

Supplemental Table 1: scoring of PDI scores

Food groups	Scoring for each quintile of PDIs														
	PDI					hPDI					uPDI				
	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5
Healthy plant food groups															
Whole grains	1	2	3	4	5	1	2	3	4	5	5	4	3	2	1
Fruits	1	2	3	4	5	1	2	3	4	5	5	4	3	2	1
Vegetables	1	2	3	4	5	1	2	3	4	5	5	4	3	2	1
Nuts	1	2	3	4	5	1	2	3	4	5	5	4	3	2	1
Legumes	1	2	3	4	5	1	2	3	4	5	5	4	3	2	1
Tea/coffee	1	2	3	4	5	1	2	3	4	5	5	4	3	2	1
Less healthy plant food groups															
Fruit juices	1	2	3	4	5	5	4	3	2	1	1	2	3	4	5
Sugar-sweetened beverages	1	2	3	4	5	5	4	3	2	1	1	2	3	4	5
Refined grains	1	2	3	4	5	5	4	3	2	1	1	2	3	4	5
Potatoes	1	2	3	4	5	5	4	3	2	1	1	2	3	4	5
Sweets/desserts	1	2	3	4	5	5	4	3	2	1	1	2	3	4	5
Animal food groups															
Animal fat (butter or lard)	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
Dairy	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
Eggs	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
Fish/seafood	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
Meat	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
Range of scores	16~80					16~80					16~80				

Supplemental Table 2: three sampling to illustrate the PDIs scoring method

	Median Scenario Diet ¹					Participant #1					Participant #2				
	Intake		Sub-Scoring for			Intake		Sub-Scoring for			Intake		Sub-Scoring for		
	(s/d) ²	Ranks ³	PDI	hPDI	uPDI	(s/d) ²	Ranks ³	PDI	hPDI	uPDI	(s/d) ²	Ranks ³	PDI	hPDI	uPDI
Healthy plant food groups															
Whole grains	0.14	3	3	3	3	0.07	Q2	2	2	4	0	Q1	1	1	5
Fruits	0.94	3	3	3	3	0.07	Q1	1	1	5	0.14	Q1	1	1	5
Vegetables	0.99	3	3	3	3	0.42	Q1	1	1	5	0.07	Q1	1	1	5
Nuts	0.21	3	3	3	3	0.07	Q1	1	1	5	0	Q1	1	1	5
Legumes	0.28	3	3	3	3	0.14	Q2	2	2	4	0	Q1	1	1	5
Tea/coffee	1.0	3	3	3	3	0	Q1	1	1	5	0	Q1	1	1	5
Less healthy plant food groups															
Fruit juices	0.07	3	3	3	3	0	Q1	1	5	1	0.14	Q4	4	2	4
Sugar-sweetened beverages	0.14	3	3	3	3	0	Q1	1	5	1	0.07	Q3	3	3	3
Refined grains	0.64	3	3	3	3	1.3	Q5	5	1	5	0	Q1	1	5	1
Potatoes	0.35	3	3	3	3	1.37	Q5	5	1	5	1.74	Q5	5	1	5
Sweets/desserts	0.43	3	3	3	3	0.35	Q2	2	4	2	1.37	Q5	5	1	5
Animal food groups															
Animal fat (butter or lard)	0.14	3	3	3	3	0	Q1	5	5	5	0.07	Q2	4	4	4
Dairy	1.22	3	3	3	3	0	Q1	5	5	5	0.35	Q1	5	5	5
Eggs	0.43	3	3	3	3	0	Q1	5	5	5	1	Q5	1	1	1
Fish/seafood	0.07	3	3	3	3	0	Q1	5	5	5	0	Q1	5	5	5
Meat	1.42	3	3	3	3	0	Q1	5	5	5	2.38	Q5	1	1	1
Total PDIs scores ⁴			48	48	48			47	49	67			40	34	64
			PDI	hPDI	uPDI			PDI	hPDI	uPDI			PDI	hPDI	uPDI

¹Median Scenario Diet is based on the dietary intakes were the median value of all food group, as a representative of the study population, dietary intakes of Participants #1 and #2 were from the real data of MVP.

²s/d: serving per day of each food group intake.

³#: quintile number of the quintile distribution of the study population.

⁴sum of all sub-scores of the 16 food groups