AN ESTIMATION OF PER CAPITA FOOD CONSUMPTION AND RELATED POVERTY IN FAQIRABAD AREA (PESHAWAR CITY)

Aliya Gul
Department of agricultural and Applied economics,
The University of Agriculture, Peshawar
Robina Karim
Department of Agricultural and Applied Economics,
The University of Agriculture, AMK Campus Mardan
Nasrullah
Department of Soil and Envirnomental Sciences, The University of Agriculture, Peshawar
Osaidullah
Department of Horticulture, The University of Agriculture, Peshawar

Abstract

This study analyzes the per capita food consumption and related poverty in Peshawar Valley, Faqirabad Area was selected. The average household size, based on 400 households is 7.77. It appears that on average an adult equivalent takes 210.30 grams of flour, 73.10 grams of meat, 57.11 grams of rice, 319.14 grams of vegetables, 52.30 grams of pulses, 193.00 grams of fruits, 191.71 grams of milk, 51.80 grams of fats, 8.65 grams of black tea, 39.56 grams of sugar, and 6.16 grams of spices daily. To live a normal life an adult person requires 2350 calories per day. The poverty status of the households surveyed shows that out of 400 households studied, 58.5% are above, 37% below, and 4.5% on the poverty line The comparison shows that in most of the cases, food consumption has reduced due to price hike, so it is recommended that actions should be taken to either stabilize the prices by subsidizing the major food items or to increase the monthly incomes of households to help them increase food consumption.

Keywords: Estimation, Food, Consumption, Poverty

Introduction

Pakistan has a rich and vast natural resource base, covering various ecological and climatic zones; hence the country has great potential for producing all types of food commodities. Agriculture has an important direct and indirect role in generating economic growth. The importance of agriculture to the economy may be seen in three ways: first, it provides food to consumers and fibres for domestic industry; second, it is a source of scarce foreign exchange earnings; and third, it provides a market for industrial goods.

Normally, at its simplest, Pakistani cooking today consists of staple foods which are cheap and abundant. Wheat and other flour products is the mainstay of the diet, one familiar form being CHAPATI. Vegetables, usually seasonal, such as: tomatoes, onions, cauliflower, cabbage, lady finger, egg plant, lentils etc are commonly used. Families with large incomes eat more meat (beef, mutton, poultry, and fish), eggs and fruits. And the more affluent cook with GHEE, which is clarified butter, instead of with vegetable oil. From the earliest times, the imaginative - and sometimes heavy - use of spices, herbs, seeds, and flavorings and seasonings have helped people transform rather ordinary staple foods into an exotic cuisine.

Milk, pulses (gram, mung, masoor, beans) and tea (black and green) are also the main food items both in rural and urban areas of Pakistan. (Taus-Bolstad, S 2003)

Food dynamics are important aspects of life. Consumption patterns are changing over time. Several factors including food prices, income of consumers, increasing population and personal taste and preferences of the individuals are responsible for this change. Aggregate food consumption is also influenced by population growth and its distribution between the rural and urban areas, the level and distribution of income, food prices, education, profession, social mobilization, age, human taste and preferences, etc. (GoP, 1988)

The household food consumption expenditure is also affected by the household strength/size. As the number of persons in households increase, the consumption expenditure on food also increases. Education level of the household is another factor, which affect the consumption expenditure on major food commodities and consumption patterns.

The level of human food consumption and its composition are very important. The level of food consumption determines how much a nation and its inhabitants are poor. Poverty is a multi-dimensional concept – income, health care, nutritional status, education and leisure time all provide insights into individual welfare. However consumption expenditure will be used as a welfare indicator because first, it measures the command an individual has over goods and services that are inputs into the welfare. Second, there is a strong theoretical basis for it as an indicator of current welfare. Third, it is perhaps the most common indicator of welfare used in poverty analysis (Lampietti and Stalker 2000).

Keeping the importance of food consumption in consideration, the researcher is interested in sorting out the household consumption of various food items and determining the level of poverty based on food-based calorie intake. Specifically, the study focuses to find out level and composition of food consumption in Faqirabad Area (Peshawar city) based on primary data and to work out the monthly and daily per capita consumption of major food items and compare with the previous studies. And also to estimate monthly expenditure of average household incurred on various food commodities.

Review of literature

Several studies have been conducted on food consumption such as Chishti (2000) studied four major daily use agricultural commodities (wheat, Chickpea, potato and onion) in order to evaluate the performance of agricultural markets in Pakistan. This revealed that the changes in prices of wheat and potato were fully transmitted between their respective markets over a piriod and hence such markets were fully integrated.

Hohn (2000) advocated that in order to improve fruit and vegetable consumption, fruit quality needs to be guaranteed from harvest to consumption. He has also measures for quality maintenance and marketing of golden delicious apples and pears.

Rawski et al. (2000) examined constraints for the marketing and demand of fruit and vegetables and its processed products in Mali. Constraints for quality control are also outlined, including the absence of norms, lack of suitable control equipment poor packaging, no processing and low level of training. Strategies to improve the situation are discussed, including more publicity (use of mass media), participation in expositions and trade markets, and standardized quality controls.

Buckley et al. (2002) found that US per capita use of processed fruit and vegetables was growing because of improved distribution and availability of, introduction of new product forms, better storage facilities, higher disposable personal incomes, increased advertising and promotion, and the desire of increasingly health conscious consumers to include more fruits and vegetables in their diet.

Noreen (2002) studied the food consumption patterns in Peshawar Valley. Two sites, Zaryab Colony (urban area) and village Amankot (rural area) were selected. The results

showed that with the increase in household income, superior food commodities (meat, fruits and milk) replaced the inferior food commodities (vegetables and pulses).

Sofia (2005) conducted her research in Hayatabad Township on food consumption patterns and estimated the basic food need poverty by using the basic food needs approach. Poverty Band suggested that though Hayatabad Township on average was above Poverty Line, but its 11% people lie within poverty band and 6% below poverty band.

Shoaib (2005) studied the survey in rural and urban Mansehra and analyzed the food consumption patterns and estimated the basic food needs approach for comparison of food consumption pattern and calories intake poverty in rural and urban Mansehra.

Robina (2006) suggested that in Dheri Baghbanan an adult household member consumed on average 340.39 gm of flour, 43.05 gm of meat, 484.41 gm of vegetables,36.07 gm of rice, 27.80 gm of pulses, 115.45 gm of fruits, 35.23 gm of fats, 156.44 gm of milk, 51.64 gm of sugar and 5.46 gm of tea per day. Poverty line was also estimated which showed that Present Study= 1.03, Tarnab=1.39, Shabqadar= 1.44, Wah Cantt=1.05, Peshawar= 0.9880, Dargai=1.02, Timargara=1.07 and Bajour= 0.89.

Nafees (2007) conducted an analysis of food consumption pattern and food intake poverty in Rural Peshawar. The household's poverty ranking showed that on the basis of GPLR, 88.75% were above poverty line and 11.25% were below poverty line.

Afshan (2007) investigated food consumption patterns in Urban Hayatabad and observed that to increase and improve food production and its availability so that food consumption is enhanced and poverty reduces/vanishes.

Materials and methods

A sample of 400 households was randomly selected from Faqir Abad area of Peshawar city. Every eleventh household was selected in the area, and the lady-incharge of the household was interviewed, using the interview scheduled.

1. Descriptive statistics (mean, standard deviation, minimum and maximum) have been developed and used to elaborate and discuss a number of aspects related to the theme of the study undertaken.
2. Data on food consumption were collected on weekly basis and then converted to have it on daily, monthly and yearly basis, wherever necessitated.
3. Data on food consumption were collected for a household, which were later on converted into an adult-equivalent basis as per the following procedure.

The average size of the household of our respondents was turned out to be 7.77, with 3.18 numbers of children (≤ 15 years), 4.20 numbers of adults (16-60 years) and 0.40 numbers of elderly persons (Table 1).

Table 1: Composition and size of household

Particulars	**Age (in years)**	**Mean values (Number)**	**Standard deviation**	**Minimum**	**Maximum**
Children					
	Below 5	1.12	1.5060	0	8
	5-10 years	0.88	1.0546	0	7
	11-15 years	1.18	1.2826	0	10
	All ≤ 15	3.18	2.6791	0	18
Adults	16-60	4.20	2.8193	1	27
Aged/elderly	>60	0.40	0.7619	0	7
Household size (Nos)		7.77	4.1250	2	34

We converted the above reported composition of households into its adult-equivalent, taking into account various ages-calorie requirements (Table 2).

Table 2:Calorie required by age and sex (per capita/ day)

Age (in year)	**Male**	**Female**
01-04	1304	1304
05-09	1768	1768
10-14	2816	2464
15-19	3087	2322
20-39	2760	2080
40-49	2640	1976
50-59	2460	1872
60+	2146	1632
National Average (based on age, sex and activities)		2150 **2350***

Source: *Adopted from CRPRID (2002). Pakistan Human Condition Report, Centre for Research on Poverty Reduction and Income Distribution, Pak Secretariat, Islamabad, p.79.*

We used above fractions/weights to convert the actual household size of 7.77 persons to adult-equivalent household size of 6.96. We used this adult-equivalent household size (6.96) to convert weekly household food consumption in to adult-equivalent per capita consumption, using the following formula.

$$\text{FPPD(gm)} = \frac{\text{FCPH(Kg)}}{6.96 * 7} * 1000 \qquad (3.1)$$

Where

FPPD stands for food consumption per capita per day in grams

FCPH stands for food consumption per household per week in kilograms

And 6.96 and 7 represent adult-equivalent and number of days in one week respectively. We also multiply the resultant figures with 1000 to convert consumption from kilograms to grams.

4. The adult-equivalent per capita daily consumption of food was then converted in to calorie-intake estimates, using the calorie contents per 100 gram of various foods (table 3).

Table 3: Household size conversion to adult-equivalent

Particulars	**Age**	**Actual strength**	**Weight (to convert into adults equivalent)**	**Adults equivalent**
Children				
	Below 5	1.12	0.55	0.6174
	5-10 years	0.88	0.75	0.6562
	10-15 years	1.18	1.00	1.1775
	All ≤ 15	3.18		2.4511
Adults	16-60	4.20	1.00	4.1975
Aged	>60	0.40	0.80	0.3160
Household size (Numbers)		7.77		6.9600

5. The following poverty-status measures were estimated, using the food-based calorie intake of the households surveyed.

Poverty line

PL = DCI/2350 (3.2)

Where PL = Poverty line

DCI = daily calorie intake

Poverty-gap

Since poverty line is a thin line, and people may drop from and go above this line with a slight change in food consumption and the resultant calorie intake, a more accurate measure of poverty estimates may be computed in terms of Poverty-Gap. Poverty-gap includes all population, which falls within a 2.50% above and 2.50% below poverty line already discussed.

Vulnerable, Transient and Absolute Poor

The above estimated poverty-gap helps classify two other types of poor, Vulnerable-Poor and Transient-Poor. Those people who fall within a range of 5% above poverty-gap are called vulnerable-poor and those who fall within 5% range below poverty-gap are called transient-poor. All those who fall below transient-poor category are referred to as Absolute-Poor and all those who fall above vulnerable-poor category are called Non-Poor.

Results and discussion

Household Size and Composition

Results showed that an adult person requires 2350 calorie per day. A child of 1 - 4 years of age requires 1304 calories, which estimates at 0.55 of the adult calorie requirements (2350 calorie). Similarly, the children of 5 - 9 years of ages' calorie requirements are estimated at 0.75 of that of adults. Children of 10 - 14 years may be considered equivalent to the adults. The adults up to age 59 may also be considered equivalent to an adult. For the aged people above 60, the average calorie requirements for a male is 2146 and female is 1632, and the average of these two estimates at 1889 or 0.80 of that of adults. Hence the household members of various ages would be converted to its adult-equivalent by using the following fractions.

Using the above fractions/weights, we converted the actual household size into adult-equivalent, which turned out to be 6.96. Thus our household size, which consists of 7.77 persons of various ages, is equal to 6.96 adult-equivalents as per conversion provided in (table 3).

Food consumption per capita

We collect data of various food commodities consumed by the household on weekly basis. The averages are presented in (table 4).

Table 4: Consumption per household per week (kg)

Particulars	**Consumption (kg)**	**Particulars**	**Consumption (kg)**
Flour	**10.9778**	Beans	0.9017
Beef	1.3585	Chick Pea	0.2455
Mutton	0.4475	Black Mung	0.0125
Poultry	1.6981	Mash	0.02187
Fish	0.3119	**Total pulses**	**2.7081**
Total meat	**3.8160**	Apple	1.7425
Basmati rice	2.1592	Mango	1.9962
Rough rice	0.8222	Guava	1.1463
Total rice	**2.9814**	Banana	1.5025
Onions	2.3519	Grapes	1.3075
Potato	2.3660	Watermelon	0.9413
Ladyfinger	1.5164	Orange	0.06875
Cauliflower	0.7100	Peach	0.3175
Pea	1.1515	Apricot	0.1396
Spinach	1.0527	Pear	0.0000
Bitter gourd	0.6087	Musk melon	0.9125
Cucumber	0.6705	**Total fruit**	**10.07465**

Tomato	2.5600	Fresh fluid milk	8.4825
Carrot	0.4085	Packed fluid milk	1.4700
Turnip	0.8260	Powder milk	0.0547
Eggplant	0.8731	**Total milk**	**10.0072**
Calocacia	0.7456	Cooking oil	1.6931
Cabbage	0.4094	Banaspati ghee	1.0106
Radish	0.0325	**Total fats**	**2.7037**
Sponge gourd	0.1675	**Black Tea**	**0.4516**
Loki	0.2087	White Sugar	1.9427
Total vegetables	**16.659**	Brown Sugar	0.1225
Gram	0.6910	**Total Sugar**	**2.0652**
Mung	0.4691	**Spices**	**0.3216**
Masoor	0.3883		

We further converted the data on food consumption per household per week into per capita per adult-equivalent. For this purpose, we used the formula (3.1).

And 6.96 and 7 represent adult-equivalent and number of days in one week respectively. We also multiply the resultant figures with 1000 to convert consumption from kilograms to grams.

To convert the daily food consumption into yearly basis, we multiplied the food consumption per capita per day with 365 days and divided yearly consumption by 12 to have consumption on monthly basis.

Using formula (3.2) and adopting the two stated steps, we arrived at the food consumption per capita per day, per month and per year, with estimates provided in (table 5).

Table 5: Food consumption per capita per day, per month and per year (gram)

Particulars	**Daily Consumption**	**Monthly Consumption**	**Yearly Consumption**
Flour	**210.30**	**6396.75**	**76761.04**
Beef	26.02	791.59	9499.09
Mutton	8.57	260.76	3129.07
Poultry	32.53	989.47	11873.69
Fish	5.97	181.74	2180.91
Total meat	**73.10**	**2223.56**	**26682.76**
Basmati rice	41.36	1258.16	15097.85
Rough rice	15.75	479.09	5749.10
Total rice	**57.11**	**1737.25**	**20846.95**
Onions	45.05	1370.44	16445.28
Potato	45.32	1378.66	16543.87
Ladyfinger	29.04	883.60	10603.18
Cauliflower	13.60	413.71	4964.56
Pea	22.05	670.97	8051.68
Spinach	20.16	613.40	7360.83
Bitter gourd	11.66	354.69	4256.24
Cucumber	12.84	390.70	4688.36
Tomato	49.04	1491.70	17900.38
Carrot	7.82	238.03	2856.37
Turnip	15.82	481.31	5775.67
Eggplant	16.72	508.75	6105.01
Calocacia	14.28	434.46	5213.49
Cabbage	7.84	238.56	2862.66
Radish	0.62	18.94	227.25
Sponge gourd	3.21	97.60	1171.22
Loki	3.10	121.60	1459.30
Total vegetables	**319.14**	**9707.11**	**116485.3**
Gram	13.24	402.64	4831.71

Mung	8.99	273.34	3280.11
Masoor	7.44	226.26	2715.12
Beans	17.27	525.42	6304.99
Chick Pea	4.70	143.05	1716.62
Black Mung	0.24	7.28	87.40
Mash	0.42	12.74	152.92
Total pulses	**52.30**	**1590.74**	**19088.87**
Apple	33.38	1015.35	12184.15
Mango	38.24	1163.18	13958.1
Guava	21.96	667.94	8015.32
Banana	28.78	875.50	10505.99
Grapes	25.05	761.87	9142.48
Watermelon	18.03	548.49	6581.89
Orange	1.32	40.06	480.72
Peach	6.08	185.01	2220.07
Apricot	2.67	81.34	976.13
Musk melon	17.48	531.71	6380.51
Total fruit	**193.00**	**5870.45**	**70445.35**
Fresh fluid milk	162.50	4942.71	59312.50
Packed fluid milk	28.16	856.56	10278.74
Powder milk	1.05	31.87	382.48
Total milk	**191.71**	**5831.14**	**69973.72**
Cooking oil	32.43	986.56	11838.73
Banaspati ghee	19.36	588.87	7066.46
Total fats	**51.80**	**1575.43**	**18905.19**
Black Tea	**8.65**	**263.14**	**3157.74**
White Sugar	37.22	1132.00	13584.01
Brown Sugar	2.35	71.38	856.56
Total Sugar	**39.56**	**1203.38**	**14440.57**
Spices	**6.16**	**187.39**	**2248.74**

Comparison with surveys conducted at national level

A comparison of present study estimates with that of two national surveys conducted during 2001-02 and 2004-05 is provided in (table 7**).** As indicated in (table 7), year 2001-02 shows the highest flour consumption (8.94 kg) followed by 8.20 and 6.397 kg in 2004.05 and 2007-08 respectively. Similarly meat consumption (2.219 kg), vegetables consumption (4.24 kg) pulses consumption (0.9 kg) and fats consumption (1.58 kg) are highest in present study as compared to previous national surveys while sugar (1.2 kg) and milk consumption (5.82 kg) are the least in present study as compared to previous surveys. Lastly the highest trend in fruits consumption (4.73 kg) was observed in 2004-05 followed by 1.8kg in 2001-02 and 1.9 kg in 2007-08.

Table 7 Per capita monthly food consumption: a comparison with national surveys conducted during 2001-02 and 2004-05

Food Commodities/ Products	**Present Study (2007-08) Kg.**	**National Survey (2001-02) Kg.**	**National Survey (2004-05) Kg.**
Flour	**6.397**	**8.94**	**8.20**
Beef	0.79	0.30	0.33
Mutton	0.26	0.10	0.07
Poultry	0.989	0.14	0.23
Fish	0.18	0.05	0.06
Total meat	**2.219**	**0.59**	**0.69**
Rice	**1.74**	**1.17**	**1.03**
Onions	1.37	0.98	0.94
Potato	1.38	1.05	1.18
Tomato	1.49	0.34	0.36
Total vegetables	**4.24**	**2.37**	**2.48**

Gram	0.40	0.16	0.20
Mung	0.27	0.07	0.09
Masoor	0.22	0.05	0.06
Mash	0.01	0.04	0.06
Total Pulses	**0.9**	**0.32**	**0.41**
Apple	1.02	0.11	0.24
Banana	0.88	1.69	4.49
Total Fruits	**1.9**	**1.8**	**4.73**
Fresh fluid milk	4.94	5.80	6.67
Packed fluid milk	0.85	2.15	0.06
Powder milk	0.03	0.01	0.01
Total milk	**5.82**	**7.96**	**6.74**
Cooking oil	0.99	0.09	0.12
Banaspati ghee	0.59	0.64	0.67
Total fats	**1.58**	**0.73**	**0.79**
White Sugar	1.13	1.26	1.31
Brown Sugar	0.07	0.15	0.17
Total Sugar	**1.2**	**1.41**	**1.48**

Source: Data collected in previous years has been extracted from: Household Integrated Economic Survey, 2001-02 and 2004-05 by Federal Bureau of Statistics, Islamabad

Expenditure on Food Commodities

Percentage share of expenditure of each of the commodity is also estimated (table 8). According to Table 4.8, an average household spent Rs.9894.68 of their monthly income on food consumption. Meat had the greatest contribution in expenditure, which accounted for 20.14% of the total expenditure, followed by vegetables (14.08%), fruits (13.54%), milk (13.87%), fats (9.96%), pulses (5.7%), rice (5.58%), black tea (3.68%), spices (3.31%), and sugar (2.49%).

Table 8: Monthly Expenditure on Food Consumption by Commodity

Particulars	**Total Expenditure Per Month (Rs.)**	**As % of Total Expenditure on Food**
Flour	**755.13**	**7.63**
Beef	665.15	6.72
Mutton	347.86	3.52
Poultry	806.78	8.15
Fish	173.35	1.75
Total meat	**1993.14**	**20.14**
Basmati rice	453.03	4.58
Rough rice	99.27	1.00
Total rice	**552.30**	**5.58**
Onions	213.65	2.16
Potato	177.02	1.79
Ladyfinger	139.29	1.41
Cauliflower	48.70	0.49
Pea	142.89	1.44
Spinach	51.97	0.52
Bitter gourd	49.60	0.50
Cucumber	37.58	0.38
Tomato	267.35	2.70
Carrot	19.32	0.19
Turnip	51.32	0.52
Eggplant	65.56	0.66
Calocacia	72.43	0.732
Cabbage	24.90	0.25
Radish	1.32	0.01
Sponge gourd	10.51	0.11

Loki	20.28	0.20
Total vegetables	**1393.71**	**14.08**
Gram	135.88	1.37
Mung	118.34	1.20
Masoor	76.43	0.77
Beans	173.97	1.76
Chick Pea	54.06	0.55
Black Mung	2.03	0.02
Mash	3.55	0.04
Total pulses	**564.26**	**5.70**
Apple	276.54	2.79
Mango	285.87	2.88
Guava	112.59	1.14
Banana	200.40	2.02
Grapes	285.69	2.89
Watermelon	45.81	0.46
Orange	8.36	0.08
Peach	32.46	0.33
Apricot	22.17	0.22
Musk melon	70.01	0.71
Total fruit	**1339.90**	**13.54**
Fresh fluid milk	1044.26	10.55
Packed fluid milk	273.66	2.76
Powder milk	54.37	0.55
Total milk	**1372.29**	**13.87**
Cooking oil	602.61	6.09
Banaspati ghee	382.52	3.86
Total Fats	**985.12**	**9.96**
Black tea	**364.34**	**3.68**
White sugar	226.52	2.29
Brown sugar	20.02	0.20
Total sugar	246.54	**2.49**
Spices	**327.94**	**3.31**
Total	**9894.68**	**100.00**

Food Consumption, Calorie Intake and Poverty

According to (Table 9), an individual member (adult-equivalent) of the surveyed household takes food, yielding 2437.98 calories per day. The flour has the greatest contribution in calories intake, contributing 731.86 calories per day. Meats contribute 137.31 calories, vegetables 189.55 calories, rice 206.80 calories, pulses 185.67 calories, fruits 122.25 calories, 207.35 calories, fats 459.67 calories, sugar 152.79 calories, black tea 25.09 calories and spices19.65 calories.

Table 9: Estimated calories intake per capita per day

Particulars	**Per Capita Daily Food Consumption (gram)**	**Calories per 100 grams of food weight**	**Estimated calories per capita per day**
Flour	**210.30**	**348**	**731.86**
Beef	26.02	212	55.17
Mutton	8.57	178	15.26
Poultry	32.53	185	60.18
Fish	5.98	112	6.69
Total meat	**73.10**		**137.31**
Basmati rice	41.36	364	150.56
Rough rice	15.75	357	56.23
Total rice	**57.11**		**206.80**
Onions	45.06	41	18.47

Potato	45.32	81	36.71
Ladyfinger	29.05	31	9.01
Cauliflower	13.60	26	3.54
Pea	22.06	330	72.80
Spinach	20.17	31	6.25
Bitter gourd	11.66	19	2.22
Cucumber	12.84	15	1.93
Tomato	49.04	20	9.81
Carrot	7.82	37	2.90
Turnip	15.82	28	4.43
Eggplant	16.73	25	4.18
Calocacia	14.28	91	12.10
Cabbage	7.84	28	2.20
Radish	0.62	18	0.11
Sponge gourd	3.21	19	0.61
Loki	3.10	35	1.40
Total vegetables	**319.14**		**189.55**
Gram	13.24	357	47.26
Mung	8.99	361	32.44
Masoor	7.44	354	26.33
Beans	17.27	350	60.46
Chick Pea	4.70	357	16.79
Black Mung	0.24	361	0.86
Mash	0.42	363	1.52
Total pulses	**52.30**		**185.67**
Apple	33.38	58	19.36
Mango	38.24	64	24.47
Guava	21.96	78	17.13
Banana	28.78	108	31.09
Grapes	25.05	71	17.78
Watermelon	18.03	19	3.43
Orange	1.32	25	0.33
Peach	6.08	53	3.22
Apricot	2.67	53	1.42
Musk melon	17.48	23	4.02
Total fruit	**193.00**		**122.25**
Fresh fluid milk	162.50	106	172.25
Packed fluid milk	28.16	106	29.85
Powder milk	1.05	501	5.25
Total milk	**191.71**		**207.35**
Cooking oil	32.43	880	285.43
Banaspati ghee	19.36	900	174.24
Total fats	**51.80**		**459.67**
Black Tea	**8.65**	**290**	**25.09**
White Sugar	37.22	391	145.52
Brown Sugar	2.35	310	7.27
Total Sugar	**39.56**		**152.79**
Spices	**6.16**	**319**	**19.65**
Total			**2437.98**

Calorie intake and poverty line

The poverty line can thus be determined using the following formula.

PL = DCI/2350 (4.1)

Where PL = Poverty line

DCI = daily calorie intake

If PL > 1, it means the person is above poverty line; if PL= 1, the person is on poverty line and if PL < 1, then the person is below poverty line.

Using formula (4.1), we compute poverty line for the average calorie intake estimated.

PL = 2437.98/2350 = 1.04 (4.2)

On the basis of average calorie intake, the surveyed households are found, on average, a little above poverty line.

Poverty line, poverty-gap and poverty status of households surveyed

Since poverty line is a thin line, and people may drop from and go above this line with a slight change in food consumption and the resultant calorie intake, a more accurate measure of poverty estimates may be computed in terms of Poverty-Gap. Poverty-gap includes all population, which falls within a 2.50% above and 2.50% below poverty line already discussed. Those people who fall within a range of 5% above poverty-gap are called vulnerable-poor and those who fall within 5% range below poverty-gap are called transient-poor.

All those who fall below transient-poor category are referred to as Absolute-Poor and all those who fall above vulnerable-poor category are called Non-Poor. Following the above definitions, the poverty status of the households surveyed is re-estimated; results are provided in (table 10). Which shows that out of 400 households studied, 58.5% are above, 37% below, and 4.5% on the poverty line.

Table 10: Poverty estimates: further details

Category	**Households Number**	**Households In percentage**
Non-Poor	206	51.50
Vulnerable-Poor	17	4.25
Poverty-Gap	44	11.00
Transient-Poor	25	6.25
Absolute-Poor	108	27.00
Total	400	100

Sumary, conclusions and recommendations

Sumary

This study analyze the per capita food consumption and related poverty in Peshawar Valley, Faqirabad Area was selected. The average household size, based on 400 households is 7.77. An average adult equivalent takes 210.30 grams of flour, 73.10 grams of meat, 57.11 grams of rice, 319.14 grams of vegetables, 52.30 grams of pulses, 193.00 grams of fruits, 191.71 grams of milk, 51.80 grams of fats, 8.65 grams of black tea, 39.56 grams of sugar, and 6.16 grams of spices daily. Moreover, an average household spends Rs.9894.68 of their monthly income on food consumption.

On the basis of average calorie intake, the surveyed households are found, on average, a little above poverty line (PL= 1.04). On the basis of poverty status analysis, 4.5% of households fall on poverty line, 37% below poverty line and 58.5% above poverty line.

Conclusion and Recommendations

Results **c**oncluded that on the basis of average calorie intake, the surveyed households are found, on average, a little above poverty line (PL= 1.04). The poverty status of the households surveyed shows that out of 400 households studied, 58.5% are above, 37% below, and 4.5% on the poverty line. Amongst the 21.5% Poor, 4.25% are Vulnerable-poor, 11.00% fall with in the poverty band and remaining 6.25% are Transient-poor. The comparison shows that in most of the cases, food consumption has reduced due to price hike, so it is recommended that actions should be taken to either stabilize the prices by subsidizing the major food items or to increase the monthly incomes of households to help them increase food consumption. And at most half of the population under study is suffering from poverty, so policy makers and other involved should take a serious note of it and should apply some strategies to make the population better off.

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