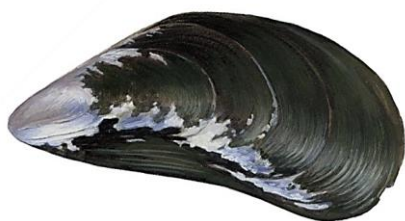




MUSSEL

(*MYTILUS EDULIS* AND *MYTILUS GALLOPROVINCIALIS*)



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Mytilus edulis (1) and *Mytilus galloprovincialis* (2)

BIOLOGY AND HABITAT

- **Species description** (Read more [\(1\)](#) [\(2\)](#))

Mussel is the common name used for members of several families of bivalve molluscs. *Mytilus edulis* (blue mussel) and *Mytilus galloprovincialis* (Mediterranean mussel) are the main species of the family of Mytilidae produced and consumed in the EU.

- **Geographical distribution and habitat** (Read more [\(1\)](#) [\(2\)](#))

Mussels are found in a wide variety of habitats, from tidal areas to fully submerged zones, with a broad range of temperatures and salinities.

RESOURCE, EXPLOITATION AND MANAGEMENT

- **Production methods and fishing gears** (Read more [\(1\)](#) [\(2\)](#))

In the wild, mussels are caught using dredges and trawls.

When farmed, mussels are produced using bottom culture techniques (sheltered beds) or suspended and off-bottom (rafts, *bouchots*, longlines).

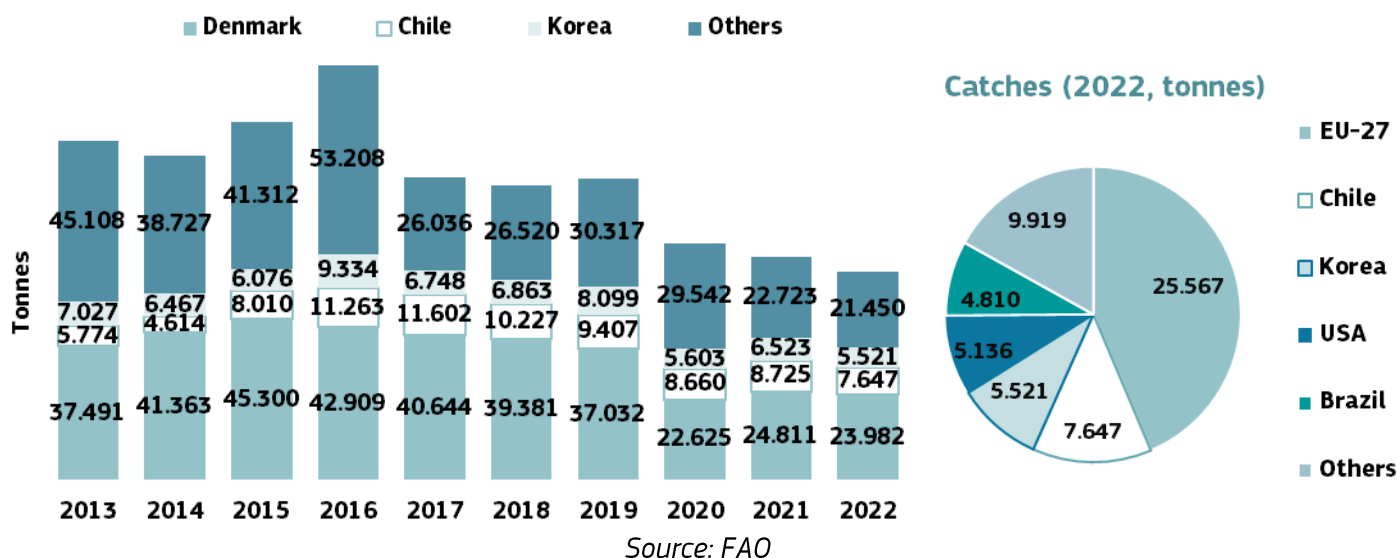


Mussels

CATCHES

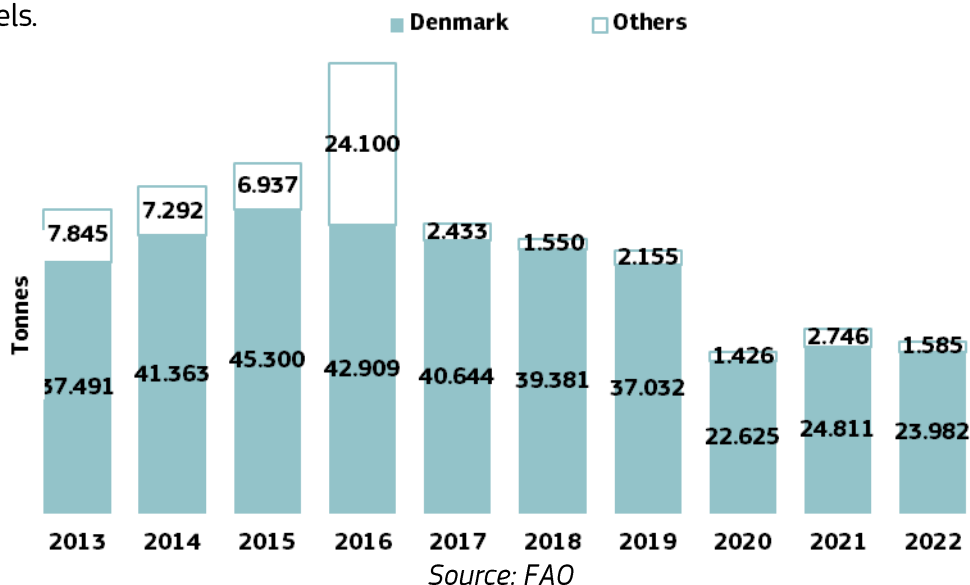
Evolution of world catches

- At global level, catches of mussels (mainly blue mussels, 51% of world mussels' catches) amounted at circa 58.600 tonnes in 2022 (i.e. **0,06%** of total global catches). The EU is the main producer globally (44% of the catches) in 2023.



Evolution of EU catches

- In 2022, the EU accounted for 44% of the global catches of mussels.
- The same year, Denmark provided 94% of the EU catches and 41% of global catches of mussels.

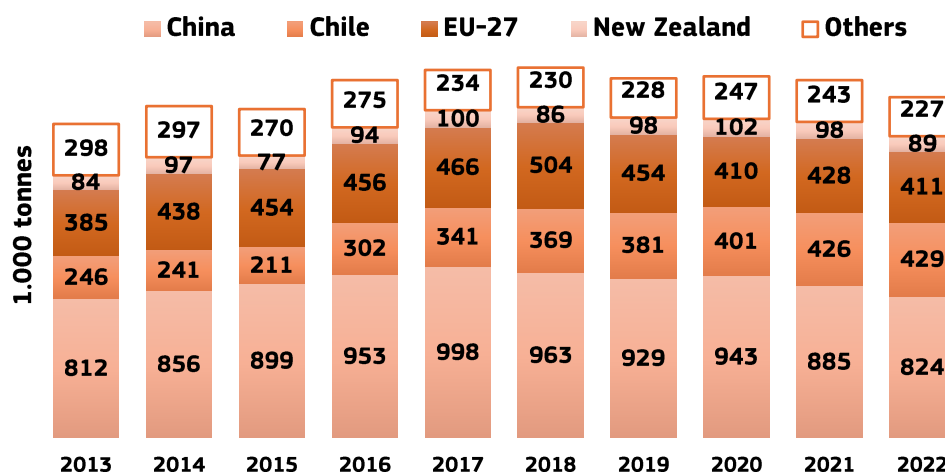




AQUACULTURE PRODUCTION

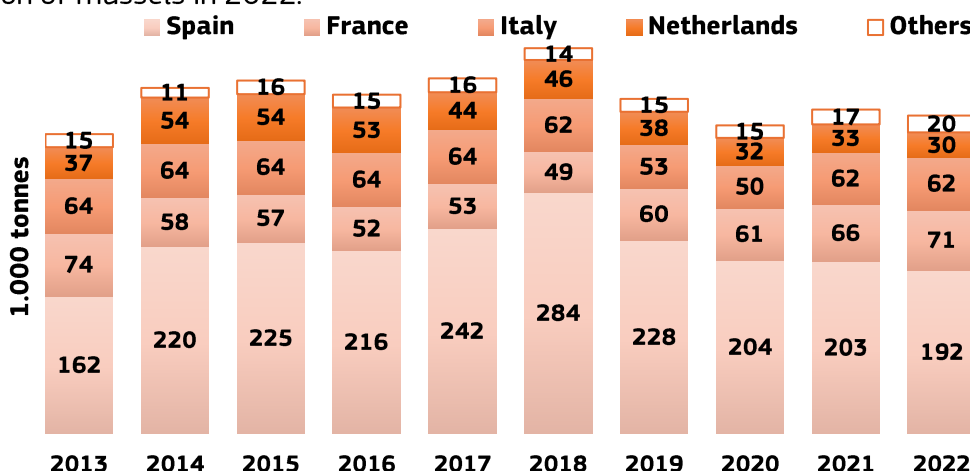
Evolution of world aquaculture production

- From 2013 to 2022, the global mussel's aquaculture production increased by **9%**, driven mainly by the growth of the Chilean and Spanish production (74% and 19% increase respectively). China, Chile and Spain were the top-three producers. They provided 73% of the global production in 2022.
- Global mussel aquaculture production reached almost 2.000.000 tonnes in 2022, out of which *Mytilus edulis* and *Mytilus galloprovincialis* represented 13% (almost all produced in the EU).



Evolution of EU aquaculture production

- In 2022, the EU production reached over 410.900 tonnes, contributing to 10% of the global mussels' production. The EU production of *Mytilus edulis* and *Mytilus galloprovincialis* reached 135.203 tonnes and 79.970 tonnes respectively. From 2013 to 2022, the EU production of mussels has remained relatively stable (+7%).
- The top-four EU producers (Spain, France, Italy and Netherlands) accounted for 86% of the EU production of mussels in 2022.



Source: FAO

For Spain, data are reported under the statistical category 'sea mussels nei', which corresponds to *Mytilus galloprovincialis* and to lesser extent to *Mytilus edulis*. For UK, data are reported under the category Mytilidae.



PROCESSING

- Traditionally, a large part of mussels is consumed live or fresh, while there has also been production of canned mussel (e.g. Spain). With the increase of frozen and prepared mussel imports, in recent years, the processing industry has opted for more added value products through a greater degree of processing, especially ready-to-eat products such as boiled mussels with and without shell (e.g. Ireland) and even processed dishes of fresh mussels in different sauces.
- There are no specific data on EU production of processed mussels at EU level. Data are available for Spain which is the main producer of processed mussel in the EU (mainly canned mussels). In 2021, it produced 14.778 tonnes of canned mussels (net weight) for a value of over EUR 124 million (-2% in volume and -9% in value in comparison to 2020) (Source: Spanish association of canned fish: *Asociación Nacional de Fabricantes de Conservas de Pescados*, ANFACO).



Mussels

TRADE

- **Combined nomenclature** [\(1\)](#) [\(2\)](#)

EU imports-exports (2023, EU-27)

Concerning the genus *Mytilus*, which is produced in EU, trade is mainly intra-EU. Extra-EU trade concerns other species than *Mytilus spp.*

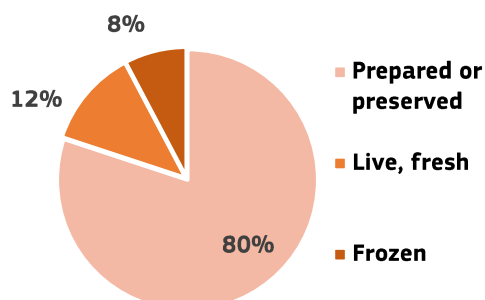
EU trade of mussels (tonnes - 2023)

CN code	Product	EU imports	EU exports
03 07 31 10	Mussels " <i>Mytilus spp.</i> ", Live, fresh or chilled	7.046	1.983
03 07 31 90	Mussels " <i>Perna spp.</i> ", live, fresh or chilled, with or without shell	1	144
03 07 32 10	Mussels " <i>Mytilus spp.</i> ", frozen	23	665
03 07 32 90	Mussels " <i>Perna spp.</i> ", frozen, even in shell	4.441	105
03 07 39 20	Mussels " <i>Mytilus spp.</i> ", smoked, dried, salted or in brine	22	205
03 07 39 80	Mussels " <i>Perna spp.</i> ", smoked, dried, salted or in brine, even in shell	30	28
16 05 53 10	Mussels, prepared or preserved, in airtight containers	11.230	1.589
16 05 53 90	Mussels, prepared or preserved, other	35.009	1.282
Total		57.802	6.001

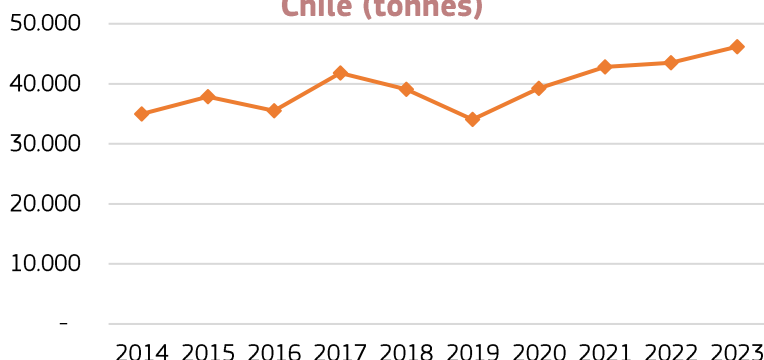
Extra-EU imports of mussels reached over 57.800 tonnes in 2023. These were constituted mostly by other mussels' species than *Mytilus spp.* (i.e. *Perna spp.*)

- 80% of EU imports concerned preserved mussels (46.239 tonnes). All preserved mussels imported to the EU came from Chile. These imports have increased by 32% between 2014 and 2023.
- Only 12% of EU imports concerned live, fresh mussels in 2023, imported from the UK (after Brexit).
- Spain, France and Italy were the main importers in the EU (together they represented 76% of EU mussels' imports in 2023).

**Imports by product type
(2023 % in volume)**



**EU imports of preserved mussels from
Chile (tonnes)**



Source: EUROSTAT-COMEXT



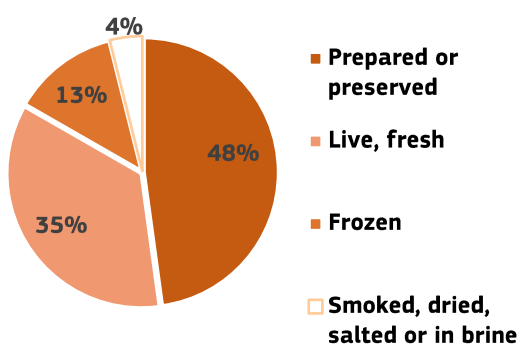
Mussels

TRADE

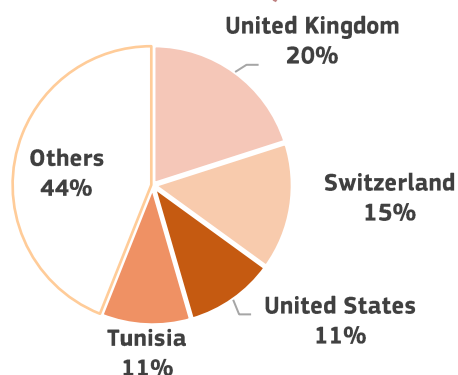
Extra-EU exports reached circa 6.000 tonnes in 2023. Mussels' exports concerned mainly prepared and preserved mussels (48%) and live and fresh mussels (35%). Main destinations were United Kingdom (20% of the EU exports, in volume terms), Switzerland (15%), the USA and Tunisia (11% each).

Spain, Italy, Denmark and France were the main exporters, together they accounted for 71% of EU mussels' exports in 2023.

Exports by product type (2023, % in volume)



Main destinations (2023, % in volume)



Source: EUROSTAT-COMEXT

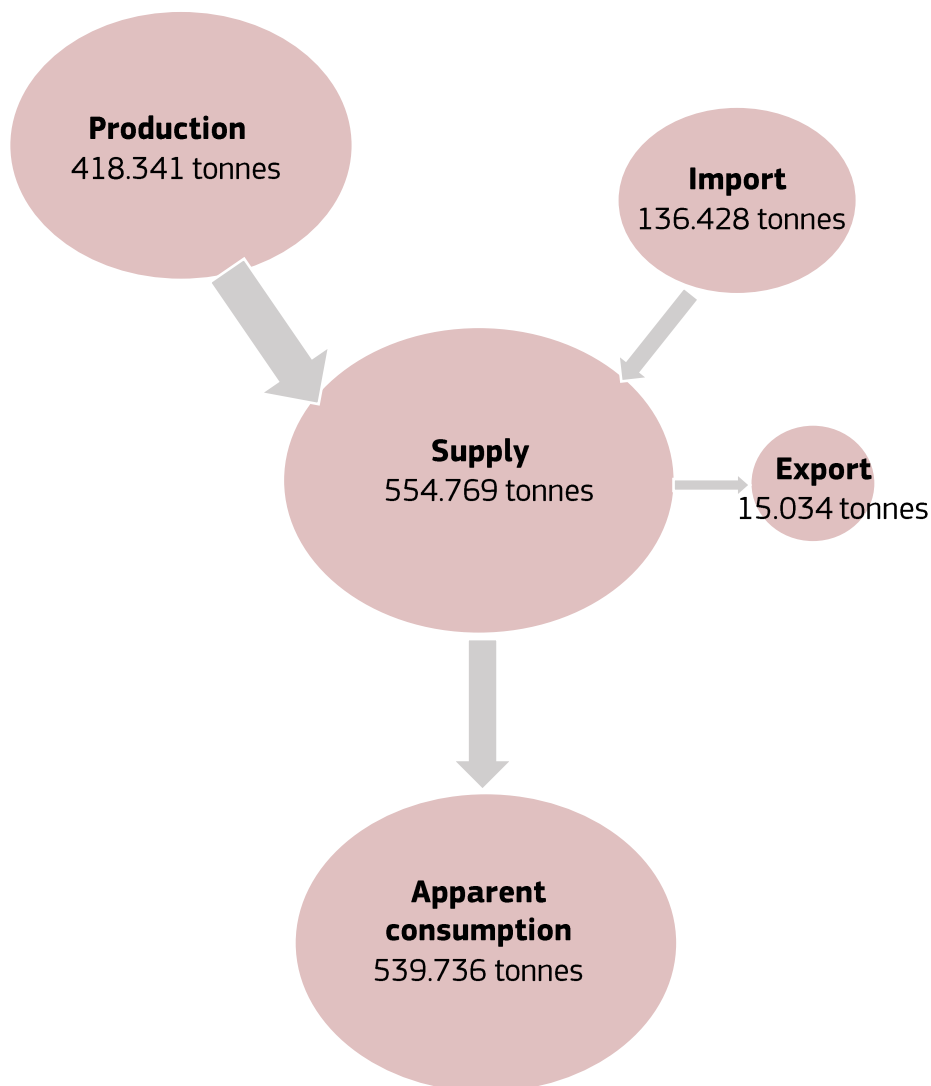


Mussels

Supply balance

EU supply balance (2022¹) – Tonnes of live weight equivalent² – Mussels:

Data concern *Mytilus edulis*, *Mytilus galloprovincialis* and other species of mussels (i.e. *Perna* spp.)



Source: FAO/ EUROSTAT-COMEXT

¹ Supply balance is provided for the year 2022 (trade data for 2022 were taken into account). Detailed trade data provided in the slides 5 and 6 concern the year 2023.

² The [conversion factors](#) were used to convert net weight of imports and exports of fishery and aquaculture products into live weight equivalents.



Mussels

PRICES ALONG THE SUPPLY CHAIN (EUR/kg)

First-sale (wild)/ Ex-farm (farmed) - (live/fresh)

First-sale prices are presented for the main producers in the EU : Denmark for wild blue mussel; Spain and Italy for farmed *M. galloprovincialis* and France and Netherlands for farmed *M. edulis*.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024*	Source
Denmark (wild)	0,26	0,27	0,24	0,23	0,20	0,20	0,24	0,24	0,26	0,25	EUMOFA
Spain (farmed)	0,51	0,55	0,54	0,55	0,52	0,52	0,68	0,81	n.a.	n.a.	EUMOFA
France (farmed)	2,02	2,39	2,62	2,11	2,28	2,27	2,26	2,37	n.a.	n.a.	EUMOFA
Italy (farmed)	0,82	0,84	0,90	0,87	0,85	0,88	0,90	1,00	n.a.	n.a.	EUMOFA
Netherlands (farmed)	1,06	0,84	1,07	1,13	1,20	1,38	1,99	1,73	n.a.	n.a.	EUMOFA

(*) From January to November 2024

Wholesale (fresh)

Wholesale prices are provided for the largest seafood wholesale market in the EU, Mercamadrid.

Most frequent prices	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024*	Source
Spain	1,92	1,9	1,97	1,91	1,73	1,8	1,87	2	2,17	2,26	Mercamadrid

(*) From January to November 2024

Retail/consumption (fresh)

Retail prices refer to Denmark, France, Spain, Netherlands, and Italy (prices refer to *Mytilus spp.*).

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024*	Source
Denmark	4,5	3,8	5,02	4,79	8,03	4,76	5,15	4,10	4,21	n.a.	EUMOFA
France	4,21	4,32	4,5	4,72	4,72	4,81	4,83	5,55	5,62	n.a.	EUMOFA
Spain	2,94	2,98	3,02	3,13	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	EUMOFA
Spain - frozen mussel	6,35	6,49	6,12	6,69	6,64	7,04	7,2	7,92	8,64	n.a.	MAPA
Spain - fresh mussel	2,46	2,52	2,55	2,58	2,62	2,81	3,66	3,79	3,81	n.a.	
Netherlands	4,12	4,45	3,60	3,84	3,86	5,04	4,48	4,52	4,56	n.a.	EUMOFA
Italy	n.a.	n.a.	n.a.	n.a.	1,2	1,25	1,25	1,38	1,31	1,30	ISMEA

(*) From January to November 2024



Mussels

PRICES ALONG THE SUPPLY CHAIN (EUR/kg)

Import (prepared/preserved from Chile)

Extra-EU imports concern prepared/preserved mussels (from species other than *Mytilus spp.*). The main importers were Spain, France, Italy and to lesser extent the Netherlands.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024*	Source
Spain	3,34	3,07	3,2	3,09	4,4	4,83	3,77	4,22	4,27	4,22	EUMOFA
France	2,66	2,4	2,32	2,19	2,27	2,44	2,52	2,87	2,90	2,60	EUMOFA
Italy	2,77	2,38	2,4	2,17	n.a.	2,34	2,08	2,56	2,66	2,43	EUMOFA
Netherlands	2,88	2,59	2,44	2,18	2,43	2,67	2,20	2,72	2,86	2,71	EUMOFA

(*) From January to August 2024

Export (fresh)

Extra-EU exports concern mainly fresh mussels of the species *Mytilus spp.* Main exporters are Ireland, Italy, Denmark and France.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024*	Source
Denmark	1,86	1,97	2,31	3,97	n.a.	1,97	2,27	1,99	2,49	5,37	EUMOFA
Ireland	6,08	5,03	6	3,75	3,74	1,37	26,81	1,77	2,34	2,29	EUMOFA
Italy	3,94	5,03	5,19	5,45	4,16	3,39	6,68	8,05	6,57	8,74	EUMOFA
France	4,36	3,78	3,5	3,54	3,89	4,50	4,54	5,55	5,46	5,05	EUMOFA

(*) From January to August 2024



Mussels

MARKETING

- National lists of commercial designations ([Read more](#)).
- Information system on commercial designations and scientific names in all EU languages ([Read more](#) [\(1\)](#) [\(2\)](#)).
- In the EU, there are three names protected under **Protected Designations of Origin** (PDO) and one name under **Traditional Specialities Guaranteed** (TSG) for fresh mussels. They are:
 - PDO “**Mejillón de Galicia; Mexillón de Galicia**” in Spain;
 - PDO “**Moules de Bouchot de la Baie du Mont-Saint-Michel**” in France;
 - PDO “**Cozza di Scardovari**” in Italy;
 - TSG “**Moules de Bouchot**” in France.

CONSUMPTION

- Mussel (all species included) is the sixth most consumed species in the EU (source: [The EU Fish Market – 2023 edition](#), EUMOFA)
- Mussel (all species included) apparent consumption per capita in 2022: **1,22 kg** live weight equivalent (source: [Supply balance - 2022](#), EUMOFA)
- Apparent consumption of *Mytilus spp* in 2022: 0,93 kg **kg** live weight equivalent (source: [Supply balance - 2022](#), EUMOFA)
- Nutritional value (Blue mussel, Mediterranean mussel, nutrition values per serving 100 g), [Read more](#) [\(1\)](#) [\(2\)](#)

Nutrition values	Blue mussel	Mediterranean mussel
Energy (kcal)	86	86
Total fat (g)	2,24	0,96
Saturates (g)	0,425	0,187
Carbohydrate (g)	3,69	3,57
Sugar (g)	0	0
Protein (g)	11,9	14,67
Salt (mg)	715	1502,5