

Impact of cooking methods on nutritional value of food

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Abstract

National health lies on the hands of women engaged in preparation of varieties of cooking dishes, the good nutritive value of food helps to the children, adult, youth, young, middle and old group of people to maintain good health. In this research paper authors have tried their best to suggest the rural mass regarding various methods of cooking helpful to the people to get nutritive food required to run good health. The research work was conducted in Kanpur district, covering two blocks namely Kalyanpur and Sarsaul and ten villages. Under each village 15 household women were selected randomly. The primary data was collected with the help of pre-tested instrument (well structured) interview schedule. The collected data was pooled, classified, tabulated and analysed using percentage, X^2 and correlated coefficient. The outcomes of the study clearly reveals that most of the respondents are in habit to use roasting regularly. They roast potato and use tandoor for chapatti. Poaching, baking, stewing, grilling were less used by landless, marginal and small because the equipments are costly and they were unaware. The women belonging to medium income group preferred steaming and boiling most. The use of good method of cooking depends on education and income of the family. The first rank was given to boiling of vegetables, cereals and pulses so that harmful substances like insecticides, pesticides are killed and did not produce ill effect on human health.

Key words: Household women, correlated coefficient, insecticides, pesticides

Introduction

Food preparation is an important step in meeting the nutritional needs of the family and methods of cooking is a part of food security. By understanding the cooking methods enables one to choose the correct method for specific foods, the various methods of cooking have a direct impact on the outcomes of the finished dish. Cooking the correct method not only affects the flavour of foods, but also texture, appearance, quality and nutritional value meant for good health. Different cooking methods have different impact on the nutritive value of food. The most important for cooking methods are; dry heat, moist heat and combination of heat. Dry heat methods are; dry heat, moist heat and combination of heat. Dry heat methods cook the goods with hot air or fat (santeing, pan-frying, deep frying grilling, broiling, roasting, baking); moist heat cooking methods cook the food with liquid, usually water, stock or steam (poaching, simmering, boiling, steaming) and combination cooking methods use, as the name suggests, a combination of dry heat and moist heat methods (braising and stewing) by understanding the cooking methods enables one to choose the correct method for specific foods the various methods of cooking have a direct impact on the outcome of the finished dish. Keeping in view of the importance of the above facts, the present study was designed with

specific objective to analyse the impact of cooking methods on nutritional value of foods.

Materials and Methods

The present study was conducted in Kanpur district of Uttar Pradesh. Two blocks namely Kalyanpur and Sarsaul and ten villages were selected randomly. Under each village fifteen (15) household women were selected randomly. The primary data was collected with the help of pre-tested instrument (well structured) interview schedule. The data (primary) were collected, pooled, classified, tabulated, and analysed with the help of percentage, X^2 and correlation coefficient.

Results and Discussion

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Table 1 indicates and method of cooking followed by the women respondents according to land holding. The roasting and frying method were adopted by respondents in all land holding category whereas baking, poaching stewing and grilling were adopted by majority of women respondents in small and large land holding category. Baking, poaching, stewing and grilling were the costly cooking methods and these were used by respondents whose monthly income was about Rs.10000/= and above.

The results clearly reveal that all types of respondents (landless, marginal, small and large landholder respondents) were using roasting regularly.

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They roast potato and use tandoor for chapatti. Poaching, baking, stewing, grilling were less used by landless, marginal and small because the equipments are costly and they were unaware.

Table 1: Use of cooking methods by the farm women in different holding size

Method of cooking	Landless	Marginal	Small	Large
Roasting	10(6.7)	14(10.7)	22(14.0)	13(8.7)
Frying	13(8.7)	15(10.0)	24(16.0)	11(7.3)
Steaming	2(1.3)	19(12.7)	24(16.0)	14(9.3)
Boiling	14(9.3)	18(12.0)	18(12.0)	12(8.0)
Baking	2(1.3)	3(2.0)	8(5.3)	14(9.3)
Poaching	-	2(1.3)	5(4.0)	13(8.7)
Stewing	3(2.0)	3(2.0)	5(3.3)	12(8.0)
Grilling	1(0.7)	3(2.0)	6(4.0)	11(7.3)

Table 2: Method of cooking according to monthly income of farm women

Method of cooking	Monthly income			
	Upto Rs 3000	Rs 3001- Rs 6000	Rs 6001- Rs 9000	Rs 9000 & above
Roasting	12(8.0)	15(10.0)	20(13.3)	12(8.0)
Frying	10(6.7)	13(8.7)	20(13.3)	20(13.3)
Steaming	3(2.0)	20(13.3)	19(12.7)	15(0.0)
Boiling	18(12.0)	18(12.0)	16(10.7)	10(6.7)
Baking	-	3(2.0)	8(5.3)	16(10.7)
Poaching	-	-	5(3.3)	15(10.0)
Stewing	2(1.3)	1(0.7)	4(2.7)	16(10.7)
Grilling	-	1(0.7)	4(2.7)	16(10.7)

Table 3: Method of cooking according to education

Method of cooking	Education					
	Illiterate	Can read only	Primary	Secondary	High School	Intermediate
Roasting	9(6.0)	4(2.7)	12(8.0)	11(7.3)	11(7.3)	12(8.0)
Frying	12(8.0)	6(4.0)	12(8.0)	10(6.7)	13(8.7)	10(6.7)
Steaming	8(5.3)	3(2.0)	11(7.3)	10(6.7)	12(8.0)	13(8.7)
Boiling	10(6.7)	4(2.7)	12(8.0)	12(8.0)	12(8.0)	12(8.0)
Baking	1(0.7)	1(0.7)	2(1.3)	2(1.3)	6(4.0)	15(10.0)
Poaching	-	-	-	-	3(2.0)	12(8.0)
Stewing	-	-	1(0.7)	2(1.3)	6(4.0)	14(9.3)
Grilling	-	-	-	1(0.7)	5(3.3)	15(10.0)

(Figures in parentheses denote per cent value)

Table 2 shows that in the method of cooking according to monthly income of women respondents, methods of cooking, roasting, frying, steaming and boiling were used in all four income category whereas baking, poaching, stewing and grilling were used by women respondents who earned Rs.9000/= and above because these methods were expensive not able to used by lower category of women. The women belonging to medium income group (Rs.3000- 6000) preferred steaming and boiling most.

Table 3 shows that in the method of cooking used by women respondents according to education,

Table 4: Rank wise contribution of cooking methods

Method of cooking	Score	Rank
Roasting	1.98	II
Frying	1.98	II
Steaming	1.11	V
Boiling	2.02	I
Baking	1.90	III
Poaching	0.82	VII
Stewing	1.21	IV
Grilling	1.00	VI

High school and above educated women used all the various methods of cooking whereas primary and secondary educated women did not use poaching and grilling method of cooking, Illiterate and can read only women respondents used boiling, frying and roasting method of cooking. The respondents having intermediate qualification used baking, steaming and grilling which is (10.0, 9.3 and 10.0%). There is different relation in between the use of these methods and variable (income and education).

Table 4 shows that in the rank wise distribution of methods of cooking respondents given first rank to boiling method and second rank to frying and roasting methods. Other cooking methods like grilling, steaming and poaching were used by respondents to lower rank because these methods were adopted by higher income group and large land area of respondents. First rank was given to boiling because TV and programmes of state government stress hard the villagers to boil vegetables, cereals, pulses so that harmful substances

like insecticides, pesticides are killed and did not produce ill effect on human health.

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