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Resilient Coasts, Thriving Communities: A Sea of Solutions

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**The Lifechanging Benefits of Aquatic Foods
in the First 1000 Days of Life**

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Focus on the first 1000 days of life



Pregnancy									Breastfeeding						Complementary feeding																	
1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

Aquatic foods are superfoods

Minerals

Fe **Iron**
essential for brain development in children and increases maternal survival rates.

I **Iodine**
essential for brain development in fetus and young children and helps prevent stillbirth.

Zn **Zinc**
crucial for childhood survival, reduces stunting in children and fights diarrhea.

Essential fatty acids

help prevent preeclampsia, preterm delivery, low birth weight, and support cognitive development and better vision in children.

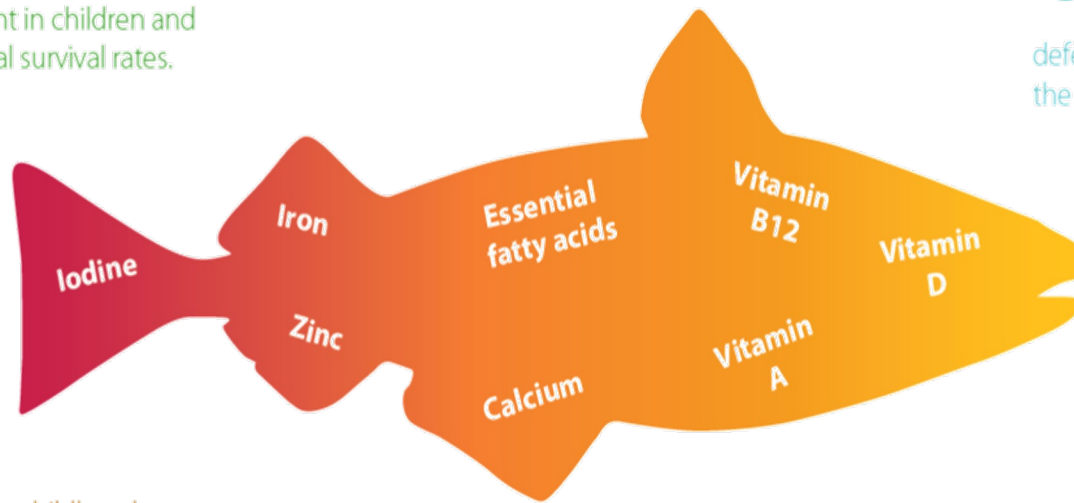
Vitamins

B12 **Vitamin B12**
essential for a healthy pregnancy; helps prevent brain and spinal cord birth defects, and supports healthy maintenance of the nervous system and brain in children.

D **Vitamin D**
essential for the development of strong, healthy bones, teeth and muscles in children and helps prevent preeclampsia, preterm delivery and low birth weight.

A **Vitamin A**
essential for childhood survival, prevents blindness, helps fight infections and promotes healthy growth.

Ca **Calcium**
helps prevent preeclampsia and preterm delivery, and is essential for strong bones and teeth.



Small fish chutney for pregnant and lactating women

Ingredients: 37% dried small fish, 15% oil, 37% onion, 7% garlic and 4% red chili



Equivalent to
60 g **raw** small fish

Small fish big impact: fish chutney for women in the first 1000 days

Study

- Community-based small fish chutney production in rural Bangladesh
- Small fish chutney consumed by 150 pregnant and lactating women
- Daily intake per woman: 30 g small fish chutney, for 12 months

Study outcomes

- **Daily intake from small fish chutney:** 24% iron RNI, 35% calcium, 21% iodine, 12% zinc, 10% vitamin B12
- **Increased MUAC** ↑ 4.7%
- **Increased Hb** ↑ 13.7%
- **Women's empowerment:**
 - Improved self-worth, community leadership, decision-making power
 - Income-generating opportunities
 - Engagement in community-based small fish drying and collection
 - Trained in small fish processing, cooking, bottling



Small fish powder



Nutrient composition per 100 g small fish powder

Energy	Protein	Fat	Iron	Zinc	Calcium
317 kcal	19 g	22 g	22 g	4.5 mg	1669 mg

Small fish powder added to family foods



Complementary food with small fish powder

15 % Fish

30% OSP flour

45% Rice flour

10% Soybean oil

Oven-dry

Grind

Package



Other aquatic foods as superfoods in the first 1000 days

Seaweed



Artemia



Artemia omelette in Bangladesh



Artemia kebab in Bangladesh

Aquatic foods for nourishing people throughout the lifetime

- The **next** 1000 days (2-5 y)
- School feeding programmes
 - Childhood (5-9 y)
 - Adolescence (10-14 y and 15-19 y)
- Throughout lifetime



Small fish used for animal feed



Photos: Joeri Scholtens

Thank you

