The Centre for Global Food and Resources

The Vietnam urban food consumption and expenditure study

Factsheet 3: What foods dominate monthly food expenditures?

In this factsheet we explore urban Vietnamese households' monthly expenditures on food products. In the survey, we asked respondents about their consumption and purchasing behaviour for 92 different food items or categories of food. Specifically, we first asked: "During the past month, how many times did your household purchase [particular food product ..."]. Next, respondents were asked: "For each purchase, what is the normal value (in VND) of [the product] bought for household consumption."

Using the information that respondents provided in the food expenditure section of the survey we calculate monthly expenditures for each of the 92 foods items. The 92 individual food expenditures values are summed to get total monthly food expenditures for each household. We then calculate expenditure shares for various food items or groups of foods by dividing the expenditures on food items (or groups such as fruit, vegetables, dairy etc.) by the household's total monthly food expenditure.

To address variations in household size and makeup, we 'weight' household expenditure by the number of adult male equivalents in the household. This allows us to standardise food expenditure across households with more or less people and different ratios of adults to children.

Figure 1 shows monthly household food expenditure shares for 12 categories of food. Table A1 provides an explanation of what is included in each category.

Meat accounts for the largest share of the monthly food expenditures for urban Vietnamese households. Across cities and income groups, meat and eggs account for 37%–44% of households' monthly food expenditures (Figure 1).

In the survey, households were asked to indicate which (of nine) different gross monthly income categories would be most accurate for their household. Household income was then aggregated into four categories (see Figure 2 and Table A3 for categories). The larger samples in Ho Chi Minh City and Hanoi allow us to do analyses on subsets of the sample, based on their income. We do this to understand whether income has an impact on the types of foods households purchase. We expected that higher income households would have higher expenditures on relatively more expensive or higher value food items, such as dairy (milk and milk products), some processed foods, and meat compared to less expensive (inferior) food items, e.g. rice or other staples.

household incomes increase absolute expenditure on foods per adult male equivalent increases (Table A5). This is perhaps due to households 'dietary upgrading' and consumption of more convenience/processed foods. For example, we also see an increase in expenditure shares items. Higher-income spent on certain households in Hanoi spend a relatively greater



¹ The weights were calculated using WHO/FAO energy requirements from the 2004 Human Energy Requirements, Food and Nutrition Technical Report Series.

share of monthly food expenditures on milk and milk products, beverages, processed foods and food consumed away from home (FAFH; Figure 2). In Ho Chi Minh City the share of expenditure dedicated to similar foods was relatively constant across income groups. However, in Ho Chi Minh City we do see small increase in the share of expenditure dedicated to milk and milk products and meat and eggs as household income increases. Also following expectations decreases our were expenditure shares on staples such as rice in Ho Chi Minh City and on vegetables in Hanoi (Figure 2).

Some types of FAFH is relatively expensive. Increasing expenditure shares on FAFH with increasing incomes in Hanoi supports that this may be the case in Hanoi. However, the decrease in the share of expenditures dedicated to FAFH in Ho Chi Minh City could be a reflection of the rapid growth of cheap

street restaurants, or households in the lower income groups could be placing greater value on time at work (to maintain family income) and consequently be willing to pay for food to be consumed away from home in order to spend less time cooking family meals.

The high relative expenditure on meat across income groups may arise because lower households can afford to income inexpensive meats such as pork when higher income households may be spending more money on more expensive meats such as beef. Further, there could be a switch from inferior beef cuts such as the brisket to high-quality, expensive cuts such as rib-eye steak as incomes increase. Either of these factors could be driving the relatively constant expenditure share on meat across income categories. We explore this issue in more detail in Factsheet 11.

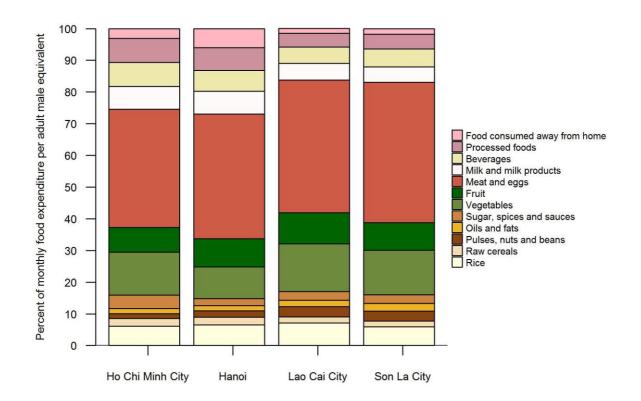


Figure 1. Percent of monthly food expenditure for each adult male equivalent on different food types for the average household in Ho Chi Minh City, Hanoi, Lao Cai City and Son La City, Vietnam.

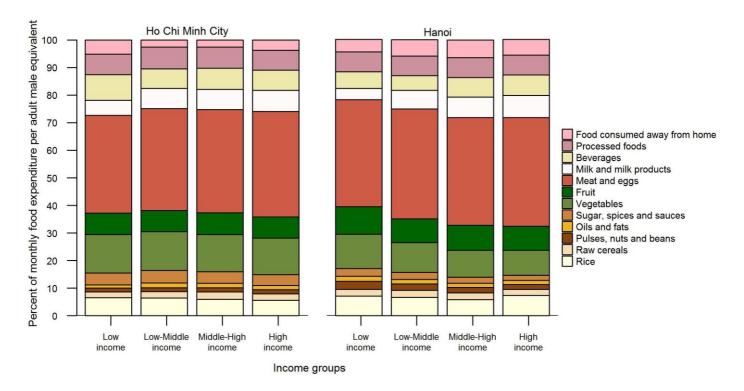


Figure 2. Percent of monthly food expenditure for each adult male equivalent on different food types by income groups in Ho Chi Minh City (left) and Hanoi (right), Vietnam. The 'Low income' group includes households with a gross monthly income of 1.5 to 4.5 million VND. The 'Low-Middle income' group includes households with a gross monthly income of 4.5 million to 7.5 million VND. The 'Middle-High income' group includes households with a gross monthly income of 7.5 to 15 million. The 'High income group' includes households with a gross monthly income of more than 15 million VND. See the tables in the appendix for breakdown of income groups and percentages of expenditure graphed here.

Appendix to Factsheet 3

Definitions and percentages used to generate graphs

Table A1. Foods in different food groups used in analyses

Food category	Types of foods included in category
Rice	Rice
Food consumed away from home	Food and beverages consumed away from home
Vegetables	All fresh, frozen, dried and canned vegetables
Meat and eggs	Fresh pork, fresh fish and seafood, fresh chicken, fresh beef, fresh duck, fresh lamb, fresh mutton, fresh veal, processed meat, dried meat, eggs
Pulses, nuts and beans	Beans (e.g. kidney, soya beans), pulses, nuts, tofu
Fruit	All fresh, frozen, dried and canned fruit
Processed cereals	Maize products, other grains and flour, pasta, noodles, bread, breakfast cereals
Sugar, spices and sauces	Sugar and sweeteners, salt, soya sauce, monosodium glutamate, chilli sauce, other sauces, spices and seasonings (e.g. pepper, coriander, etc.)
Beverages	Bottled water, tea, coffee, fruit juice, soft drinks, alcoholic beverages, herbal drinks, infant formula, nutrition drinks, vitamin drinks
Oils and fats	Coconut oil, palm oil, lard oil, other cooking oils, coconut milk, fats, butter, margarine
Processed food	Instant noodles, cakes, biscuits, pastries, chocolate bars, ready-to-eat meals, quick prepare meals, potato crisps and other snack food
Milk and milk products	Fresh, powdered, UHT and canned milk, other dairy products (e.g. cheese, cream, yoghurt, etc.)

Table A2. Percent of monthly food expenditure for each adult male equivalent on different food types for the average household in Ho Chi Minh City, Hanoi, Lao Cai City and Son La City, Vietnam.

Foods	Ho Chi Minh City	Hanoi	Lao Cai City	Son La City
Rice	6.12%	6.55%	7.08%	5.95%
Processed cereals	2.41%	2.36%	2.01%	1.77%
Pulses, nuts and beans	1.52%	2.08%	3.22%	3.12%
Oils and fats	1.59%	1.56%	2.03%	2.44%
Sugar, spices and sauces	4.24%	2.23%	2.71%	2.76%
Vegetables	13.61%	10.06%	15.02%	14.09%
Fruit	7.76%	8.88%	9.83%	8.69%
Meat and eggs	37.27%	39.38%	41.92%	44.28%
Milk and milk products	7.27%	7.12%	5.22%	4.79%
Beverages	7.52%	6.63%	5.13%	5.67%
Processed foods	7.65%	7.17%	4.33%	4.66%
Food consumed away from home	3.02%	5.97%	1.51%	1.78%

Note: Foods included in each food group are detailed in Table A1.



Table A3. Percent of households in each gross monthly income group in Ho Chi Minh City and Hanoi, Vietnam.

Income group	Household gross monthly income (VND)	Household gross monthly income (USD) ⁺	Percent of households#	
	, ,	• •	Ho Chi Minh City	Hanoi
Low income	1.5 to 4.5 million	67.29 to 201.88	7.2%	6.7%
Low-Middle income	4.5 to 7.5 million	201.89 to 336.46	30.3%	32.1%
Middle-High income	7.5 to 15 million	336.47 to 672.92	41.4%	40.6%
High income	≥ 15 million	≥ 672.93	21.1%	20.7%

^{*}Based on exchange rate of 1 USD = 22,291 VND from 1 December 2016; *Sample includes only those households that answered all questions about expenditure, Ho Chi Minh City n = 993 and Hanoi n = 702.

Table A4. Percent of monthly food expenditure for each adult male equivalent on different food types by income groups in Ho Chi Minh City and Hanoi, Vietnam.

Foods	Low income	Low-Middle income	Middle-High income	High income
	Ho Chi Minh City			
Rice	6.6%	6.5%	6.0%	5.6%
Processed cereals	2.1%	2.3%	2.6%	2.4%
Pulses, nuts and beans	1.4%	1.4%	1.6%	1.5%
Oils and fats	1.1%	1.7%	1.6%	1.5%
Sugar, spices and sauces	4.3%	4.5%	4.2%	3.9%
Vegetables	14.0%	14.1%	13.4%	13.3%
Fruit	7.7%	7.7%	7.9%	7.6%
Meat and eggs	35.4%	36.9%	37.4%	38.2%
Milk and milk products	5.5%	7.3%	7.4%	7.7%
Beverages	9.3%	7.1%	7.6%	7.3%
Processed foods	7.4%	7.9%	7.7%	7.2%
Food consumed away from home	5.1%	2.5%	2.6%	3.8%
	Hanoi			
Rice	7.1%	6.7%	5.9%	7.4%
Processed cereals	2.5%	2.5%	2.4%	2.2%
Pulses, nuts and beans	2.9%	2.4%	2.0%	1.7%
Oils and fats	1.8%	1.6%	1.5%	1.5%
Sugar, spices and sauces	2.8%	2.5%	2.2%	1.9%
Vegetables	12.5%	10.8%	9.8%	9.0%
Fruit	10.0%	8.6%	9.0%	8.8%
Meat and eggs	38.8%	39.9%	39.1%	39.4%
Milk and milk products	4.0%	6.7%	7.4%	8.0%
Beverages	6.1%	5.4%	7.1%	7.4%
Processed foods	7.2%	7.1%	7.2%	7.2%
Food consumed away from home	4.5%	5.9%	6.4%	5.7%

Note: Income groups are defined in Table A3.

Table A5. Monthly food expenditure (thousands VND) for each adult male equivalent on different food types by income groups in Ho Chi Minh City and Hanoi, Vietnam.

Foods	Low income	Low-Middle income	Middle-High income	High income
	Ho Chi Minh City			
Rice	126.21	115.66	114.52	109.27
Processed cereals	39.96	40.22	48.33	47.80
Pulses, nuts and beans	27.63	25.06	30.37	30.08
Oils and fats	21.16	30.24	30.95	29.63
Sugar, spices and sauces	83.08	80.23	79.42	76.94
Vegetables	269.46	249.06	253.75	260.17
Fruit	148.87	136.67	149.24	148.52
Meat and eggs	680.97	652.10	707.92	747.84
Milk and milk products	148.87	136.67	149.24	148.52
Beverages	179.97	125.84	143.71	143.25
Processed foods	142.79	140.21	146.57	141.02
Food consumed away from home	98.94	43.29	50.19	73.95
	Hanoi			
Rice	103.34	111.73	105.33	155.00
Processed cereals	37.13	41.20	42.43	45.71
Pulses, nuts and beans	41.78	39.27	36.26	34.73
Oils and fats	26.70	27.11	27.08	31.66
Sugar, spices and sauces	40.72	40.93	39.61	39.42
Vegetables	182.89	180.37	176.16	188.32
Fruit	145.77	142.81	161.13	184.97
Meat and eggs	567.64	664.15	701.20	825.65
Milk and milk products	58.05	111.19	131.85	167.49
Beverages	88.76	90.33	127.70	155.94
Processed foods	105.06	117.92	129.93	150.10
Food consumed away from home	66.57	98.00	114.71	119.07

Note: Income groups are defined in Table A3.