

Healthy Diet from Sustainable Food Systems is not Affordable: Our Rejoinder to The Lancet Commission

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The EAT-Lancet Commission on healthy diets has proposed a diet based on plant and animal foods for not only health promotion and disease prevention but also for sustainable development. It has been predicted that the proposed diet shall protect the environment with lower greenhouse gases, land use, energy use, acidification potential, and eutrophication potential and shall be better for climate change, freshwater use, nitrogen and phosphorus flows, biodiversity loss, land-system change and overall food-systems.¹ Food items proposed include whole grains, tubers or starchy vegetables, other vegetables, fruits, dairy foods, protein sources, added fats, and added sugars based on evidence from observational studies and clinical trials and are similar to recommendations in most international guidelines.

We believe that the intake of 2500 calories as suggested by the report would be obesogenic and diabetogenic in low and lower-middle income countries. In India, for example, calorie intake of 1500-1800 has been suggested in national guidelines with high calorie intake restricted to a small proportion of population.² Moreover, large proportion of calories in the anthropocene diet is from carbohydrates which is in contrast to emerging evidence of harm of such a strategy.^{3,4} Safety of added fats such as palm oil, lard, and tallow is also unclear according to recent studies.³

We calculated retail cost of an 1800-calorie diet for people in India using locally available data. It is observed that the annual cost to an individual for such a diet is Indian Rupees (INR) 26500, which is equivalent to purchasing power parity dollars (PPP\$) 560 (Table). The annual cost for such a diet would be PPP\$ 2800 for a typical family of

five. The median per capita income in India currently is PPP\$ 4000 and varies from a low of PPP\$ 1300-1500 in large states such as Bihar and Uttar Pradesh to PPP\$ 7000-9000 for smaller states such as Delhi, Goa and Chandigarh.⁵ Our calculations, thus, show that about 10-50% of income of Indians shall be for the healthy food proposed by the EAT-Lancet Commission. Moreover, when more than 50% of the Indian population has annual income of less than PPP\$ 2.00 a day,⁶ the food is clearly not affordable.

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Table: Daily and annual cost of food items in India for 1800 calorie diet adapted from the EAT-Lancet Commission on healthy diets from sustainable food system

Healthy Foods Suggested by EAT-Lancet Commission	Macronutrient (g/day)	Calorie intake (kcal/day)	Cost/day (INR)	Cost/year (INR)	Int \$/year (PPP)
Whole grains					
Rice, Wheat, Corn and other	170	584	3.34	1219.1	24.8
Tubers or Starchy vegetables					
Potatoes and Cassava	35	28	0.72	262.8	5.3
Vegetables					
All Vegetables	225	--	5.40	1971.0	40.2
Dark Green Vegetables	70	17	2.16	788.4	16.2
Red and Orange Vegetables	70	22	2.88	1051.2	21.4
Other Vegetables	75	18	2.16	788.4	16.0
Fruits					
All Fruits	150	91	8.64	3153.6	64.3
Dairy foods					
Whole Milk or Derivative equivalents (e.g., cheese)	180	110	7.20	2628.0	53.6
Protein sources					
Beef and Lamb	5	11	2.52	919.8	18.7
Pork	5	11	3.53	1287.7	26.2
Chicken and Other Poultry	20	45	4.17	1524.2	31.1
Eggs	10	14	1.40	511.0	10.4
Fish	20	28	6.04	2204.0	44.9
Legumes					
Dry beans, Lentils, and Peas	35	124	2.52	919.8	18.7
Soy Foods	20	81	0.90	328.5	6.7
Peanuts	20	102	1.44	525.6	10.7
Tree Nuts	20	107	12.6	4599.0	93.8
Added Fats					
Palm Oil	5	43	0.73	266.5	5.4
Unsaturated Fats	30	255	2.88	1051.2	21.4
Lard/Tallow/Ghee	5	26	0.72	262.8	5.3
Added Sugar					
All sweeteners	25	86	0.90	328.5	6.7
Total		1800	75	26600	540

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