Shift to coarse grains from rice for healthy, environment-friendly diet: study

• Eating wheat and coarse cereals (such as millets) instead of rice, pulses instead of meat, and dark leafy vegetables and coconut could alleviate micronutrient deficiencies cost effectively.

• With the Green Revolution, the government focused on high-yield varieties of wheat and rice, leading to a reduction in the area on which (the more nutritious) coarse cereals were grown.

• The Indian government is actively promoting millets. It has declared 2018 as ‘National Year of Millets’ and is working to bring in millets into the public distribution system (PDS). It has also notified some of the coarse cereals as ‘nutri-cereals’.

A diet that moves away from white, polished rice to include coarse grains and wheat could help Indians tackle micronutrient deficiencies affordably and cut down greenhouse gas (GHG) emissions associated with agriculture by up to 25 percent, says a new study.

Researchers led by Narasimha D. Rao, scientist at the International Institute for Applied Systems Analysis examined the National Sample Survey (2011–12) for consumption expenditure. They found that more than two-thirds of the Indian population (around 500 million people) are affected by deficiencies in protein, micronutrients such as iron and zinc, and vitamin A.

Data presented in the study shows that nearly 90 percent of the diets are iron deficient, nearly 85 percent are Vitamin A deficient and more than 50 percent are protein-deficient. Micronutrient deficiencies in India are more prevalent than calorie and protein deficiencies.

In regional trends, the analysis revealed that India’s south and east (where rice is the staple food) eat less nutritious food than the wheat-eating north and western part of the country.

Cereals and Millet at a market in Nizampet, Hyderabad. Photo by Adityamadhav83/Wikimedia Commons

Micronutrient deficiencies are worse in urban than in rural areas, and more so, in lower-income households. Rural counterparts fared better due to greater diversity in their cereal consumption.

The study determined that “overall, eating wheat and coarse cereals instead of rice, pulses instead of meat, and dark leafy vegetables and coconut would alleviate deficiencies cost effectively.”

The authors recommend a selection of wheat, maize, and millet products instead of rice; and chicken and legumes over beef and eggs to boost protein intake. Read more..