

## Supplemental Appendix

**Supplemental Table 1. Countries included in study by defined region**

Region	Countries
Southeast Asia, East Asia, and High-Income Asia Pacific (ASIA) 14 countries	Brunei Darussalam, Cambodia, China, Fiji, Indonesia, Japan, Laos, Malaysia, Myanmar, Philippines, Singapore, South Korea, Thailand, and Vietnam.
Central Europe, Eastern Europe, and Central Asia (CEE) 27 countries	Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Macedonia, Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia, Tajikistan, and Ukraine.
Latin America and the Caribbean (LAC) 29 countries	Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Lucia, St. Vincent and Grenadines, Suriname, Trinidad and Tobago, and Uruguay.
Middle East and North Africa (MENA) 17 countries	Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, Turkey, United Arab Emirates, and West Bank and Gaza.
South Asia (S-ASIA) – 7 countries	Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
Sub-Saharan Africa (SSA) 43 countries	Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo DR, Congo, Côte d'Ivoire, Djibouti, Equatorial Guinea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Sudan, Tanzania, Togo, and Uganda.
High Income/Rest of World (HIC) 24 countries	Australia, Austria, Belgium, Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and United States.

**Supplemental Table 2. Saturated fat intake estimates using country level data (n = 160)**

	Model 1	Model 2	Model 3	Model 4
Constant	13.66 (0.46)***	1.03 (1.75)	10.81 (0.23)***	12.05 (2.87)***
ASIA	-1.19 (0.76)			-0.66 (0.81)
CEE	-1.36 (0.63)**			-1.16 (0.67)*
LAC	-4.07 (0.62)***			-4.26 (0.74)***
MENA	-3.43 (0.73)***			-2.85 (0.77)***
S-ASIA	-7.41 (0.97)***			-6.34 (1.10)***
SSA	-4.07 (0.58)***			-3.65 (0.90)***
ln(Y)		1.03 (0.18)***		0.14 (0.26)
ln(P)			-3.90 (1.94)**	-4.33 (1.89)**
Adjusted R <sup>2</sup>	0.39	0.16	0.02	0.41

Dependent variable is saturated fat intake measured in % energy/d. Robust standard errors are in (parenthesis). \* $p \leq 0.10$ ; \*\* $p \leq 0.05$ ; \*\*\* $p \leq 0.01$ . East and Southeast Asia (ASIA), Central and Eastern Europe and Central Asia (CEE), Latin America and Caribbean (LAC), Middle East and North Africa (MENA), South Asia (S-ASIA), and Sub-Saharan Africa (SSA). Y is real GDP per capita, purchasing-power-parity adjusted. P is an inflation adjusted price index for meats, dairy products and eggs, and oils and fats.

### Income, Price, and Expenditure Data Across Countries

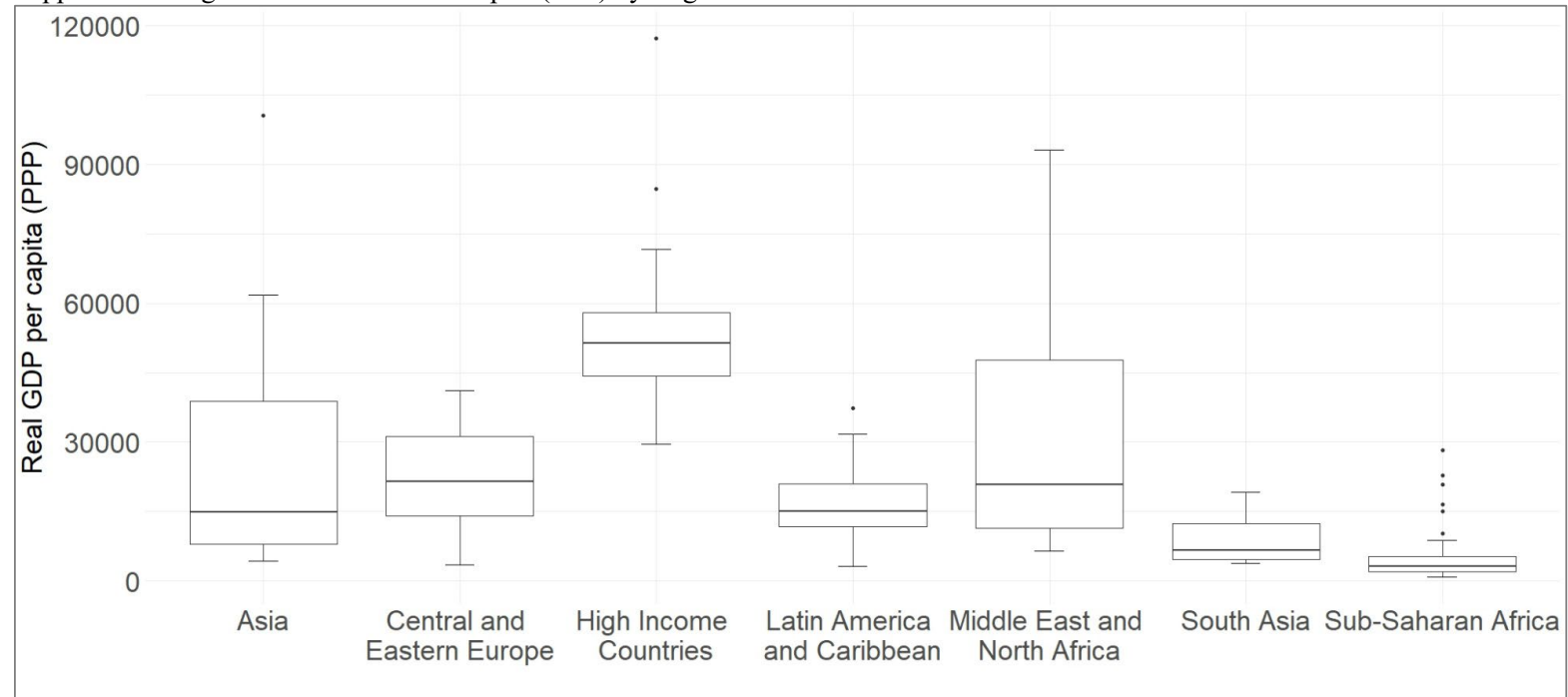
Supplemental Figures 1 – 3 contain box plots by region for the country-specific explanatory variables.

**Supplemental Figure 1** shows real GDP per capita (PPP) for the seven regions in our study. The highest GDP region is High-Income Countries, which is unsurprising. The median income for High-Income Countries was \$51,432 per person. In contrast, Sub-Saharan Africa had the smallest real GDP per capita, with a median value of \$3,147.

**Supplemental Figure 2** shows expenditure shares for the contributing food categories: meats, dairy, and oils and fats by region. Food expenditure shares were derived from the World Bank International Comparison Program (ICP) which allows for global spending comparisons by standardizing expenditures to a common currency (U.S. Dollars). Across regions, meat expenditures were the highest food expenditure category, except for South Asia. In South Asia, the median dairy food expenditure share was the highest at 0.47 and the interquartile range (IQR) was 0.34 to 0.60. Asia, Latin America and Caribbean, and Sub-Saharan Africa were the regions with the highest median expenditures for meats at 0.65 and an IQR from 0.55 to 0.74. South Asia has the lowest meat expenditure share at 0.31 with an IQR from 0.16 to 0.48. Apart from South Asia, dairy expenditure shares represented the second highest expenditure shares across regions. Oils and fats account for the smallest share of food expenditures compared to the other food categories for all regions.

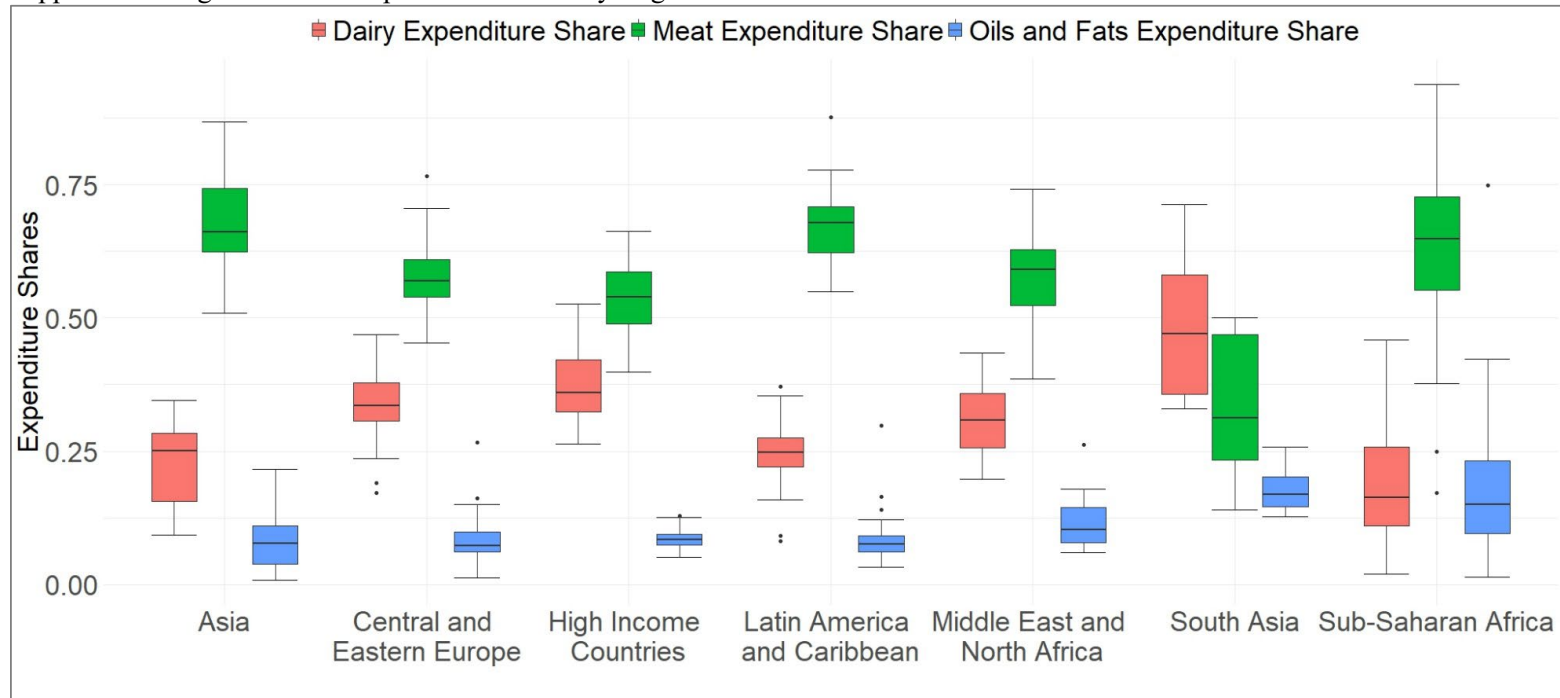
**Supplemental Figure 3** shows the price indexes for meat, dairy, and oil and fats, and the weighted average price index (weighted based on the expenditures in Supplemental Figure 2) by region. The weighted average food price index is the sum of each price index times the expenditure share for the corresponding food category. Most regions exhibit relatively similar values across price index categories and shorter “whiskers” include Central and Eastern Europe, Middle East and North Africa, and South Asia. Alternatively, some regions (High-Income Countries, Latin America and Caribbean, and Sub-Saharan Africa) exhibit a greater range between the IQR and maximum and minimum values and greater variation in prices. For example, in the Latin American and Caribbean region, the dairy price index has a median value of 134.49 and IQR of 98.60 to 156.59. In contrast, the Central and Eastern Europe region has a dairy price index median value of 86.58 and IQR range of 75.84 to 93.50.

Supplemental Figure 1. Real GDP Per Capita (PPP) by Region



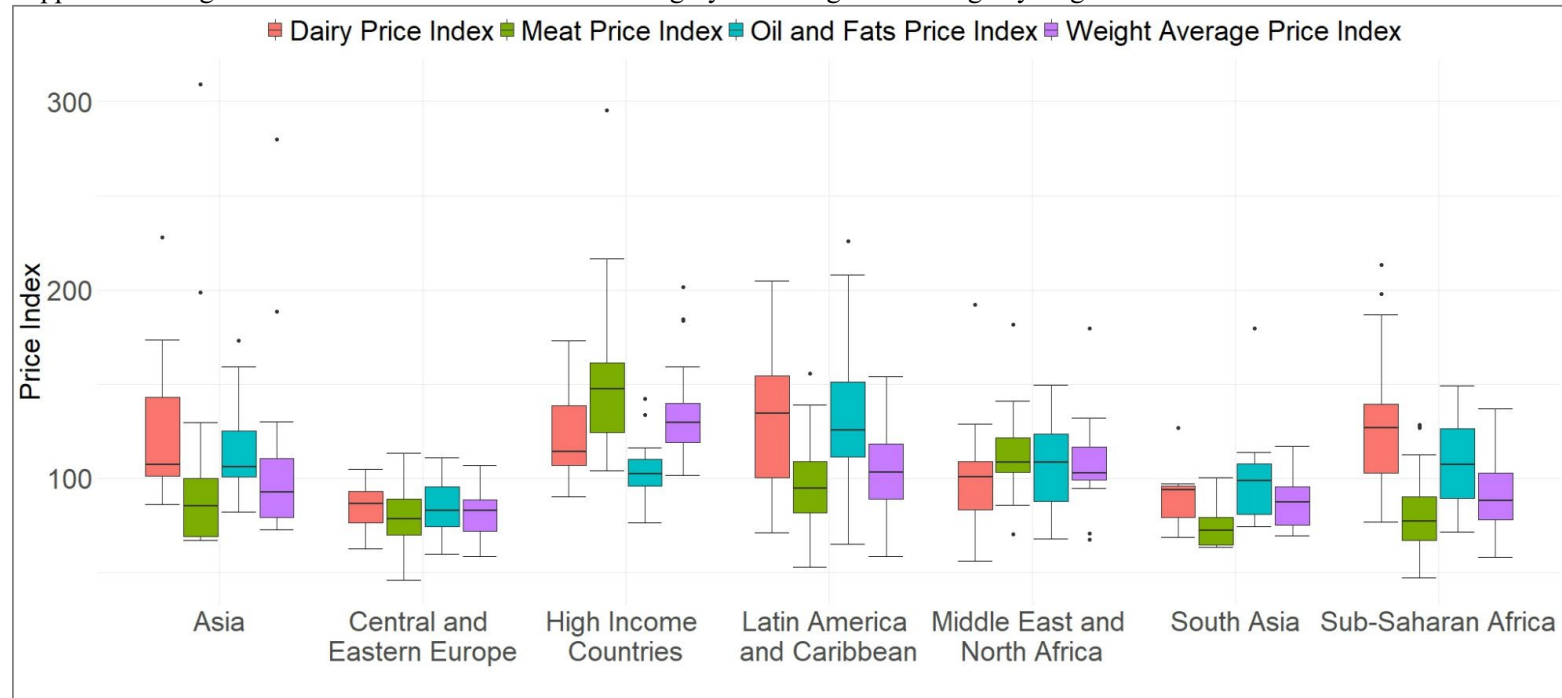
Source: Authors' estimates using income data from the World Bank Development Indicators.

Supplemental Figure 2. Food Expenditure Shares by Region



Source: Authors' estimates using income data from the World Bank International Comparison Program.

Supplemental Figure 3. Price Indexes for each Food Category and Weighted Average by Region



Source: Authors' estimates using income data from the World Bank International Comparison Program.

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