



## Nutritional Status, Knowledge, and Dietary Practices among Women in Amaltari, Nawalpur

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### Abstract

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Malnutrition, which is a big problem in Nepal, and lack of quality of diet are the challenges that have created problems for women living in rural areas because they are the main people who prepare food, and all members of the family eat the food prepared by them, and the health of the family depends on them. In this regard, a descriptive cross-sectional study was conducted in Kawasoti 17 Amaltari, Nawalpur, with the aim of studying the nutritional knowledge, perception, and eating behaviour of rural women. Convenience sampling was used to recruit participants aged 15-79 years. A total of 120 women were interviewed with a structured interview schedule adopted from FAO guidelines and prior Nepali surveys. Participants were predominantly aged 30-39 years (37.5%), with most having secondary education (48.33 %) and normal BMI (70.83%). The primary data obtained from that study were analyzed using the SPSS version 16 program. According to the respondents, 90% of people in that community thought they would adopt non-vegetarian food for taste (43.33%), nutrition (21.66%), or as a source of strength (21.66%). To improve people's balanced food intake and reduce malnutrition, education should not only work but also be culturally sensitive, and if community-based awareness programs are conducted, similar food consumption habits and misconceptions in rural areas can be addressed.

*Keywords:* nutritional knowledge, dietary habits, malnutrition, cultural beliefs, balanced diet



## **Introduction**

In low-income countries like Nepal, nutritional status is a major public health challenge. Weak communities living in rural areas of Nepal seem to be at high risk of malnutrition, especially among women, children, and people from poor communities. It is customary to prepare food for families of all age groups at home, but when they eat food in that way, it is not suitable for children and the elderly, because such food cannot fully obtain nutrients. The kitchen is important for the health of the family, the health condition of the women working in the place, the scientific approach, the modern wrong eating habits, which determine the health of the whole family, not only the individual. For this reason, this study has been conducted in Ward No. 17, Amaltari, Nawalpur.

According to the American Medical Association's Food and Nutrition Board, nutrition is the science of food. It includes nutrients and other substances, the interaction of those food elements with health and disease, and the processes of animal digestion, digestion and absorption in the intestines, and transport to the blood. The English word nutrition is derived from the Latin word 'nutriri', which means 'to nourish' the body. Nutrition can also be traditionally understood as the science of the relationship between food and health. Nutrition includes not only the biological use of food, but also dietary patterns and patterns that are influenced by psychological, socio-economic, and environmental factors caused by food. Consumers perceive foods labeled as plant-based best or organic foods to be healthy, tasty, and good. But the mixed elements in it cannot be said to be all good, and can be bad. (FAO, 2018). A balanced diet plays an important role in children's physical, social, and cognitive development (Karkee et al., 2014). Pregnant women, women planning to become pregnant, infants, young children, breastfeeding mothers, lactating mothers, and children under five years of age, as well as growing adolescents, require nutritious food that provides protein, fat, carbohydrates, and various vitamins and minerals (Victora et al., 2008). Poor nutrition can weaken a person's immune system, making it less effective in fighting disease (Bhutta et al., 2008; Martorell et al., 2010).

Nutritional problems have emerged as a major health problem in developing countries (Kraemer, 2014; UNICEF, 2012). In general, malnutrition is a serious health problem caused by not eating enough food, not being able to eat it, or not eating the right amount and type of healthy food, and not having access to proper food (UNICEF, 1990; WFP, 2012a; WFP,



Malnutrition is more prevalent in developing countries and especially in low-income communities (Kraemer, 2014; UNICEF, 2012; NDHS, 2022). Malnutrition is especially common in communities affected by natural disasters such as drought, landslides, heavy rains, and earthquakes (Jha, 2010). Apart from these, other causes of malnutrition include poor child care practices, inadequate sanitation, food insecurity, and inadequate health services (UNICEF, 1990). Lack of physical infrastructure, inadequate knowledge about nutritious food, poor economic conditions, unfavorable political conditions, civil war, and incorrect cultural beliefs also contribute to malnutrition (Smith, 2000).

According to a 2025 screening program conducted across nine municipalities in Kanchanpur district, Nepal, involving 3,252 children aged 6-59 months, the prevalence of underweight was 19.3% (girls: 19.83%, boys: 18.9%), and stunting was observed in 17.02% of the children (boys: 17.2%, girls: 16.7%) (Mishra, 2025). According to a recent study (MoHP et al., 2022) report, comparing the 2016 and 2022 reports, the current underweight rate has decreased from 27% to 19%, and wasting has decreased from 10% to 8%.

Sultana et al.,(2023) revealed that among the surveyed rural women, 51.22% demonstrated the highest level of knowledge about food and nutrition, while 31.71% had low knowledge, and 17.07% had no knowledge at all. Additionally, 27% of these rural women expressed a need for training to tackle nutrition-related challenges. Comparable findings have been noted in prior research (Gupta et al., 2011; Rai et al., 2017 ).

On the other hand, unnecessarily refined foods are available in the market, and because of the taste, children and parents are more accustomed to such unnatural foods than to our natural foods (Pandey, 2026). Malnutrition has become a major challenge due to the lack of essential nutrients. Due to this, obesity is also increasing in childhood (Hall et al., 2019).

After reviewing the literature, there is no study of women working in kitchens in rural areas regarding their knowledge of food and its operation, their perceptions, and the activities they do during the daily preparation and feeding of food. Therefore, this study has attempted to elucidate the knowledge, perceptions, and activities related to food in rural communities.

### **Method**

The descriptive research method was employed in this study, which involved creating an interview schedule, conducting interviews, and analyzing and presenting the data obtained from them. Although mainly numerical data were collected in this study, some things were qualitative, including the expressions given by the respondents during the interview. Because



complete and in-depth analysis (Lingard, 2008). This study examines the importance of nutritious food, the benefits and results of a healthy diet, recommended foods for a healthy diet, and the problems in the body caused by unhealthy food.

In this study, the Kawasoti-17 Amaltari area under Kawasoti Municipality has been selected. Although this area is defined as an urban area, various wards of Kawasoti do not meet the criteria of an urban area. Kawasoti-17 is a rural area where most of the population lives in rural villages. The current study was conducted in Kawasoti-17 Amaltari village, which is 15 kilometers south of the main town, Kawasoti Bazaar. This area is most suitable for the study as it has small communities of Bote, Dalit, Janajati, Brahmin, and Chhetri. This area has been selected as the survey area as it can be used to study the food and nutritional habits of various mixed castes.

This study was conducted in only 120 households out of a total of nearly 200 households in the Amaltari community of Kawasoti-17. From the above 200 enumeration areas, 120 eligible households were selected. A total of 120 women aged 15–79 years were included in this study. The study included women who worked in the kitchen. The participants for this study were contacted by the researcher at their homes.

The selection of respondents to participate in the study was based on the convenience sampling method. The rule was that a household must have at least one member of the target group to be studied. The sampling process could not be randomized due to the lack of a complete sampling frame.

Data were collected by meeting only respondents who were willing to participate in the study and by asking the questions listed in the interview schedule. For those who could fill out the form, they were also given the option to complete it themselves.

A two-part interview questionnaire was constructed to collect detailed information on the demographic characteristics of the respondents, In relation to family details and respondents' characteristics, questions related to age, gender, education, religion, caste, BMI, land, and family income were asked, as well as questions to food and nutrition-related knowledge and practices such as their eating habits, beliefs about food, and values were prepared based on the guidelines of FAO, 2014.

Similarly, studying the detailed knowledge of food and nutrition topics, such as eating habits and trends at different times, was also included in the interview schedule. The interview schedule prepared in this way was tested in five nearby households for pre-testing,



2004, as well as sample questions from the Ethiopian Demographic and Health Survey 2005, the Nepal Demographic and Health Survey 2006, and the Jajarkot Nutrition Survey 2008, were also pre-tested, and an improved interview schedule was developed.

The researcher went to each respondent's home and conducted the interview. Before conducting the interview, consent was also taken, keeping in mind confidentiality. The respondents were prepared for the interview only after being assured that the data collection in this way would only be used for research purposes and would not violate confidentiality. In spite of this, some of the respondents denied that they would give an interview. During the interview, the respondent was given the right to withdraw. It was agreed that if the respondent was not willing to give an interview or if the respondent did not meet the criteria for various reasons, the researcher would go to another house for the study. Also, to take BMI before the interview, the height was measured using a tape measure to determine the BMI of the respondent, which was converted into square meters, and the BMI was taken from the weighing machine. Only after that was the interview conducted. The interview schedule was revised and finalized after discussing with the health workers, female community health volunteers, and food experts. The data were collected by directly meeting only the respondents who were willing to participate in the study and asking the listed questions in the interview schedule. For those who could fill out the form, they were also given the option to complete it themselves.

This descriptive research was conducted to investigate the knowledge, perception and habits related to food and nutrition of women working in the kitchen. After collecting the data on the basis of the carefully prepared interview list, it has also been carefully analyzed. The data was analyzed and interpreted using SPSS version 16 and statistics software.

The researcher liaised with local authorities to further manage the survey area, work ethically at the local level, and support data collection proposed by the community. The researcher established relationships with Kawasoti Municipality, Kawasoti-17 Ward Office, Kumarvarti Health Post, and FCHV to create a conducive environment in the survey area.

The respondents who wanted to participate in this study were first informed about the study method, purpose, procedure, and information to be collected. During the interview, they were given complete freedom to answer in a voluntary manner and to opt out at any time. Answers received from the respondents were assured to be strictly confidential, not to be published anywhere, and the information given by them would not be disclosed. Also,



Limitations of this study include interviews with women who were easily accessible and mostly worked in kitchens. Therefore, the results should not be generalized to all Nepali women or food handlers. The information obtained from the interviews with a total of 120 women included in the study cannot be considered representative of the entire region, as this is a small sample size. BMI was measured solely to assess general nutritional status and was not subjected to any further analysis or interpretation.

**Results**

The research title "Nutritional Status, Knowledge, and Dietary Practices among Women in Amaltari, Nawalpur" and the study achieved the anticipated outcomes, as outlined below-

**Participation rate**

Over 170 households were contacted, with 120 respondents agreeing to participate. All 120 completed the interview, yielding a participation rate of 71%.

**Socio-demographic characteristics of respondents**

The socio-demographic details of the participants are presented in Table 1.

**Table 1**

*Socio-Demographic Characteristics of Respondents*

Age group (years)	n (%)	Education level	n (%)	Occupation	n (%)
15-19	10 (12.0)	Illiterate	12 (10.0)	Student	52 (43.33)
20-29	27 (22.5)	Basic	13 (10.83)	Service	4 (3.33)
30-39	45 (37.5)	Primary	27 (22.5)	Agriculture	5 (4.16)
40-49	25 (20.83)	Secondary	58 (48.33)	Housewife	32 (26.66)
50-59	5 (4.16)	Higher level	10 (8.33)	Business	2 (1.66)
60-69	6 (5.0)			Labour	15 (12.5)
70-79	2 (1.66)			Unemployed	10 (8.33)
<b>Total</b>	<b>120 (100)</b>	-	<b>120 (100)</b>	-	<b>120 (100)</b>

All 120 respondents were women. of the total participants, 12.0% were under 20 years old, 22.5% were aged 20-29 years, 37.5% were aged 30-39 years, 20.83% were aged 40-49 years, 4.16 % were 50-59 years, 5.0 % were 60-69 years, and 1.66 % of 70 years and above. Among these ages, women aged 30-39 were the most likely to work in the kitchen, while women over 70 were the least likely to be responsible for kitchen work. When



not studied or are illiterate, 10.83% have studied basic level, 22.5% have studied primary level, 48.33% have studied secondary level, and 8.33% have studied higher level. Among them, 43.33% were students, 3.33% were working in an organization's job, 4.16% were doing agriculture, 26.66% were total housewives, 1.66% were involved in business, 12.5% of the respondents said they were doing labour work, and 8.33% were unemployed.

Summarizing the results of this table, women involved in kitchen work were selected as respondents in this study sample. The highest age group among the respondents was women aged 30 to 36 years. Most of them studied at the secondary level. From this, rural women in Nepal are more responsible for household kitchen work.

**Table 2***Other Characteristics of the Respondents*

Age group	Marital status		BMI Weight/H eight (m) <sup>2</sup>	n. (%)	Religion		Ethnicity	
	Married n. (%)	Unmarried n. (%)			Variable	n (%)	Variable	n (%)
15-19	4	6	< 18.5	2 (1.66)	Hindu	97 (80.83)	Brahmin	25 (20.83)
20-29	35	2	18.5-24.99	85 (70.83)	Buddhist	2 (1.66)	Chhetri	38 (31.66)
30-39	70	-	25-29.99	21 (17.5)	Christian	21 (17.5)	Janajati	27 (22.5)
40-49	3	-	30-34.99	7 (5.83)			Dalit	30 (25.0)
50 +	-	-	35-39.99	5 (4.17)				
<b>Total</b>	<b>112 (93.33)</b>	<b>8 (6.66)</b>	<b>-</b>	<b>120 (100)</b>		<b>120 (100)</b>		<b>120 (100)</b>

Table 2 presents the demographic and health-related characteristics of the 120 respondents. In this table, the details about the age, marital status, BMI, religion, and caste of the respondents are kept, which shows that the respondents are especially from the Chhetri and Dalit population, and all of them have a normal BMI. In this table, under the age group,



married women in the age group of 30 to 36 years are the most, followed by 35 married women and two unmarried women in the age group of 20 to 26 years.

Similarly, four married and six unmarried respondents aged 15 to 16 years are seen. Three respondents aged 40 to 46 are married, and five are above 50 years. When analyzing the marital status, 63.33% respondents are married, and 6.66% are single. Similarly, when analyzing the BMI, 70.83 % or 85 respondents were found to be normal, 5.83% or 7 were obese, and 4.17 or 5 were obese. Analyzing the religious situation, 97% are Hindus, 17.5% are Christians, and 1.66% are Buddhists. Similarly, the table shows that there were Dalit 25%, Tribal 22.5%, and Brahmin 20.83% were found in the study, while no other caste was present in that community.

To sum it up, respondents included married Hindu women, Chhetri, Dalit, and Tribal groups. Among them, most of the respondents were in the age group of 30-36 years and had a normal BMI.

**Table 3**

*Socio-Economic Conditions of the Respondent's Family*

	Description	n	%
<b>Own house</b>	Yes	120	100
	No	0	0
<b>Types of houses</b>	Permanent	62	51.66
	Semi-permanent	35	29.16
	Temporary	23	19.16
<b>Personal land</b>	Yes	115	95.83
	No	5	4.16
<b>Area of land</b>	Below 10 Kattha	80	66.66
	10 Kattha-1 Bigaha	22	18.33
	Over 1 Bigaha	10	8.33
	Unknown	8	6.66
<b>Plenty to eat</b>	Below 6 months	5	4.16
	Up to 6 months	65	54.16
	6 month-1 year	42	35.0
	Unknown	8	6.66
<b>Source of family</b>	Abroad	55	45.83



<b>income</b>	Agriculture/animal husbandry	59	49.16
	Job	4	3.33
	Business	2	1.66
<b>Monthly income</b>	20-50 thousand	73	60.83
	50 thousand-1 lakh	8	6.66
	Over 1 lakh	39	32.5

The socio-economic status of the households is presented in the given table number 3. According to the table, all households have their own houses, 51.66% of them are concrete houses, 26% are semi-detached houses, and 10.83% are temporary houses, while 8.33% of people live in simple houses. As presented in the table, 65.83% of the families have less than 10 katthas of land, 18.33% have 10 katthas-1 bigaha, and 8.33% have more than one bigaha of land. Similarly, 54.16% of families have land that is enough to eat for six months, 35% have land that is enough to eat for 6 months-1 year, and 4.16% of families have land that is enough to eat for less than six months.

When it comes to the family's economic resources, 46.16% of people depend on agriculture and animal husbandry, and 45.3% of families depend on income from abroad. Statistics show that only 3.33% of families depend on jobs, and only 1.66% earn from business. The monthly income distribution shows that 60.83% of individuals earn between 20,000 and 50,000, 6.66% earn between 50,000 and 1 lakh, and 32.5% earn over 1 lakh.

**Table 4***Level of Nutritional knowledge*

	Description	n.	%
<b>Knowledge about food and nutrition</b>	Food and nutrients	28	23.33
	Energy obtained after eating food	68	56.66
	All types of edible food, which, after eating, go into the body and provide energy to the body	15	12.5
	All edible food is called food, and the science that studies its digestion, utilization, and excretion after eating is nutrition.	9	7.5
<b>Knowledge about foods containing the most nutrients</b>	Rice, bread, cereals	12	10.0
	Nuts and legumes	3	2.5
	Green vegetables and fruits	35	29.16
	Fish, meat, eggs	63	52.5
	Milk, curd, ghee, and fat	7	5.83
<b>Respondent's opinion about eating fruits or vegetables every day</b>	Yes	105	87.5
	No	15	12.5
<b>Why should we eat fruits or vegetables daily?</b>	Keeps a person healthy	49	40.83
	Keeps a person from getting sick	38	31.66
	Gives strength	25	20.83
	Keeps the stomach clean	8	6.66
<b>Knowing about the main symptoms of malnutrition</b>	The body becomes wasting, weak, or emaciated	27	22.5
	Not eating and crying	35	29.16
	Appearing emaciated or scaly	46	38.33
	Persistent skin problems, diarrhoea, and illness such as pneumonia	12	10.0

Data presented in table 4 shows the nutritional knowledge of respondents, and their understanding of food and nutrition. Regarding knowledge about food and nutrition, 56.66% associate it with energy obtained after eating, 23.33% link it to food and nutrients, 12.5% view it as edible food providing bodily energy, and 7.5% define it as the science of digestion, utilization, and excretion of food. When identifying foods with the most nutrients, 52.5% cite fish, meat, and eggs, 29.16% mention green vegetables and fruits, 10% point to rice, bread, and cereals, 5.83% indicate milk, curd, ghee, and fat, and 2.5% choose nuts and legumes. A



strong 87.5% of respondents believe in eating fruits or vegetables daily, with 40.83% stating it keeps a person healthy, 31.66% noting it prevents illness, 20.83% saying it provides strength, and 6.66% mentioning it keeps the stomach clean. On malnutrition symptoms, 38.33% identify appearing emaciated or scaly, 29.16% note not eating and crying, 22.5% mention wasting, weakness, or emaciation, and 10.00% cite persistent skin problems, diarrhea, and illnesses like pneumonia. Overall, in this table, it appears that the respondents give high priority to protein-rich foods compared to the vegetables and fruits they eat daily. There is a level of understanding that they give less priority to the importance of vegetables and fruits and put more emphasis on foods such as fish and meat.

Table 5 presents details about the daily eating habits of the respondent's family. 89.16% eat the main meal twice a day, while 9.16% eat the main meal three times a day. Similarly, very few, i.e., 1.66%, eat only one main meal a day. It has been found that 78.33% of the respondents' families eat snacks only once a day, 18.33% eat snacks twice, and only 3.33% eat snacks three times a day.

Therefore, based on the details in this table, the number of people who eat the main meal twice and snacks only once is higher in those families.

**Table 5**

*Eating Practices*

Description	Meal time a day	n	%	
<b>Time to eat food</b>	Main meal time	One	2	1.66
		Two	107	89.16
		Three	11	9.16
	Snacks time	One	94	78.33
		Two	22	18.33
		Three	4	3.33

Accordingly, Table 6 presents the main meals consumed by the respondents and their families and the timing of meals. In the mentioned table, it can be seen that rice, bread, and cereals are always eaten by everyone, or 100%, while pulses are eaten by 15% always, 56.66% sometimes, 18.33% eat them often, and 7.5% eat them once a week. 5% always eat green vegetables, salad, pickles, and fruits, 62.5% sometimes, 25% eat often, and 1.66% only eat them once a week. It is found that 10% eat milk curd, ghee, and other dairy products always, 43.33% sometimes, 29.16% occasionally, and 13.33% eat it once a week. 35.83% eat



food like meat, fish, and eggs always, 42.5% eat it sometimes, 11.66% eat it occasionally, and 6.66% eat it only once a week. As mentioned in the presented table, 2.5% never eat pulses and legumes, 5.83% never eat green vegetables and fruits, 4.16% never eat dairy products, and 3.33% never eat fish and meat.

Thus, as presented in table 6, for the main food, the respondent's households are mostly dependent on grains, which are consumed all the time, other food groups, pulses, and vegetables. This table highlights a staple reliance on cereals for lunch, with varied consumption patterns for other food groups, particularly pulses and vegetables, which are more frequently consumed on an occasional basis.

**Table 6**

*Types of Food Eaten as Lunch*

S.N.	Food item for lunch	Always n. (%)	Sometimes n (%)	Often n (%)	Once a week, n (%)	Never n (%)
1.	Rice, bread, or cereal items	120 (100)	0	0	0	0
2.	Pulses items	18 (15)	68 (56.66)	22 (18.33)	9 (7.5)	3 (2.5)
3.	Fruits, green vegetables, salads, and pickled items	6 (5)	75 (62.5)	30 (25)	2 (1.66)	7 (5.83)
4.	Milk, curd, and ghee items	12 (10)	52 (43.33)	35 (29.16)	16 (13.33)	5 (4.16)
5.	Fish, meat, and egg items	43 (35.83)	51 (42.5)	14 (11.66)	8 (6.66)	4 (3.33)

**Table 7**

*Types of Food Eaten for Dinner*

S.N.	Food item for dinner	Always n (%)	Sometimes n (%)	Often n(%)	Once a week, n (%)	Never n(%)
1.	Rice, bread, or cereal items	120 (100)	0	0	0	0
2.	Pulses items	5 (4.16)	82 (68.33)	8 (6.66)	2 (1.66)	23 (19.16)
3.	Fruits, green vegetables, salads, and pickled items	5 (4.16)	92 (76.66)	3 (2.5)	0	20 (16.66)
4.	Milk, curd, and ghee items	2 (1.66)	95 (79.16)	5 (4.16)	0	18 (15)
5.	Fish, meat, and egg items	17 (14.16)	63 (52.5)	20 (16.66)	18 (15)	2 (1.66)



Table 7 presents the main meals or dinner consumed by the respondents and their families, and the timing of meals. In the mentioned table, it can be seen that rice, bread, and cereals are always eaten by everyone, or 100%, while pulses are eaten by 4.16% always, 68.33% sometimes, 6.66% eat them often, and 1.66% eat them once a week. 4.16% always eat green vegetables, salad, pickles, and fruits, 76.66% sometimes, 2.5% eat often, and 16.66% never eat them. It is found that 1.66% eat milk curd, ghee, and other dairy products always, 79.16% sometimes, 4.16% occasionally, and 15% never eat them. 14.16% eat food like meat, fish, and eggs always, 52.5% eat it sometimes, 16.66% eat it occasionally, and 15% eat it only once a week, and 1.66% never eat it.

This table indicates a strong reliance on cereals for dinner, with other food groups like pulses, vegetables, and dairy consumed less frequently, often only occasionally, and a significant portion of respondents avoiding these items entirely.

In addition of this, Table 8 presents the details of respondents' cultural influence on food. According to this table, 90% of the people in that community were non-vegetarians and only 10% were vegetarians. The reasons for being non-vegetarians, and giving more importance to meat were 43.33% who answered that they eat it because everyone likes it and it is delicious, 11.66% who answered that it is easily available, 21.66% who said that eating it makes them strong, 18.33% who answered that it contains many nutrients and 5.00% who said that it is the current trend. Similarly, there were 3.33% who always included fruit and salad in their meals and snacks, 10.00% who consumed them only occasionally, 8.33% who consumed them twice a week, and 78.33% who did not use them much. When asked about the reasons for not using fruit or salad for meals and snacks, 16.66% answered that it is not easily available, 12.5% answered that they do not want to eat it, 23.33% answered that it is expensive to buy, 20.83% said that they are not satisfied by eating it, 16.66% said that this food is cold, and 10.00% answered that such food is eaten by patients. Fasting is practiced by 18.33% (22 respondents), mainly for weight loss (12.5%) or faith in God (3.33%), while 81.66% (98 respondents) do not fast. The table highlights a strong inclination toward non-vegetarian diets and limited incorporation of fruits and salads, shaped by practical, economic, and cultural factors.

**Table 8***Cultural Influences on Nutritional Food*

S.N.	Description	n (%)
1.	Food preferences in the family	Vegetarian 12 (10)
		Non-vegetarian 108 (90)
2.	Reasons for non-vegetarian food preference	It is delicious and everyone likes it 52 (43.33)
		It is easily available 14 (11.66)
		It gives strength 26 (21.66)
		It contains more nutrients 22 (18.33)
		It is a trend 6 (5)
3.	Eating habits of fruits and salads at meals or snacks	Always 4 (3.33)
		Sometimes 12 (10)
		Once/twice a week 10 (8.33)
		No preference 94 (78.33)
4.	Reason for not including fruits and salads in the diet	It is not available 20 (16.66)
		No one wants to eat it 15 (12.5)
		It costs more to buy 28 (23.33)
		It is not satisfying 25 (20.83)
		It is cold 20 (16.66)
		Fruits are foods that can be eaten by the sick 12 (10)
5.	Fasting and its reason	Number of the fasting population 22 (18.33)
		No fasting population 98 (81.66)
6.	Reason for fasting	Faith in God 4 (3.33)
		To lose weight 15 (12.5)
		To soothe the stomach 1 (0.83)
		family tradition 2 (1.66)

**Discussion**

This study was conducted to identify nutrition and food practices of women working in the kitchens of rural families, and to assess the impact of social, cultural, and economic factors on it.



According to the study, almost respondents' families prefer non-vegetarian food. The reasons for this are the sweet taste, physical strength and the high amount of nutrients. This finding is consistent with the findings of (Kwol et al., 2020). that In the rural areas of Nepal, priority is given to eating more grains. Most of the people in the community eat more rice and fewer vegetables and fruits (Subedi, 2002 & Shakya, 2006). Majority of respondents believe that non-vegetarian foods as more nutritious and energy-providing than vegetarian food. Reason for this may be due to their social and cultural norm and influences.

The summary of the data analysis conducted in this study appears to be consistent with the results of the 2022 Nepal Demographic and Health Survey. While households in rural areas have more dietary diversity compared to residents in urban areas, the likelihood of malnutrition is also higher. Also in this study, it was found that the people of the community maximize the use of grains in the morning and evening meals, but reduce the use of fruits and vegetables, including pulses, so there is a lack of a balanced diet. As a result, stunting and underweight are more common among children in rural communities than the national average. For instance, the heavy reliance on cereals (100% for both lunch and dinner in this sample) and low preference for fruits/vegetables (78.33% showing no preference) mirrors rural disparities in stunting (31%) and underweight prevalence, which exceed national averages of 25% and 19%, respectively (MOHP et al., 2023). Cultural beliefs (e.g., fruits as "cold" or suitable only for the sick) and economic barriers (e.g., cost and availability) likely contribute to these gaps, emphasizing the need for localized, culturally sensitive interventions in rural places like Amaltari.

In this way, due to food shortages in rural Nepal, reliance on grains and a lack of priority for fruits and vegetables, problems are more visible among children here. People living in rural areas of Nepal believe that fruits get sick due to cold and an imbalance between heat and cold. So that it may be in the state of childbirth, be it in the state of a child, be it in the time of any problem or illness, vegetables and fruits do not seem to be given much priority. In the same way, 10.00% of the opinion that fruits or vegetables are suitable for patients, and 18.33% of people in rural areas have a lack of nutrition knowledge. The study found that 10% of participants were illiterate and 48.33% had reached a maximum of secondary education. Additionally, poor economic status was associated with malnourishment in 60.83% of the sampled population.

The key points recommended here will contribute to establishing the value of fruits, vegetables, and micronutrient-rich foods due to community food values, beliefs, and socio-cultural influences, and eliminate the confusion between hot and cold foods. It is necessary to



provide special training to female community health volunteers, local health workers, school teachers, etc., in nutrition education and nutrition promotion, and send them to villages for nutritional awareness.

Since this study has a small sample group of only 120 people, the results obtained from it cannot be applied to the entire population of Nepal. However, it seems necessary to address misconceptions and conduct awareness programs, such as nutrition education in Nepal.

The attention of the local bodies should be drawn to provide nutrition education to the health workers and female community health volunteers working in the local health institutions, and mobilize them in the rural areas by bringing a special program on nutrition. In addition, the local government should be responsible for expanding such studies and research to other communities and carrying out more research activities. Likewise, it is necessary to conduct kitchen and garden consulting services in coordination with various agricultural agencies. In the same way, to benefit the families who depend on grains for their morning and evening meals, and to ensure that everyone eats a balanced diet. It is necessary to train the students from an early age by keeping the subject of agriculture, food, and nutrition in the local curriculum, strengthening the market, and training farmers for the modern practice of farming. In this way, it is necessary for everyone to be responsible for changing the knowledge and behavior of women working in kitchens related to food and nutrition, and finally improving health indicators.

### **Conclusion**

It is felt that the study on nutrition-related knowledge and behavior among rural women in Kawasoti-17, Amaltari, Nawalpur, is highly relevant in the contemporary context. In this study, the knowledge and perceptions of women working in kitchens regarding nutrition, as well as social, cultural, and religious influences on eating habits and food practices, are linked to the process of empowering a particular food. Respondents associate nutrition with energy provision and recognize green vegetables and fruits as sources of strength. In the same way, there is an opinion that breakfast and evening meals should be eaten regularly, given the recognition of food that gives strength to rice and bread. In the same way, most of the respondents' preference for a non-vegetarian diet is given priority, which is similar to prior research.



Similarly, fruits and vegetables are considered to be cold food. Respondents' practice of fasting is found in the community, which is considered a cultural belief. Overall, this study finds that the lack of balanced food in rural areas of Nepal and beliefs about food have led to the risk of malnutrition in the future, where low dietary diversity contributes to high rates of stunting and wasting among children.

To conclude the overall study, it is necessary to raise public awareness about nutrition in rural areas to identify the situation in order to address problems such as malnutrition in rural Nepal. Similarly, to solve the problem by engaging the multi-faceted sector to increase complete literacy, reduce economic and behavioral barriers, protect cultural contexts, provide knowledge about nutrition to the women of the household, and it is important to teach practical skills of cooking and eating food in the home environment. Such efforts increase nutrition literacy, reduce economic and other behavioral barriers, and respect cultural aspects. In this way, in general, problems such as malnutrition stemming from misconceptions, limited knowledge, and a lack of balanced food at the rural level will improve and help reduce the rate of malnutrition in Nepal.

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