

Appendix A.. Results of Longitudinal Probit Analysis for the Likelihood of Consuming Food-group (%) among adults aged 20-45 in China, 1989 - 93 (Standard error is in parentheses.)

Determinants	Rice	Wheat flour	Coarse grains	Pork	Eggs	Edible oils
Age (year)	0.0248 (.0036)	0.0041 (.0026)	-0.017 (.0028)	0.0389 (.0026)	0.0292 (.0021)	0.0279 (.0028)
Male (1, 0)	-0.2784 (.0376)	-0.0510 (.0228)	0.0284 (.0307)	-0.3589 (.0276)	-0.3340 (.0223)	-0.2936 (.0281)
Education (year)	0.2014 (.0270)	0.0703 (.0150)	-0.0553 (.0192)	0.3596 (.0173)	0.2394 (.0150)	0.2337 (.0190)
Household size	-0.0743 (.0171)	0.0193 (.0115)	0.0642 (.0142)	0.0074 (.0117)	-0.0619 (.0143)	0.0361 (.0156)
Price of rice (log)	-0.9028 (.0848)	0.3605 (.0588)	0.6645 (.0638)	-0.0295 (.0490)	0.0242 (.0527)	0.1379 (.0640)
Price of wheat (log)	1.1441 (.1397)	-0.4344 (.0807)	-0.4079 (.0822)	0.1679 (.0715)	0.1632 (.0674)	-0.1657 (.0832)
Price of grains (log)	0.0142 (.0354)	-0.0379 (.0259)	-0.0630 (.0302)	0.0492 (.0325)	-0.1146 (.0328)	0.0135 (.0372)
Price of pork (log)	-1.7655 (.3163)	0.8499 (.1925)	0.7974 (.2621)	-0.5725 (.1972)	-0.5658 (.1848)	1.2859 (.2287)
Price of eggs (log)	-0.2309 (.0659)	-0.0130 (.0538)	0.2417 (.0668)	-0.1133 (.0662)	-0.1162 (.0693)	-0.0060 (.0759)
Price of oils (log)	-1.2234 (.1399)	0.1598 (.0822)	0.098 (.0783)	-0.1481 (.0851)	-0.1558 (.0652)	-0.2391 (.0817)
Urban (1, 0)	-0.1030 (.0882)	0.5152 (.0462)	-0.1076 (.0536)	0.1431 (.0481)	0.0310 (.0390)	-0.0898 (.0533)

Determinants	Rice	Wheat flour	Coarse grains	Pork	Eggs	Edible oils
North (1, 0)	-0.7951 (.0665)	0.2229 (.0436)	0.7217 (.0458)	-0.0933 (.0411)	-0.0508 (.0380)	-0.6616 (.0638)
South (1, 0)	1.5118 (.0837)	-0.7667 (.0365)	-1.114 (.0649)	0.7471 (.0425)	-0.3063 (.0343)	-0.9321 (.0497)
Income (log)	0.5525 (.3281)	-0.5539 (.2545)	-0.3097 (.2782)	1.2203 (.3049)	0.2301 (.2913)	1.3421 (.3301)
Income <sup>2</sup> (log)	-0.0308 (.0299)	0.0454 (.0227)	0.0172 (.0241)	-0.0965 (.0266)	-0.0077 (.0254)	-0.1122 (.0296)
Time89	-0.6889 (1.4474)	-0.8420 (1.4600)	0.1414 (1.4380)	2.6340 (1.4006)	2.5563 (1.7232)	2.7315 (1.5237)
Time93	-0.1569 (1.0122)	-0.7449 (.9421)	-0.6542 (.8878)	0.9498 (.9417)	-0.1928 (.9335)	2.5330 (1.0772)
Income (log) x Time89	0.2596 (.5165)	0.0746 (.5014)	0.0152 (.5026)	-0.9290 (.4872)	-0.8842 (.5783)	-1.1572 (.5302)
Income <sup>2</sup> (log) x Time89	-0.0164 (.0455)	0.0054 (.0425)	-0.0047 (.0433)	0.0772 (.0418)	0.0685 (.0481)	0.0884 (.0457)
Income (log) x Time93	0.0183 (.3757)	0.3201 (.3378)	0.1064 (.3174)	-0.4571 (.3241)	0.1663 (.3194)	-0.8817 (.3836)
Income <sup>2</sup> (log) x Time93	0.0029 (.0342)	-0.0307 (.0299)	0.0038 (.0282)	0.0509 (.0278)	-0.0213 (.0271)	0.0726 (.0338)

Appendix B. Results of Longitudinal Regression Analysis for the Quantity of Major Food-Group Consumed (log) among adults aged 20-45 in China, 1989 - 93 (Standard error is in parentheses.)

Determinants	Rice	Wheat flour	Coarse grains	Pork	Eggs	Edible oils
Age (year)	-0.0040 (.0013)	-0.0154 (.0018)	-0.020 (.0037)	0.0054 (.0015)	-0.0008 (.0021)	0.0055 (.0012)
Male (1, 0)	0.1383 (.0126)	0.3034 (.0182)	0.3088 (.0395)	0.0684 (.0128)	0.2430 (.0228)	-0.0138 (.0125)
Education (year)	-0.0182 (.0088)	-0.1162 (.0111)	-0.1901 (.0249)	0.0742 (.0080)	0.0354 (.0138)	0.0685 (.0079)
Household size	-0.0172 (.0062)	0.0210 (.0076)	-0.0087 (.0174)	-0.0307 (.0066)	-0.0584 (.0098)	-0.0720 (.0051)
Price of rice (log)	-0.1234 (.0214)	0.1779 (.0320)	0.3185 (.0766)	0.0093 (.0333)	-0.1014 (.0576)	-0.0624 (.0266)
Price of wheat (log)	0.8453 (.0322)	-0.1894 (.0376)	-0.0524 (.0896)	0.0220 (.0456)	0.0038 (.0720)	-0.0795 (.0333)
Price of grains (log)	0.0286 (.0102)	-0.0498 (.0199)	-0.0197 (.0311)	0.0862 (.0213)	-0.0252 (.0414)	-0.0364 (.0190)
Price of pork (log)	-0.4554 (.0945)	0.0814 (.0999)	-0.7671 (.2395)	-0.3948 (.1087)	-0.0955 (.1776)	0.5553 (.1093)
Price of eggs (log)	-0.0408 (.0225)	0.0916 (.0382)	0.1821 (.1026)	-0.1317 (.0544)	-0.1405 (.0791)	-0.1255 (.0329)
Price of oils (log)	-0.1825 (.0310)	0.3387 (.0449)	-0.2265 (.1095)	-0.1543 (.0551)	0.0275 (.0848)	-0.1076 (.0474)
Urban (1, 0)	-0.2665 (.0240)	0.1002 (.0305)	-0.4165 (.0757)	-0.0004 (.0217)	0.0322 (.0392)	-0.0882 (.0214)

Determinants	Rice	Wheat flour	Coarse grains	Pork	Eggs	Edible oils
North (1, 0)	-0.5669 (.0359)	0.3048 (.0307)	0.3355 (.0475)	-0.0584 (.0264)	0.1596 (.0367)	-0.3493 (.0189)
South (1, 0)	0.3846 (.0208)	-0.8505 (.0292)	0.0070 (.1102)	0.3004 (.0225)	-0.1741 (.0396)	-0.0657 (.0166)
Income (log)	0.0299 (.1153)	-0.6545 (.1238)	-0.7927 (.2347)	0.5991 (.2537)	0.1625 (.2475)	0.4518 (.1346)
Income <sup>2</sup> (log)	-0.0035 (.0098)	0.0520 (.0113)	0.068 (.0209)	-0.0427 (.0214)	-0.0113 (.0201)	-0.0290 (.0115)
Time89	-1.3518 (.8052)	-0.9727 (.7585)	-1.8476 (1.1515)	1.0770 (1.1839)	2.3263 (1.587)	2.1292 (1.0807)
Time93	-0.2814 (.4774)	-0.5794 (.4102)	-1.5804 (.8017)	0.9336 (.8253)	-0.3955 (.8792)	0.4785 (0.4904)
Income (log) x Time89	0.4008 (.2701)	0.2610 (.2644)	0.7843 (.4221)	-0.2050 (.3881)	-0.5659 (.5367)	-0.7468 (.3659)
Income <sup>2</sup> (log) x Time89	-0.0267 (.0224)	-0.0178 (.0227)	-0.0768 (.0381)	0.0046 (.0316)	0.0301 (.0450)	0.0494 (.0308)
Income (log) x Time93	0.0483 (.1564)	0.2211 (.1473)	0.6667 (.2910)	-0.2888 (.2787)	0.1423 (.2829)	-0.1674 (.1686)
Income <sup>2</sup> (log) x Time93	-0.0029 (.0127)	-0.0239 (.0132)	-0.0688 (.0262)	0.0225 (.0234)	-0.0114 (.0227)	0.0132 (.0144)

Appendix C. Results of Longitudinal Regression Analysis for Energy and Macronutrient Intakes (log) among adults aged 20-45 in China, 1989 - 93 (Standard error is in parentheses.)

Determinants	Energy	Protein	Fat	% energy from fat
Age (year)	-0.0028 (.0004)	0.0001 (.0006)	0.0090 (.0009)	0.0117 (.0009)
Male (1, 0)	0.1606 (.0038)	0.1169 (.0054)	-0.0196 (.0097)	-0.1786 (.0081)
Education (year)	-0.0212 (.0023)	0.0114 (.0033)	0.0974 (.0062)	0.1173 (.0054)
Household size	-0.0113 (.0020)	-0.0068 (.00250)	-0.0478 (.0042)	-0.0367 (.0039)
Price of rice (log)	0.0429 (.0101)	0.0447 (.0117)	0.0543 (.0207)	0.0104 (.0179)
Price of wheat (log)	-0.0204 (.0129)	-0.0355 (.0163)	-0.0290 (.0252)	-0.0062 (.0217)
Price of grains (log)	0.0069 (.0063)	0.0179 (.0066)	0.0147 (.0119)	0.0075 (.0114)
Price of pork (log)	-0.1754 (.0318)	-0.1794 (.0385)	-0.4434 (.0686)	-0.2551 (.0500)
Price of eggs (log)	-0.0229 (.0097)	-0.0209 (.0145)	-0.0942 (.0280)	-0.0710 (.0200)
Price of oils (log)	0.0142 (.0121)	0.0440 (.0202)	-0.1582 (.0339)	-0.1686 (.0241)
Urban (1, 0)	-0.0527 (.0066)	-0.0432 (.0086)	-0.0372 (.0178)	0.0205 (.0150)

Determinants	Energy	Protein	Fat	% energy from fat
North (1, 0)	-0.0462 (.0068)	-0.0400 (.0099)	-0.1244 (.0174)	-0.0764 (.0134)
South (1, 0)	-0.0368 (.0054)	-0.0717 (.0078)	0.1326 (.0152)	0.1702 (.0130)
Income (log)	-0.0598 (.0460)	-0.0669 (.0601)	0.5595 (.0993)	0.6031 (.0963)
Income <sup>2</sup> (log)	0.0041 (.0040)	0.0042 (.0052)	-0.0419 (.0086)	-0.0448 (.0082)
Time89	-0.1126 (.2476)	-0.0764 (.2965)	0.8295 (.3304)	0.9298 (.6031)
Time93	-0.1532 (.1616)	-0.1762 (.2197)	0.7445 (.3566)	0.8782 (.3100)
Income (log) x Time89	0.0313 (.0840)	0.0253 (.1020)	-0.3407 (.2264)	-0.3679 (.2037)
Income <sup>2</sup> (log) x Time89	-0.0037 (.0071)	-0.0020 (.0087)	0.0239 (.0192)	0.0272 (.0171)
Income (log) x Time93	0.0201 (.0564)	0.0274 (.0759)	-0.2874 (.1244)	-0.3005 (.1080)
Income <sup>2</sup> (log) x Time93	-0.0008 (.0049)	-0.0009 (.0064)	0.0257 (.0107)	0.0259 (.0093)

Appendix D. Sample Descriptive Statistics and Variable Definition

**Summary Statistics**

**(16,049 observations across all three years)**

**(5,625 in 1989; 5393 in 1991; 5031 in 1993)**

**Dependent Variables (all years)**

<b>Dependent Variables</b>	<b>N</b>	<b>Mean</b>	<b>S.D.</b>	<b>Definition</b>
<b>logrice</b>	13465 <sup>a</sup>	5.72	0.74	Natural logarithm of the grams of rice consumed.
<b>logflour</b>	11031 <sup>a</sup>	5.08	1.00	Natural logarithm of the grams of wheat flour consumed.
<b>loggrain</b>	3742 <sup>a</sup>	4.70	1.00	Natural logarithm of the grams of coarse grains consumed.
<b>logmeat</b>	10213 <sup>a</sup>	4.21	0.78	Natural logarithm of the grams of pork consumed.
<b>logegg</b>	5146 <sup>a</sup>	3.42	0.79	Natural logarithm of the grams of eggs consumed.
<b>logoil</b>	12689 <sup>a</sup>	3.27	0.72	Natural logarithm of the grams of edible oils consumed.
<b>logcal</b>	16049	7.87	0.27	Natural logarithm of daily energy intake.
<b>logpro</b>	16049	4.34	0.31	Natural logarithm of daily protein intake.
<b>logfat</b>	16049	4.05	0.61	Natural logarithm of daily fat intake.
<b>logpcf</b>	16049	2.99	0.56	Natural logarithm of percentage calories from fat.
<b>loginc</b>				Natural logarithm of (deflated, 1980 yuan) per capita income, [ $\ln [\max(1, \text{household per capita income}+1)]$ ]
<b>1989</b>	5625	5.87	1.06	
<b>1991</b>	5393	5.85	1.21	
<b>1993</b>	5031	5.87	1.46	
<b>all years</b>	16049	5.86	1.26	

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### Summary Statistics

(16,049 observations across all three years)

(5,625 in 1989; 5393 in 1991; 5031 in 1993)

Explanatory Variables	Mean	S.D.	Definition
<b>(All Years)</b>			
<b>maxage<sup>b</sup></b>	35.42	7.34	Age of oldest adult in the household used in this analysis.
<b>pcagri<sup>b</sup></b>	45.77	34.17	Percentage of population engaging in agriculture in given community.
<b>wage_b<sup>b</sup></b>	1.69	3.74	Wage for baby-sitter in given community.
<b>self_emp<sup>b</sup></b>	15.33	33.99	Dummy indicating self-employment.
<b>h_wu<sup>b</sup></b>	.16	.36	Living house/apartment whether belongs to work unit or not.
<b>kerosene<sup>b</sup></b>	.71	.39	Community kerosene price.
<b>gasoline<sup>b</sup></b>	.99	.22	Community gasoline price.
<b>nuclear<sup>b</sup></b>	.47	.50	Nuclear household dummy variable.
<b>colortv<sup>b</sup></b>	.28	.45	Dummy for household owning a color television.
<b>refriger<sup>b</sup></b>	.18	.38	Dummy for household owning a refrigerator.
<b>medins<sup>b</sup></b>	.30	.46	Dummy for household having medical insurance/care.
<b>hhwage<sup>b</sup></b>	1442	2197	Household income from wages.
<b>dhwage<sup>b</sup></b>	.53	.50	Dummy for any earnings from wages for household members.
<b>dhgarden<sup>b</sup></b>	.50	.50	Dummy for household earning income from own garden.
<b>dhfarm<sup>b</sup></b>	.44	.50	Dummy for household earning any income from agriculture.

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### Summary Statistics

(16,049 observations across all three years)

(5,625 in 1989; 5393 in 1991; 5031 in 1993)

<b>dhlstk<sup>b</sup></b>	.30	.46	Dummy for household earning any income from livestock.
<b>dhfish<sup>b</sup></b>	.02	.14	Dummy for household earning any income from fishing.
<b>dhbusi<sup>b</sup></b>	.16	.37	Dummy for any income from household business.
<b>dhsubs<sup>b</sup></b>	.36	.48	Dummy for receipt of various subsidies (excluding food subsidies).
<b>dhfood<sup>b</sup></b>	.33	.47	Dummy for household receiving food subsidies.
<b>hrent<sup>b</sup></b>	1.30	7.47	Monthly house/apartment rent.
<b>tapwater<sup>b</sup></b>	.56	.50	Dummy for household having tap water.
<b>electric<sup>b</sup></b>	.95	.22	Dummy for household having electricity.
<b>distgain<sup>b</sup></b>	1.48	2.41	Distance to obtain grains from the community.
<b>distoil<sup>b</sup></b>	1.55	2.51	Distance to obtain edible oils from the community.
<b>distveg<sup>b</sup></b>	1.54	4.94	Distance to obtain vegetables from the community.
<b>distmeat<sup>b</sup></b>	1.27	1.42	Distance to obtain animal meats from the community.
<b>popden<sup>b</sup></b>	2502	7167	Population density in given community.
<b>age<sup>c</sup></b>	33.63	7.46	Individual age.
<b>male<sup>c</sup></b>	.48	.50	Gender.
<b>pedu<sup>c</sup></b>	7.40	1.91	Individual's years of education.
<b>1989 dummy<sup>c</sup></b>	.35	.48	Indicator for year 1989.
<b>1991 dummy<sup>c</sup></b>	.33	.47	Indicator for year 1991.

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### Summary Statistics

(16,049 observations across all three years)

(5,625 in 1989; 5393 in 1991; 5031 in 1993)

<b>1993 dummy<sup>c</sup></b>	.31	.46	Indicator for year 1993.
<b>count<sup>d</sup></b>	4.60	1.55	Household size.
<b>urbrur<sup>d</sup></b>	3.06	1.13	Urban and rural classification.
<b>north<sup>d</sup></b>	.24	.43	North region.
<b>south<sup>d</sup></b>	.37	.48	South region.
<b>lgrice<sup>d</sup></b>	-.98	.34	Natural logarithm of rice price in given community.
<b>lgflour<sup>d</sup></b>	-1.04	.27	Natural logarithm of wheat flour price in given community.
<b>lggrain<sup>d</sup></b>	-2.00	.58	Natural logarithm of coarse grains price in given community.
<b>lgpork<sup>d</sup></b>	1.06	.09	Natural logarithm of pork price in given community.
<b>lgegg<sup>d</sup></b>	0.29	.27	Natural logarithm of eggs price in given community.
<b>lgoil<sup>d</sup></b>	0.33	.21	Natural logarithm of edible oils price in given community.

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<sup>a</sup>Only positive for natural logarithm of the grams of food consumed.

<sup>b</sup>Only used to predict real per capita household income.

<sup>c</sup>Only used to predict individual level food group consumption.

<sup>d</sup>Used to predict both real per capita household income and individual food consumption.