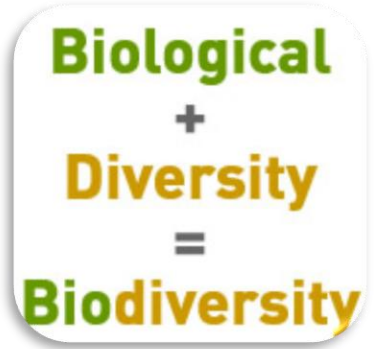


Food composition data for nutrition

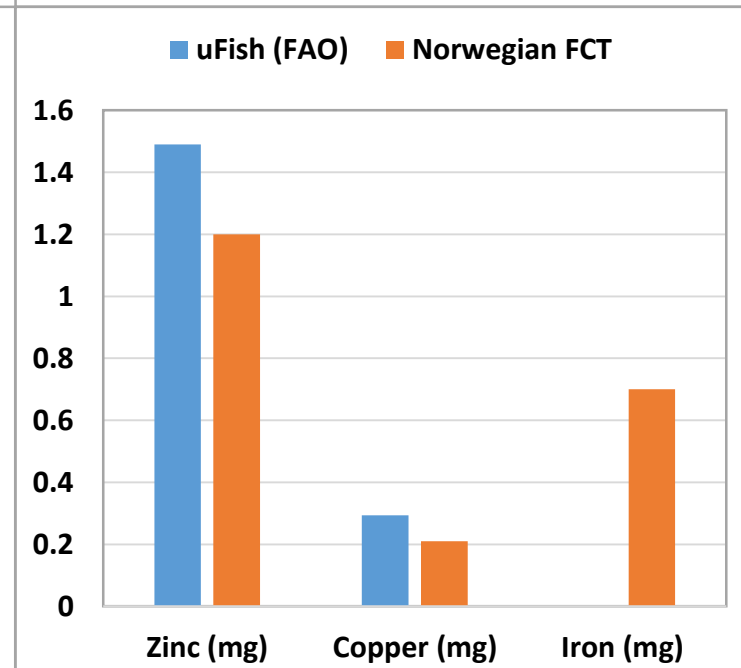
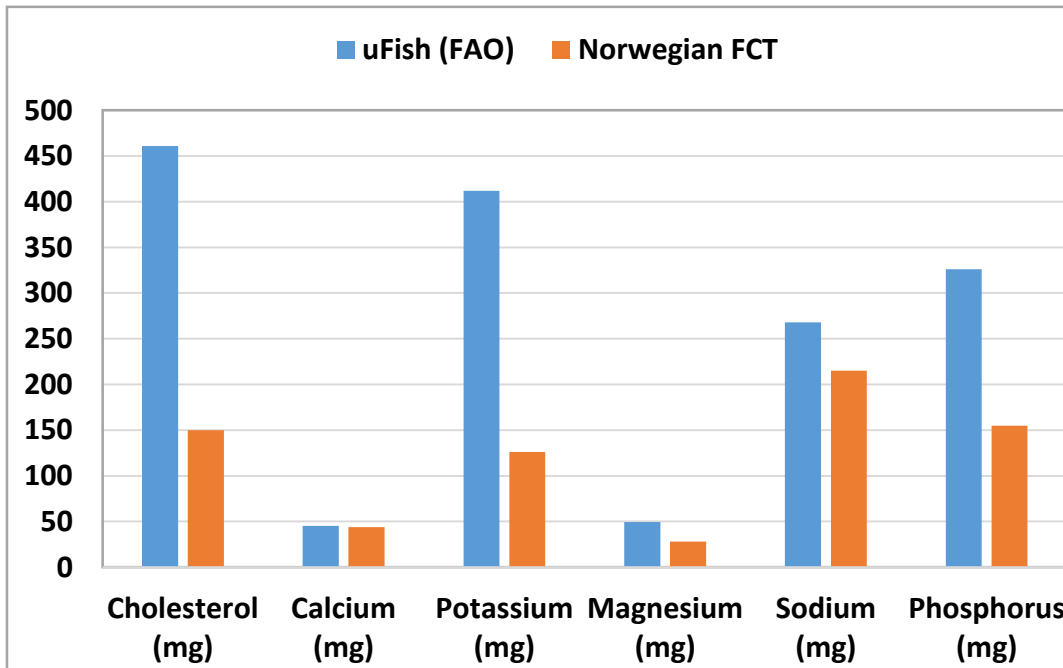
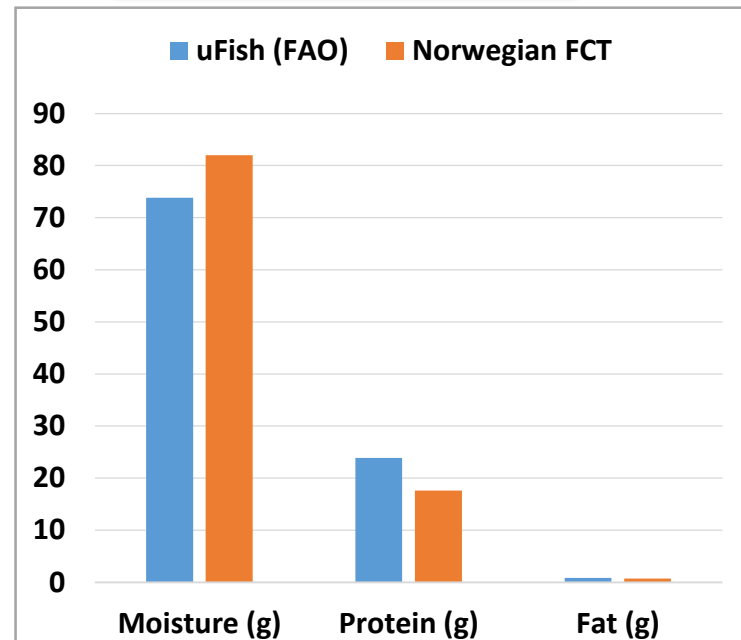
- Aquatic foods contributes to **food and nutrition security**
- Reduces the risk of micronutrient deficiencies and non-communicable diseases
- Excellent source of **protein**, **omega 3 and omega 6 fatty acids**, **vitamin D**, **B-vitamins**, **iodine**, **selenium**, **calcium**, **zinc and iron**
- A need exists for more knowledge on the nutritional composition of locally available food from the aquatic environment, including aquatic plants and by-products
- Food composition data is essential for nearly all activities in nutrition, e.g.:
 - ✓ Accurate nutrient intake data of the population/individuals
 - ✓ Increased agricultural production policies for nutrient-rich varieties
 - ✓ Investigating the role of traditional food systems for better nutrition
 - ✓ Development of food-based dietary guidelines
 - ✓ Consumer education



Data variability

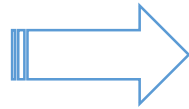
- Foods are biological materials - natural variability in composition, even processed foods
- For critical components variability may impact on the sufficiency, deficiency, or excess of the intake of a given component
- Species and/ or intra-species variation of nutrient values due to: season, geographic origin, production type, cut, preservation state, packing medium, preparation methods

Example - King Prawn



Recently entered an electronic era...

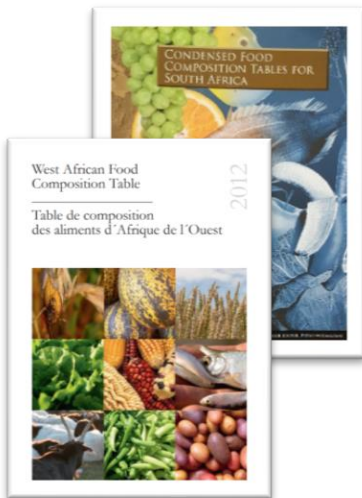
From printed



Websites and e-books

Electronic datasets

EuroFIR AISBL e-book collection on food composition datasets



MATVARETABELLEN This food database shows nutrient values per 100 grams of edible food

Search: the table is updated as you type

Food item (22 of 1878)	Edible %	Water %	KJ %	kcal %	Fat %	Carbo %	Fibre %	Protein %	Alco %
Alaska pollock, raw	-	84 g	305 kJ	72 kcal	0.7 g	0 g	0 g	16.4 g	0 g
Anchovies, canned	100%	53 g	903 kJ	216 kcal	13.1 g	12.1 g	0 g	12.5 g	0 g
Anchovy fillets, canned	100%	58 g	1030 kJ	245 kcal	16 g	8 g	0 g	16 g	0 g
Angler fish, flat, skinned	100%	78 g	352 kJ	83 kcal	0.1 g	0 g	0 g	20.5 g	0 g
Angler fish, raw	34%	83 g	272 kJ	64 kcal	0.1 g	0 g	0 g	15.8 g	0 g
Blue ling, raw	-	82 g	276 kJ	64 kcal	0.1 g	0 g	0 g	15.7 g	0 g
Casseroles, with cod and tomato	100%	81 g	348 kJ	83 kcal	2.5 g	1.8 g	0.7 g	12.9 g	0 g
Casseroles, with saddle, onion and sweet pepper sauce	100%	76 g	411 kJ	98 kcal	2.9 g	5 g	0.6 g	12.6 g	0 g
Catfish fillet, rolled in flour, bread in fat	100%	68 g	868 kJ	159 kcal	7.1 g	2.9 g	0.1 g	20.9 g	0 g



- FAO/INFOODS FCDB for fish and shellfish (uFish database):
<http://www.fao.org/3/i6655e/i6655e.pdf> or
http://www.fao.org/fileadmin/templates/food_composition/documents/uFiSh1.0.xls
- SEAFOOD^{TOMORROW} FishChoice database: www.fishchoice.eu
- FAO/INFOODS Food Composition Table for Western Africa (2019):
<http://www.fao.org/3/ca7779b/CA7779B.PDF>
- USDA FoodData Central: <https://fdc.nal.usda.gov/data-documentation.html>
- McCance and Widdowson's The Composition of Foods Integrated Dataset 2021:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/971018/McCance_Widdowsons_Composition_of_Foods_Integrated_Dataset_2021..xlsx

Way forward

- Nutrient composition data that includes biodiversity is important and can have a significant impact on data interpretation and on nutritional adequacy of diets
- Capturing biodiversity data of local foods in dietary surveys will also be an important step towards understanding the impact of biodiversity on food and nutrition security
- Computerised food composition databases are the need of the day
 - ✓ Data Base Management Systems that supports complex data analyses, compilation and reporting and data mining, e.g. recipe calculations, aggregation, compilation steps plus quality assurance steps
 - ✓ Should accommodate updates efficiently
 - ✓ Data should be updated regularly as analytical data becomes available

Seafood Nutrition Facts

Calories 130 per 3 oz (85g) serving

Seafood (per 3 oz)	Calories	Total Fat	Saturated Fat	Trans Fat	Cholesterol	Sodium	Total Carb	Dietary Fiber	Sugars	Protein
Seafood (mixed species)	130	1.7g	0g	0g	57mg	1,022mg	4g	0g	0g	22g
Blue Crab	88	0.5g	0g	0g	25mg	25mg	0g	0g	0g	18g
Crabfish	95	0.5g	0g	0g	25mg	25mg	0g	0g	0g	18g
Crab, mixed species	94	0.5g	0g	0g	25mg	25mg	0g	0g	0g	18g
Cod	96	0.5g	0g	0g	25mg	25mg	0g	0g	0g	18g
Flounder	96	0.5g	0g	0g	25mg	25mg	0g	0g	0g	18g
Haddock	96	0.5g	0g	0g	25mg	25mg	0g	0g	0g	18g
Halibut	96	0.5g	0g	0g	25mg	25mg	0g	0g	0g	18g
Salmon	115	0.5g	0g	0g	25mg	25mg	0g	0g	0g	18g
Shrimp	85	0.5g	0g	0g	25mg	25mg	0g	0g	0g	18g
Trout	96	0.5g	0g	0g	25mg	25mg	0g	0g	0g	18g
Yellow Perch	96	0.5g	0g	0g	25mg	25mg	0g	0g	0g	18g

Shrimp

- 76 CALORIES
- 1g FAT
- 15g PROTEIN
- 0g FIBER
- 1g CARBS

✓ Low in Saturated Fat
 ✓ Gluten-Free ✓ Low-Fat
 ✓ Sugar-Free

Provides heart-healthy EPA and DHA omega-3 fatty acids. Boil or steam to avoid excess calories and fat

(per 3 ounces, steamed or boiled)

Nutrition Facts

Serving Size 3 oz (85g)
 Clam, mixed species, cooked moist heat

Amount Per Serving	Calories 130	Calories from Fat 15
	% Daily Value*	
Total Fat 1.7g		2%
Saturated Fat 0g		0%
Trans Fat 0g		
Cholesterol 57mg		19%
Sodium 1,022mg		50%
Total Carbohydrate 4g		1%
Dietary Fiber 0g		0%
Sugars 0g		
Protein 22g		
Vitamin A 10%	Vitamin C 30%	
Calcium 8%	Iron 130%	
Selenium 80%		
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.		
	Calories: 2,000	2,500
Total Fat	Less than 65g	80g
Saturated Fat	Less than 20g	25g
Cholesterol	Less than 300mg	300mg
Sodium	Less than 2,400mg	2,400mg
Total Carbohydrate	Less than 300g	375g
Dietary Fiber	25g	30g
Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4		