

BIVALVES AN EXCEPTIONAL SOURCE OF NUTRIENTS, WHY?

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Food and Agriculture
Organization of the
United Nations

FAO's Vision

A sustainable and food secure world for all

1 NO POVERTY



2 NO HUNGER



3 GOOD HEALTH



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 RENEWABLE ENERGY



8 GOOD JOBS AND ECONOMIC GROWTH



9 INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



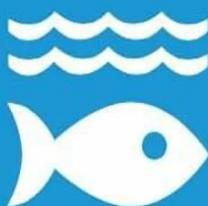
12 RESPONSIBLE CONSUMPTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE AND JUSTICE



17 PARTNERSHIPS FOR THE GOALS



THE GLOBAL GOALS
For Sustainable Development



**BETTER
PRODUCTION**



**BETTER
NUTRITION**

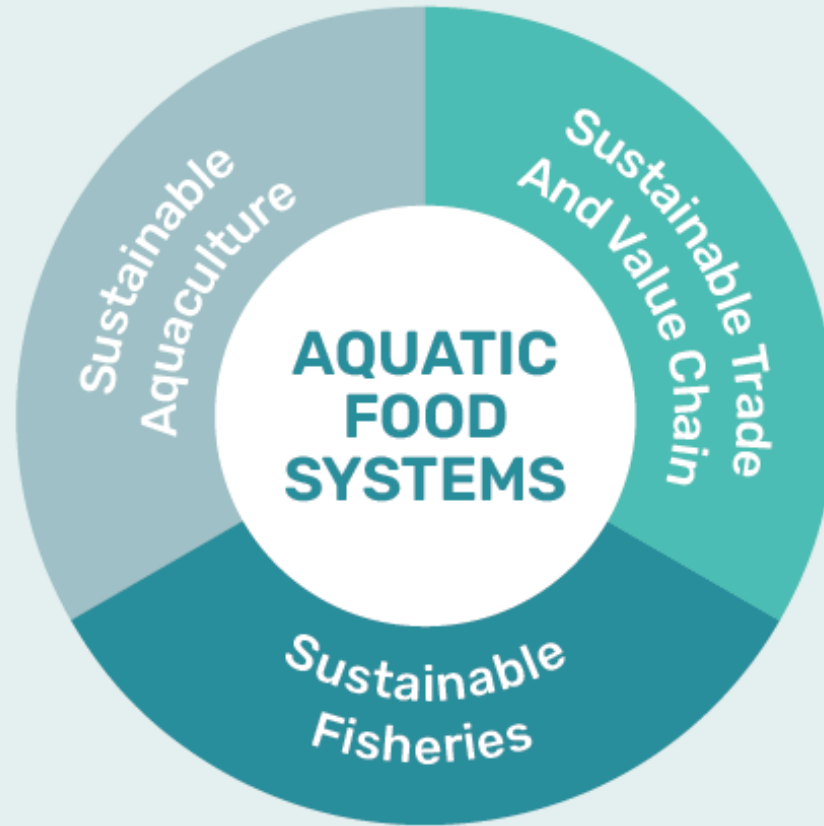


**BETTER
ENVIRONMENT**



**BETTER
LIFE**

BLUE TRANSFORMATION



2021 COFI declaration for sustainable fisheries and aquaculture



Vitamin A

Protein

DHA

EPA

Vitamin B12

Zinc

Calcium

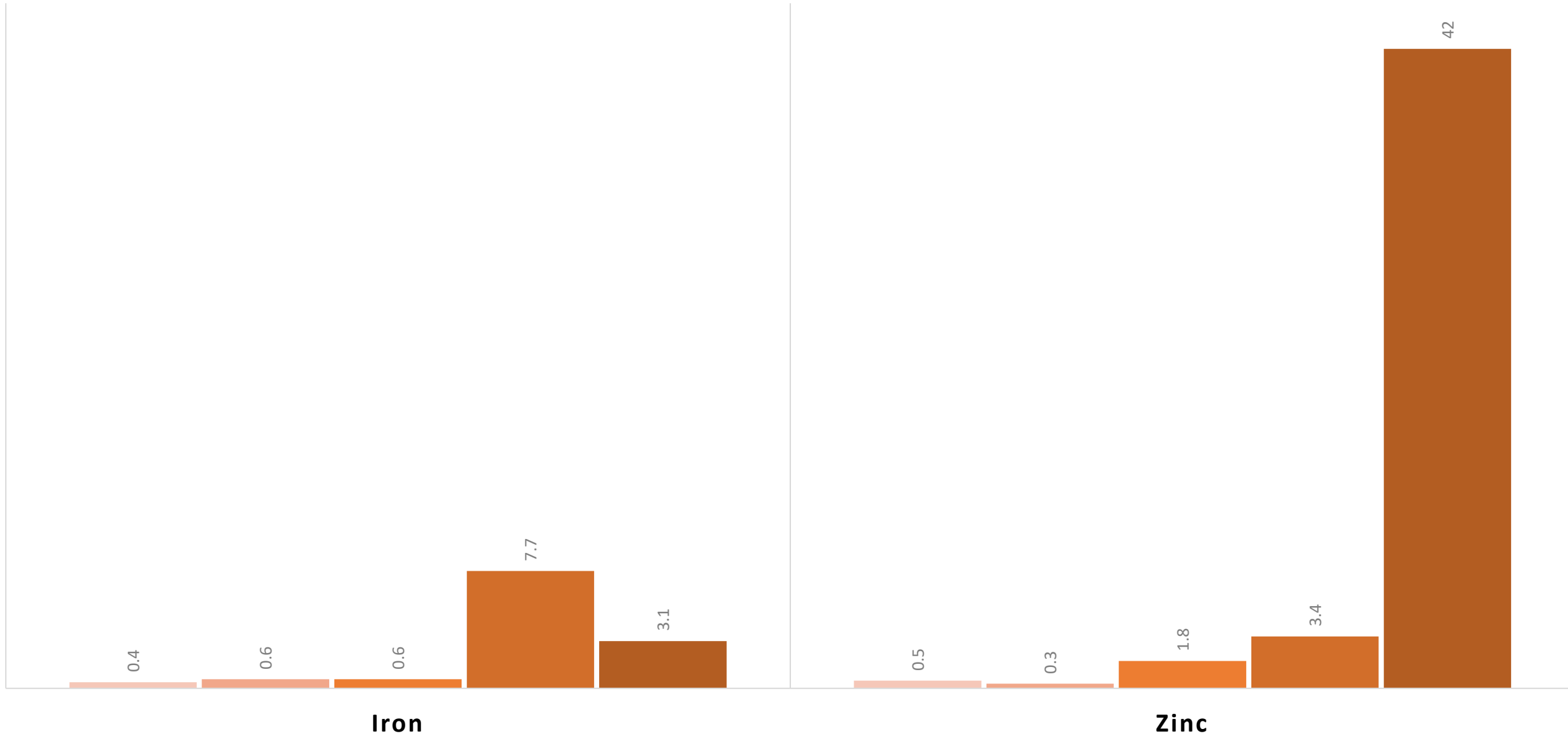
Iodine

Selenium

Iron

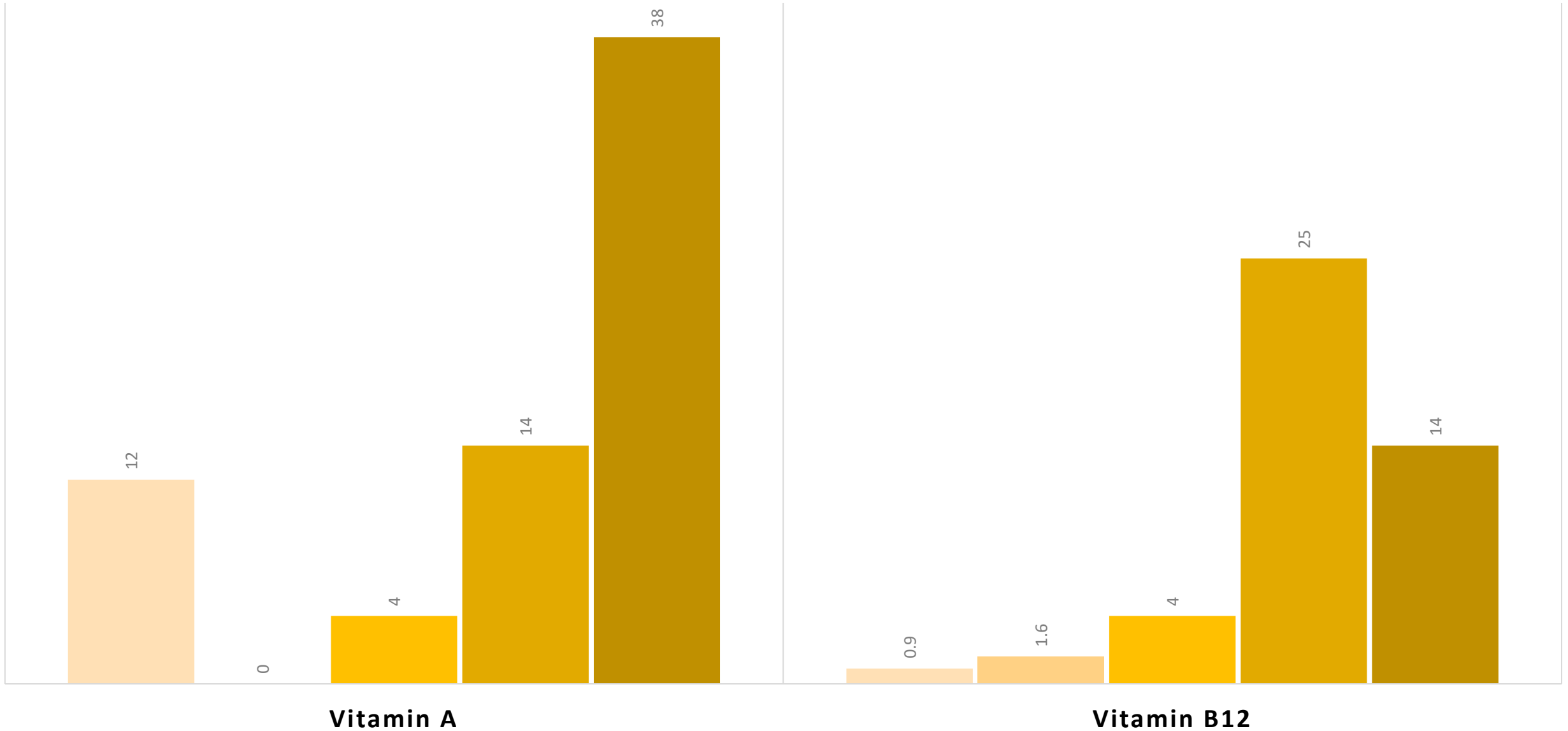
Levels of Iron and Zinc (mg/100g)

Cod Tialpia Scallops Mussel Oyster



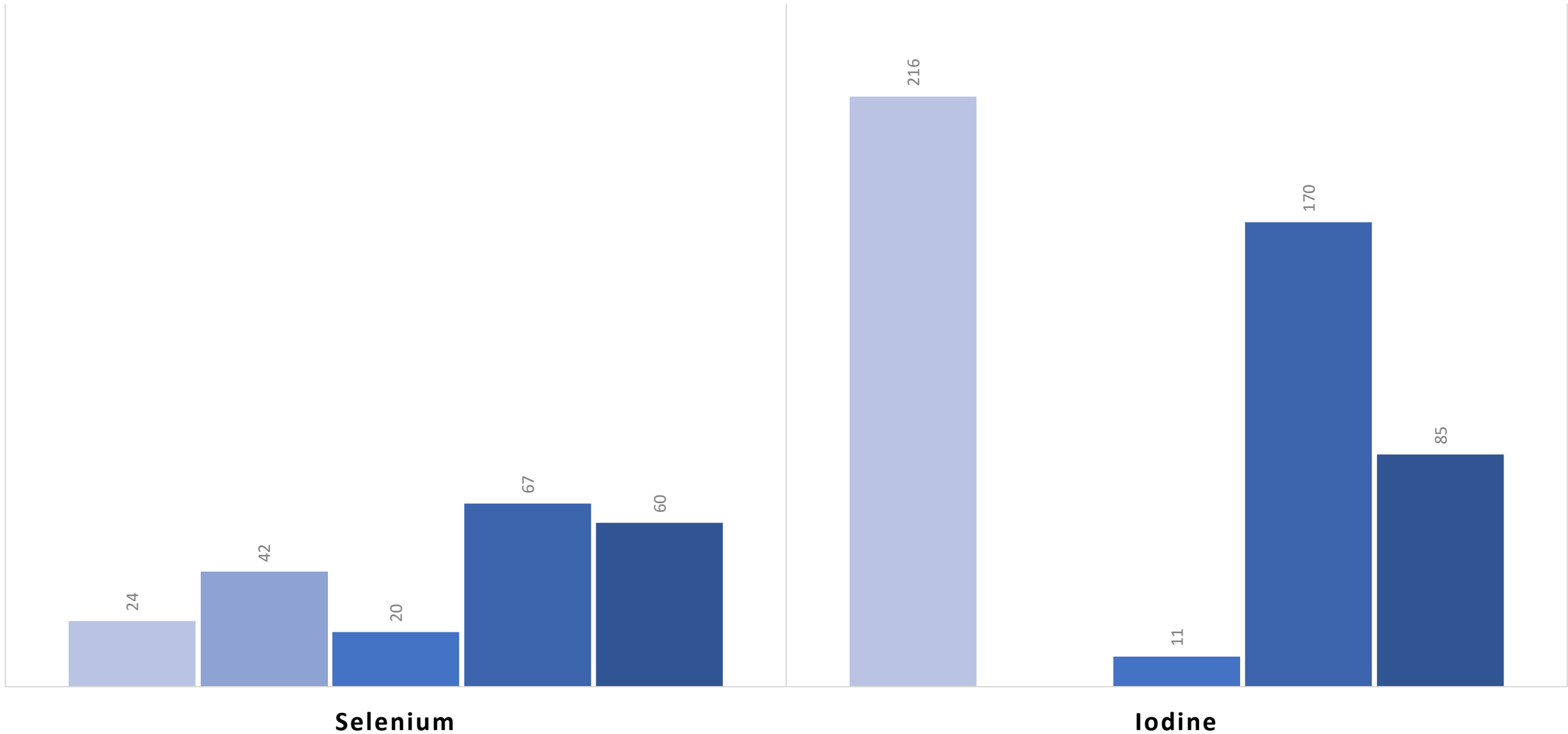
Levels of Vitamin A and Vitamin B12 ($\mu\text{g}/100\text{g}$)

Cod Tilapia Scallops Mussel Oyster



Levels of Selenium and Iodine ($\mu\text{g}/100\text{g}$)

Cod Tilapia Scallops Mussel Oyster



Micronutrient Composition

		Scallops	Mussel, Blue	Oyster, Pacific	Cod, Atlantic	Tilapia
DHA + EPA	mg/100g	320	500	650	180	90
Calcium	mg/100g	7	30	22	16	10
Iron	mg/100g	0.6	7.7	3.1	0.4	0.6
Zinc	mg/100g	1.8	3.4	42	0.5	0.3
Selenium	µg/100g	20	67	60	24	42
Vitamin A	µg/100g	4	14	38	12	0
Vitamin B12	µg/100g	4	25	14	0.9	1.6

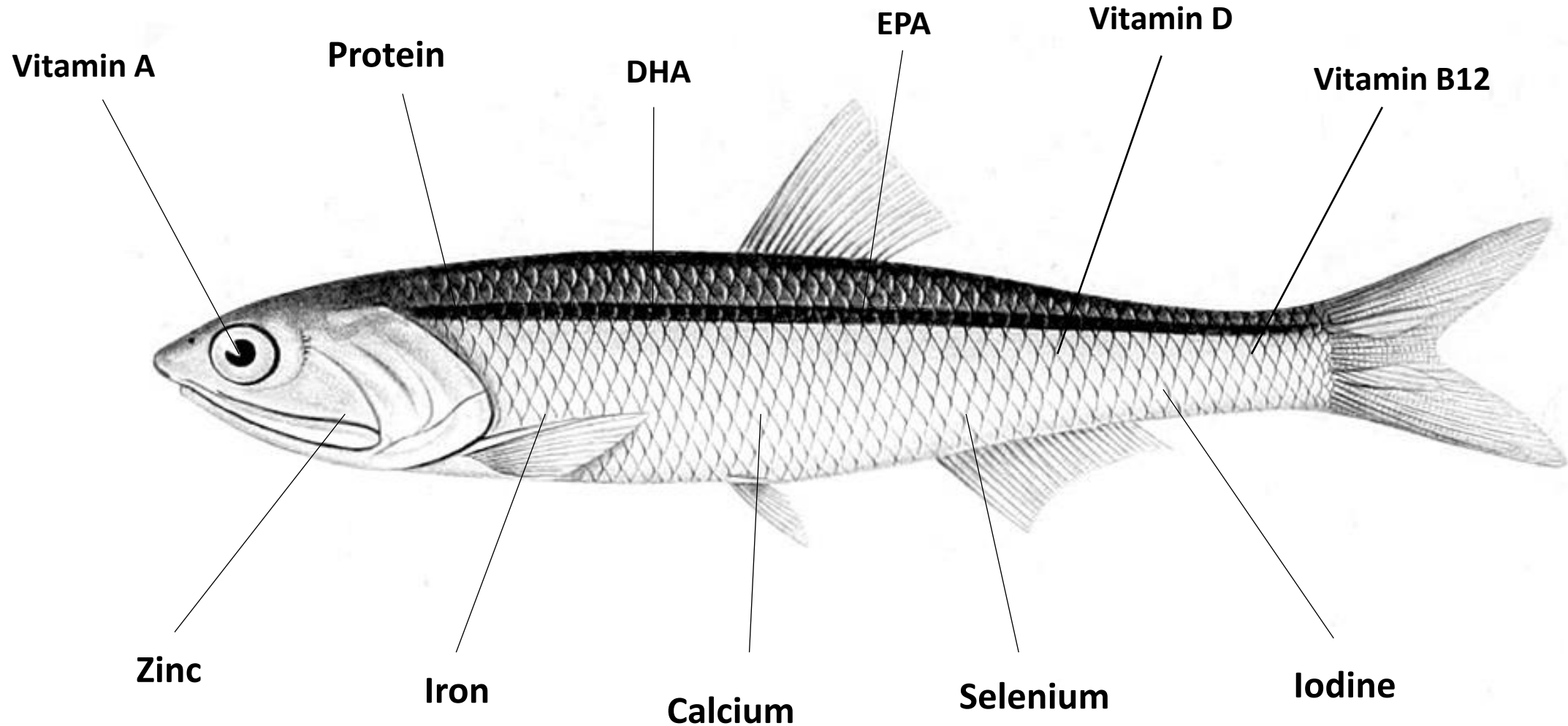
Selected micronutrients per 100 grams edible portion of Mola (*Amblypharyngodon mola*)

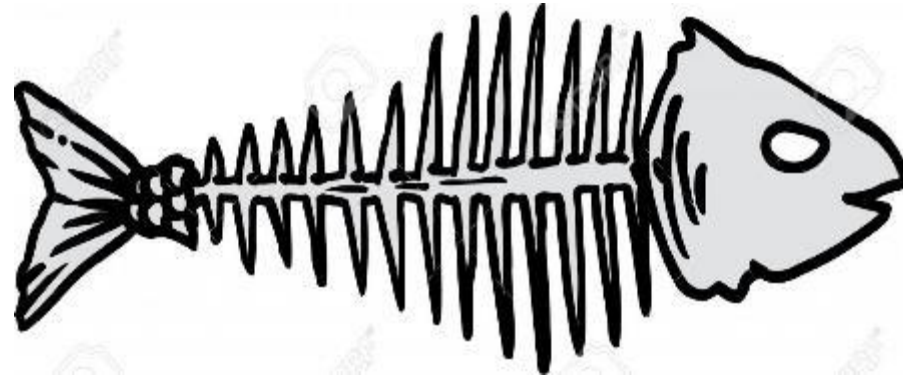


		<u>Carp</u>	<u>Tilapia</u>	<u>Mola</u>	<u>RDI*</u>
Calcium, Ca	mg	41	10	800	1000
Iron, Fe	mg	1.24	0.56	5.7	8.9
Zinc, Zn	mg	1.48	0.33	3.2	5.6
Vitamin A	µg RAE	9	0	2680	500

*RDA for a child, moderate bioavailability

Fish, much more than proteins





		<u>Tuna</u>	<u>Tuna backbones</u>	<u>Mola</u>	<u>RDI*</u>
Calcium	mg/100g	29	10,000	800	1000
Iron	mg/100g	1.3	36	5.7	8.9
Zinc	mg/100g	0.8	8.6	3.2	5.6
Vitamin A	µg/100g	16	-	2,700	500
EPA+DHA	mg/100g	260	3,000	300	150

*RDI for a child, moderate bioavailability

Tuna Frames



Fish powders based on whole fish



Ghana



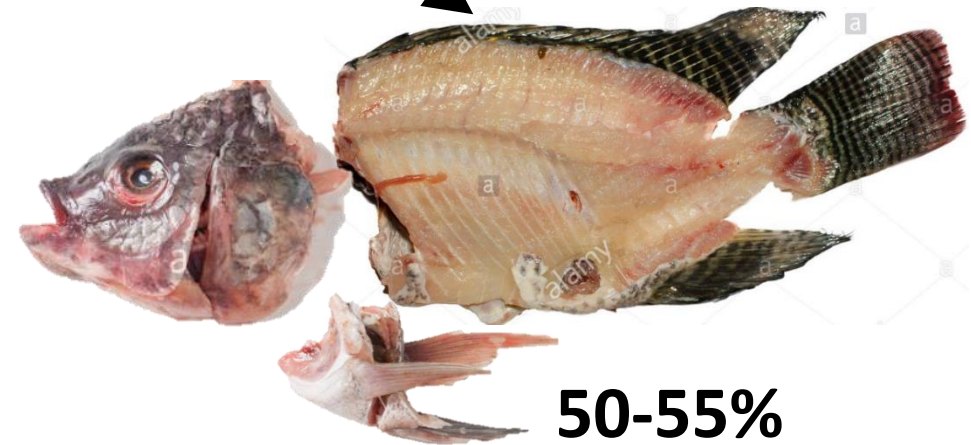
Tilapia processing, it is all food!



6 million tonnes (2020)



30-35%



50-55%

Tilapia Powder and Minced Fish Remains

- Tasty; highly appreciated among school children
- Nutritious; increased level of micronutrients severalfold
- More food; 2-3 times more meals per fish without increased production
- Creation of jobs; new nutritious product developed and produced
- Shelf life; powder can be stored for months

Guatemala



Organización de los Estados Americanos
Comisión Interamericana de Derechos Humanos
& la Reproductores

AMEXCID

Mesoamérica
sin
Hambre

Cooperación y políticas
para la seguridad alimentaria



THANK YOU !

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