

# U.S. HEALTH CARE SECTOR GREENHOUSE GAS EMISSIONS LEAD TO INCREASES IN MALNUTRITION WORLDWIDE

## FAST FACTS

Health care activities in the U.S. have **global climate and health consequences**.

Climate change increases the frequency and intensity of **precipitation extremes**, including both heavy rainfall and drought.

**9-10%** of national greenhouse gas emissions were attributed to U.S. health care activities in 2013. Health care facilities are energy-intensive operations that generate long-lived carbon dioxide emissions. Goods and services that feed into the health care sector include waste disposal, drugs, medical devices and supplies and clean water supplies.

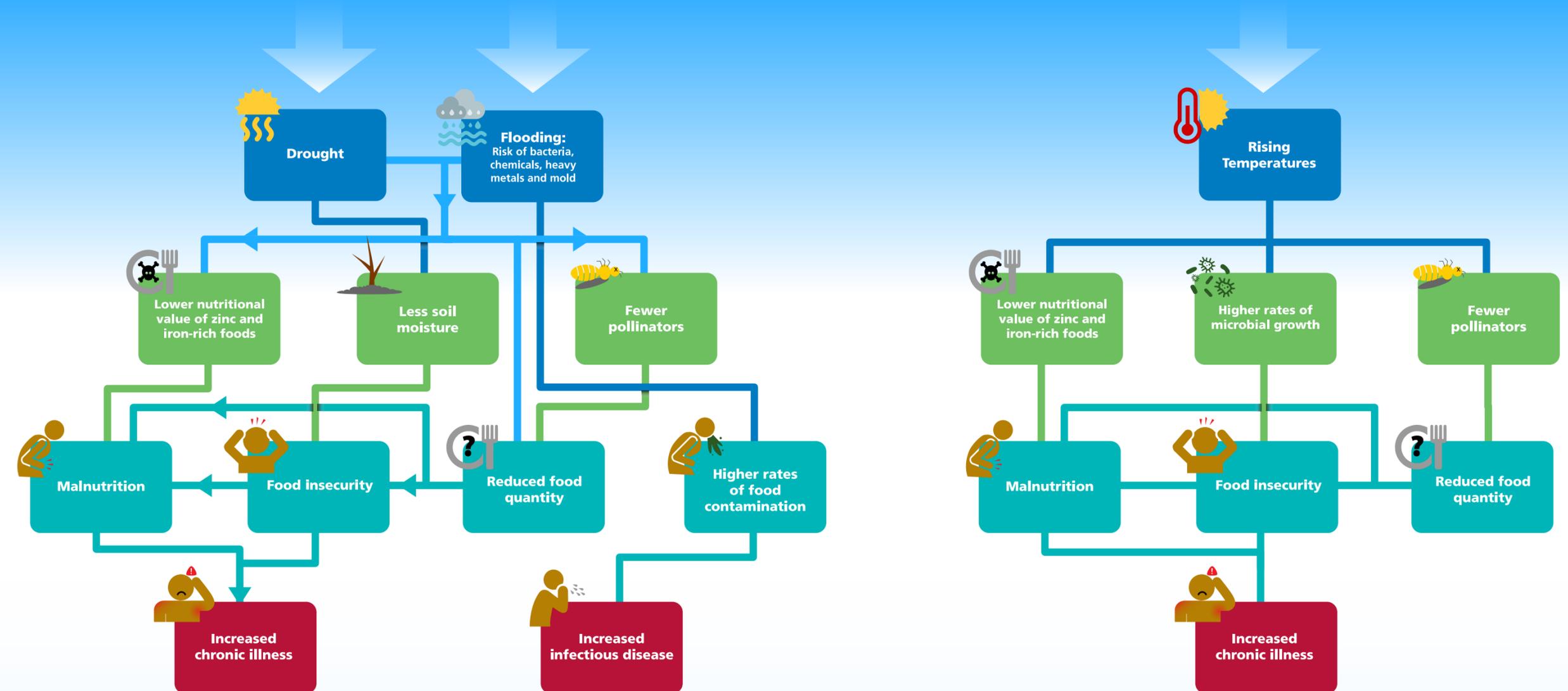
Roughly **2.75 billion people** around the world receive at least 70% of their dietary zinc and/or iron intake from C3 crops\* and will be at **significant risk for malnutrition** given climate change impacts. People at highest risk for malnutrition live in impoverished areas in Africa and in parts of South and Southeast Asia.

Up to **258,000 years** of healthy life lost, mostly due to **malnutrition**, are associated with annual greenhouse gas emissions from health care in the U.S. **49%-63%**, the largest potential health damages, were attributable to malnutrition globally.

Efforts to reduce the carbon footprint of the U.S. health care system will have **worldwide environmental and health co-benefits**.

## GREENHOUSE GASES CAUSE THE CLIMATE TO CHANGE

When we burn fossil fuels, such as coal and natural gas, we release carbon dioxide. CO<sub>2</sub> builds up in the atmosphere and causes Earth's temperature to rise, much like a blanket traps heat. This extra trapped heat disrupts many of the interconnected systems in our environment.



\*C3 crops show significant reductions in iron and zinc due to climate change impacts on the atmosphere. C3 crops include beans, rice, wheat, spinach, barley, and potatoes. (Myers, 2015). Myers, Samuel S et al. 2015. Effect of increased concentrations of atmospheric carbon dioxide on the global threat of zinc deficiency: a modelling study. The Lancet Global Health, Vol. 3, Issue 10, e639-e645

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