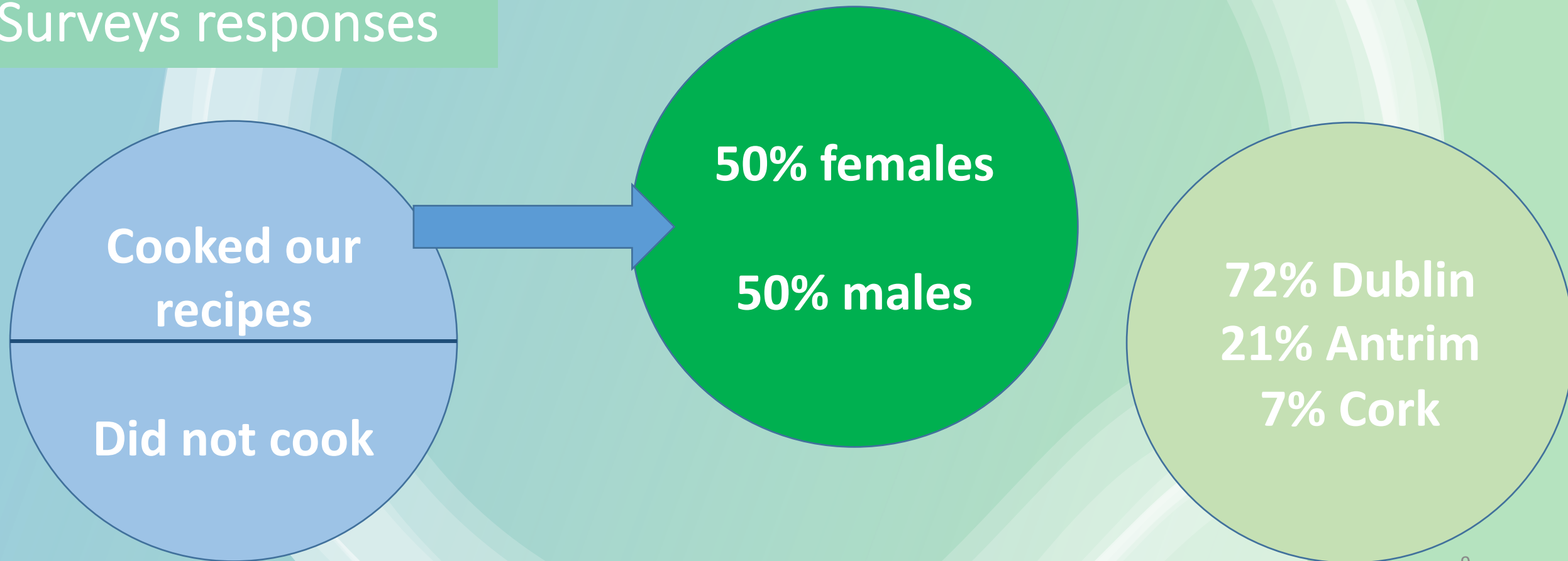
### Survey responses





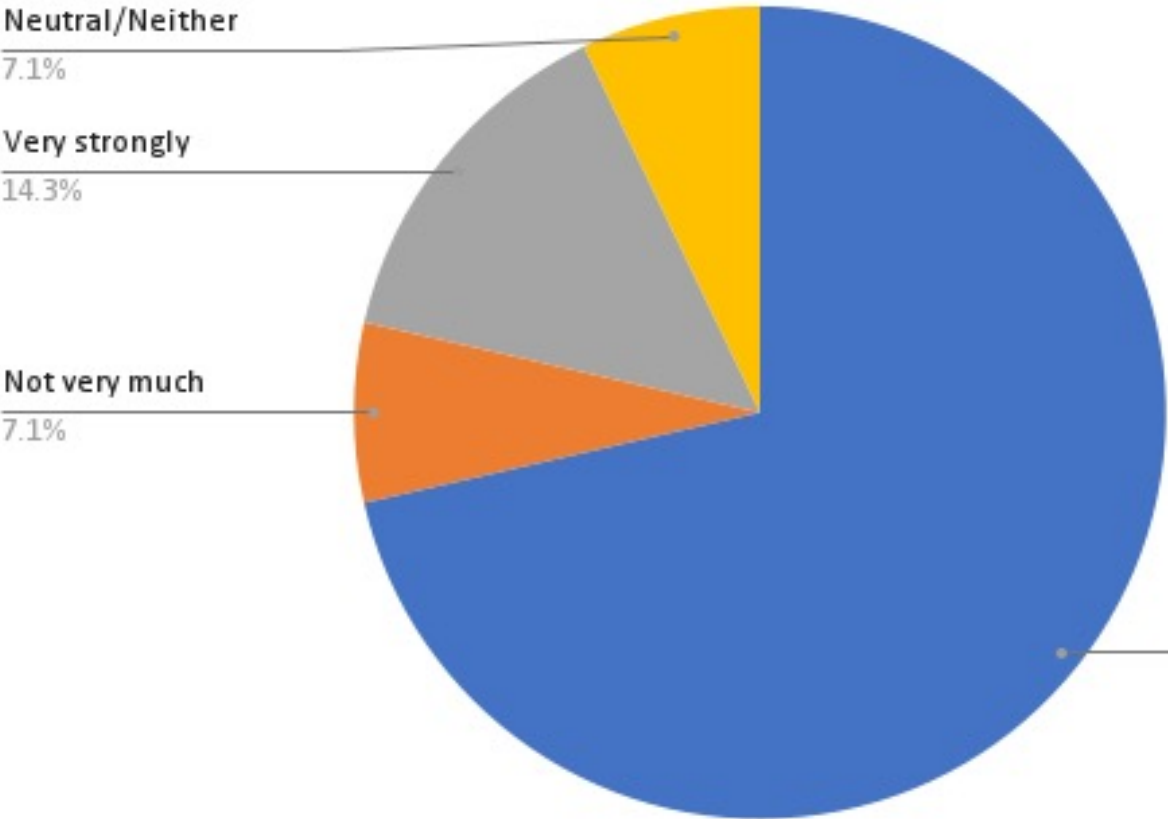
## WHO RESPONDED?

### Surveys responses



# Recipes surveys – key findings

How strongly do you feel connected to the sea?



**Food Smart Dublin** @foodsmartdublin · Mar 22

Happy #WorldWaterDay everyone! 💧

Today we're celebrating our amazing #Irish coast and want to know how connect YOU feel with your local coast. 🌊🦀🐟🐙🐠🐡🐳🦑🦐🦞🦀🦑🦐🦞

@tcddublin @MuseumWater @DublinPortCo @dublinbiosphere @ECOUNESCO @IrishResearch @IrishTimes

Strongly connected	62.5%
Somewhat connected	18.8%
Not connected	18.8%

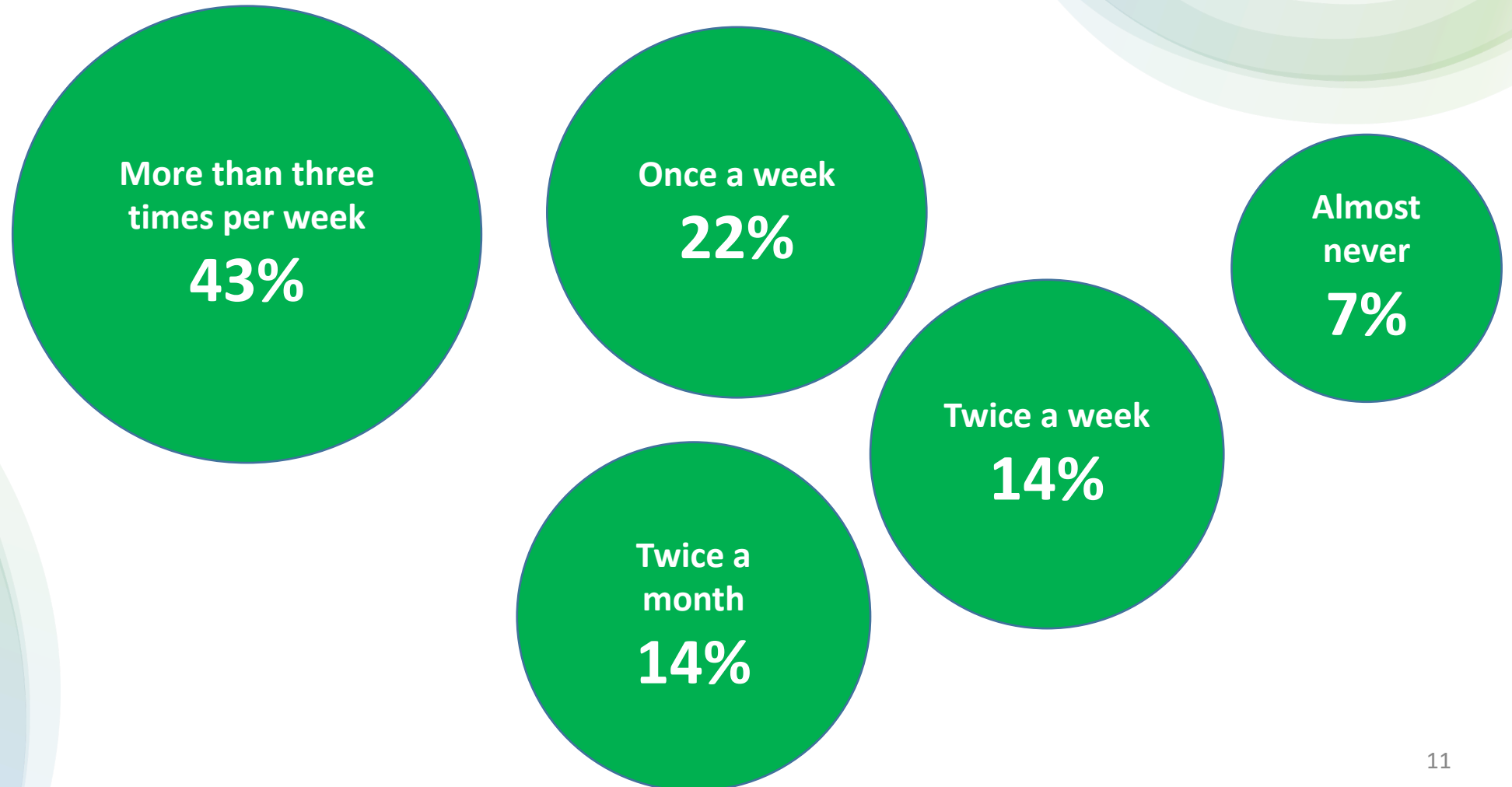
32 votes · Final results

Strongly connected  
71.4%



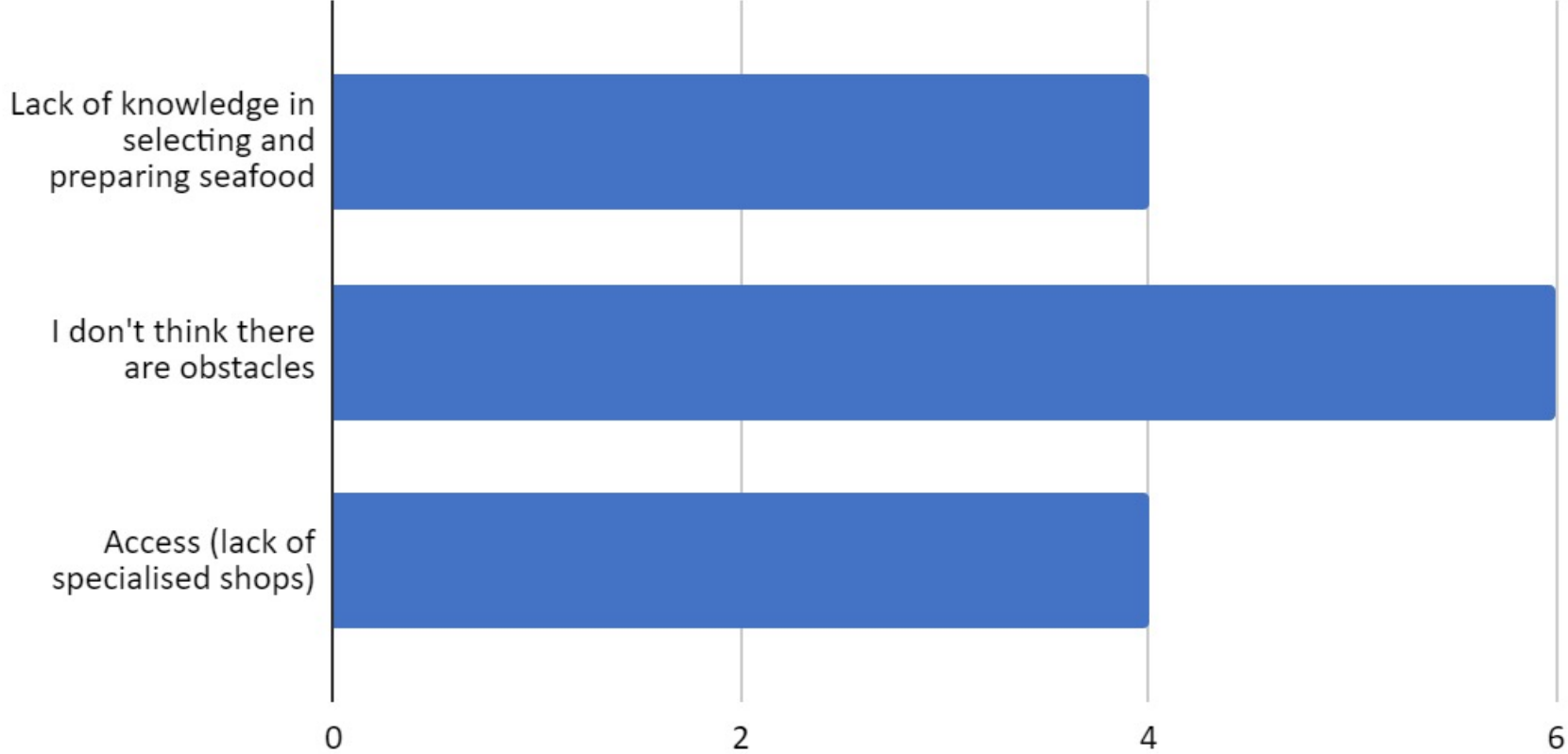
# Recipes surveys – key findings

How many times a month/week do you consume seafood?

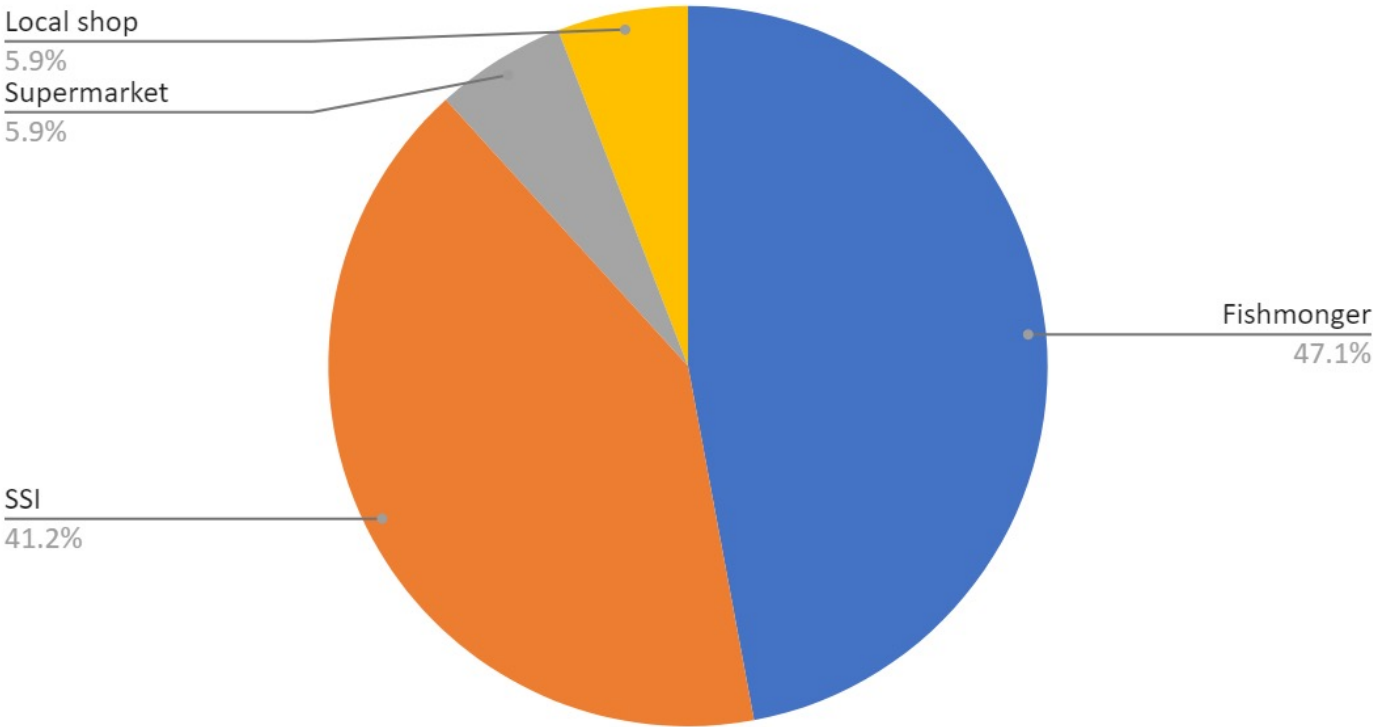


# Recipes surveys – key findings

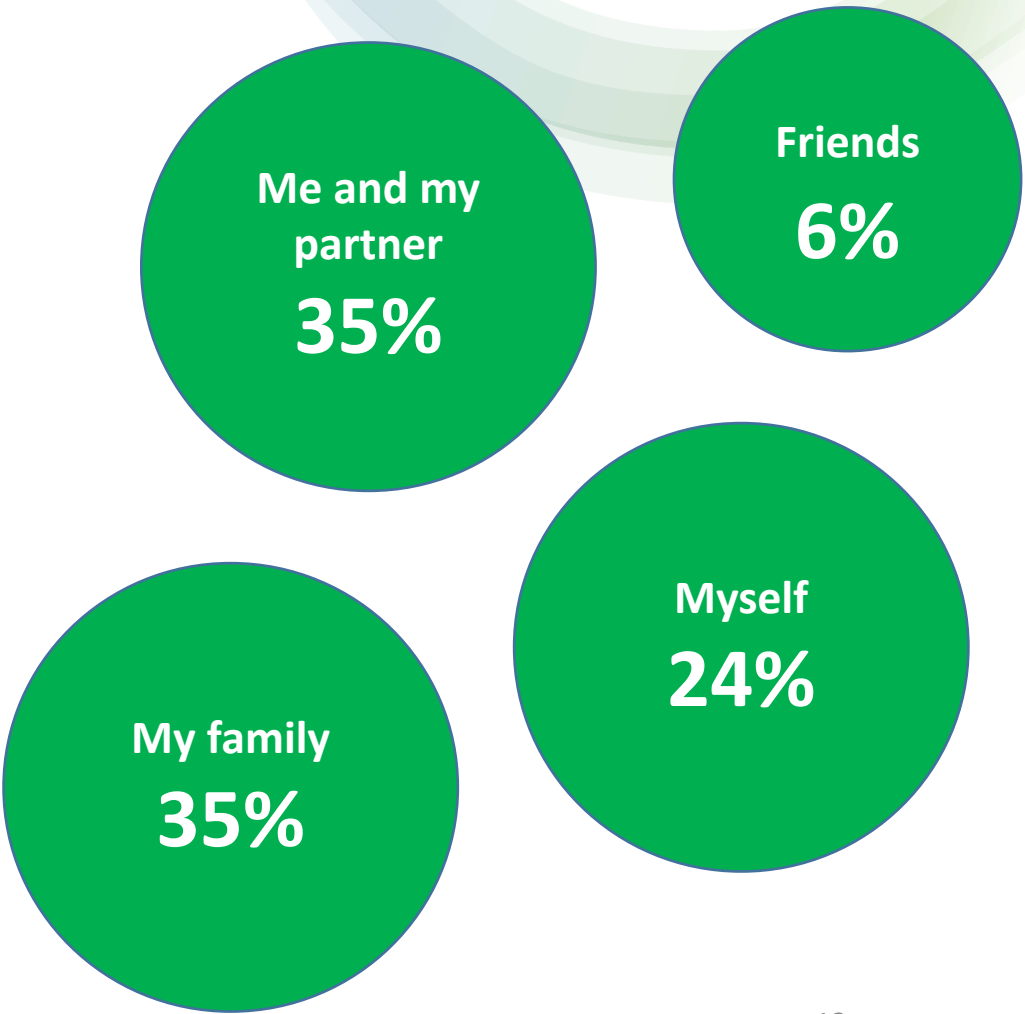
What are the main obstacles for you in consuming more seafood?



Where did you purchase/source the seafood?



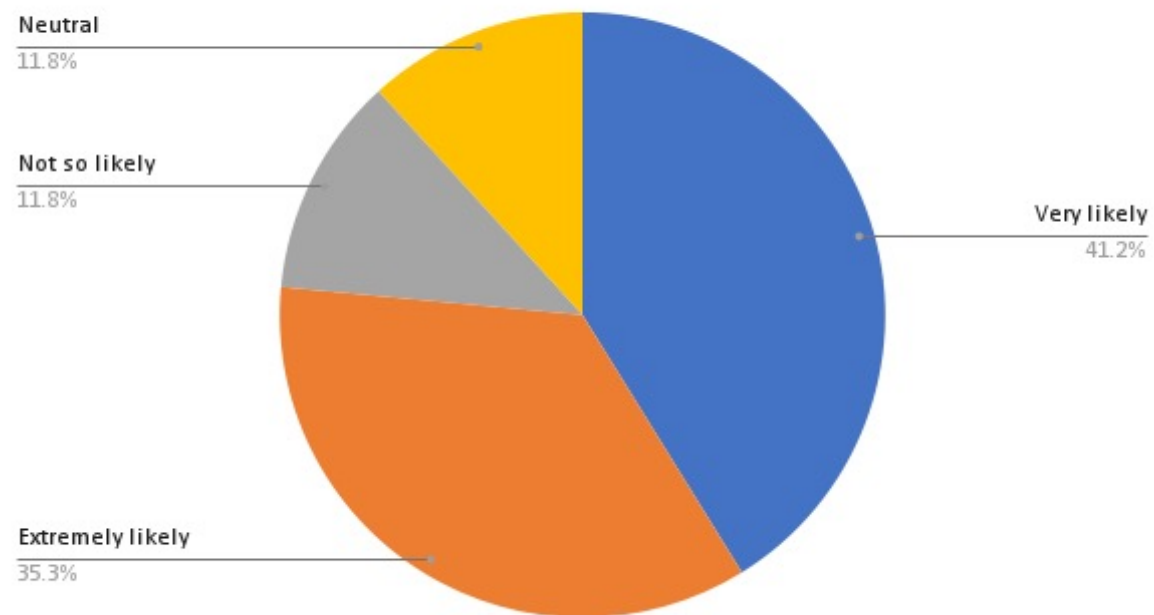
For whom did you cook the recipe?



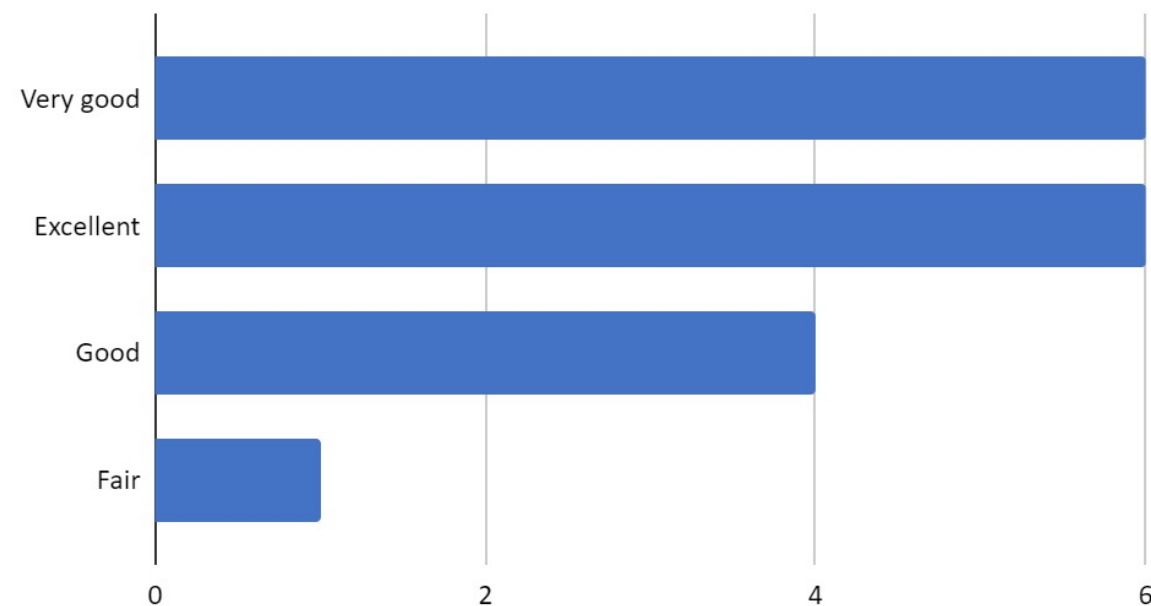


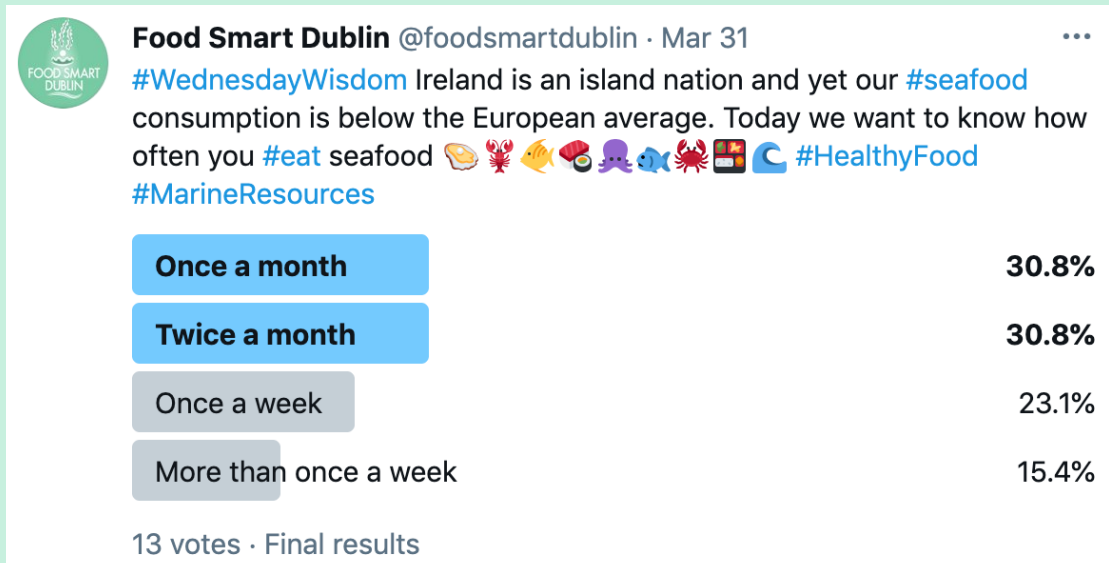
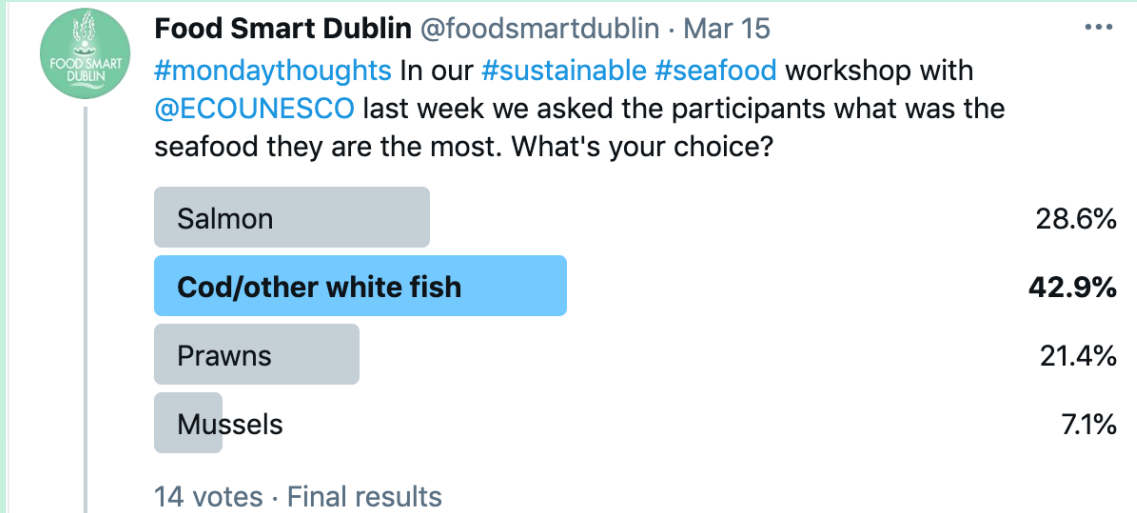
# Recipes surveys – key findings

How likely are you to prepare this recipe again?



Overall, how would you rate the recipe?









Interactive  
Workshops



24 September -  
30 October  
2020

# Food Smart Dublin Workshops





# BE FOOD SMART! CALENDAR

September - October 2020

## FRIDAY 25TH SEPTEMBER

4:30pm - 6:30pm: Sustainable Food - Online

## FRIDAY 2ND OCTOBER

4:30pm - 6:30pm: Irish Seafood - Online

## FRIDAY 9TH OCTOBER

4:30pm - 6:30pm: Seasonality - Online

## SATURDAY 17TH OCT

3:00pm - 5:00pm: Foraging Workshop - Sutton Beach  
(Dublin Bay side near Marine Hotel)

## SATURDAY 24TH OCTOBER

3:00pm - 5:00pm: Cooking Workshop  
(Online, including cooking kit)



Due to Covid-19 all workshops had to be carried out online via Microsoft Teams. All workshops were developed applying the blend-in approach.





# Cooking together in Covid times

Due to Covid-19 the in-person cooking class could not take place as planned.

The cooking was delivered in the kitchen of Chef Niall Sabongi with the participants following their instructions at home in their own kitchens through virtual media. Seafood kits were prepared for each participant a day before and delivered to their door.





# The final results

These are some of the delicious dishes prepared by our young participants at the end of the cooking workshop:

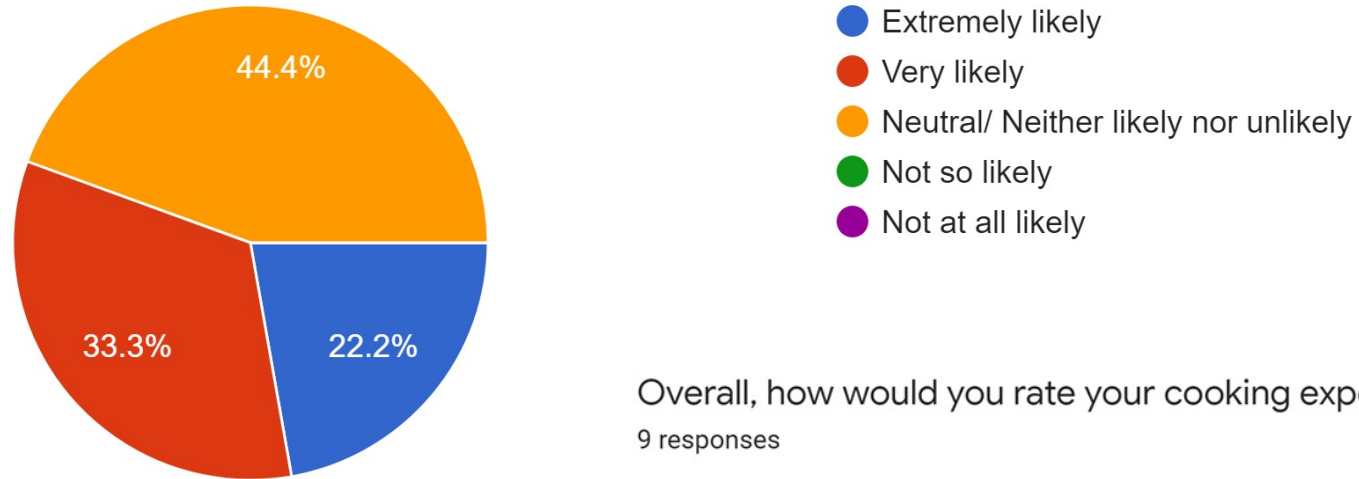




# Outcomes and feedback – FSD workshop

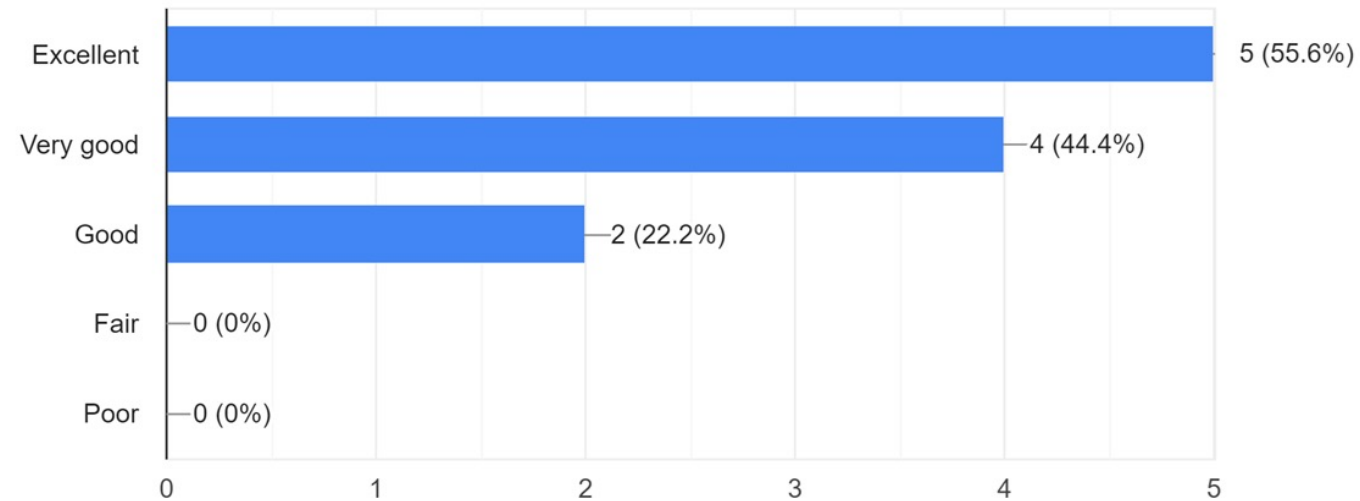
How likely are you to prepare these recipes again?

9 responses

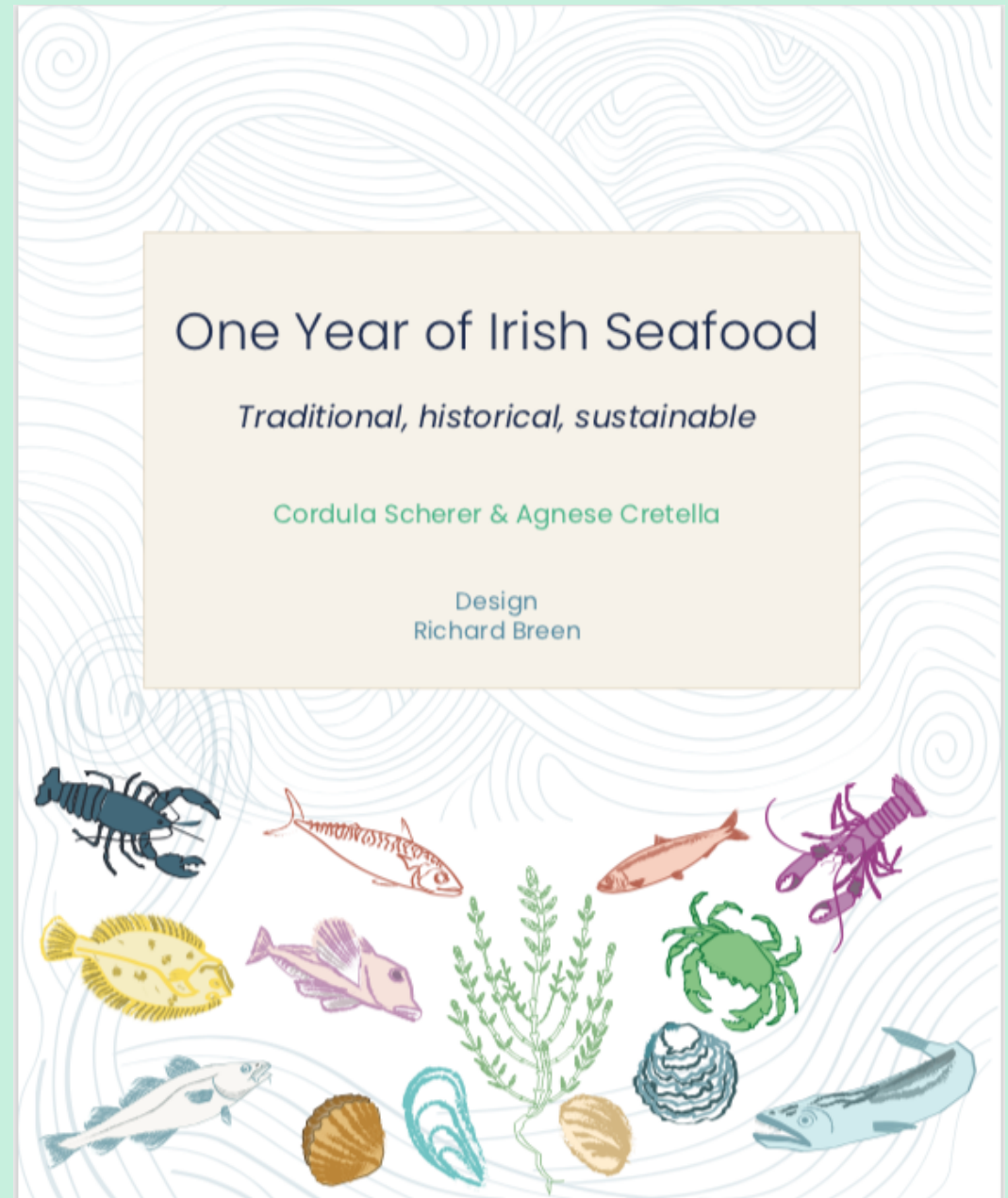


Overall, how would you rate your cooking experience?

9 responses



# 6.Cookbook



Please don't eat wild caught native oysters! They are under threat! The farmed oysters that are grown on our coasts are simply divine and one of the most sustainable seafood choices. Let's eat more oysters! If you're not keen on our recipe, try oysters straight up with a bit of lemon juice or tabasco.

The Sustainability of Oysters in Ireland

The farming of oysters is as sustainable as it gets and in many places actually restorative environmentally. It holds great promise for relieving pressure on land-based protein sources and is a great example for how to gain more food from the ocean.

Nowadays, there are 124 oyster farms nationwide producing around 10,000 tonnes of oysters annually with Co. Donegal and Waterford accounting for about 60% of the Irish production. Oysters from Ireland are highly prized and in recent years a lot of branding of the 'Irish Oyster' is happening with a premium paid, especially on the Asian market. The 'Irish Rock Oyster' is in fact the introduced Pacific oyster (*Magallana gigas*) and it might not be as high a quality as the native oyster *Ostrea edulis*, but it is seen as superior in quality and taste to other cultivated oysters elsewhere in Europe. The unique blend of wild Atlantic waters, clean freshwater rivers and minerals from an unspoilt landscape makes each Irish oyster a unique taste experience. Due to abundant plankton and the exceptional growing conditions around the Irish coast, oysters from Ireland have distinctively high meat content.

Oyster cultivation

Generally there are about five steps involved in oyster farming: 1) brood stock 2) hatchery 3) nursery 4) grow-out and 5) harvest. The first few steps are carried out in a controlled tank environment, i.e. water composition, temperature, food and light are all controlled and regulated to achieve optimum conditions.

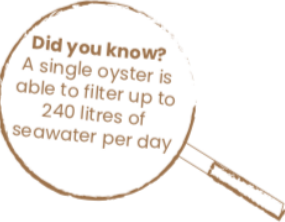
A solid and high qualitative brood stock is key to successful oyster farming. These oysters are the "parents" or base of an oyster farm that provide the gametes. It is important to have a large number of oysters, because it is impossible to tell if an oyster is male or female from its outer appearance. In the hatchery, fertilisation of eggs with sperm takes place within minutes and cell division occurs over the next 24 hours. There can be as many as 110 million fertilised eggs in 7,000 litre tanks in the rearing rooms depending on the farm's capacity. This is the most fragile stage of an oyster's life history. The larvae are ready to be moved to the nurseries after two to three weeks when they developed an eye-spot and a foot, a sign that they are ready to latch on to a hard substance.

	Season	Rec. size	Fishing Method	Sustainability Rating
Oyster	September – March	farmed oysters size dependent	hand-picked, dredged	1

Trophic Level: 2

Adult Oyster are placed at trophic level 2. They are filter feeders which means they filter water for particles such as phytoplankton and nutrients.

Check out the food pyramid on page x to see how oysters shape up compared to other sea creatures!



Native Oyster spawning Season



Nurseries are usually outdoor systems in ambient water with a variety of cultch options. The best cultch is usually full or ground up oyster shells because oysters are naturally attracted to other oyster shell to ensure their future reproductive success. After the larvae settle, they are considered 'spat' or 'seed'.

In the maturation stage, the cultivation method is chosen – this is where the oyster's unique taste, quality and appearance is formed. There are two maturation methods commonly used in Ireland. 1) Seed/spat are distributed over existing oyster beds where they are left to mature naturally. Such oysters are in time collected or harvested using a dredge; 2) Seed/spat are put in racks, bags or baskets which are held on metal frames above the seafloor. Oysters cultivated this way are harvested by lifting the bags or racks to the surface and removing mature oysters, or simply retrieving the larger oysters when the enclosure is exposed at low tide. The latter method avoids losses to some predators, but it is more time consuming and therefore expensive. The oysters remain in their grow-out environment until they are harvested after about 3–4 years.

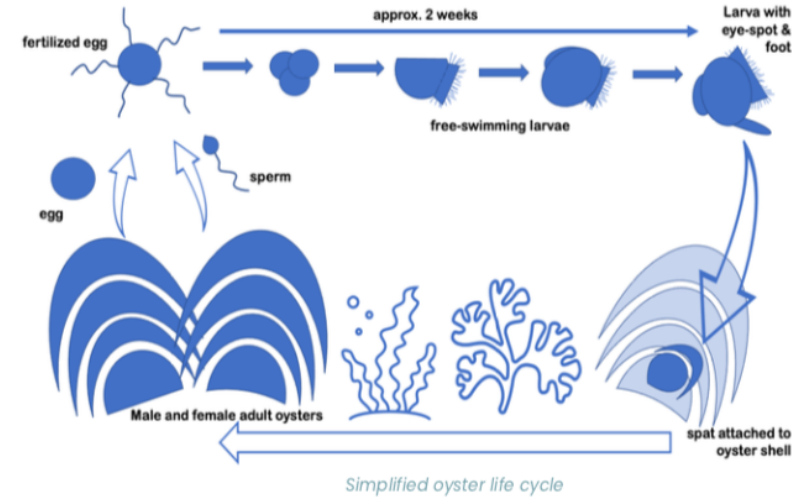
Before the mature oysters go to market, they are graded.

In Ireland and the UK, this is done by size while France grades them purely by weight.

The following applies when you buy oysters in Ireland: grade 1 is the biggest and grade 4 is the smallest while it is said that a size of grade 2 is the best value for money for your oyster.

Current threats

The biggest threat to our oysters nowadays are parasites. Slipper limpets, starfish and dog whelk continue to take their toll on native and farmed stocks without ever reaching plague proportions. However, two relatively recent invaders, the stink winkle and the American oyster drill, are becoming more worrying. They drill holes in the oysters and suck out their flesh. The long-term consequences of these parasites are still mostly unclear.





## History of Oysters

Ireland is the perfect location for oyster farming with over 7,000km of indented, often sheltered coastline and rain filtering through 12,000km<sup>2</sup> of turf land.

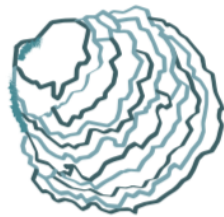
Records show evidence that the native oyster (*Ostrea edulis*) has been cultivated in the island since the 13<sup>th</sup> century and consumption of oysters has been a tradition since the first settlers came to Ireland 10,000 years. The native oyster holds great cultural value, its fishing and cultivation have formed the heart of Irish coastal communities for centuries.

Experts say that there were naturally occurring oyster stocks in almost all suitable bays around the emerald island. The native oyster seemed to have been so plentiful along the Irish shoreline that the exploitation and consumption by coastal communities living in these prehistoric times had little effect on the stock.

Compared to those times, written reports from as early as 1461 (the so-called "Chain book" of the city of Dublin) illustrate the growing economic importance of the oyster business through regulations on the oyster fishery for Dublin's fish market.

Detailed accounts are given in the late 17<sup>th</sup> century on the abundance and size of the native Irish oyster as well as its increasing consumption, especially among city dwellers. In fact, oysters became so popular with increasing commercial importance that artificial oyster beds were located north of Dublin City in Clontarf and Howth (Sutton side) to ensure a steady supply. Dublin Bay was also home to natural oyster banks located in Poolbeg which even produced pearls and Malahide estuary (where the trainline is now) which had the partly green-finned oyster praised to be the most delicious of them all. Alterations of Dublin port for navigation and increased transport infrastructure changed the oyster habitats and wiped out the natural banks. While natural oyster banks elsewhere also declined due to harsh winters, over-harvesting and pollution of inshore waters, the way oysters were consumed changed as well. For over two centuries they were either preserved or cooked as a bulk of other ingredients in stews and pies or baked into loaves of bread. As they became scarcer, they began to be treated with greater respect and became the first real 'fast food' for the masses of the industrial revolution with oyster vendors becoming a common sight in the picture of towns and cities selling raw oysters.

The artificial beds in Clontarf and Sutton flourished for a long time and provided oysters for the masses for years. The oyster fishery was a lucrative if labour intense business until continued overharvesting of the shellfish in the 19<sup>th</sup> century along with heavy pollution, harsh winters and the disease *Bonamia ostrea* led to a dramatic decline of the native oyster in Ireland and threatened to wipe out its stock altogether. Projects such as the Ardfry Experimental Oyster Cultivation Station in Co. Galway in 1903 to save the species failed in the attempt to cultivate it and times were dire for this nation shaping bivalve.



Today, there are two types of oysters that are cultivated and eaten in Ireland: the native or European flat oyster (*Ostrea edulis*) and the Pacific oyster (*Magallana gigas* or *Crassostrea gigas*) which was introduced in the early 1970s and successfully cultivated.

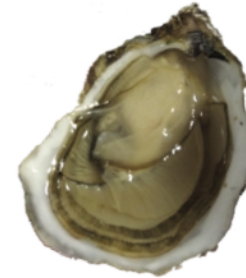
While the Irish name for oyster is 'oisre', the two types are commonly known as Gigas, Irish rock oyster or rock oyster (*M. gigas*) and natives, native flats or native oyster (*O. edulis*).

## Ecology of Oysters

Almost all oyster species are habitat-building bivalve molluscs. Young oysters are so small that they are part of the zooplankton community for a while, free-floating in the water column, before they preferentially settle out on adult oysters or any suitable hard substrate. Once settled, oysters fuse their shells to the underlying substrate and can therefore form dense aggregations, known as an oyster reef.

Oyster reefs provide us with a range of ecosystem services and hold both economic and environmental importance. The complex reef structure provides food and habitat for numerous marine creatures and may serve as nursery grounds for some fish species.

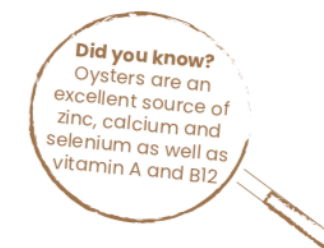
Oysters are filter feeders which means they filter water for nutrients and particles to feed on and grow. They are true eco-engineers as they can restore and "heal" parts of our damaged marine ecosystem through sediment stabilisation, nutrient cycling and sequestration and by providing a safe and nourishing habitat for other organisms while also acting as natural storm defences and shoreline protection along our coasts.



The native oyster grows up to approx. 15cm with an age of up to 30 years while sexual maturity is reached at an age between 3-4 years.

It is shaped round and flat rather than oval and with ridges like the Pacific oyster which is also much bigger.

The natural habitat of *O. edulis* are estuaries and sea lochs as well as open coastal seas as deep as 50m depth. This species is primarily found in the subtidal zone and colonises on mixed hard substrates, in particular shell material. The range of the native oyster is pan-European which includes the northeast Atlantic from the south of Norway to the Mediterranean Sea as far as the Black Sea.



The native oyster is the only species that spawns in our temperate waters which usually happens in our summer months or for easier memory in the months without an 'r' (May - August). During the spawning process, the oyster's body goes from being opaque to translucent, almost watery in appearance. During this time avoid eating native oysters as they will taste very unpleasant, highly acidic and thin.

Since the Irish rock oyster (*Gigas*) doesn't spawn in our waters (they spawn in temperature controlled tanks in commercial hatcheries and nurseries) they can be enjoyed all year round.

### Oyster protection and restoration

Recently many oyster restoration projects have shot out of the ground everywhere. Europe shows incredible concerted efforts in restoring the native European oyster *Ostrea edulis* best represented through NORA (Native Oyster Restoration Alliance) since 2017. In Ireland the Marine Institute and Cuan Beo are involved in the NORA project as well as the Native Oyster Network UK & Ireland.

### An Oyster Poem

'Oysters, oysters, Sir, said she,  
If you want oysters buy them from me;  
Two for a penny, but three I'll give thee  
If you'll buy my Malahide oysters.  
Oysters, oysters fresh and good,  
As ever came from an ocean flood,  
They'll nourish your heart, cherish your blood.  
Come buy my Malahide oysters.'



'The bay dredge' was used for dredging oysters on soft sediments. Omeath, Co. Louth 1957. Courtesy of The Photographic Collection, B005.15.00001. Photographer Michael J. Murphy © National Folklore Collection, UCD, ducas.ie



Pacific oysters served 'naked' on ice with slices of lime. Photo: C. Maguire



Map of Dublin Bay showing the artificial oyster beds in Clontarf. Extract from Rocque's 'Actual Survey of the City of Dublin, 1760'.



Oyster vendor in Carlingford, Co. Louth 1950. Courtesy of The Photographic Collection, C050.15.00009, photographer Maurice Curtin © National Folklore Collection, UCD, ducas.ie

### 'Oyster Loaves'

#### Oyster loaves.

Take French rolls, cut a little hole on the top as big as half a crown, then take out all the crumbs, but don't break the crust of the loaf, then stew some oysters in their own liquor, with a blade of mace, a little whole pepper, salt and nutmeg, and a little white-wine; skim them very well, thicken them with a piece of butter rolled in flower, then fill the rolls with them and put on the piece again that you cut off; then put your rolls in a mazarine dish, melt butter, pour it into them, then set them into your oven, let it be as hot as if it were for an orange pudding.

Ceres, 'A Lady's companion: or accomplish'd director of the whole art of cookery', 1769.

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The recipe we give you here was reimagined and adjusted to the modern taste by the talented Cian O'Leary. It's the perfect dish to impress your family and friends with.



Oyster vendor in Omeath, Co. Louth 1950. Courtesy of The Photographic Collection, C050.15.00008, photographer Maurice Curtin © National Folklore Collection, UCD, ducas.ie

One great thing about this recipes is that you can cut corners in some places (like Ceres did herself in her recipe), for example, if you don't want to make the bread buns from scratch, you can just buy "French bread" or some buns to your taste. And if you feel that the Kinsale mead in the oyster soup is just a wee bit too expensive you can swap it with Guinness.





Image by Mike O'Toole



### Ingredients for the Bread Buns

350ml warm water  
500g strong white flour  
70g caster sugar  
1 tbsp salt  
3 tbsp olive oil  
tbsp olive oil  
1 tbsp cornmeal  
1 egg white  
1 tbsp water  
7g dried yeast

## Oyster soup with Kinsale mead served in individual bread cups

by Cian O'Leary

Prep: 90 mins; Cook time: 40 mins (bread buns) 20 mins (oyster soup); Serves 4 as main and 8 as starter

### METHOD FOR THE BREAD BUNS

1. In large bowl dissolve yeast in warm water. Let stand until creamy. About 10 min.
2. Add salt, oil and 2/3 of the flour to the yeast mixture. Beat well. Stir in remaining flour a small bit at a time, beating well with an electric mixer.
3. When the dough has pulled together scoop out onto a lightly floured surface and knead until smooth. Lightly oil a large bowl. Cover with a damp cloth and let rise until it doubles in volume. 40 min approx.
4. Punch dough down (knock back) and divide into 4 or 8 equal portions depending on whether you make them as a starter (8) or main course (4). Shape each portion into equally sized round loafs. Place loaves on lightly greased baking sheets and sprinkle with cornmeal. Cover and let rise in a warm place until doubled in size. 35 min approx.
5. Preheat oven to 200 degrees Celsius. In a small bowl beat together egg whites and 1 tablespoon of water and lightly brush the loaves with half the egg wash.
6. Bake in preheated oven for 15 min. Brush with remaining egg wash mixture for another 10-15 min until golden brown. Cool on wire racks.
7. To make bowls. Cut a half inch thick slice from the top of each loaf. Scoop out the centre leaving half inch thick shell. The bread shells are ready to be filled.

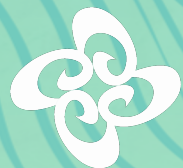
*Turn over for Soup recipe!*



# THANK YOU!

A huge thank you to everyone who was involved in the project, inspiring us and sharing their knowledge so generously whether on seafood sustainability, seafood history, coastal heritage or other project related fields.

All research outputs will be updated at  
<https://www.tcd.ie/tceh/projects/foodsmartdublin>



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Follow us on our social media and check our website for updates and information on getting a copy of the book once it's available

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