

PREFERENCES OF WILLINGNESS TO CONSUMPTION OF GREEN LEAFY VEGETABLES AMONG RURAL AND URBAN SCHOOL CHILDREN IN MADURAI DISTRICT OF TAMIL NADU, INDIA

P. Sheela^{1*}, M. Ramasubramanian², M. Ganapathy Ramu³, A. Anbarassan⁴ and N. Periasami⁴

¹Assistant Professor, Unit Head, Department of Food Science and Technology,

SRM College of Agricultural Sciences, SRM Institute of Science and Technology (Tamil Nadu), India.

²Associate Professor and Head - Programme Coordinator, ICAR Krishi Vigyan Kendra, Agriculture college and Research Institute, Tamil Nadu Agricultural University, Madurai district (Tamil Nadu), India.

³Assistant Professor, Department of Agricultural Extension, JKK Munirajah College of Agricultural Science, T.N. Palayam, Erode district (Tamil Nadu), India.

⁴Assistant Professor, Department of Agricultural Economics, SRM College of Agricultural Sciences, SRM Institute of Science and Technology, Vendhar Nagar, Chengalpattu district (Tamil Nadu), India.

(Corresponding author: P. Sheela*)

(Received 20 March 2022, Accepted 11 May, 2022)

(Published by Research Trend, Website: www.researchtrend.net)

ABSTRACT: Children all around the world are fonder about the consumption of junk food in the current scenario. The advertisements on the colour of food, the taste and the flavor in the junk food always appetize the children mainly in among the urban community and create an urge to consume them frequently. Though tastes of children might vary there is always an importance of green leafy vegetables given in our Indian diet. Green leafy vegetables are a rich source of calcium, beta carotene and vitamin C. Leafy vegetables are particularly rich in mineral nutrients and iron. The deficiency of iron leads to anemia, a common health problem in children. The recommended dietary allowance of green leafy vegetables for pre-school children (4-6 yrs) and for boys and girls beyond 10 years of age is 50g/day. (RDA, 2010). The effect of green leafy vegetables on nutrition and the consumption pattern of the school children of green leafy vegetables majorly depend on the environment and family preferences of food pattern. Food preferences are the evaluative attitudes that people express toward foods. Food preferences include the qualitative evaluation of foods, and also how much people like and dislike them. A study on the preferences of willingness of consumption of green leafy vegetables among rural and urban school children was carried out in Madurai district of Tamil Nadu. Thirty school children belonging to age group of 9- 11 years were selected purposively in both rural and urban population each. The quantitative data was collected using verbal response from the children and the qualitative data was collected using the observation technique through photo elicitation responses. The height (cm) and weight (kg) was recorded and revealed that there was about 16% among urban and 13% among rural children were in the weight range between 36 to 42 Kg, which is a serious concern about obesity development in childhood. The preference of children on the ten major attributes was recorded and revealed that significant association among appearance and taste of the greens among the rural and urban children. Thus, the study hereby reveals the importance of consumption of greens and the aspect in which the greens are being influenced for consumption among the school children.

Keywords: Children, Green leaves, consumption, preference, obesity and factors influencing consumption.

INTRODUCTION

Food is a basic necessity of all living organisms. It is essential for growth and development of children. Good food that explores the truth manner of food for well being. The consumer has become more sensitive to health issues and partly due to factors like rise in income, availability of variety of vegetables, etc. (Goksel *et al.*, 2009). Green leaves are blessing for a

secure and healthier life and have been in use for hundreds of years. They are considered as a necessary a part of the diet to fulfill the daily nutrient requirements (Muhammad Atif *et al.*, 2015). Green leafy vegetables are a vital of any diet. They proved fiber, essential vitamins and minerals like iron, calcium and magnesium and rise any meal. They supply protection against diseases like high cholesterol, heart diseases and conditions like anemia (WHO, 2012). Indian cuisine is

noted for its use of green leafy vegetables that are commonly called "saag". Saag is a generic term used for a range of green like spinach, mustard leaves and amaranth (Sue Rodwell Williams, 2004). Food consumption preferences are developed early in life (Ventura and Worobey 2013). Understanding how children's food consumption choices are developed has the potential to learn individual's health over their entire lifetime (Andrew *et al.*, 2017). Specifically, limiting the consumption of sweetened beverages, while increasing the consumption of healthy food choices like fruits and vegetables, can have protective effects on people's health (Ludwig *et al.*, 2001 and Malik *et al.*, 2013). In spite of this children were more profound to consuming junk foods and that they adopt to prefer sugar based beverages everywhere in the globe. During this context, their knowledge about green leafy vegetables and consumption of those green leafy vegetables may be a very crucial role in their day to day life is that the key idea to assemble the factors referring to tragedy involving the consumption among them. The gap between the nutritional parameter of green leafy vegetables and therefore the consumption towards liking is the main drawback of its usage.

This paper addresses factors that influence the consumption of green leafy vegetables among the school-going children and therefore the perception of green leafy vegetables about their knowledge. This effort to cover a large spectrum of factors gathered from the children by both quantitative and qualitative methods that believed to shape child food consumption and examine their influence in food consumption context.

METHODOLOGY

Quantitative approach. The study is explored to come across the preferences of green leaves consumption among the school-going children in order to rural and urban. The data collection was carried out among 30 rural and 30 urban children from the schools located in rural and urban localities. The children who were studying in 4th, 5th and 6th standards were included in the study whose age ranged between 9 and 11. Madurai district was purposively selected for the study as it is one of the backward rural district in southern Tamil Nadu with more number of people living below poverty line and ultimately with poor nutrition. Madurai district of Tamil Nadu comprises of seven taluks, thirteen blocks and six hundred and sixty four revenue villages. Since the respondents for this study are to be selected from rural and urban background, the secondary data collected from ICDS office (Integrated Child Development Scheme), Madurai, pertaining to nutritional indicators in different blocks were analyzed. Two rural blocks namely Usilampatti and Melur were selected for rural school children based on the criteria of more number of moderately and severely

underweight children in these blocks. As far as rural is concerned, 30 children were selected as respondents. They were selected from two schools namely Government High School (15 students), Rangasampuram in Usilampatti block and Government Girls Higher Secondary School (15 students), Ulaganeri in Melur Block. For the selection of urban school children to the study the researcher discussed with officials in Madurai collectorate and Madurai Corporation. Considering the socio-economic status for the selection of urban school children, Goripalayam was selected. In this place, two schools were purposively selected, namely Katie Wilcox Matriculation School (15 students) and Kakkai Padiniyaar Girls Government School (15 students). The children were questioned about their awareness and preferences towards greens consumption. The rationale for the selection of 8th to 12th age group was that verbal response, comprehension skills and cognitive skills would be better for this age group, which will be a prerequisite for data collection.

Qualitative approach. For a qualitative data collection 'Photo-elicitation' tool was used wherein a photo of greens were shown to rural and urban children and their instantaneous verbal response was recorded. A photograph of greens is shown to a group of students and their instantaneous responses were recorded. This data collection method is useful for obtaining perceptions, opinion, attitudes regarding an issue in an interactive group setting (Collis and Hussey 2014).

Data analysis. There are two statistical tools used in this study viz., chi square and binary logistic regression analysis. The analysis was run with SPSS 16.00. Since children are going to be the future generation, their health is set to change the health of the nations. Hence, their willingness to consume greens has been taken as another important component of the present investigation. In these analyses children's willingness to consume greens has been operationalised as the positive orientation of children to consume greens in their diet. The scoring procedure to study this component has been exclusively designed for this study. Ten 'yes' or 'no' closed ended questions to elicit information related to factors influencing willingness to consume greens from children were designed and administered among rural and urban school children. A score of '2' was assigned for 'yes' response and 'one' was assigned for 'no' response. Further the data related to every child's age and number of years of schooling was collected. The height and weight of each child was also collected; in cms and Kgs respectively.

RESULTS AND DISCUSSION

Profile of children. Children are going to be the future generation and their orientation towards healthy living can shape healthy India in coming years. It could be inferred from table 1, that the weight of the children ranged from 23Kg to 42 Kg and nearly half of them

(50.00 per cent in rural and 46.67 per cent in urban) were in the weight range of 26 Kg to 30 Kg. A few children (16.66 per cent in rural and 13.33 per cent in urban) were in the weight range of 36 Kg to 42 Kg which is a cause of serious concern. Obesity has been a

big problem with children who is likely to get many diseases when they enter into adulthood or old age. It is common in both rural and urban that children are increasingly consuming junk foods and this culture need to be changed.

Table 1: Distribution of rural and urban children according to their Weight.

Sr. No.	Range of Weight of Children	(N= 60)				't' value
		Rural Children (n = 30)		Urban Children (n = 30)		
		No	Per cent	No	Per cent	
1.	23 Kg to 25 Kg	5	16.67	7	23.33	0.346 ^{NS}
2.	26 Kg to 30 Kg	15	50.00	14	46.67	
3.	31 Kg to 35 Kg	5	16.67	5	16.67	
4.	36 Kg to 42 Kg	5	16.66	4	13.33	
Mean		30.03		29.60		
Standard Deviation		4.97		4.74		

NS- Non significant.

The Table 1, clearly shows that there existed no significant difference between rural and urban children in their weight which is substantiated through non significant 't' value calculated using independent sample 't' test. The mean and Standard deviation also did not show much difference for rural and urban children respectively indicating there was no difference between them in terms of weight.

It is obvious from Table 2 that majority of rural children (66.67 per cent) were in the height range of 124 cm to 130 cm, whereas majority of urban children put together were in the height range of 131 cm to 140 cm (63.33 per cent) and 141 cm to 154 cm (26.67 per cent), respectively.

Table 2: Distribution of rural and urban children according to their Height.

Sr. No.	Range of height of Children	(N= 60)				't' value
		Rural Children (n = 30)		Urban Children (n = 30)		
		No	Per cent	No	Per cent	
1.	121cm to 130 cm	20	66.67	3	10.00	4.95**
2.	131cm to 140 cm	8	26.67	19	63.33	
3.	141cm to 154 cm	2	6.66	8	26.67	
Mean		130.20		137.80		
Standard Deviation		5.52		6.35		

** - Significant at one percent level of probability

It is to be noted here that a sizable number of children in urban were above the normal range of height than rural children which resulted in significant 't' value at one per cent level of probability which indicated that rural and urban children differ. This was reinforced by the difference in mean and standard deviation of height for rural and urban children as evidenced from table 2. The higher standard deviation of urban indicated more variability in the height of urban children. The reason which could be attributed here is that urban children are more prone for junk food eating than rural children.

Factors Influencing consumption of greens by Children. The consumption of greens by children might have been influenced by several factors which encompass influence of fellow children, teacher, parents and the factors associated with type of preparation of dishes and taste of greens also and it is denoted in table 3.

Appearance of dish made of greens. All the rural children (100.00 per cent) interviewed were influenced and liked the appearance of dish made of green and many replied that they did not attach more meaning to appearance whereas nearly half (56.70 per cent) of the urban children were found to be influenced or liked the appearance of dish made of greens. There was a clear difference in response from rural and urban children which was substantiated through significant chi-square value at one per cent level of probability. Appearance does matter for urban children who are attuned to the urban culture of adornment and embellishment.

Influence of classmates/friends eating greens. Cent percentage of rural children and whopping majority of urban children (83.30 per cent) reiterated that they were influenced by their classmates/ friends eating greens. The peer pressure did influence especially during childhood since the children often see their peer and

compare themselves. Sometimes it results in good habit and vice versa. But this accumulation of social capital among children has been the hot topic for many researchers and in this study also the finding of peer pressure was reinforced. A small difference between urban and rural children was visible in the table and the chi-square was found to be significant at five per cent level of probability.

Taste of the greens. Majority of rural (70.00 per cent) and urban (60 per cent) children were more concerned about the taste of food and they responded that if the greens are tasty they will consume otherwise they will not. Normally children will have a liking towards tasty foods and that too sweets and chocolates and they usually reluctant to take non tasty food items. The chi-square is non significant and thus there existed no difference between rural and urban children as for as taste of the food is concerned since there was uniformity in their response.

Greens mixed with main food. There was unanimity among rural (100.00 per cent) and urban (90.00 per cent) children for the factor that they were inclined towards greens mixed with main food. If one could observe children's eating behavior, he or she can understand, the children would be reluctant to take vegetables separately but they would eat vegetables unknowingly if it is mixed with food. Specifically greens added with rice and a little ghee is delicious and

much preferred by children. One of the children told during the interview that he would prefer to eat moringa leaves if it is added with egg rice.

Preparation of greens by mother. Rural (100.00 per cent) and urban (90 per cent) children had complete consensus for their eating greens due to the dish being prepared by their mother. Mothers in families working or non working would serve as an important influencing factor shaping the eating behavior of their wards. Further as for as Indian society is concerned kids are closer to their mothers rather than their fathers.

Mother's scolding for not eating greens. Nearly two-third (66.70 per cent) of rural children and exactly fifty percentages of urban children responded that they ate greens in order to avoid getting scolded by their mothers. It is to be noted here that at least half of the children did not get influenced by scolding and told the researcher that they took greens due to their awareness about the health benefits of greens often taught by their teachers in schools.

Liking towards crispy foods than greens. There is no surprise that both urban and rural children liked crispy fried food than greens. The results that cent percentage of rural and urban respondents were found to be liking fried and crispy foods endorsed the statistics given by various public and private organizations that children are inclined to junk foods which are crispy in nature.

Table 3: Distribution of children in rural and urban localities according to the factors influencing consumption of greens *.**

Sr. No.	Factors Influencing consumption of greens by children	(N=60)				Chi-Square
		Rural Children (n = 30)		Urban Children (n = 30)		
		No	Per cent	No	Per cent	
1.	Appearance of dish made of greens	30	100.00	17	56.70	16.59**
2.	Influence of classmates/friends eating greens	30	100.00	25	83.30	5.45*
3.	Taste of the greens	21	70.00	18	60.00	0.659 ^{ns}
4.	Greens mixed with main food	30	100.00	27	90.00	3.16 ^{ns}
5.	Preparation of greens by mother	30	100.00	27	90.00	3.16 ^{ns}
6.	Mother's scolding for not eating greens	20	66.70	15	50.00	1.71 ^{ns}
7.	Liking towards crispy foods than greens	30	100.00	30	100.00	-
8.	Person feeding the children (mother/father/grandparents)	16	53.30	18	60.00	0.27 ^{ns}
9.	Absence of options other than taking greens	29	96.70	17	56.70	13.42**

*** The chi-square analysis was conducted since every factor is categorical in nature with 'yes' and 'no' responses and due to easy understandability of the table the number of 'no' response was not shown in the table

** - Significant at one percent level of probability

* - Significant at five percent level of probability

ns - Non significant

Person feeding the children (mother/father/grandparents). The person who feed the children is also a factor to reckon with because children used to develop a selective liking towards certain members in the family. In some families where both the parents are working, grandparents used to take care of their grandsons/daughters. If the parents and

grandparents in a family are not in a position to feed their children sometimes maids are given the task of feeding the children. Hence, children would develop more bonding with maids rather than parents. In depth sociological studies attempted elsewhere portrayed the consequences of less care or no care given by working parents on their children. In the present study also more

than half of the children in rural (53.30 per cent) and urban (60.00 per cent) did say that they were influenced **Absence of options other than taking greens.** A vast majority of rural children (96.70 per cent) reported that they ate greens because there was no option for them other than greens whereas only 56.70 percentages of the urban children were found to be influenced by this factor. The researcher while interviewing could observe that rural people does not give much importance for variety of vegetables and go in for whatever vegetables available to them. Greens are available in plenty and more accessible to rural people. Hence rural women used to prepare greens in more number of days in a week than urban women. Moreover, the lifestyle of urban women is completely at variance from rural women wherein urban women used to visit the nearby retail shop where variety of vegetables would be available. This finding drew support from the finding that urban women increasingly purchase from retail shop reported elsewhere in this report.

Qualitative data collected from Children. Apart from using an interview schedule to collect information regarding the profile of children, willingness of children to consume greens and associated factors, a qualitative methodology was followed to add value to the information collection through interview schedule. Following is the excerpts of the varied responses of children.

- On seeing the picture, half the number of students in the group instantaneously said that the picture is a vegetable.
- Majority of the children could tell that the vegetable shown in the photograph is important for human health
- A few children could be able to tell the individual nutrients like Iron, Vitamins and minor elements present in the greens.
- Some of the children told about the varieties of greens available. They could tell the names of the greens like drumstick leaves, thandu keerai, sirukeerai, vallaraikeerai. One of the child told that her mother used to give tablets, pickles made of vallaraikeerai to improve the memory power.
- A sizable number of children told greens are important to improve eye sight, gives energy and improves bone strength.
- A few number of girl children reported that they were told by their mother, if they eat greens, their hair will grow well.
- Some have reported on seeing the photograph that drumstick leaves are being grown in their home garden
- A few children told the greens are bitter and they dislike the greens.

by who fed them. Most of the children preferred their mother to feed them followed by grandmothers.

In nut shell, the qualitative data collected from children revealed that all the children interviewed were at least aware of either the health benefits or name of the greens. It is heartening to note that everyone has something to tell about greens and a few could tell about nutritional elements and associated benefits of the greens.

Willingness of rural and urban children to consume greens. Another dimension of the study is to assess the willingness of both urban and rural children put together to consume greens which might have been influenced by several factors. The researcher tried to find the out how the factors enlisted in table 3 contributed to the willingness of greens. While contemplating a model for such a scenario, logistic regression model was found to be appropriate. Since the dependent variable Willingness to consume is dichotomous and was scored '1' and '0' for willing and unwilling, respectively the appropriate model would be logistic regression which will predict the willingness to consume greens, given the profile of children and other influencing factors. The results of logistic regression are given below.

Table 4 presents two important estimate namely cox & Snell R^2 and Nagelkerke R^2 . It is evident that both R^2 value indicated moderate variance in the dependent variable (Willingness to consume) due to selected independent variables. Among the two measures Nagelkerke R^2 is to be preferred, since it achieves maximum value of 1. In this case it could be interpreted that 51 per cent of variance in willingness to consume is predicted by selected independent variables.

Another measure which is important to be interpreted from logistic regression is classification table 5, which gives the measure of how well the model performs in its ability to accurately classify cases in to the two categories of the variables willing and unwilling.

The overall predictive accuracy is 83.30 per cent. The table 5 did classify much better, the willing children to consume greens as the model correctly predicted 41/1 or 97.60 per cent of these cases. Hence the model is going to have good predicting ability. The following table 6 presents the logistic regression coefficients.

Table 4: Model summary of logistic coefficients.

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	46.116	0.364	0.517

Table 5: Classification table to check the predictive ability of the logistic model.

Observed		Predicted		Percentage correct
		Unwilling	Willing	
Willingness to consume	Unwilling	9	9	50.00
	Willing	1	41	97.60
Overall percentage				83.30

a. The cut value is .500

Table 6: Logistic regression coefficients.

Predictors	B	S.E.	Wald	df	Sig.	Exp(B)
Residential status of children	2.562	1.585	2.612	1	.106	12.963
Weight of the children	.109	.102	1.140	1	.286	1.116
Height of the children	-.068	.082	.693	1	.405	.934
Appearance of dish made of greens	2.927	1.525	3.683	1	.055	18.677**
Influence of classmates/friends eating greens	8.616	44.863	.037	1	.848	5522.021
Taste of the greens	2.867	1.288	4.956	1	.026	17.583**
Greens mixed with main food	10.995	44.514	.061	1	.805	59568.068
Preparation of greens by mother	.602	.820	.539	1	.463	1.825
Person feeding the children (mother/father/grandparents)	.275	.846	.106	1	.745	1.317
Absence of options other than taking greens	-.063	.908	.005	1	.945	.939

In logistic regression, the original model is in terms of the log of the odds ratio, or log it. In logistic model, 'B' coefficients are the effect of 1 unit change is independent variables on the log odds. The Exp (B) column presents the exponentiated value of B.

In the present analysis two variables namely 'appearance of dish made of greens' and 'taste of the greens' were found to be significant at one percent level of probability.

It could be interpreted that, if a child is influenced by appearance of dish made of greens the odds of his/her willing to consume greens would increase by a factor of 18.68 units. In other words, the willingness of a child improves 18 times if he/she is influenced by the appearance of the dish made of greens.

Similarly, if a child is influenced by taste of greens, the odds of his/her willingness to consume greens would increase by a factor of 17.58 units. In other words, the willingness of child to consume greens improves 17 times if he/she is influenced by the taste of greens.

It has already been discussed from table 3 that the taste and appearance could potentially influence the consumption pattern of greens among children. It is obvious that children would be more inclined to foodstuffs which are looking good and tasty. Thus their significance in predicting the willingness could be justified.

CONCLUSION

In conclusion this study provides strong evidence that knowledge about green leafy vegetables and their food preference that influencing the consumption of greens. We are the parents must choose right food for in daily diet through their preferences. Children are the backbone of the country to correct the consumption pattern by the way of family followed by society and to the nation. The results of the study revealed that (16.66 per cent in rural and 13.33 per cent in urban) were in the weight range of 36 Kg to 42 Kg which is a cause of obesity among the school children. The factors influencing the children on consumption of greens showed that there is a significant association between

the appearance of the dish made from greens, the peers influence and the absence of other alternative foods for greens has made the children consume green leafy vegetables in both urban and rural areas. The qualitative data collected from children revealed that all the children interviewed were at least aware of either the health benefits or name of the greens. In the present analysis with logistic regression it was observed that two variables namely 'appearance of dish made of greens' and 'taste of the greens' were found to be significant at one percent level of probability. Thus, the study on food preferences of school children in both urban and rural population is mainly influences by the taste and the appearance of the greens. As an initiative to improve the consumption pattern of greens among school children the study results depict that change in appearance and taste of greens with varietal attributes will attract the children to consume greens. Thus, it would substantiate to help in improving the quality of food consumed with nutrients and reduce the amount of junk foods consumed by the children. Resulting towards a obesity free nation from children would lead to a developed healthy nation.

FUTURE SCOPE

The study was focused on children green leafy vegetables consumption pattern. This data will help to food scientist to evolve the best cooking practices of greens consumption for children to boost frequent intake. To the policy makers and researcher, this data will useful to formulating some schemes and plans pertaining to children health and education regarding greens consumption.

Acknowledgement. We thank integrated child development scheme (ICDS), Madurai office, Tamil Nadu for collected secondary data pertaining to nutritional indicators in different blocks. Our gratitude goes to Government High School (Usilampati), Government Girls Higher Secondary School (Melur block), Katie Wilcox Matriculation School & Kakkai Padiniyar Girls Government School (Goripalayam block) for allowing us to collect the quantitative and qualitative data from the students.

Conflict of Interest. The Authors declared No Conflict of Interest.

REFERENCES

- Andrew, Z. H. Yee, May, O. Lwin, and Shirley, S. Ho. (2017). The influence of parental practices on child promotive and preventive food consumption behaviours: a systematic review and meta-analysis. *International journal of Behavioural Nutrition and Physical Activity*, 14: 47.
- Collis, J. and Hussey, R. (2014). *Business research*. 1st ed. Basingstoke, Hampshire: Palgrave Macmillan.
- Goksel, A. M., Sibel Mehter Aykin, Cengiz S. and Burhan Ozkan (2009). The role of demographic variables in purchasing decisions on fresh fruit and vegetables. *Journal of Food, Agriculture and Environment*, 7(3-4): 106-110.
- Jill, Collis and Roger, Hussey (2014). Fourth edition Business research – a practical guide for undergraduate and post graduate students. Palgrave Macmillon higher education.
- Ludwig, D. S., Peterson, K. E., and Gortmaket, S. L. (2001). Relation between consumption of sugar sweetened drinks and childhood obesity: a prospective, observational analysis. *Lancet*. 357: 505-508.
- Malik, V. S., Pan, A., Willett, W.C., and Hu, F. B. (2013). Sugar Sweetened beverages and weight gain in children and adults: a systemic review and meta analysis. *American Journal of Clinical Nutrition*, 98:1084-102.
- Muhammad Atif Randhawa, Ammar Ahmad Khan, Muhammad Sameem Javed and Muhammad Wasim Sajid (2015). Chapter 18 - Green leafy vegetables: A health promoting source. Handbook of Fertility. 205-220.
- Recommended Dietary Allowances and estimated average requirements: Nutrient requirements for Indians, Indian Council of Medical Research, 2010.
- Sue Rodwell Williams (2004). Text Book of Basic Nutrition and Diet Therapy; 1st Edition. Published by Mosby.
- Ventura, A.K. and Worobey, J. (2013). Early influence on the development of food preferences. *Current Biology*. 23: R401-8.
- World Health Organization (2015). The global prevalence of anaemia in 2011. Geneva: World health organization; 2015. p. 1–6.

How to cite this article: P. Sheela, M. Ramasubramanian, M. Ganapathy Ramu, A. Anbarasan and N. Periasamy (2022). Preferences of Willingness to Consumption of Green Leafy Vegetables among Rural and Urban School Children in Madurai District of Tamil Nadu, India. *Biological Forum – An International Journal*, 14(2): 930-936.