



Supplemental Fig. 1 Participant flow diagram in China Health and Nutrition survey 2009 wave (A) and 1997-2015 wave (B).

Abbreviations: CMDs, cardiometabolic diseases; hs-CRP, high-sensitivity C-reactive protein.

Supplemental Table 1 Scoring criteria for each plant-based dietary index and food items of each food group ^a.

		PDI	hPDI	uPDI
Plant Food Groups				
Healthy				
Whole grains	Wheat, wheat germ, bran, black rice, brown rice, corn, barley, millet, yellow rice, cereal, oatmeal, other grains	+	+	-
Fruits	kernel and stone fruits, berry fruit, citrus, tropical and subtropical fruits, melons	+	+	-
Vegetables	Root vegetables, fresh beans, eggplant, garlic and onion, young stems and leaves, aquatic vegetables, yams or sweet potatoes, wild vegetables, mushrooms and algae	+	+	-
Nuts	Peanuts and nuts	+	+	-
Legumes	String beans, tofu or soybeans, beans or lentils, peas or lima beans	+	+	-
Vegetable oils	Vegetable oil used for cooking	+	+	-
Tea and coffee	Tea, coffee	+	+	-
Less healthy				
Fruit juices	Orange juice, lemon juice, plum juice, other juices	+	-	+
Refined grains	Noodles, white rice, bread, biscuits, and other leisure foods, flour, instant noodles, pancakes, steamed buns, dumplings, rice cake	+	-	+
Potatoes and starch	Potatoes, chips, starch	+	-	+
Sugar sweetened beverages	Carbonated beverages, solid beverages, milk beverages, plant protein beverages, other beverages.	+	-	+
Sweets and desserts	Cakes, desserts, mooncakes, sugars, preserves, jams	+	-	+
Animal Food Groups				
Animal fat	lard, butter or mutton tallow	-	-	-
Dairy	Milk, yogurt, ice cream, cheese	-	-	-

Eggs	Eggs	-	-	-
Fish or seafood	Fish, shrimp, crab, shellfish and molluscs	-	-	-
Meat	Pork, beef, mutton or lamb, other red meat, processed meats, chicken and other poultry	-	-	-

^a All food groups intakes were adjusted for total energy intake by the regression residual method ¹ and each food group was ranked by quintiles to assign a “+” or a “-” score. “+” indicates that a maximum score of 5 assigned to individual intakes in the highest quintile and a minimum score of 1 assigned to individual intakes in the lowest quintile. “-” indicates that a minimum score of 1 assigned to individual intakes in the highest quintile and a maximum score of 5 assigned to individual intakes in the lowest quintile. Abbreviations: hPDI, healthy plant-based dietary index; PDI, overall plant-based dietary index; uPDI, unhealthy plant-based dietary index.

Supplemental Table 2 Scoring criteria for ERD and food items of each food group.

Food groups ^a	Scoring criteria	
	0 point	1 point
Whole grains		
Rice, wheat, corn and others	>464 g/d or ≤464 g/d and whole grain fiber ≤5 g	≤464 g/d and whole grain fiber >5 g
Tubers or starchy vegetables		
Potatoes and cassava	>100 g/d	≤100 g/d
Vegetables		
All vegetables	<200 g/d or >600 g/d	200-600 g/d
Fruits		
All fruits	<100 g/d or >300 g/d	100-300 g/d
Dairy foods		
Whole milk or derivative equivalents (eg, cheese)	>500 g/d	≤500 g/d
Protein sources		
Beef, mutton, lamb and pork	>28 g/d	≤28 g/d
Chicken and other poultry	>58 g/d	≤58 g/d
Eggs	>25 g/d	≤25 g/d
Fish	>100 g/d	≤100 g/d
Legumes ^b	>150 g/d	≤150 g/d
Nuts	>75 g/d	≤75 g/d
Added fats		
Unsaturated oils	<20 g/d or >80 g/d	20–80 g/d
Saturated oils	>11.8 g/d	≤11.8 g/d
Added sugars		
All sugars	>31 g/d	≤31 g/d

^a Food groups are directly taken from the "Summary Report of the EAT-Lancet Commission" ². ^b Legumes including dry beans, lentils, peas and soy

foods. Abbreviations: ERD, EAT-Lancet diet score.

Supplemental Table 3 Scoring criteria for WISH and food items of each food group.

Food groups ^a	Recommended Intake in g/d (Lower and Upper Range of Intake)	Scoring criteria ^b			
		0	$10 \times \frac{\text{reported intake} - \text{lower intake}}{\text{recommended intake} - \text{lower intake}}$	10	$10 \times \frac{\text{upper intake} - \text{reported intake}}{\text{upper intake} - \text{recommended intake}}$
Whole grains	≥125 (100–150)	<100	100-125	≥125	
Vegetables	300 (200–600)	<200	200-300	≥300	
Fruits	200 (100–300)	<100	100-200	≥200	
Legumes	75 (0–100)	0	0-75	≥75	
Dairy foods	250 (0–500)	>500	0-250	250-500	
Fish	28 (0–100)	>100	0-28	28-100	
Nuts	50 (0–75)	>75	0-50	50-75	
Red meat	14 (0–28)	>28		0-14	14-28
Eggs	13 (0–25)	>13		0-13	13-25
Chicken and other poultry	29 (0–58)	>29		0-29	29-58
Unsaturated oils	40 (20–80)	<20 or >80	20-40	40-80	
Saturated oils	11.8 (0–11.8)	>11.8		0-11.8	
Added sugars	31 (0–31)	>31		0-31	

^a Food groups are consistent with the "Summary Report of the EAT-Lancet Commission" ². ^b Reported intake indicates that actual intake. Abbreviations: WISH, World Index for Sustainability and Health.

Supplemental Table 4 Scoring criteria for PHDI and food items of each food group.

Food groups	Scoring criteria (points) ^a				
	0	5	10	5	0
Nuts and peanuts	0		≥11.5		
Legumes	0		≥11.3		
Fruits	0		≥5.0		
Vegetables	0		≥3.1		
Whole cereals	0		≥32.4		
Eggs	0		0.8		≥1.5
Fish and seafood	0		1.6		≥5.7
Tubers and potatoes	0		1.6		≥3.1
Dairy	0		6.1		≥12.2
Vegetable oils	0		16.5		≥30.7
DGV/total ratio ^b	0	29.5		29.5	100
ReV/total ratio ^c	0	38.5		38.5	100
Red meat	≥2.4		0		
Chicken and substitutes	≥5.0		0		
Animal fats	≥1.4		0		
Added sugars	≥4.8		0		

^a All point values expressed as caloric densities from the reference diet proposed by the EAT-Lancet Commission ². ^b Ratio between the energy intake of dark green vegetables (numerator) and the total of vegetables (denominator). ^c Ratio between the energy intake of the red and orange vegetables (numerator) and the total of vegetables (denominator). Abbreviations: PHDI, Planetary Health Diet Index.

References

1. W. C. Willett, G. R. Howe and L. H. Kushi, Adjustment for total energy intake in epidemiologic studies, *Am J Clin Nutr*, 1997, **65**, 1220S-1228S; discussion 1229S-1231S.
2. W. Willett, J. Rockström, B. Loken, M. Springmann, T. Lang, S. Vermeulen, T. Garnett, D. Tilman, F. DeClerck, A. Wood, M. Jonell, M. Clark, L. J. Gordon, J. Fanzo, C. Hawkes, R. Zurayk, J. A. Rivera, W. De Vries, L. Majele Sibanda, A. Afshin, A. Chaudhary, M. Herrero, R. Agustina, F. Branca, A. Lartey, S. Fan, B. Crona, E. Fox, V. Bignet, M. Troell, T. Lindahl, S. Singh, S. E. Cornell, K. Srinath Reddy, S. Narain, S. Nishtar and C. J. L. Murray, Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems, *Lancet*, 2019, **393**, 447-492.