



SEAFOOD TOMORROW'S RECIPES CHALLENGE

RECIPES CHALLENGE 2021

The dramatic decline of marine resources is a global issue. It is crucial to make sustainable choices when we consume seafood to maintain the biodiversity in our ocean and to ensure that marine food sources are available for future generations. For wild or farmed species, key criteria need to be considered by consumers before buying produce. When the product is wild, criteria such as the fishing area from which they have been harvested, fishing gear, and the maturity of the fish should be considered. A sustainable choice means choosing seafood that comes from sustainable stock fished with equipment that respects the environment and marine biodiversity. Additionally, it is important to choose species that have had time to reproduce before being captured. For farmed products, a good choice means that we select seafood products that have been produced in ethical and sustainable conditions in regard to fish feed, pollution, and animal welfare.

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CONTEST TO SELECT RECIPES

The recipes contest is part of SEAFOOD^{TOMORROW'S} wider strategy to promote the consumption of sustainable seafood.

Seafood-based recipes contests were organised for culinary school students from six European participating countries in order to create **innovative recipes using sustainable and underused seafood. These recipes were customized for three target groups: seniors, pregnant women and children.** They will be used by restaurants and catering operations.

National challenges were first organized in the **six participating countries: Belgium, France, Poland, Portugal, Spain and Sweden.** The recipes selected at national level were then prepared at the final European Contest in Paris in July 2019.

For each contest, both national and European, the jury was composed of representatives from the food and catering industry, as well as scientists and nutritionists. They had the challenging task of selecting the best recipes created by students, based on a number of criteria including sustainability, scaling feasibility, the nutritional needs of the target consumers and, of course, taste!

The recipes selected at the European level have been produced industrially by the French project partner IDmer, before being tested by consumer panels of the target groups in three countries representing distinct European regions—Central, Eastern and Southern Europe.

THE FOLLOWING SCHOOLS PARTICIPATED IN THE CONTEST:

- CVO Vitant, Antwerp, **BELGIUM**
- Lycée Yvon Bourges, Dinard, **FRANCE**
- Lycée & CFA Hôtelières, Marseille, **FRANCE**
- Lycée Maurice Marland, Granville, **FRANCE**
- Lycée Edouard Branly, La Roche-sur-Yon, **FRANCE**
- Culinary school Gryfino (Zespół Szkół Ponadgimnazjalnych nr 2), Gryfinie, **POLAND**
- Culinary school Szczecin (Zespół Szkół Nr 6 im. Mikołaja Reja), Szczecinie, **POLAND**
- Escola de Hotelaria e Turismo de Lisboa, **PORTUGAL**
- Escola Superior de Hotelaria e Turismo do Estoril, **PORTUGAL**
- Escola de Hotelaria e Turismo de Setúbal, **PORTUGAL**
- Escola Superior d'Hostaleria de Barcelona, **SPAIN**
- The Faculty of Gastronomic Sciences - Basque Culinary Center of Mondragon Unibertsitatea, San Sebastian, **SPAIN**
- Kristianstad University, Bachelor program in food and meal science, **SWEDEN**

THE WINNERS ARE

▼ KRISTIANSTAD UNIVERSITY, SWEDEN,

FOR THREE RECIPES:

- fish fillet of common dab with a wheat salad,
- fish roulade using blue whiting, both recipes ideal for pregnant women,
- a mussel soup for seniors.

▼ BASQUE CULINARY CENTER, SAN SEBASTIAN, SPAIN,

FOR ONE RECIPE TARGETING SENIORS:

- fishballs made with blue whiting together with vegetables and marinara sauce.

▼ LYCEE & CFA HÔTELIERS, MARSEILLE, FRANCE,

FOR ONE RECIPE FOR CHILDREN:

- fishballs made with bib (or pouting) with a purée.

▼ CULINARY SCHOOL SZCZECIN, SZCZECINIE, POLAND,

FOR ONE RECIPE FOR CHILDREN:

- fish sausage using carp accompanied by vegetables.

SEAFOOD^{TOMORROW} aims to promote the consumption of sustainable seafood species and to diversify the origin of proteins essential for our health.

To find out more please see: www.seafoodtomorrow.eu

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WINNING RECIPES



CARP SAUSAGES WITH BROCCOLI AND CARROT

by the Culinary school Szczecin, Szczecin, Poland
Species: Common carp (*Cyprinus carpio*)

METHOD

1. Grind the fillets, chicken liver and pre-boiled vegetables.
2. Mix all ingredients together and form the sausages.
3. Cook sausages at 70-75 °C for 25-30 minutes.
4. Prepare the salad sauce: mix natural yogurt, mayonnaise, French mustard, iodized salt, pepper.
5. Cut the cherry tomatoes and red onions.
6. Cut the sweet potatoes and roast them with rapeseed oil at 180 - 200 °C for 30 minutes.



Recipe for 4 persons

INGREDIENTS

Sausages

- 400 g of carp fillets
- 64 g of broccoli
- 64 g of carrot
- 12 g of chicken liver
- 0,4 g of dried seaweed

Salad sauce

- 160 g of natural yogurt
- 48 g of mayonnaise
- 48 g of French mustard
- 16 g of iodized salt
- 1,2 g of pepper

- 108 g of cherry tomatoes
- 28 g of red onion
- 372 g of sweet potatoes
- 28 g of rapeseed oil

The common carp has a thick body covered with scales, excepted on the head. Its back has a dark green or bronze color and the belly is lighter. Carp is one of the main farmed species worldwide. It generally comes from extensive farming, producing different species with different trophic levels. Carp can be considered sustainable.

DAILY NUTRITIONAL NEEDS FOR CHILDREN

Omega 3	> 80 mg (EPA+DHA*) / 100 g
Vitamin D	> 1,5 µg / 100 g
Protein/lipids	> 2
Fish portion	70 g (+/-10%)
Complete dish weight	250 g

* Docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) are two of the three omega-3 fatty acids.

Suggestions

To increase vitamin D and omega 3, replace chicken liver by cod liver oil in the sausages (around 0,5 g per plate).
To reduce the fat, use light mayonnaise in the sauce. If you prefer to avoid additives that are commonly found in light mayonnaise, eliminate the mayonnaise and adjust the quantity of mustard.

BIB AND QUINOA BALLS, SWEET POTATOES AND BANANA PURÉE

by the Lycée & CFA Hôtelières, Marseille, France
Species: Bib (*Trisopterus luscus*)

METHOD

1. Clean, scale and fillet the fish. Poach and allow to cool before crumbling the flesh.
2. Cut, cook and mash the sweet potatoes.
3. Finely slice the banana, coat in icing sugar and then dry it in a low heat oven at 90°C for 1 hour.
4. Cook the quinoa, and then blend the fish, cooked quinoa and other ingredients together. Thicken with an egg yolk and season. Pipe the mixture onto a baking tray before shaping the balls. Bake the fish balls for 15-20 minutes at 150 °C.

Recipe for 4 persons

INGREDIENTS

- 800 g of bib
- 720 g of sweet potatoes
- 400 g of banana
- 140 g of quinoa
- 60 g of egg yolk
- 20 g of icing sugar
- 4 g of olive oil
- 40 g of butter
- 160 g of cream
- 40 g of ketchup



Bib is a small gadidae, with thin but fragile flesh. It can be encountered on all types of ocean floor, only if it has a nearby shelter: cave, fault, wreck. The bib deserves to be better known. It offers a sustainable alternative to overfished white fish species.

DAILY NUTRITIONAL NEEDS FOR CHILDREN

Omega 3	> 80 mg (EPA+DHA*) / 100 g
Vitamin D	> 1,5 µg / 100 g
Protein/lipids	> 2
Fish portion	70 g (+/- 10%)
Complete dish weight	250 g

* Docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) are two of the three omega-3 fatty acids.

Suggestions

To enhance the content in vitamin D and omega 3, replace olive oil in the fishballs by cod liver oil. Reduce fat in the dish by replacing cream by milk in the purée, and reduce butter.

COMMON DAB WITH WHEAT BERRY SALAD

by Kristianstad University, Sweden

Species: Common dab (*Limanda limanda*)

METHOD

1. Bring water to boil and add the beetroots. Cook for 20 minutes, then drain and peel them.
2. Bring 0,5 litre of water to boil with a pinch of salt: add the wheat berries and simmer for 10 minutes, drain and let it sit for a couple of minutes.
3. Fry the fish.
4. Finely chop the dill and chives.
5. Slice the fennel thinly using a mandolin and squeeze over 2 tablespoons of lemon over the slices.
6. Heat a frying pan and add the oil and butter.
7. Put salt and pepper on the fish.
8. Turn the fish in flour and fry it until the internal temperature it reaches 55°C checking with a food thermometer.
9. Cut the beetroots into pieces.
10. Mix the wheat berries with crumbled feta cheese, 2 tablespoons of lemon, a pinch of black pepper, rapeseed oil, honey, dill and chives.
11. Serve with the fennel, beetroots and fish.
12. Grate a small piece of horse radish as a garnish.



Recipe for 4 persons

INGREDIENTS

- 400 g of common dab
- 20 g of rapeseed oil
- 50 g of fennel
- 100 g of wheat berries
- 1/2 lemon
- 30 g of feta cheese
- 10 g of dill
- 10 g of chives
- 5 g of butter
- 10 g of honey
- 80 g of beetroots
- 2 g of horseradish
- Pinch of salt
- Pinch of black pepper

Common dab is a flat fish present in the English Channel and on the North Sea coasts. It can be recognized by the angle formed by the lateral line above its pectoral fin. It can reach 40 cm and weigh 1 kg. The dab stocks seem sustainable, but it has to be consumed with moderation because of the lack of knowledge of the status of the stock. It is important to avoid the dab during spawning season because of egg-bearing females and the lower quality of the flesh during that period.

DAILY NUTRITIONAL NEEDS FOR PREGNANT WOMEN

Vitamin D	> 1,5 µg / 100 g
Iodine	> 45 µg / 100 g
Omega 3	> 80 mg (EPA+DHA*) / 100 g
Protein/lipids	> 2
Fish portion	100 g (+/-10%)
Complete dish weight	250 g

* Docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) are two of the three omega-3 fatty acids.

Suggestions

To increase the content of vitamin D and omega 3, replace the teaspoon of rapeseed oil in the sauce of the salad by a teaspoon of cod liver oil. There will be no effect on the taste but a greater intake of essential fats.

FISH ROULADE

by Kristianstad University, Sweden

Species: Blue Whiting (*Micromesistius poutassou*)

METHOD

1. Boil water and blanch the cabbage leaves for 2-3 minutes and then place them in an icebath to chill. Bring 0,5 liter of water to boil. Add a pinch of salt.
2. Prepare and boil the potatoes and the wheat berries in separate pots.
3. Take the chilled cabbage leaves and drain and cut off the stem but keep the leaves intact as much as possible. Drain and chill the wheat berries.
4. Chop the shallots and cook of in some of the butter on a low heat. The onions should get soft but not take on any color.
5. Add the white wine vinegar and the white wine and let it reduce so only half of the liquid remains.
6. Cut the fish into small bites and mix with the cream, salt and pepper to a creamy yet firm paste. Ad 3/4 of the lemon zest, chopped chives, dill and all of the chilled wheat berries and stir it together.
7. Place the cabbage leaves on a cutting board and add 2 tablespoons of the fish paste in the middle of the cabbage in a line going across from the root of the cabbage. Fold the bottom part of the leaf and then the sides in and then roll it together.
8. Heat up a pan and add in cooking oil and a little bit of butter and place the roulade in seam-side down to make sure it holds it's shape. Cook for 3-5 minutes per side on medium heat.
9. Drain the onions from the wine reduction and re-heat. Remove form the heat and add cubes of butter in small amounts at the time. Mix using a hand blender to make a creamy foam.
10. Place the boiled potatoes on the plate, place the fish roulades on top and add the sauce all around on the fish and potatoes and sprinkle the remaining herbs and lemon zest on top.



Recipe for 4 persons

INGREDIENTS

- 600 g of blue whiting
- 400 g of savoy cabbage
- 1 kg of potatoes
- 2 shallots
- 40 g of chives
- 40 g of dill
- 1 cup of wheat berries
- 1 cup of white wine
- 1 cup of cream
- White wine vinegar
- 60 g of butter
- Lemon zest
- Pinch of salt
- Pinch of pepper

Present mainly in the North Atlantic, blue whiting belongs to the gadidae family (like cod). It is an oceanic species that lives on the continental slope between 150 and more than 1000 meters deep. It rises to the surface at night to feed and stays at the bottom during the day. Blue whiting is mainly used to produce fish flour and oil intended to feed farmed fish. A part is also used for in surimi production. It should be thought of as a fresh fish. Stocks are in good health (North East Atlantic stock is a little overfished but the reproductive capacity is high). Blue whiting consumption can be recommended.

DAILY NUTRITIONAL NEEDS FOR PREGNANT WOMEN

Vitamin D	> 1,5 µg / 100 g
Iodine	> 45 µg / 100 g
Omega 3	> 80 mg (EPA+DHA)* / 100 g
Protein/lipids	> 2
Fish portion	100 g (+/-10%)
Complete dish weight	250 g

* Docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) are two of the three omega-3 fatty acids.

Suggestions

To bring more vitamin D and omega 3 add a teaspoon of cod liver oil in the roulade filling and reduce the amount of cream to balance the fats. Add seaweed to the sauce to increase the amount of iodine and enhance the taste. To reduce the fat content, replace the butter sauce with a milk based sauce, with shallots, lemon juice, and starch to thicken the texture.

MUSSEL SOUP

by Kristianstad University, Sweden

Species: Blue mussel (*Mytilus edulis*)

METHOD

1. Peel and cut carrots, parsnip, celeriac, swede and onions into small pieces and fry of in some oil for 2 to 3 minutes.
2. Add the potatoes (cut into pieces), along with chopped chili and garlic.
3. Fry on high heat for 2-3 minutes, add tomato purée, and stir. Add the white wine and the stems of the parsley. Chop the leaves and set aside for later.
4. Let the wine reduce down to half before adding the water and fish stock.
5. Simmer until the vegetables are soft, then add the fresh cream, salt and pepper.
6. Add the mussels and let the soup simmer for 3-5 minutes or until the mussels are soft.
7. Add the chopped parsley at the end and serve.

DAILY NUTRITIONAL NEEDS FOR SENIORS

Vitamin D	> 1,5 µg / 100 g
Vitamin B12	> 0,75 µg / 100 g
Sodium	< 1,3 g Na / day
Proteins	> 20 % energy
Protein/lipids	> 2
Fish portion	70 g (+/-10%)
Complete dish weight	250 g

Suggestions

To increase vitamin D, add cod liver oil (a small quantity is enough).

To reduce the fat, use light cream.



Recipe for 4 persons

INGREDIENTS

- 600 g of shelled mussels
- 600 g of potatoes
- 300 g of parsnips
- 300g of celeriac
- 600 g of carrots
- 300 g of swede
- 3 yellow onions
- 1 cup of white wine
- 2 tablespoons of tomato purée
- 2 garlic
- 1 cup of fresh cream
- 3 tablespoons of fishstock
- 1 red chili
- 1 bundle of parsley
- Pinch of salt
- Pinch of pepper

Mussels grow in abundant congregations, attached to each other and linked to a fixed support.

They feed by filtering the plankton present in their natural environment. They are a cheap source of marine protein.

Mussel farming is characterized by a low environmental impact.

BLUE WHITING 'MEATBALLS' WITH VEGETABLES AND MARINARA SAUCE

by the Faculty of Gastronomic Sciences - Basque Culinary Center of Mondragon Unibertsitatea, San Sebastian, Spain
Species: Blue Whiting (*Micromesistius poutassou*)

METHOD

1. Chop the garlic, onion, broccoli, and Shiitake mushrooms.
2. Clean the blue whiting and mince it in a mincing machine (98 mm, 1 °C). If you don't have a mincing machine, simply use a blender and fry in a large pot.
3. Make the meatballs mixture: mix the blue whiting, evaporated milk, egg, bread crumbs, white pepper and cod liver oil in the mixing machine (4 °C, 9 minutes).
4. Stir fry the chopped garlic, 10 g of the chopped onion, and 1 ml of extra virgin olive oil at 110 °C for 4 minutes.
5. Add the paprika and tomato sauce and stir.
6. Add the white wine and allow the alcohol to evaporate.
7. Cook the chickpeas for 40 minutes.
8. Prepare the stock: add 92 ml of fish stock and wakame seaweed. Cook at 85 °C for 20 minutes.
9. At the same time, stir-fry 60 g of the chopped onion, broccoli, Shiitake mushrooms, as well as the raisins and boiled lentils, using approximately 20 ml of extra virgin olive oil in a pan and spatula (we recommend exoglass, but any spatula is good) (110 °C, 10 minutes).
10. Take 100 g of the meatball mixture (step 3), make 4 balls (each approximately 25 g) and put them in gastronorm 65 mm 1/1 at 1° (or on a baking tray).
11. Cook the balls in a steam oven at 140 °C, 70 % steam, for 3 minutes. Alternatively, place a pan of boiling water in a conventional oven to create steam.
12. Blend and strain the stock that you prepared in step 7.
13. Dissolve about 1 tablespoon of fish stock and 6 g of corn-starch and stir until homogeneous.
14. Prepare the sauce: integrate the two stock mixtures and cook at 70 °C, until thick.

Recipe for 4 persons

INGREDIENTS

- 300 g of blue whiting
- 108 ml of fish stock
- 32 g of egg
- 400 g of chickpeas
- 36 g of bread crumbs
- 100 g of broccoli
- 100 g of Shiitake mushrooms
- 120 g of lentils
- 70 g of onion
- 20 g of raisins
- 48 g of tomato sauce
- 24 g of evaporated milk
- 6 g of cornstarch
- 20 ml of white wine
- 24 ml of extra virgin olive oil
- 4 g of cod liver oil
- wakame seaweed
- 1 g of garlic
- 1 g of paprika
- 4 g of white pepper



Present mainly in the North Atlantic, blue whiting belongs to the gadidae family (like cod). It is an oceanic species that lives on the continental slope between 150 and more than 1000 meters deep. It rises to the surface at night to feed and stays at the bottom during the day. Blue whiting is mainly used to produce fish flour and oil intended to feed farmed fish. A part is also used for in surimi production. It should be better thought of as a fresh fish. Stocks are in good health (North East Atlantic stock is a little overfished but the reproductive capacity is high). Blue whiting consumption can be recommended.

DAILY NUTRITIONAL NEEDS FOR SENIORS

Vitamin D	> 1,5 µg / 100 g
Vitamin B12	> 0.75 µg / 100 g
Sodium	< 1.3 g Na / day
Proteins	> 20 % energy
Protein/lipids	> 2
Fish portion	70 g (+/-10%)
Complete dish weight	250 g



OTHER RECIPES



HORSE MACKEREL ECLAIR AND GREEN PEAS

by the Lycée Yvon Bourges, Dinard, France
Species: Horse mackerel (*Trachurus trachurus*)

METHOD

1. For the choux pastry, bring together water, 50 g of butter and salt, wait for the butter to melt, add the flour and dry the dough. In a round bottom-mixing bowl, add the eggs one by one and mix with a spatula. Put in a pastry bag, and place on a baking sheet. Bake it for 30 minutes at 180 °C.
2. For the potted fish, cook the fish in 200 ml of cream, season with garlic, ginger, thyme, salt and Espelette pepper. Leave to cool. Chop the fish, add 40 g of soften butter and add 150 ml of cream little by little. Add tarragon, lemon juice and zest.
3. Cook the peas in boiling salted water in a Russian oven and cool in iced water. Strain through a sieve and rectify with 100 ml of cream and 20 g of butter, then stick with gelatin and rectify.
4. For the tarragon sauce, make the fumet, bleach the tarragon and then mix it all together and rectify.

DAILY NUTRITIONAL NEEDS FOR CHILDREN

Omega 3	> 80 mg (EPA+DHA*) / 100 g
Vitamin D	> 1,5 µg / 100 g
Protein/lipids	> 2
Fish portion	70 g (+/-10%)
Complete dish weight	250 g

* Docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) are two of the three omega-3 fatty acids.

Suggestions

To reduce the fat in the recipe, reduce the amount of butter and use light cream.



Recipe for 4 persons

INGREDIENTS

- 270 g of horse mackerel
- 1 litre of water
- 110 g of butter
- 40 g of flour
- 120 g of eggs
- 450 ml of cream
- 200 g of green peas
- 10 g of ginger
- 1 lemon
- 1 clove of garlic
- 3 sheets of gelatin
- 150 g of tarragon
- 10 g of shallots
- 5 cl of olive oil
- 1 g of salt
- Thyme
- Espelette pepper
- 20 cl of a preparation of fish bone, carrot, onion, celery stalk

Horse mackerel is a small pelagic fish, undervalued in many countries, but very tasty! Horse mackerel coming from the Portuguese coast is the most abundant of all, and its stock is sustainable. Do not use horse mackerel from other areas. Select the fish that measure more than 30 cm, in order to give them time to reproduce.

BACKED PEPPER SOUP WITH HERRING BALLS

by the Culinary school Gryfino, Gryfinie, Poland
Species: Herring (*Clupea harengus*)

METHOD

1. Roast the red pepper, white onion, garlic in oven (190 °C, 50 minutes).
2. Mix red pepper, white onion, garlic, cream, 4 g of ionized salt, 2 g of pepper, vegetable decoction. Cook and blend the soup (100 °C, 10 minutes).
3. Grind the herring fillets.
4. Mix wheat roll, egg, dried seaweed, 12 g of ionized salt, 2,2 g of pepper, form the balls and cook in soup.

Recipe for 4 persons

INGREDIENTS

- 600 g of herring fillets
- 300 g of red pepper
- 60 g of white onion
- 20 g of garlic
- 60 g of cream (18 % of fat)
- 16 g of ionized salt
- 4,4 g of pepper
- 28 g of wheat roll
- 80 g of egg
- 0,4 g of dried seaweed
- 432 g of water/vegetable decoction



Herring is a small, gregarious pelagic and highly migratory fish, very abundant in the Northeast Atlantic. It's blue color on the dorsal side and white on the ventral side is a camouflage technique for predators. At night, it rises to the surface to feed on plankton. The sustainability of the herring stocks depends on the area where it is fished. Herring coming from eastern channel of the North Sea, Skagerrak and Kattegat (autumn spawners), the northern part of the Irish Sea and Gulf of Riga can be recommended for consumption as the stocks are in good shape.

Herring from Barents Sea, Norwegian Sea, north of North Sea (spring spawners) can be consumed with moderation as the stocks are being fished a little bit above maximum sustainable yield, but the stock has full reproductive capacity.

These stocks should be avoided, due to low safe biological limits: west of Scotland, west of Ireland, south of Irish Sea, Celtic Sea, Southwest of Ireland, Skagerrak and Kattegat (spring spawners), west of the Baltic Sea.

DAILY NUTRITIONAL NEEDS FOR PREGNANT WOMEN

Vitamin D	> 1,5 µg / 100 g
Iodine	> 45 µg / 100 g
Omega 3	> 80 mg (EPA+DHA)* / 100 g
Protein/lipids	> 2
Fish portion	100 g (+/-10%)
Complete dish weight	250 g

* Docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) are two of the three omega-3 fatty acids.

BAKED BREADED MACKEREL WITH CRUSHED SWEET POTATOES

by the Escola de Hotelaria e Turismo de Setúbal, Portugal
Species: Chub mackerel (*Scomber japonicus*)

METHOD

- Clean and fillet the fish.
- Prepare a brine (12 %) by diluting 12 g of coarse salt in 1 litre of water.
- Marinate the fish in the brine for 7 minutes.
- Remove the fish, wash, dry and remove skin and bones.
- Mix the honey and mustard.
- Chop finely the parsley and the algae and mix with panko.
- Dip the fillets on the mixture of mustard and honey and dust with the panko mixture.
- Cook in the preheated oven.
- Wash and cut the potatoes into pieces.
- Bake the potatoes in the preheated oven (180 °C, 40 minutes).
- Peel and crush the potatoes coarsely.
- Sauté the chopped onions with the garlic and the tomatoes in olive oil.
- Add the potatoes and mix.
- Season with salt.
- Plate the crushed sweet potatoes as garnish of baked breaded mackerel.

Recipe for 4 persons

INGREDIENTS

- 480 g of chub mackerel
- 4 g of parsley
- 80 g of panko breadcrumbs
- 160 g of honey
- 160 g of mustard
- 12 g of coarse salt
- 600 g of sweet potatoes
- 120 g of onions
- 12 g of garlic
- 328 g of tomatoes
- 20 g of olive oil
- 4 g of algae
- 1 litre of water



Chub mackerel lives in the warm waters of the eastern Atlantic, and in the Mediterranean Sea, but also in the coastal waters of the Indo-Pacific region. Do not mistake it with the Atlantic mackerel (*Scomber scombrus*). It can be differentiated by the lower part of its sides which are mottled with small dusky blotches. The chub has also a larger eye. It can be consumed but with moderation, as little is known about the stocks.

DAILY NUTRITIONAL NEEDS FOR PREGNANT WOMEN

Vitamin D	> 1,5 µg / 100 g
Iodine	> 45 µg / 100 g
Omega 3	> 80 mg (EPA+DHA)* / 100 g
Protein/lipids	> 2
Fish portion	100 g (+/-10%)
Complete dish weight	250 g

* Docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) are two of the three omega-3 fatty acids.

Suggestions

To increase vitamin D, remove 1.5 ml of olive oil in step 3 and add 1.5 ml of cod liver oil in step 2 (Mix the honey, mustard and cod liver oil, etc.).

WHITING WITH CHICORY ROOT, SUNCHOKE PURÉE AND MAREDSOUS

by the CVO VITANT, Antwerp, Belgium
Species: Whiting (*Merlangius merlangus*)

METHOD

1. Peel chicory root and thinly slice it. Keep in lemon water to prevent discoloration.
2. Peel and cut sunchokes and potatoes, boil in 75 g of milk with garlic, thyme and salt.
3. Drain potatoes and sunchokes, keep the milk. Make a purée with 10 g of butter, egg yolk, salt, pepper and nutmeg.
4. Submerge chicory root in water with vinegar (7/3) and boil until it is still firm. Drain well.
5. Caramelize chicory root slices in 10 g of butter, orange juice and ginger syrup.
6. Boil the maredsous with cream and 25 g of milk, mix well. Season and add caramelized chicory, boil for a minute.
7. Prepare classic white wine sauce, with white wine, demi-glace and 30 g of butter.
8. Portion the fish fillets and cook in oven.



Recipe for 4 persons

INGREDIENTS

- 400 g of whiting
- 400 g of chicory root
- 400 g of sunchokes
- 600 g of potatoes
- 100 g of milk
- 72 g of egg yolk
- 80 g of butter
- 100 g of maredsous cheese
- 100 g of cream
- 10 g of ginger syrup
- 100 g of white wine
- 100 g of demi-glace
- 1 g of pepper
- Orange juice
- Vinegar
- Pinch of salt
- Pinch of nutmeg

Whiting belongs to the gadidae family; it is similar to cod. It is recognizable by the black mark at the base of the pectorals and the dark-colored lateral line along its body. Known as a poor man's dish in the 20th century, it has since become a sought-after and appreciated fish. Whiting from Spanish water and Bay of Biscay are the most sustainable. Avoid whiting from other fishing areas.

DAILY NUTRITIONAL NEEDS FOR SENIORS

Vitamin D	> 1,5 µg / 100 g
Vitamin B12	> 0.75 µg / 100 g
Sodium	< 1.3 g Na / day
Proteins	> 20 % energy
Protein/lipids	> 2
Fish portion	70 g (+/-10%)
Complete dish weight	250 g

Suggestions

To increase vitamin D, add cod liver oil.

HORSE MACKEREL CANNELLONI WITH GRANNY SMITH AND FENNEL

by the Lycée Maurice Marland, Granville, France

Species: Horse mackerel (*Trachurus trachurus*)

METHOD

1. Moist the cannelloni to make the dough soft and easier to work.
2. Make the white wine sauce: sweat the shallots, add the white wine and reduce, add cream, check the seasoning and set aside.
3. Cut fennel and Granny apple in brunoise.
4. Dress and lift the mackerel fillets, be careful to cover all edges.
Cook the fillets with shallow poaching (cold water, salt and lemon juice).
Once cooked, mince the fish with a fork, mix and add a little milk, check the seasoning.
Mix this mixture with the brunoises.
5. Stuff the cannelloni with the mousse, arrange in a dish and cover with white wine sauce.
Sprinkle with mimolette.
6. Bake for 25 minutes at 220 °C.

DAILY NUTRITIONAL NEEDS FOR SENIORS

Vitamin D	> 1,5 µg / 100 g
Vitamin B12	> 0.75 µg / 100 g
Sodium	< 1.3 g Na / day
Proteins	> 20 % energy
Protein/lipids	> 2
Fish portion	70 g (+/-10%)
Complete dish weight	250 g

Suggestions

To reduce lipids put less sauce and replace butter by yogurt.



Recipe for 4 persons

INGREDIENTS

- 800 g of horse mackerel
- 100 g of cannelloni
- 40 g of shallots
- 6 g of dry white wine
- 8 g of butter
- 240 g of clotted cream
- 60 g of Granny Smith apples
- 5 g of fennel
- 60 g of mimolette
- 40 g of lemon
- Skim milk
- Pinch of salt
- Pinch of pepper

Horse mackerel is a small pelagic fish, undervalued in many countries, but very tasty! Horse mackerel coming from the Portuguese coast is the most abundant of all, and its stock is sustainable. Do not use horse mackerel from other areas. Select the fish that measure more than 30 cm, in order to give them time to reproduce.

FILET OF HORSE MACKEREL WITH INDIAN GARNISH AND A WHITE BUTTER ALGUES SAUCE

by the Lycée Edouard Branly, La Roche-sur-Yon, France

Species: Horse mackerel (*Trachurus trachurus*)

METHOD

1. Clean and peel the potatoes, the chioggia beetroots, shallots and carrots.
2. Fillet and cut the horse mackerel into thick slices (4-6 cm for each thick slice).
3. Peel the pepper in the oven. Cut the potatoes and make the marinade with olive oil and spices.
4. Cut the cabbage and make the marinade with olive oil and lemon.
5. Cut the shallots and make the reduction for the white butter with the ginger. Sauté potatoes indy.
6. Cut the carrots in brunoise, cook in boiling water. Peel the tomatoes and make the tomato purée.
7. Cut zucchini and pepper in brunoise and then sauté it with olive oil and black sesame.
8. Sauté the horse mackerel with the skin and finish it in the oven. Bake for 7 minutes at 80 °C.
9. Cut the chioggia beetroots in discs.
10. Whisk the white butter (reduction and butter).
11. Season and serve!

DAILY NUTRITIONAL NEEDS FOR SENIORS

Vitamin D	> 1,5 µg / 100 g
Vitamin B12	> 0.75 µg / 100 g
Sodium	< 1.3 g Na / day
Proteins	> 20 % energy
Protein/lipids	> 2
Fish portion	70 g (+/-10%)
Complete dish weight	250 g



Recipe for 4 persons

INGREDIENTS

- 450 g of horse mackerel
- 250 g of butter
- 600 g of tomatoes
- 30 g of shallots
- 500 g of potatoes
- 50 g of chioggia beetroots
- 50 g of carrots
- 100 g of olive oil
- 200 g of zucchini
- 100 g of cabbage
- 20 g of lemon
- 15 g of ginger
- 50 g of white wine
- 150 g of pepper 3 colors
- 10 g of black sesame
- Pinch of spices (curry madras, turmeric, roasting spices, massala)
- Pinch of salt
- Pinch of pepper

Horse mackerel is a small pelagic fish, undervalued in many countries, but very tasty! Horse mackerel coming from the Portuguese coast is the most abundant of all, and its stock is sustainable. Do not use horse mackerel from other areas. Select the fish that measure more than 30 cm, in order to give them time to reproduce.

VINAIGRETTE OF GILTHEAD SEABREAM WITH WHITE BEAN PURÉE AND SAUTED GREENS

by the Escola Superior de Hotelaria e Turismo do Estoril, Portugal
Species: Gilthead seabream (*Sparus aurata*)

METHOD

1. Chop finely the onion and the parsley; sauté in olive oil with the laurel; season with salt, pepper and paprika; toss with vinegar.
2. Prepare the fish in fillets; season with salt and pepper; steam to perfection 'en papillote', make sure to paper well as it needs to hold in all the moisture to steam the fish.
3. Prepare and sauté the turnip greens; add the garlic.
4. Make a white bean purée.
5. Plate the white bean purée, the onion and turnip greens sauteed and fish fillets. Drizzle with olive oil and serve with lemon wedges and parsley.



Recipe for 4 persons

INGREDIENTS

- 280 g of gilthead seabream
- 320 g of white bean
- 20 ml of vinegar
- 100 g of onion
- 16 g of parsley
- 20 g of paprika
- 2 g of laurel leaves
- 12 g of garlic
- 4 ml of olive oil
- 400 g of turnip greens
- 1,6 g of coarse salt
- 0,8 g of black pepper
- 280 g of lemon

Gilthead seabream is a saltwater fish that lives near the coast. It is present in the Atlantic and the Mediterranean Sea. It is recognizable by its gray color, and the golden band it wears on the forehead. It likes to dwell in sandy bottoms and mixed bottoms, made up of rocks and sand. Most of Gilthead seabream is farmed, and wild populations are growing in the northeast Atlantic (stock is sustainable). Gilthead seabream is a sustainable choice (check the farming conditions before buying this fish).

DAILY NUTRITIONAL NEEDS FOR SENIORS

Vitamin D	> 1,5 µg / 100 g
Vitamin B12	> 0.75 µg / 100 g
Sodium	< 1.3 g Na / day
Proteins	> 20 % energy
Protein/lipids	> 2
Fish portion	70 g (+/-10%)
Complete dish weight	250 g

MACKEREL WITH MANIOC PURÉE

by the Escola de Hotelaria e Turismo de Lisboa, Portugal

Species: Chub mackerel (*Scomber japonicus*)

METHOD

1. Fillet the fish, remove the skin and bones; peel the manioc, remove the inner fiber, and cut into pieces and strips. Cut the celery into julienne; chop finely the fresh coriander.

2. Sear the fish in hot olive oil for approximately 30 seconds on each side; cut the fish into small pieces and reserve the fat.

3. Cook the manioc pieces in water; reserve the cooking water; make a purée with the manioc.

4. Sauté the onion in the fat collected and add the turmeric; add the manioc purée to the sauté; add the manioc cooking water; adjust the salt; add the chopped coriander, the raw celery and the fish pieces.

5. Cook the manioc strips in water; prepare chips by baking the manioc strips in a preheated oven with a dash of olive oil.

6. Plate the soup with the manioc chips and coriander powder.



Recipe for 4 persons

INGREDIENTS

- 280 g of chub mackerel
- 480 g of manioc
- 8 g of turmeric
- 160 g of onions
- 16 g of coriander (fresh)
- 4 g of coriander (powder)
- 8 ml of olive oil
- 40 g of celery
- 4 g of salt

Chub mackerel lives in the warm waters of the eastern Atlantic, and in the Mediterranean Sea, but also in the coastal waters of the Indo-Pacific region.

Do not mistake it with the Atlantic mackerel (*scomber scombrus*). It can be differentiated by the lower part of the sides which are mottled with small dusky blotches. The chub has also a larger eye. It can be consumed but with moderation, as the stocks are not well known.

DAILY NUTRITIONAL NEEDS FOR SENIORS

Vitamin D	> 1,5 µg / 100 g
Vitamin B12	> 0.75 µg / 100 g
Sodium	< 1.3 g Na / day
Proteins	> 20 % energy
Protein/lipids	> 2
Fish portion	70 g (+/-10%)
Complete dish weight	250 g

Suggestions

To increase vitamin D, remove 1 ml of olive oil in step 2 and add 1 ml of cod liver oil in step 4 (Sauté the onion in the fat collected together with the cod liver oil, etc.).

MARBLE TERRINE

by the Escola superior d'Hostaleria, Barcelona, Spain

Species: Common dab (*Limanda limanda*)

METHOD

1. Grate the parmesan. Mix with provencal herbs and cook for 3 minutes.
2. Cut the vegetables (onion, carrot, leek) in brunoises.
3. Cook the vegetables with extra virgin olive oil, garlic clove and ground pepper.
When cooked, add grated tomato and reduce.
4. Assemble the fish fillets in equal layers with the same amount of olive purée, salt and ground pepper.
5. Place the vegetables sauté on top in the oven at 180 °C for 5 minutes.
6. Make the crumble with butter, egg yolk, flour, and a little bit of basil oil and water.
7. Once the terrine is ready, add the crumble and cook it with basil oil.



Recipe for 4 persons

INGREDIENTS

- 3 common dab fillets
- 100 g of parmesan cheese
- 5 g of onion
- 5 g of carrot
- 5 g of leek
- 1 tomato
- 1 garlic clove without germ
- 10 g of black olive purée
- 100 g of butter
- 1 egg yolk
- 100 g of flour
- 1 g of ground pepper
- 3 g of salt
- Basil oil
- Pinch of provencal herbs

Common dab is a flat fish present from Iceland to the Bay of Biscay. It can be recognized by the angle formed by the lateral line above its pectoral fin. It can reach 40 cm and weigh 1 kg. The dab stocks are sustainable, but common dab has to be consumed in moderation, because of lack of knowledge of the status of the stock. It is important to avoid dab during spawning season, from January to June, depending on the area, because of the quantity of egg-bearing females and the lower quality of the flesh during that period.

DAILY NUTRITIONAL NEEDS FOR SENIORS

Vitamin D	> 1,5 µg / 100 g
Vitamin B12	> 0.75 µg / 100 g
Sodium	< 1.3 g Na / day
Proteins	> 20 % energy
Protein/lipids	> 2
Fish portion	70 g (+/-10%)
Complete dish weight	250 g

Suggestions

To increase vitamin D, add cod liver oil (a little quantity is enough: 1,2 g).



CONTACTS

www.seafoodtomorrow.eu

 @SEAFOOD_TMRW

 SEAFOOD TOMORROW

IDMER

murielle.fretigny@idmer.com

ETHIC OCEAN

contact@ethic-ocean.org



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