



Policy, Advocacy and Outreach

SITUATION REPORT OF NUTRITIONAL STATUS OF SCHOOL GOING GIRLS IN FAISALABAD DISTRICT

Executive summary

Faisalabad, Pakistan's third-largest city, is located in the Punjab province and has a population of about 3.2 million people. It is a significant industrial and commercial center with a substantial agricultural sector. Despite its economic progress and prosperity, however, Faisalabad is afflicted by a large problem of poor nutritional condition among its population. The goal of this research is to assess Faisalabad's nutritional condition and make recommendations for resolving the problem of inadequate nutrition. The importance of nutrition is an undisputable aspect of human health and its deep rooted effects cannot be denied. It encompasses all aspects of human life starting from conception till the termination of pregnancy. It entails all processes of food, from access to food till its digestion and absorption. The term "nutritional status" can be defined as the ability of the body to assimilate, process, digest and absorb the food. The estimation of nutritional status can be done through anthropometric measurements, biochemical analysis, clinical signs and symptoms and dietary assessment. The accelerated growth during childhood demands adequate consumption of nutrient to avoid deficiencies. The World Health Organization analyzes the nutritional status of children as per Weight for height (wasting), Height for age (stunting) and Weight for age (underweight or overweight).

The inclusion criteria of this was public school going girls falling in the age group of 6-11 years. This study analyzed the anthropometric measurements and the dietary

history in general and consumption of food items from each food group in particular. Various factors which could potentially influence the nutritional status of the child were also checked. This included the education level of mother, father, family size and monthly income. This survey was conducted in Tehsil City and Tehsil Saddar of Faisalabad district.

PROBLEM STATEMENT

Poor nutritional status is a major issue in Faisalabad, with populations suffering from high rates of malnutrition, stunting, and micronutrient deficiencies. According to the National Nutrition Survey 2018, around 40.2 % children under the age of five are stunted in Pakistan , and 17.7% are wasted. Micronutrient deficits are very widespread, especially among women and children. Poverty, limited availability to good food, a lack of information about healthy eating, and cultural factors all contribute to the problem of poor nutritional status. It is critical to address this issue in order to improve health outcomes, reduce healthcare costs, and promote economic growth. Numerous factors influence an individual's nutritional status, notably that of youngsters. Some of the important elements are the family's socioeconomic situation, parents' educational status, nutritional knowledge and education, feeding practices, dietary choices, and maternal autonomy to make food choices for the child.

METHODOLOGY

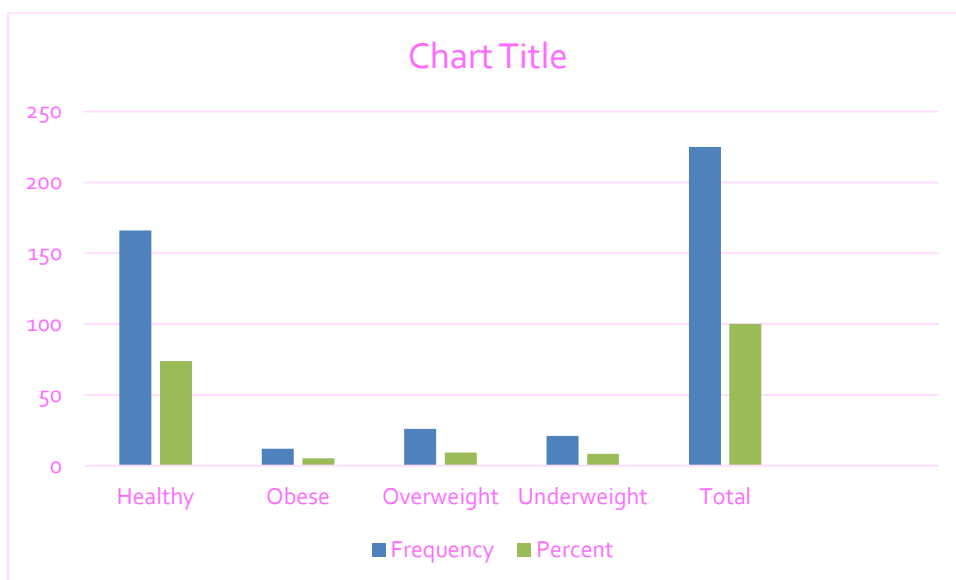
The height, weight, BMI, dietary record of children based upon food frequency questionnaire, demographic factors like age, family size, sleep cycle, number of meals consumed per day, the education level of parents and the monthly income level of parents were recorded. Comparison between the urban and rural areas were also made.

FINDINGS

Various factors which could potentially influence the nutritional status of children were analyzed such as the education level of parents, monthly income , the consumption of food items from six food group, the family size and number of children of that particular couple and the general food trends in families. However, the socioeconomic status and

the accessibility to food was founded to be the most influential factor on the nutritional status of children. The anthropometric measurements of children were done. Followings were the findings:

- **Based upon BMI**



- **Based upon food frequency**

Food items	Category	Residence		Chi-square value	p-value
		Rural	Urban		
Cereals	Once a day	9	6	11.72	0.020
	2-3 times per day	101	104		
	Once a week	2	3		
Milk	Never	4	3	9.97	0.040
	Once a day	88	92		
	2-3 times per day	4	6		
	Once a week	14	8		
	3-4 times per week	2	4		
Yogurt	Never	9	12	8.6	0.043
	Once a day	60	61		
	2-3 times per day	1	1		
	Once a week	29	22		
	3-4 times per week	9	15		

	2-3 times Per month	4	2		
Fruits	Never	3	4	14.88	0.031
	Once a day	49	54		
	2-3 times per day	2	1		
	Once a week	44	36		
	3-4 times per week	9	10		
	Once a month	2	4		
	2-3 times Per month	3	4		
Vegetables	Once a day	19	23	31.03	0.021
	2-3 times per day	90	86		
	Once a week	2	3		
Meat and meat products	Never	15	11	27.92	0.029
	Once a day	8	8		
	2-3 times per day	0	1		
	Once a week	44	52		
	3-4 times per week	19	17		
	Once a month	11	17		
	2-3 times Per month	15	7		
Egg	Never	9	4	44.03	0.012
	Once a day	36	40		
	2-3 times per day	5	2		
	Once a week	50	50		
	3-4 times per week	11	16		
	2-3 times Per month	1	1		
Nuts	Never	26	26	18.02	0.030
	Once a day	26	31		
	2-3 times per day	1	1		
	Once a week	35	41		
	3-4 times per week	4	4		
	Once a month	17	8		

	2-3 times Per month	3	2		
Dates	Never	26	24	25.65	0.046
	Once a day	28	31		
	2-3 times per day	0	3		
	Once a week	42	36		
	Once a month	13	17		
	2-3 times per month	3	2		
Bakery products	Never	18	19	28.44	0.026
	Once a day	34	45		
	2-3 times per day	2	1		
	Once a week	40	31		
	3-4 times per week	5	3		
	Once a month	9	9		
	2-3 times Per month	4	5		
Packaged Items	Never	16	17	27.12	0.107
	Once a day	44	57		
	2-3 times per day	3	2		
	Once a week	40	30		
	3-4 times per week	7	6		
	Once a month	2	1		
Fast food	Never	27	25	30.22	0.027
	Once a day	6	4		
	Once a week	46	46		
	3-4 times per week	3	2		
	Once a month	18	22		
	2-3 times Per month	12	14		

Variables	Levels	Residence		Chi-square	Odds ratio	95% C. I		P-value
		Rural	Urban			Lower	Upper	
Age	6.00	9	13	12.77	-	-	-	-
	7.00	22	18		2.18	1.65	2.91	0.014
	8.00	22	18		2.55	2.02	3.28	0.035
	9.00	15	9		3.53	3.00	4.26	0.015
	10.00	23	29		1.31	0.78	2.04	0.030
	11.00	21	26		2.89	2.36	3.10	0.107
Height (inches)	40 to 45	23	19	14.76	-	-	-	-
	46 to 50	28	35		1.23	0.70	1.96	0.032
	51 to 55	18	27		2.08	1.55	2.81	0.043
	56 to 60	43	32		2.49	1.96	3.22	0.020
Weight(Kg)	20 to 30	17	21	24.76	-	-	-	-
	31 to 40	43	40		1.79	1.26	2.52	0.029
	41 to 50	18	23		2.89	2.36	3.62	0.012
	51 to 60	34	29		2.04	1.51	2.77	0.012
Nutritional Status	Healthy	82	84	18.87	-	-	-	-
	Obese	6	6		2.78	2.25	3.51	0.046
	Overweight	12	9		2.08	1.55	2.81	0.026
	Underweight	12	14		2.37	1.84	3.10	0.107
Edu. of mother	Primary	36	40	15.87	-	-	-	-
	Secondary	24	35		1.99	1.46	2.72	0.029
	Tertiary	49	37		2.18	1.65	2.91	0.021
Edu. of father	Primary	34	34	12.77	-	-	-	-
	Secondary	36	35		1.577	1.094	2.351	0.037
	Tertiary	42	44		0.917	0.434	1.691	0.023
Income level	Low	28	31	14.76	-	-	-	-
	Medium	49	43		1.677	1.194	2.451	0.030
	High	35	39		1.867	1.384	2.641	0.022
No. of siblings	.00	2	6		-	-	-	-
	1.00	6	8		1.317	0.834	2.091	0.055

	2.00	13	12	24.76	2.007	1.524	2.781	0.040
	3.00	30	30		1.717	1.234	2.491	0.020
	4.00	37	32		1.737	1.254	2.511	0.032
	5.00	8	16		2.807	2.324	3.581	0.047
	6.00	8	7		2.207	1.724	2.981	0.024
	7.00	6	2		2.857	2.374	3.631	0.044
	8.00	2	0		2.157	1.674	2.931	0.047
No. of family members	3.00	1	1	18.87	-	-	-	-
	4.00	7	6		2.467	1.984	3.241	0.025
	5.00	16	30		3.377	2.894	4.151	0.033
	6.00	38	25		2.007	1.524	2.781	0.016
	7.00	7	16		1.937	1.454	2.711	0.016
	8.00	11	9		3.177	2.694	3.951	0.034
	9.00	8	4		1.807	1.324	2.581	0.05
	10.00	5	8		2.457	1.974	3.231	0.03
	11.00	2	2		2.377	1.894	3.151	0.111
	12.00	3	1		3.827	3.344	4.601	0.031
	15.00	4	1		4.557	4.074	5.331	0.029
	16.00	4	0		2.207	1.724	2.981	0.04
	20.00	3	7		3.557	3.074	4.331	0.026
	21.00	2	1		3.567	3.084	4.341	0.047
	28.00	1	2		2.297	1.769	3.026	0.0127

ANALYSIS

The current nutritional situation in Faisalabad is cause for concern. Malnutrition, stunting, and micronutrient deficiencies are common, especially among vulnerable groups including women and children. A variety of factors contribute to this problem, including poverty, limited availability to good food, a lack of information about healthy eating, and cultural influences.

A variety of policy actions are required to address this issue. First and foremost, nutrition education must be promoted through schools, health centers, and community-based programs. This instruction should emphasize the necessity of a well-balanced diet, the advantages of healthy eating, and how to obtain nutritious foods. Second, more healthful food should be available. This can be accomplished by providing assistance to local farmers, establishing community gardens, and promoting healthy food options in schools and workplaces. Finally, community-based nutrition efforts such as women's organizations and community kitchens must be supported.

RECOMMENDATIONS

Based on the information presented in this paper, the following measures are offered to remedy Faisalabad's poor nutritional status:

- Nutrition education should be promoted through community-based programs, schools, and health centers. This should emphasize the significance of a well-balanced diet, the advantages of healthy eating, and how to obtain nutritious food
- Improve access to healthy food through supporting local farmers, establishing community gardens, and promoting healthy food options in schools and workplaces
- Support community-based nutrition initiatives such as women's clubs and community kitchens.
- Improve nutritional status monitoring and evaluation in Faisalabad to track progress and identify areas that require additional attention

- Support community-based nutrition initiatives such as women's clubs and community kitchens

CONCLUSION

In conclusion, low nutritional status is a major issue in Faisalabad, with high rates of malnutrition, stunting, and micronutrient deficiencies among its population. A variety of reasons contribute to the problem, including poverty, limited availability to good food, a lack of information about healthy eating, and cultural factors. To address this issue, a comprehensive approach is necessary, comprising a variety of policy interventions targeted at encouraging nutrition education, increasing access to nutritious food, and supporting community-based nutrition projects. The proposed proposals provide a framework for action and necessitate the participation of a wide range of stakeholders, including government agencies, non-governmental organizations, and community-based organizations.