

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
<b>Healthy plant food groups</b>															
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
<b>Less healthy plant food groups</b>															
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
<b>Animal food groups</b>															
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
<b>Range of scores</b>	16~80					16~80					16~80				

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

	Median Scenario Diet <sup>1</sup>					Participant #1					Participant #2				
	Intake		Sub-Scoring for			Intake		Sub-Scoring for			Intake		Sub-Scoring for		
	(s/d) <sup>2</sup>	Ranks <sup>3</sup>	PDI	hPDI	uPDI	(s/d) <sup>2</sup>	Ranks <sup>3</sup>	PDI	hPDI	uPDI	(s/d) <sup>2</sup>	Ranks <sup>3</sup>	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 <sup>4</sup>			48	48	48			47	49	67			40	34	64
			PDI	hPDI	uPDI			PDI	hPDI	uPDI			PDI	hPDI	uPDI

<sup>1</sup>Median 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.

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

<sup>3</sup>#: quintile number of the quintile distribution of the study population.

<sup>4</sup>sum of all sub-scores of the 16 food groups