

## INTRODUCTION OF FISH

The consumption of fish in nations, for example, the UK has declined massively in a short space of time, and significantly more meat and poultry consumption is increased whereas consumption of sea food is considered healthier in the non-vegetarian diet.

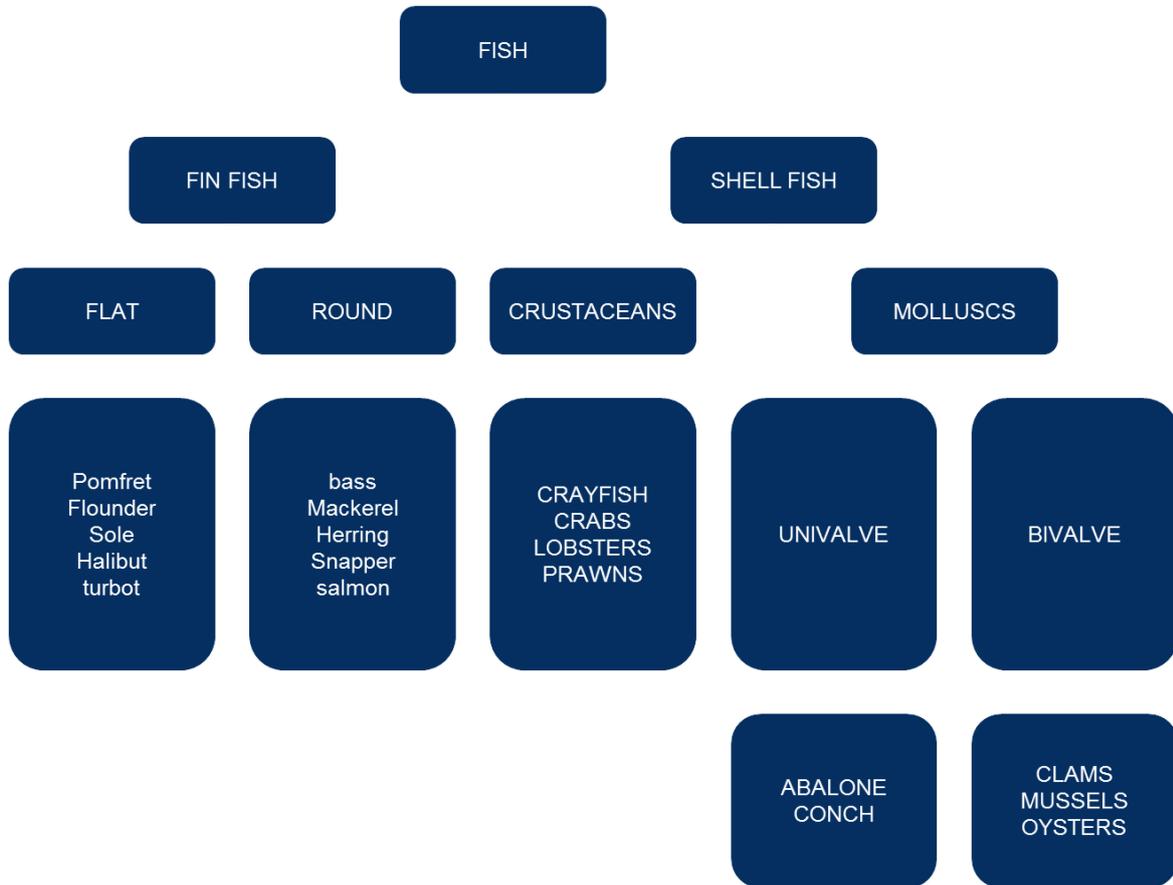
fish is exceptionally quick and simple to plan for any sort of menu or course. Not a wide range of fish emit foul scents that wait for a considerable length of time and eating fish is a lot more advantageous than eating meat, especially red meat. In some Mediterranean nations, for example, Spain, Italy and Greece or even in Scandinavian nations where cold-water fish is ample and fish are eaten on an increasingly standard frequency.

recent studies have shown that eating seafood can decrease the risk of heart attack, stroke, obesity, and hypertension. Seafood also provides essential nutrients for developing infants and children.

## SOME NUTRITIONAL FACTS ABOUT FISH

- ▶ Some types of fish are exceptionally low in fat
- ▶ The fattier fish types contain healthy essential fatty acids (omega 3) that are particularly good for the body
- ▶ White fish types are rich in vitamin B12
- ▶ Oily fish are rich in vitamins A, B12 and D
- ▶ Fish is a high protein, low-fat food
- ▶ Small fish bones that may be eaten are rich in calcium
- ▶ Fish is a good source of iron
- ▶ Fish is quite easy to digest and therefore a good food choice for the elderly or people who are not feeling very well
- ▶ Fish does not contain harmful saturated or hydrogenated fats
- ▶ 100 g of fish contain up to half the daily recommended amount of protein

## CLASSIFICATION



1. **FIN FISH:** are vertebrates and have skin and scales which cover their body. They move with the help of fins. They are subdivided into 1.lean / white fish (0.5 % - 4% of fat), the most numerous which includes all the cods family (haddock, whiting etc) and white flatfish ( plaice, sole etc) and the perch family ( bass, red mullet and skate etc). Most of these fishes are deep-sea fishes. 2. Oily fish: the amount of fat varies from 4%-20 %, these fishes are often pigmented and tend to be surface fish For example sardine, mackerel, herring, trout (fat content of these fishes lie between 4%- 10%), tuna ( 13% fat), salmon ( 12% fat),
2. **SHELLFISH:** as the name denotes have a shell covering the body. They are invertebrates and subdivided into
  - Molluscs – which are again subdivided into univalves- they are recognized by the characteristic's spiral formation on their shell, which is not divided into halves. The shells of molluscs increase at the rate of one

ring per year to allow for the growth of the organism. The age of mollusc can do be estimated by the numbers of rings on the shell Ex- winkles.

- Bivalves-which has two distinctly separate shells, joined by a hinge-like membrane. The movement of the shell is controlled by strong muscles when the muscles relax, the two shells of the shell fall open. The shell also open, when the organism dies, does expose the content of the shell to contamination from outside, resulting in quick decomposition. For example, clams, cockles, mussels, oysters, scallops etc.

UNIVALVE	FRENCH NAME	TYPE
<i>ABALONES</i> : are known as ormer or sea ear. These are large shellfish which is ear shape.	Abalone	
<i>SNAILS</i> : are characterized by a spiral shell.in classical French cuisine, these are served as a hot appetizer.	Escargot	Burgundy, petit gris
<i>CONCHES</i> : are largely related to whelks and rare mostly native to Florida.	Escargot de Mer	
BIVALVE	FRENCH NAME	TYPE
<i>CLAM</i> : are often eaten raw and are favourites of the American of the Americans. The famous Manhattan clam chowder is considered to be the national soup of the USA.	Poularde	Cherrystone, geoduck, carpet shell, razor clams
<i>COCKLES</i> : are similar to clams and sometimes called 'heart clams'. They do not have claws like clams. They have spiny shells and flesh is in the tails. The head is always used as a decorative piece or used in stocks.	Bucards	Dog cockles
<i>MUSSELS</i> : have a sweet tender flesh. They usually have beards which are used as tentacles for locomotion. Mussels must be scrubbed well to get rid of the dirt and sand	Moule	
<i>OYSTER</i> : have a thick greyish green shell. One of the shells is flat and the other is cup-shaped. Oyster are eaten raw in classical French cuisine.	Huitre	Sydney rock, coffin bay, Tasmanian.
<i>SCALLOPS</i> : are found in sandy sea beds. One of the two scallops' shells is flat and the other one is ridged and curved, which contains scallop meat.	Coquille St Jacques	King scallops.

- Crustaceans: these arthropods (a group of invertebrates with a shell and paired legs) having a segmented, crust-like shell and most of them are marine. The marine crustaceans include lobster, langoustes, crabs, shrimp etc. The only freshwater crustaceans used in cookery is the crayfish. The shell of the crustaceans does not go with the fish, unlike

those of the molluscs, but are shed each year with a new one forming to suit their size.

CRUSTACEANS	FRENCH NAME	TYPE
<i>CRABS</i> : range from tiny to large varieties. The female crab is called a hen. Crabs are eaten as soft-shell crabs soon after they complete moulting.	Crabe	Blue crab, brown crab, king crab, snow crab, mud crab, spider crab.
<i>LOBSTERS</i> : the American lobster is green in colour and the European lobster is blue-black and have the best flavour and hence are expensive.	Homnard	Maini lobster, bugs lobster, European lobster.
<i>PRAWNS/SHRIMPS</i> : are the most popular of all the crustaceans. Technically there is no difference between prawns and shrimps.	Crevettes	Coldwater prawns.eg: pink shrimps, deep-sea shrimps; Mediterranean prawns, warm water prawns eg: <i>gulf shrimps</i> .

3. Cephalopods: The word literally means “head with foot”.

Buried in the flesh of all cephalopods is the duplicate skeleton which is usually transparent and found in the form of – a long pen in a squid, an oval cuttlebone or a hard beak of an octopus.

Cephalopods are marine animals which do not have any backbone also termed as invertebrates.

Quick-cooking over high heat or long slow cooking is the rule for cephalopods.

Examples of cephalopods are - octopus, squid, cuttlefish and jellyfish.

Squids are considered to be more sweet and tender than cuttlefish.

#### CUTS OF FISH-

1. Fillet: - A cut of fish free from all skin and bone, prepared from either a round or flatfish.

- ▶ The fillet can be poached, grilled, deep-fried and shallow fried.
- ▶ Flatfish yield 4 fillet cross-cut fillets, 2 from side
- ▶ Round fish yield 2 fillets

2. Supreme- A thick slice of fish cut on the slant from a fillet prepared from a large fish.

3. Darne- A thick Slice of Fish on the bone, prepared by Cutting across a large round fish. Darnes are suitable for grilling, shallow frying and deep poaching. Darne is also known as steaks of round fish.
4. Paupiette- A neatly rolled fillet, stuffed with either a fish farce, Shellfish, vegetables. The fillet is rolled from the tapered tail to the wider head end and poached.
5. Delice: - neatly folded fillet.
6. Troncon- A thick slice of fish on the bone, prepared From a large flatfish. They are usually deep poached
7. Goujaunette or Goujon- These are approximately 8 cm long strips, cut from bigger pieces of fillets, used for garnishing. the name implies goujonettes are a smaller version of goujons and are cut into strips 3-4 cm x 5 mm. Both goujons and goujonettes are suitable for deep frying and shallow frying and are sometimes poached.
8. Mignon- fillet of Fish Foalded as a cornet
9. Medillion-A boneless round-shaped steak or a slice of fish fillet usually cut from a large fillet of fish.
10. PLIE– Fillet which is flattened and folded into two.

#### SELECTION CRITERIA-

- ▶ Gills should be bright red
- ▶ The tail should be stiff. If the tail is pulled it should spring back in place
- ▶ Scales should lie flat and firmly attached to the skin.
- ▶ Eyes should be bright and not sunken
- ▶ The flesh of fish should be firm and spring back into shape when pressed.
- ▶ There should not be any blood clots or discolouration
- ▶ It should have no foul smell. It should have a pleasant smell
- ▶ Fish should be free from slime and should not feel dry to touch. It should be undamaged and free from bruises

- ▶ The fins and tails should be flexible, it should not be brittle and dry.
- ▶ Shellfish must be alive when purchased.
- ▶ Mussels, oysters and scallops must be tightly closed.
- ▶ The legs of dead crustaceans will hang limp and lifeless.

#### Preparing fish for cooking: -

Scaling and cleaning:

1. To scale the bland side of the knife, holding the fish by the tail, scraps finely from the tail towards the head, wash well and removed any lose of scale.
2. Remove the fins and tail.
3. In case of flatfish cut away the grills and make a small opening in the belly.

Filleting – It is a neat removable of the flesh of the fish from its body to yield flesh. Cut the flesh along the line of backbone.

Skinning – Hold the tail end of the fish in the left hand than skin the flesh from tail to head with quick short sawing strokes of a sharp knife. Point the knife towards the skin so that no flesh should be wasted.

#### Cooking methods-

- ▶ Boiling: court bouillon --- sufficient to cover– simmer. Boiling: Sometimes referred to as deep poaching, this is the gentle simmering of the fish either in a court-bouillon (consisting of vegetables, water and herbs) or plenty of water containing lemon juice and salt, depending on the type and cut of fish being cooked, on top of the stove. Ideally, a special fish kettle should be used
- ▶ Steaming: seasoned ---- greaseproof paper---- sauce. Steaming: Fish which is to be shallow or deep poached may instead be steamed. The method for the preparation of the fish and the additional ingredients and cooking liquid are identical. High-pressure steamers have now been introduced to give a new method of “dry” steaming. Darnes of salmon, for example, can be cooked using this method with a variety of herbs or vegetables to give a whole range of dishes for the à la carte
- ▶ Poaching: court bouillon ---- whole fish or fillets.
- ▶ Baking: grease

- ▶ Deep frying: whole fish, goujons, fillets. Deep frying: This is the cooking of small cuts of fish immersed in clarified fat or oil at a high temperature.
- ▶ Shallow frying: fillets, Troncon, supreme, steaks and small fish.
- ▶ Grilling: suitable for various cuts and types of fish --- seasoned --- greasing.
- ▶ Stewing. - Spanish, Italian Greek cuisine has many flavorful recipes for fish stews

### Some popular preparations around the world

1. FISH 'N CHIPS – A simple preparation made with firm-textured fishes such as cod and sea bass which are traditionally dipped in a batter of flour, egg, salt, baking powder and milk and deep-fried. These are served with long lengthwise potato fingers or chips or French fries, lemon wedges and fried parsley. Traditionally this British snack is served in cones of newspaper sprinkled with vinegar. In India fish and chips commonly denotes fillets of fish which are coated with breadcrumb and deep-fried.
2. FISH ORLY – Fish fillet is marinated in lemon juice, oil, chopped parsley and salt. A batter is made with flour, stiffly beaten egg white, beer and seasoning. The fish is dipped in the batter and deep-fried served with fried parsley and tomato sauce or tomato ketchup.
3. FISH COLBERT – Fillet of fish coated with breadcrumb and deep fried served with slices of lemon and Maitre d'hôtel butter.
4. FRITTO MISTO – An Italian seafood and fish preparation which is usually served as an appetizer and consists of small bite-sized pieces of fish, squid, oysters, and other seafood which is crumbed and deep-fried usually served with lemon, parsley and a roasted bell pepper sauce.
5. SICILIENNE – Same as fish Colbert but served with brown butter, capers, and chopped anchovies and sieved hardboiled egg.
6. SOLE MEUNIERE – The fish is marinated, patted with flour and shallow fried in hot butter. Served with slices of lemon and sprinkled with lemon juice, hot brown butter and chopped parsley at the last moment.
7. BELLE MEUNIERE – Very similar to meuniere but garnished with blanched tomatoes, sliced sautéed mushrooms and few grains of caviar
8. GRENOBLOISE – Fish meuniere garnished with segments of lemon and capers.
9. RED SNAPPER DUGLERE – Fish is poached in white wine and fish fumet. The cooking liquid is strained and reduced to a sauce-like consistency with sautéed chopped garlic, dices of onion, blanched tomatoes and chopped parsley. At the last moment, the cream is added to the sauce and the sauce is poured over the poached fish.
10. SOLE VERONIQUE – Fish is poached in fumet and served with blanched and peeled white grapes and a fish velouté is made with the poaching liquor.
11. BEKTI PRINCESS – Poached fillet of Bektı served with fish velouté made with the poaching liquid and white wine. It is garnished with slices of sautéed mushroom and blanched asparagus tips.

12. SALMON COULIBIAC – Salmon fillet arranged over a layer of cooked rice, chopped hard-boiled eggs and duxelles enclosed or covered with brioche dough, baked and served as a pie.
13. SOLE NICOISE – Marinated fillet of sole placed on a bed of tomato concussed and baked in a hot oven. Served with a garnish of black olives, anchovy fillets and slices of lemon.
14. BOUILLABAISSE – is the most famous of all Mediterranean fish soups. This originated in the Marseilles region in the south of France. It is a rich and colourful mixture of fish and shellfish which is flavoured with tomatoes, saffron and rinds of oranges and usually garnished with chopped parsley. Traditional bouillabaisse is always made with rockfish, red mullet, monkfish, squid and small crabs.
15. MATELOTE – A French fish stew made with red or white wine with aromatic flavouring. The term is usually applied to stews made with freshwater fish such as eel, trout, pike etc. All matelotes are usually garnished with small onions, mushrooms, crisp bacon, fried crouton of bread and dices of crayfish meat.
16. PRAWN NEWBURG – This dish was first invented by Mr Wenburg, the Executive Chef at Delmonicos the famous restaurant in New York. Newburg sauce is made by sautéing large pieces of prawn in a pan with butter, garlic, onion, tomatoes and white wine. After the prawn is cooked, the sauce is strained and made into a puree with the addition of cream. Fish fumet and sherry are added towards the end and the sauce is poured over the prawns and served hot.
17. LOBSTER THERMIDOR – The lobster is cut lengthwise into two halves, seasoned with salt, oil, paprika and roasted in the oven. A sauce is prepared by sautéing shallots in butter to which roasting juices from the lobster, fish fumet, and white wine are added. The sauce is then thickened with béchamel sauce and is finished by adding English mustard powder and grated parmesan cheese. This sauce is poured over lobster halves and served with chopped parsley

#### STORAGE - FIN FISH-

- ▶ The most important concern when storing fish and shellfish is temperature.
- ▶ All fresh fish should be stored at temperatures between 30\* and 34 \* f (-1 to 1 \*c )
- ▶ Whole fish should be layered directly in crushed ice.
- ▶ Care should be taken that the fish does not bruise or dent during storage.
- ▶ Fabricated and portioned fish may be wrapped in moisture-proof packing.

#### STORAGE SHELLFISH-

- ▶ Under ideal conditions, shellfish can be kept alive for up to one week.
- ▶ Never store live shellfish in plastic bags and do notice them.
- ▶ If a saltwater tank is not available, live lobsters, crabs and other crustaceans should be kept in boxes with seaweed or damp newspaper to keep them moist
- ▶ Shellfish especially crabs are always preferred to store live in frozen temperature

### Glossary for Fish Mongery

1. Pavé
2. Fish Farce
3. Muniere
4. Colbert
5. Fume
6. Court Boillion

FLAT FISH	ROUND FISH
This fish is flat in shape	This fish is round in shape
Both its eyes are on one side	Eyes are on either side of the fish.
It swims flat to the surface of the water with the belly aligned parallel to the water	It swims in a horizontal fashion
Belly side of the fish is white	Both sides of the fish are the same colour
It yields four fillets	It yields two fillets
Examples: plaice, turbot, flounder...	Examples: salmon, trout, snapper...

### QUESTIONS: -

1. Classify fish with examples.
2. List and draw 8 cuts of fish and explain each one in a single sentence
3. What are the factors to remember when buying fish and shellfish?
4. What are the quality points to be checked in the selection of fish and shellfish?
5. What is court bouillon? What is it used for?
6. What is the fish fumet?

