

# Posture related problems in modern and ancient kitchen

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**ABSTRACT :** The kitchen is the heart of the home because food has such an important role to play in our lives. However, to achieve this, one has to spend a significant amount of time in kitchen, which may potentially affect the health of the person, most likely the women working in kitchen. The study initiated with concerns and questions that exist for health and safety of woman working in different types of kitchen. The kitchen has given much importance because health, comfort and happiness of the family depend on cleanliness, and food prepared there. The focused comparative assessment of the various aspects of ancient and modern kitchen will help in delineating the advantages and disadvantages that are parts of this kitchen. Furthermore, identification of these advantage and disadvantages will be helpful to offer valid and reliable suggestion/solutions to the existing health related problems faced by the women working in this kitchen. In view of the inconvenient height of platforms in the ancient and modern type kitchen, majority of study participants reported that the major body related problems (backache, pain in arm, headache etc.) were related to the posture. A substantial number of women reported that the wooden soot emanating during the cooking activities does create inconvenience in ancient types kitchen.

**KEY WORDS :** Posture, Modern and ancient kitchen

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Having a nice, beautiful and manageable kitchen is a dream of every homemaker. Moreover, it is a pride of the house owner. Kitchen organization should be simpler, more manageable and attractive portion of your home. You would just love to visit the kitchen in your home. Today, modern urban lifestyle, changing habits, communication technology etc. have been transforming the face of present day Indian kitchens.

Food, clothing and shelter are the three basic needs of human beings. To make food palatable and digestible it has to be cooked for cooking, a place is set apart in every house. The kitchen is a place where food is prepared and cooked.

The need of the kitchen place must have been felt when people got bugged up with fire getting dim or quenched every now and then because of wind and also it was difficult to fire the wood in rainy season. At that time kitchen was just a 'corner' in a room; its individuality was not in existence. Its individuality was understood when clans began residing together at the same place as agriculture simultaneously developed and needed many persons to handle. This was the

time when meals were to be prepared in large amount and need was felt to store food grains, utensils etc.

The concept of western type kitchen must have taken birth when British came to India. Our educated people who visited Britisher's houses, probably for the first time understood the importance of having water facility and food stuffs etc. at hand, the importance of standing kitchen was felt. Women education became popular day by day. They also started working outside the home. Then it was very important to minimize homemakers' time and energy devoted to household activities. Researches and studies showed the importance of standing kitchen. Basically it is a work place for food preparation with the help of several gadgets by using human energy and fuel energy ( gas, oil or electricity) energy.

Pasture refers to the position in which the body is held. Correct posture is the position, which will require the expenditure of the least amount of energy for work or rest.

In correct posture, whether standing, sitting or using a tool, muscles constructed to do certain things to them. In incorrect posture, muscles not so constructed must do the

job. Correct posture is the position, which involves establishing a centre of gravity so that the whole weight of the body falls directly on the weight bearing area below. If any part of the body is off centre, to that degree must some other part held off centre to balance it, and to the degree will strain result.

A good standing posture is one in which the head, neck, chest and abdomen are balanced vertically one upon the other, so that the weight is carried mainly by the bony framework and a minimum of effort and strain is placed upon the muscles and ligaments. When the body is well balanced in the standing position, the head will be directly over the feet, and the centre of gravity will pass through the middle ear, shoulder, hips, the outside of the knee and the outside of the ankle (Cecile, 1980).

A good sitting posture for work is a well-balanced and poised position. The weight carried by the bony support of the skeleton, thus relieving the muscles and nerves of all strain. The posture is such that minimum adjustment is necessary for such action as the work may demand. The line of gravity falls through the middle of the shoulders, hips and seat bones. The body is straight from hips to neck, and there is no flex or bend at the waistline.

The results of poor posture include changes in position of the joints, ligaments and muscles and in the location of the organs of the body. Faulty circulation results mainly from the cramping and crowding of the chest that prevents both the heart and lungs from acting as freely as they should, lower and reduce the mobility of the diaphragm. A drooping posture permits relaxation of the abdominal muscles, allowing a further sagging of the organs. As the abdominal organs sag, they press upon the pelvic organs and interfere with their functions, leading to many disagreeable symptoms. It is thought that the thoracic, abdominal and pelvic organs suffer from faulty nerve supply because of lack of tone of the muscles on the back. This shift in position affects the organs so extensively that they could not expect to function properly. Sometimes youth may carry poor posture without any apparent derangement, but by the middle life the strain on muscle and joints begins to tell and body functions may begin to fail. One of the earliest symptoms resulting from poor posture is a sense of fatigue out of all proportion to the work done. The parts of a work centre, which most commonly

contribute to poor posture, include height of working surfaces of work counters or tabletops, stovetops, oven, frequently used shelves and drawers at improper heights, types and heights of work stools and chairs.

## ■ RESEARCH METHODS

### Sample size :

The study proceeds with the selection of 300 samples, out of which 150 samples taken who were working in modern kitchen, whereas, 150 samples considered who were working in ancient kitchen.

Purposive sample technique was used to fulfill the objectives of present study. Firstly, women were selected from nuclear and extended family working in modern kitchen.

### Tool and techniques :

Data were collected by the interview schedule. This is a technique of fieldwork, which is used to watch the behaviour of an individual or individuals, and record statements. After the data collection, observation of data was done. The data generated during the present study was processed using various statistical tests with the aid of spss 18.0 statistical software. The data characteristics (descriptive statistics), such as mean, standard deviation, statistics error, frequency, percentage, minimum and maximum, etc. were determined. The comparative assessment was done using 'z' test. The significance level was chosen to be 0.05 (or equivalently, 5%) by keeping in view the consequences of such an error and to make the significance level as possible in order to protect the null hypothesis and to prevent, as far as possible, from inadvertently arriving at false conclusions.

## ■ RESEARCH FINDINGS AND DISCUSSION

Table 1 shows body related problems (backache, pain in arms, headache, etc.) faced by the respondents due to inconvenient height of cooking platform. Data revealed that out of 300 respondents using modern and ancient kitchen, 31.7 per cent (95) respondents suffered from different body related problems due to inconvenience while working in kitchen. It was observed from the data that 4 per cent (6) respondents working in modern kitchen and 22.7 per cent (34) respondents working in ancient kitchen suffered from backache.

Inconvenience	Modern kitchen				Ancient kitchen				Total	%
	Nuclear family	Joint family	Total	%	Nuclear family	Joint family	Total	%		
Backache	4	2	6	4	13	21	34	22.7	40	13.3
Pain in arms – legs	11	7	18	12	9	11	20	13.3	38	12.7
Headache	-	-	-	-	5	3	8	5.3	8	2.7
Others	-	-	-	-	4	5	9	6	9	3
Total	15	9	24	16	31	40	71	47.3	95	31.7

12 per cent (18) respondents using modern kitchen and 13.3 per cent (20) respondents using ancient kitchen reported pain in arms and legs due to inconvenience while working in kitchen. However, 5.3 per cent (8) and 6 per cent (9) respondents working in ancient kitchen suffered from headache and other body related problems. While the same problems were not reported by respondents working in modern kitchen.

In view of the inconvenience height of platforms in the ancient and modern type kitchens, majority of study participants reported that the major body related problems (backache, pain in arms, headache etc.) were related to the posture. A substantial number of women reported that the wooden soot emanating during the cooking activities does create inconvenience in ancient types kitchen. Iwakiri *et al.* (2008) reported postural support by a standing aid alleviating subjective discomfort among cooks in a forward-bent posture during food preparation. The health problems, which appear due to the posture, are generally chronic in nature. Their severity is directly dependent on the posture (Iwakiri, 2007). As per the study results, both the types of kitchens, *i.e.* ancient and modern type in present situations wherein the women using these facilities can acquire some health related

problems. This warrants further studies regarding identifying the specific cause of the problem.

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