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Consumption pattern and knowledge related to ill effects of Salt Tea (Noon Chai) among rural dwellers in Kashmir

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Abstract
Kashmiri Noon Chai is the famous Pink Tea from Kashmir. The consumption of Noon chai is considered one of the factors contributing to gastric cancer in Kashmir. In this study an attempt is made to find out the consumption pattern of salt tea (Noon Chai), its different methods of preparation and to check awareness among people related to its ill-effects (rural people). A Structured questionnaire along with face-to-face interviews was used to elicit the data. The data was collected on tea drinking, including usual quantity consumed per day, drinking temperature, addition of sodium bicarbonate, salt, or milk as ingredients, the use of samovar or other vessels to prepare, boil, or serve salt tea and consumption. it was seen that the percentage of regular drinkers was higher (79.36%) than occasional salt tea drinkers 17.46% and the percentage of those who never drink was very low (3.17%).Majority of the respondents have habit of having salt tea in the morning (77.77%). Most of the respondents prefer to have 2-3 cups/day which corresponds to 79.36% and 2g/cup of sodium chloride with total percentage of 47.61. Around 69.84% know the fact that dietary modification can decrease the risk of gastric cancer and most of the respondents (88.8%) know the fact that high salt content raises blood pressure and leads to hyper tension.

Keywords: noon chai, frequency, cancer, consumption pattern, preparation, boiling

Introduction
Tea is an aromatic beverage commonly prepared by pouring hot or boiling water over cured leaves of the *Camellia sinensis*, an evergreen shrub native to Asia. Some teas, like Darjeeling and Chinese greens, have a cooling, slightly bitter, and astringent flavor, while others have vastly different profiles. Tea originated in China as a medicinal drink. It came to the West via Portuguese priests and merchants and introduced it during the 16th century. Drinking tea became fashionable among British during the 17th century, who introduced the plant to their possessions in India to bypass a Chinese monopoly. The British brought Chinese seeds into Northeast India, but the plants failed; they later discovered that a different variety of tea was endemic to Assam and the northeast region of India and that it was used by local tribes [1]. Kashmiri Noon Chai is the famous Pink Tea from Kashmir. However, this tea is not sweet in its flavor. It is salty to taste and different from other varieties of teas available in other parts of world. Noon chai is also called pink chai (because of its pink Color). It is salty in taste and also called Namkeen chai (salty). For the development of color people in rural add some baking soda in noon chai. In some areas you can never get the right color and taste of the tea due to the acid water. Kashmiris make two or three types of tea in the samovar, and many say good Kashmiri tea has to be made in a samovar. The kehvi (also called kahva, or mogil chai) is the favorite tea of Kashmiris. The second type of tea is dabal chai. Kashmiri Pandits serve dabal chai at weddings and on feasts. The third type of tea is called shirchai. Kashmiri folk say the salt is refreshing in the heat. Kashmiri salt tea (Noon Chai) is best enjoyed in a Kashmiri kho: s (cup): it used to be served in bronze Cups by Pandits or handle less porcelain Bowls, (Chin Pyala) by Muslims. Also to mention that the tea is boiled to almost dry and the cycle is repeated a couple of times, i.e. once the tea leaves and bicarbonate have almost boiled dry, water is again added to it and then boiling cycle, the final product is the concentrate called "TUETH". A small quantity of the "Tueth" is taken and diluted up to 10 times its volume with water depending on how strong you want it to taste (not milk to dilute the concentrate) and after that you do the aeration (Khaal Waal), then you add salt and milk, maybe butter and almond, especially for special occasions. Then you simmer it (simmering is best done in Samovar, though not many people use it in modern times except on special functions) and it tastes best after an hour or so of simmering. Regarded for thousands of years in the East as a key to good health, happiness, and wisdom, tea has caught the attention of researchers in the West, who are discovering the many health benefits of different types of teas. Studies have found that some teas may help with cancer, heart disease, and diabetes; encourage weight loss; lower cholesterol; and bring about mental alertness. Tea doesn't have any calories, unless we add sweetener or milk. If you're looking for a satisfying, calorie-free beverage, tea is a top choice. Green tea has been shown to actually increase metabolic rate so that you can burn 70 to 80 additional calories by drinking just five cups of green tea per day. Tea also appears to have antimicrobial qualities, so drinking tea may help our body's immune system fight off infection. Tea's antioxidants protect our body from the ravages of aging and also tea has less caffeine than coffee. Study has also shown that drinking tea makes bones strong than non-drinkers of tea. A 2001 study published in the journal *Experimental Eye Research* reported that green tea can prevent cataract-induced blindness. Researchers found different parts of the eye absorbed varying amounts of catechins, with the highest concentration of this antioxidant found in the retina of lab rats

fed green tea extract. Drinking tea has got a bad name for its staining effect on your teeth. The hot beverage contains tannic acid, which is what gives tea its dark-like color. However, the consumption of green tea can actually be beneficial when it comes to oral health. A 2009 study published in the *Journal of Periodontology* found the intake of green tea was inversely correlated with periodontal disease. Regularly drinking green tea reduced symptoms of periodontal disease, possibly due to the presence of catechin. Catechin reduces inflammation in the body, and therefore, interferes with the body's inflammatory response to periodontal bacteria. Its ability to control bacteria and lower the acidity of saliva and dental plaque makes it useful for preventing cavities and other indicators of poor oral health.

In this work, systematic study was carried out to find out different preparation methods of salt tea, its consumption pattern in rural areas of Kashmir and awareness among people of its ill effects. Tea contains no vital nutrients, with the exception of the dietary mineral, manganese at 0.5mg per cup. Tea leaves contain diverse polyphenols, including flavonoids and other catechins [2].

The incidence of cancer is rising every year, and this is attributed to the changes in lifestyle and increase in life expectancy. The incidence and pattern of cancer varies from country to country. Developed countries have a high incidence of cancer because of their diet patterns, lifestyle and affluent living conditions. Cancer is predominantly a disease of middle and old age, although no age is immune. Esophageal cancer has a very high incidence in Kashmir valley, which is comparable to the Iranian cancer belt. This is probably because of the peculiar food habits of the people of Kashmir. Most Kashmiris take hot tea called "*Noon-Chai"* (hot beverage boiled in *samovar*) both in the morning and at supper, and this has been proposed as responsible for the high incidence of this carcinoma in the valley [3].

The consumption of Noon chai is considered one of the factors contributing to gastric cancer in Kashmir [4]. A high consumption of salt tea (>4 cups/day) is associated with gastric cancer and also the lawasa which is served with noon chai has added salt which contributes to salt intake. High sodium intake appears to be responsible for the high rate of gastric cancer in cultures where processed salted foods are consumed frequently. Excessive salt intake has been identified as a possible risk factor for gastric cancer in many correlation studies and case-control studies.

The frequent consumption of hot salted tea is shown to result in exceptionally high exposure to methylamine, ethylamine, diethylamine, pyrrolidine, and methylbenzylamine, an animal carcinogen besides the presence of preformed N-nitrosodimethylamine (NDMA), a considerable amount of N-nitrosoproline (NPRO) and N-nitroso pipecolic acid (NPIC) along with three yet unidentified non-volatile N-nitroso compounds are formed on preparing salted tea by local methods in Kashmir [5, 6]. A dietary modification involving less Noon Chai intake could be practical strategy to decrease gastric cancer in Kashmir. Esophageal cancer is the most common cancer in Kashmir. Usually, people in Kashmir eat either roti (homemade chapatti or tandoori roti from bakers) or cereal paste (locally called sattu) when they drink salt tea. The paste is placed in a cup and boiling hot tea is poured over it. Salt tea is usually served with breakfast and as afternoon tea. A study in Kashmir have shown substantially high levels of copper in water and milk samples stored in copper vessels, as well as in salt tea prepared/served in copper vessels, particularly in samovar. Therefore, besides maintaining high temperature, samovar can be a source of copper. Copper is a redox-active trace element that generates hydroxyl radicals [7]. A recent study has shown a significant association between salt tea consumption and esophageal squamous cell carcinoma (ESCC) risk in Kashmir. If the association is confirmed to be causal, modification of this habit, including not adding sodium bicarbonate to tea, may reduce ESCC risk in the populations in which salt tea drinking is common [7]. A potential source of irritants is the high consumption of hot tea prepared using sodium bicarbonate at the time of boiling tea leaves and containing added common salt (NaCl). NaCl is a well-known epithelial irritant that has been considered as risk factor for gastric cancer [8]. This salted tea exhibits a high methylating activity (equivalent to 3 p.p.m N-methylnitrosourea (NMNU)), upon *in vitro* nitrosation of caffeidine and caffeidine acid, the hydrolysis products of caffeine under alkaline conditions [9]. In view of the well-known structure-activity relationships of N-nitroso compounds, their possible endogenous formation due to high consumption of salted tea may be a critical risk factor for the high occurrence of esophageal and gastric cancers in Kashmir. 'Salted tea' prepared according to local method also formed considerable amounts of N-nitrosoproline (NPRO) (360 micrograms/kg) and N-nitrosopipecolic acid (NPIC) (5870 micrograms/kg) along with 3 yet unidentified non-volatile N-nitroso compounds besides the presence of preformed N-nitrosodimethylamine (NDMA). Tannins isolated from salted tea have been found to give a positive result in ribosomal degranulation tests and extract showed genotoxicity to rat hepatocytes in alkaline elucidative assays [10]. 'Salted tea' is usually consumed at high temperature and may cause thermal injury to the esophageal mucosa. This hyperthermic effect may contribute to the general inflammatory state of the epithelium, favouring the production of potentially damaging oxygen and nitrogen species and reasonably contribute to enhanced mutagenesis [11]. Reports and observations in Kashmir valley, in Northern India, indicate that this area has a high rate of esophageal cancer, similar to reports from several other regions of Central Asia. This high rate is associated with the exposure to dietary amines, nitrite, and nitrate through unique dietary habits such as dried and smoked fish, dried and pickled vegetables, salt tea, and smoking [12, 13]. Information regarding dietary habits like quantity and temperature of salt tea intake has been recently investigated [14]. Most of the daily foodstuffs, including the local salty tea, are commonly prepared and served using the copper utensils. Water and milk samples stored in copper vessels, as well as salt tea prepared in copper vessels, were found to contain markedly high levels of copper, which in turn may explain the high plasma copper levels. The differences in the levels of copper and zinc showed significant association with the consumption of local salted tea up to 1,500 ml per day, but the changes were insignificant beyond that. Tea consumed at higher temperature may cause thermal injury to gastric mucosa [15]. Inflammatory response then leads to inflammation and generation of free radicles that promote carcinogenesis [16]. The frequent consumption of hot salted tea is shown to result in exceptionally high levels of methylamine, ethylamine and pyrolidine [15].

Objective

- To find out the consumption pattern of salt tea (Noon Chai).
- To know about different preparation methods of salt tea.
- To know about awareness among people related to ill-effects of salt tea.

Material and Method

In the present study, both the primary as well as secondary sources of data were used. The primary data was collected by using simple random sampling in rural areas of district Anantnag and the information regarding dietary habits like quantity and temperature of salt tea intake and pattern of taking salt tea consumed per day was collected using questionnaires. Structured questionnaires were administered in face-to-face interviews in rural areas of different line. The data was collected on tea drinking, including usual quantity consumed per day, drinking temperature, addition of sodium bicarbonate, salt, or milk as ingredients, the use of samovar or other vessels to prepare, boil, or serve salt tea and consumption of roti or cereal paste (sattu) with salt tea. Data from secondary sources was collected from books, journals, published dissertations available in Alama Iqbal Library, University of Kashmir and intense literature survey was carried on internet to gather information about the present study.A samples of 63 persons of different age groups including both male and female were collected using structured questionnaires. face-to-face interviews were conducted in different villages of district Anantnag. This study comprised systematic study to find out different preparation methods of salt tea, to know its consumption pattern in rural areas and awareness among the people of its ill effects**.** To know about these parameters a structured questionnaire was formulated and face to face interviews were carried out by choosing 63 persons of different age groups in rural areas. Table 1, shows the age wise distribution and the highest frequency of 45% was in the age group of 51-60 years.

Table 1: Age-wise distribution of respondent showing frequency and percentage

Age (Years)	Frequency	Percentage (%)
21-31	7	6.34
31-41	4	11.12
41-50	7	11.12
51-60	45	71.42
Total	63	100

The second parameter on the Sex wise distribution of respondents (Table. 2) shows that the highest percentage was from the male group which corresponds to frequency of 41 with total percentage of 65.08%.

Table 2: Sex-wise distribution of respondents showing frequency and percentage.

Sex	Frequency	Percentage (%)
Male	41	65.08
Female	22	34.92
Total	63	100

Results

Section B: Frequency of consumption of salt tea in regular and occasional salt tea drinkers

Thorough study was carried out on the consumption pattern of salt tea among 63 respondents. Table 3.1, shows that the percentage of regular drinkers was higher (79.36%) and occasional salt tea drinkers was 17.46% and the percentage of those who never drink was very low (3.17). These results clearly indicate that there is huge consumption of salt tea among rural areas. In Table 3.2, results on the drinking habit of salt tea shows that people are used to have salt with sole reasons being their ancestral habit without knowing any health benefits. Further the response of subjects shows that they have the habit of having salt tea in the morning which to percentage of 77.77% (Table. 3.3) than those who do not have any specific time to drink (22.23%)

Table 3.1

Usual consumption of salt tea	Frequency	Percentage (%)
Regular salt tea drinker	50	79.36
Occasional salt tea drinker	11	17.46
Never drink tea	2	3.17
Total	63	100

Table 3.2

Statement	Yes	Percentage (%)	No	Percentage (%)
Drink salt tea (noon chai) only because it is habit of your family	42	66.66	21	33.34

Table 3.3

Statement	Yes	Percentage (%)	No	Percentage (%)
Like the habit of having salt tea (noon chai) in the morning	49	77.77	14	22.23

In the next step we tried to know about the consumption pattern namely the temperature, time schedule, amount of salt tea, amount of sodium chloride and sodium bicarbonate, color and brewing and utensils used for the preparation of salt tea. Shockingly the respondents like to have hot tea which corresponds to of 47.61%, which is the mean reason for thermal injury in esophagus (Table 3.4). Salt tea (Noon Chai) if taken at higher temperature may cause thermal injury to gastric epithelium [4]. Inflammatory response then leads to inflammation and generation of free radicles of oxygen and nitrogen that promotes carcinogenesis [17]. Previous studies have shown that people who prefer to have strong and hot tea were at high risk of gastric cancer than those who did not [17]. Further people mostly prefer to have salt-tea in the breakfast with empty stomach with total percentage of 76.19% (Table 3.5) and people prefer to have 1-2 cups in the breakfast which makes total percentage of 66.66 (Table. 3.6). And in the mid-morning the consumption is lower than in the breakfast (51.61%) Table. 3.7. The habit of having tea in the evening is lower than having during breakfast but a bit higher than having in the mid-morning (63.49%) Table 3.8.

Table 3.4

Consumption pattern	Frequency	Percentage (%)
Warm	20	31.74
Hot	30	47.61
Very hot	5	7.93
Never Drink	8	12.69
Total	63	100

Table 3.5

Time Schedule	Frequency	Percentage (%)
Breakfast	48	76.19
Mid-morning	3	4.76
Evening	2	3.18
Never drink	10	15.87
Total	63	100

Table 3.6

Number of Salt tea cups consumed in breakfast	Frequency	Percentage (%)
1 – 2 cups	42	66.66
2-3 cups	7	11.11
3-4 cups	0	0
More than 5 cups	4	6.34
Never drink	10	15.87
Total	63	100

Table 3.7

Number of Salt tea cups consumed in Mid-morning	Frequency	Percentage (%)
1 -2 cups	32	51.61
2 – 3 cups	10	15.87
3 – 4 cups	4	6.34
More than 5 cups	4	6.34
Never drink	13	20.63
Total	63	100

Table 3.8

Number of Salt tea cups consumed in evening	Frequency	Percentage (%)
1-2 cups	40	63.49
2-3 cups	10	15.87
3-4 cups	0	0
More than 5 cups	4	6.34
Never drink	9	14.28
Total	63	100

The addition of sodium chloride /sodium bicarbonate as additives in salt tea to enhance taste and color respectively are both considered as harmful agents for health. People mostly add 1mg/cup of sodium bicarbonate which corresponds to 55.55% (Table.3.9) and 2g/cup of sodium chloride with total percentage of 47.61% (Table. 3.10). Earlier studies have shown that intake of high salt stripes the lining of stomach and may make infection with *Helicobacter pylori* more likely [18]. People prefer to have brewing time of half an hour (Table. 3.11) and the good thing is that people are aware about long brewing time is harmful (Table. 3.12). And the people prefer to have light pink colored tea (Table.3.13) and they prefer to use steel utensils for its preparation (38.09%) (Table. 3.14).

Table 3.9

Amount of Sodium bicarbonate/Cup of salt tea (mg)	Frequency	Percentage (%)
1	35	55.55
2	11	17.46
3	2	3.17
Never add	15	23.80
Total	63	100

Table 3.10

Amount of Sodium chloride/Cup of salt tea (g)	Frequency	Percentage (%)
2 g	30	47.61
3 g	24	38.09
4 g	0	0
Never add	9	14.28
Total	63	100

Table 3.11

Time of Brewing	Frequency	Percentage (%)
½ hour	27	42.85
1 hour	18	28.57
1 1/2 hour	12	19.04
2 hour	6	9.52
Total	63	100

Table 3.12

Statements	Yes	Percentage (%)	No	Percentage (%)
Brewing tea for long time is harmful	41	65.07	22	34.92

Table 3.13

Colour of salt tea	Frequency	Percentage (%)
Rose pink	15	23.80
Light pink	40	63.49
Dark pink	8	12.69
Total	63	100

Table 3.14

Utensils used for preparation of salt tea	Frequency	Percentage (%)
Copper	22	34.92
Aluminium	15	23.80
Steel	24	38.09
Clay pot	4	6.34
Others	0	0.00
Total	63	100

Section C: Past History (Consumption rate and quantity of salt tea consumed during summer and winter).

Next study was carried out on consumption rate and quantity during summer and winter seasons. Compared to consumption rate in summer (1-2 cups/day), percentage of consumption of same volume was higher (28.57%) in winters (Table 4.1 and Table 4.2). The reasons behind this is obviously the harsh weather during winters where people prefer to stay indoors and consume more salt tea to keep themselves warm. Mostly in rural areas people usually use specialized cups (each cup has a volume of 100 ml) and the percentage of using such volumes is higher (47.61 %) (Table 4.3).

Table 4.1

Consumption of (noon chai) during summer	Frequency	Percentage (%)
Never	2	3.17
1 cup/day	8	12.69
2 -3/day	12	19.04
4-6/day	5	7.93
1-2/day	23	36.50
3-4/day	9	14.28
More than 5 cups/day	4	6.345
Total	63	100

Table 4.2

Consumption of (noon chai) during winter	Frequency	Percentage (%)
Never	2	3.17
1 cup/day	0	0
2 -3/day	7	11.11
4-6/day	18	28.57
1-2/day	16	25.39
3-4/day	15	23.80
More than 5 cups/day	4	6.34
Total	63	100

Table 4.3

Quantity of salt tea consumed	Frequency	Percentage (%)
One tea cup (100 ml)	30	47.61
Mug (200 ml)	15	23.80
Large mug (300 ml)	8	12.69
Never drink	10	15.87
Total	63	100

Section D: Data on general awareness of ill-effects of consuming salt tea

In the next step we tried to know the general awareness of ill-effects of consuming salt tea. The data on amount of salt tea consumed per day, having salt tea alone and its association with high risk of gastric cancer, temperature of salt tea and dietary modifications was collected from 63 respondents. Most of the people prefer to have 2-3 cups/day which corresponds to 79.36% (Table. 5.1). Percentage of respondents is 68.25% which are well aware of the fact that high consumption of salt tea is independently associated with high risk for gastric cancer (Table. 5.2). Fortunately, 69.84% know the fact that dietary modification can decrease the risk of gastric cancer and most of the respondents (88.8%) know the fact that high salt content raises blood pressure and leads to hyper tension (Table 5.2). Previous reports showed that drinking salt tea more than 1250 ml/day and using Samovar for its preparation has an increased risk of ESCC [7]. The relationship between consumption of salt tea in large volumes and ESCC risk can be attributed to

various potentially toxic chemicals that exist in salt tea. A study in Kashmir have shown substantially high levels of Copper in water and milk samples stored in copper vessels, as well as in salt tea prepared/served in copper vessels, particularly in samovar. Therefore, besides maintaining high temperature, samovar can be a source of copper. Copper is a redox-active trace element that generates hydroxyl radicals. Excess of copper may not only promote radical damage, it may also substitute for zinc in many proteins and enzymes, thus altering their activities [7].

Table 5.1

Salt tea (noon chai) should we take per day	Frequency	Percentage (%)
2 – 3 cups	50	79.36
3 – 4 cups	10	15.87
5 – 6 cups	3	4.76
Total	63	100

Table. 5.2

Statement	Yes	Percentage (%)	No	Percentage (%)	Total
High consumption of salt tea is independently associated with high risk for gastric cancer	43	68.25	20	31.74%	63 (100%)
Noon chai if taken at high temperature may cause thermal injury to the gastric epithelium	44	69.84	19	30.158	63 (100%)
Dietary modification involving less Noonchai intake could be practical strategy to decrease gastric cancer in Kashmir	44	69.84	19	30.158	63 (100%)
Drinking salt tea (noon chai) raise your BP	27	42.85	36	57.14	63 (100%)
Adding excessive amounts of salt in noon chai can lead to hypertension	57	88.88	7	11.11	63 (100%)

Section E: Reason behind quitting

In the next step we tried to know the reasons behind quitting of salt tea and time period. Good thing is that the trend of quitting salt tea is increasing during the past 10-20 years and the percentage is 63.49% (Table. 6.1). Further we came to know that the percentage of having salt of younger generation in the age group (5-10 years) is lower 14.28% compared to age group of more than 20 years (Table. 6.2) and the respondents prefer to have 2-3 cups/day which corresponds to 63.49% (Table. 6.3).

Table 6.1

Abandoned before (Years)	Frequency	Percentage (%)
10-20	40	63.49
20-30	4	6.34
30-40	8	12.69
Never stopped	11	17.46
Total	63	100

Table 6.2

Consumption of salt tea / day	Frequency	Percentage (%)
2-3 cups	40	63.49
4 -5cups	14	22.22
5-6 cups	4	6.34
No limit	5	7.93
TOTAL	63	100

Table 6.3

Reasons for quitting	Frequency	Percentage (%)
Health problems	30	47.61
Did not like taste	6	9.52
Others	14	22.22
Did not quit	13	20.63
TOTAL	63	100

Discussion

The present study reveals that, majority of males (65.08%) consumed Salt Tea (Noon Chai) than females (34.92%), on contrary to this S. Sadiqa *et al.*, 2015 [18] reported highest consumption of Salt tea (Noon chai) among females living in Srinagar. the percentage of regular drinkers was higher (79.36%) and occasional salt tea drinkers was 17.46% and the percentage of those who never drink was very low (3.17%). These results clearly indicate that there is huge consumption of salt tea among rural areas. The drinking habit of salt tea shows that people are used to have salt with sole reasons being their ancestral habit without knowing any health benefits. Further the response of subjects shows that they have the habit of having salt tea in the morning percentage of 77.77% than those who do not have any specific time to drink (22. 23%). similar findings were reported by Wani *et al.*, 2013, Mir *et al.*, 2009 [4, 19] who reported that salt tea is greater in rural areas than urban, people involved in agriculture consume more salt tea, intake increases during winter.

Most of the people prefer to have 2-3 cups/day which corresponds to 79.36%. A higher number of respondents 68.25% are well aware of the fact that high consumption of salt tea is independently associated with high risk for gastric cancer. Fortunately, 69.84% know the fact that dietary modification can decrease the risk of gastric cancer and most of the respondents (88.8%) know the fact that high salt content raises blood pressure and leads to hyper tension. Previous reports Dar NA & friends (2015) showed that drinking salt tea more than 1250 ml/day and using Samovar for its preparation has an increased risk of ESCC**.** The relationship between consumption of salt tea in large volumes and ESCC risk can be attributed to various potentially toxic chemicals that exist in salt tea

Conclusion

The percentage of regular drinkers is higher and occasional salt tea drinkers were 17.46% and the percentage of those who never drink was very low. The present study clearly shows that there is still huge consumption of salt tea among rural areas, with the sole reasons being their ancestral habit without knowing any health benefits. People in rural areas usually prefer to have salt tea in the morning which needs to be discontinued. Shockingly the respondents like to have hot tea which is the mean reason for thermal injury in esophagus which ultimately leads to cancer. Compared to consumption rate in summer, percentage of consumption of same volume was higher in winters. The reasons behind this is obviously the

harsh weather during winters where people prefer to stay indoors and consume more salt tea to keep themselves warm. Fortunately, people in rural areas know the fact that dietary modification can decrease the risk of gastric cancer and most of the respondents know the fact that high salt content raises blood pressure and leads to hyper tension. Our study shows that the trend of quitting salt tea is increasing during the past 10-20 years and the positive sign is that younger generation is well aware of the health problems associated with salt tea drinking. Salt tea (Noon chai) is related to the risk of gastric cancer in Kashmir and dietary modifications by using less intake of salt tea could be best strategy to decrease gastric cancer in Kashmir.

Recommendations

Awareness programs should be organized by NGO's and PG students of Home Science and health sciences in rural areas about the ill-effects of consumption of salt-tea. People should be encouraged to have good breakfast to discontinue salt-tea on empty stomach. Amount of sodium carbonate/sodium chloride should be reduced. Those having higher consumption of hot salt-tea should at least prefer to have warm tea to minimize thermal injury in stomach which leads to gastric cancer.

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