# Global Fish Production

*Health Benefits, Dependency, Trends, and Policy*

## Health Benefits of Fish

1. Helps reduce blood pressure
2. Reduces incidence of pneumonia
3. Enhances ability to fight infection
4. Supports proper growth and strengthens bones
5. Lowers risk of obesity

**Minerals**
**Zinc:** Supports immune system function and reduces incidence of diarrhea, pneumonia, and infections
**Calcium:** Supports proper growth

**Iron**
Lowers prevalence of anemia, especially crucial for pregnant and lactating women

**Vitamins**
**D:** Lowers the risk of common cancers, autoimmune diseases, high blood pressure, gestational diabetes, preterm birth, and cardiovascular disease
**A:** Decreases prevalence of childhood blindness and enhances ability to fight infection
**B:** Helps prevent anemia

**Protein**
Increases dietary energy intake, provides dietary diversity, alleviates malnutrition, and lowers risk of obesity

**Fatty Acids**
Improves cardiovascular health, lowers risks from coronary heart disease, improves maternal and infant health outcomes, and supports proper cognitive development

## World Fish Utilization and Supply

**Fish Dependence***

1. Maldives – 70.87%
2. Cambodia – 68.71%
3. Sierra Leone – 64.36%
4. Kiribati – 62.46%
5. Solomon Islands – 59.13%
6. Sri Lanka – 55.30%
7. Bangladesh – 54.13%
8. Indoneisa – 52.67%
9. Ghana – 49.94%
10. Gambia – 49.01%
11. São Tomé – 48.87%
12. Nigeria – 42.54%
13. Senegal – 42.49%
14. Myanmar – 42.36%
15. Lao People's Democratic Republic – 40.44%

Europe 18 MT annually

Asia 90 MT annually

America 15 MT annually

Africa 11 MT annually

Oceania 2 MT annually

** Fish dependence indicates the contribution of fish as a percent of animal-source protein for the population*

**MT= consumption in million tons*

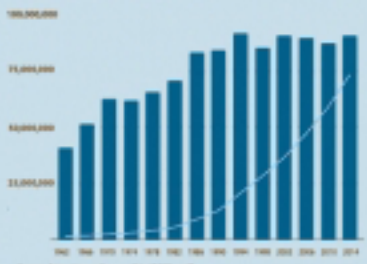
Source: https://oneblueeconomychub.files.wordpress.com/2016/12/costello-et-al-2016-update-global-fishery-prospects.pdf

## Trends

**1 IN 5**

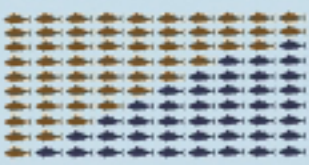
People on this planet depend on fish as a primary source of protein within their diet

**World Fish Production**




Source: http://www.fao.org/3/a-i5555e.pdf

The future of global fish supply depends on how well we address overfishing, climate change, pollution, competition for freshwater resources, and other threats.



**Eight countries are more than 50% dependent on fish**

## Policy to enhance the contribution of fisheries to nutrition and food security

Supporting the contribution of fisheries to food security and nutrition requires research and policy throughout the entire supply chain, from fisheries ecosystems to human consumption.

Ecosystems → Fisheries and Aquaculture → Post-Harvesting and Processing → Trade and Marketing → Access and Consumption → Nutrition and Food Security

**Data needed for policy and research agenda:**
Nutritional profiles of diverse fish species, health and nutrition outcomes of fish consumption, and distribution and access dimensions of fisheries production

**Drivers of interest needed for policy and research agenda:**
Governance, trade, and climate change

Source: http://www.fao.org/docrep/019/i3640e/i3640e.pdf

Read the report: nicholasinstitute.duke.edu/fisheries-and-nutrition

Duke Nicholas Institute for Environmental Policy Solutions

EDF Environmental Defense Fund

Duke Nicholas School of the Environment, Duke University Marine Lab

Duke Sanford World Food Policy Center