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## A study on occupational health hazards among cooks of hotels

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### Abstract

No doubt food services industry is creating a huge employment in India but at the very time research had recorded various incidences of work related problems among the cooks in different food outlets. The purpose of this study was to examine the Occupational Health Hazards among Cooks of Hotels. Fifty (50) male cooks from Aurangabad, Maharashtra, of the age group 30 to 45 years, were selected through random sampling. Data was collected using a self made questionnaire, Interview and also measurement of Abdomen, Buttocks and Forearm was done and recorded accordingly. Back Pain (41.5%) was the most evident health hazard among the cooks. Besides that fat composition in Abdomen ( $M=38.34$ ,  $SD=3.65$ ) was found more than Buttocks ( $M=32.10$ ,  $SD=3.49$ ) and Forearm ( $M=29.94$ ,  $SD=2.84$ ). 55% of cooks were obese and 45% were towards obese. It was concluded that hotel cooks were under a great threat of occupational health hazards and measures should be taken to safe guard their lives.

**Keywords:** Hotels, cooks, health, hazards, occupational

### 1. Introduction

People throughout the world are enjoying the fast foods and ready cooked meals available along with the ever increasing choice of world cuisine within the food market (HSA, 1998) [1]. But this increased demand and supply of food had lead to heavy work load on the workers employed in this industry (HSE, 1999) [3]. Like many other hazardous works, hotel cooks exposed to harsh work environment are also exposed to many work-related hazards that cause injuries and illnesses and impact their lives, income, and family. Such occupational injuries are not given the importance they require and are often ignored. Cooks working in the commercial kitchens were identified as an occupational group with high risk of occupational injury and disease (Bindu, *et al.*, 2013) [6]. Occupational injury results from a work-related event or a single impulsive exposure in the workplace (HSE, 1999; Courtney TK, *et al.*, 2006) [3, 4]. Besides being a combination of the workplace, job and worker characteristics, there are many risks and hazards in restaurants that contribute to injuries. Typical injuries reported included musculoskeletal injuries, cuts, lacerations, scalds, burns and eye injuries (HSA, 1998) [1]. The immediate causes of accidents in hotel kitchens are slips and trips, manual handling of heavy loads, exposure to hot surfaces and steam, injured while moving articles and hot vessels and hand tools, exposure to direct fire and electrical shock (Mardis AL, *et al.*, 2013). Despite the high risks from health and safety hazards are known to all, health and safety procedures are not given the priority the way it should be. Workers of all ages are at risk of being seriously injured on the job in the hotel and other commercial kitchens. In line of that this study was aimed to highlight the most prevalent health issues among the hotel cooks. The result of this study will help to predict the health and safety needs of hotel cooks and thereby aid in the implementation of effective interventions.

### 2. Methodology

Fifty (50) male hotel cooks from Aurangabad, Maharashtra, of the age group 30 to 45 years, were selected through random sampling. Data was collected using a self made questionnaire, Interview and also measurement of Abdomen, Buttocks and Forearm was done using measuring tape and was recorded accordingly. Information about the personal profile and health profile of the workers was collected.

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**2.1 Statistical method**

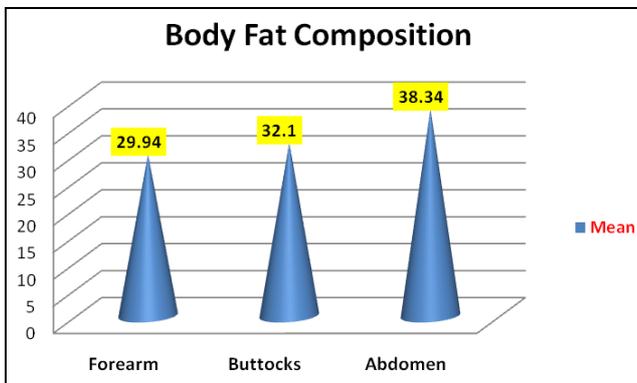
After getting the response from the cooks the data was statistically analyzed, Mean and Standard Deviation were calculated. Besides that to find out the percentage of body fat composition Conversion Constants Chart and the formula i.e. Percent Fat = Constant A + Constant B - Constant C -15.0 (Frank I. Katch, *et al.*, 2002) was used.

**3. Result**

The mean value of body fat composition of Buttocks of the cooks of hotels is 32.10, and SD is 3.65. The mean value of body fat composition of Abdomen of the cooks of hotels is 38.34, and SD is 3.49. The mean value of body fat composition of Forearm of the cooks of hotels is 29.94, and SD is 2.84 (Table 1). It was also found that 55% of cooks were obese and 45% were towards obese. Besides that 41.5% cooks were having Back-Pain problem which was high when compared to other problems like 40.5% cooks have burnt their fingers due to oil and hands while handling hot utensils, 33.5% cooks got cuts in fingers, 29.5% cooks are having knee problem, 22.5% cooks are having eye sight problem, 20.5% cooks are having neck pain, 20.5% cooks are taking medicines while feeling pain in any body part, 18% cooks are having acidity problem, 4.5% cooks have got surgeries (Table 2).

**Table 1:** Shows Mean and SD of Fat Composition for Buttocks, Abdomen and Forearm of Hotel Cooks.

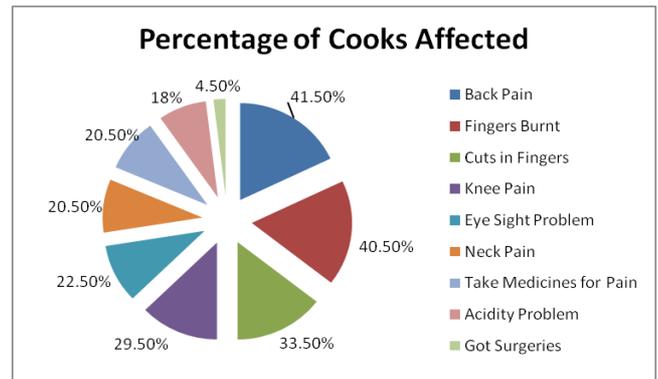
Fat Composition	Mean	SD
Buttocks	32.10	3.65
Abdomen	38.34	3.49
Forearm	29.94	2.84



**Graph 1:** Represents Mean of Fat Composition for Buttocks, Abdomen and Forearm of Hotel Cooks.

**Table 2:** Shows percentage of affected hotel cooks by various occupation related health problems.

S. No.	Health Hazard	Percentage of Cooks Affected
1	Back Pain	41.5%
2	Fingers Burnt	40.5%
3	Cuts in Fingers	33.5%
4	Knee Pain	29.5%
5	Eye Sight Problem	22.5%
6	Neck Pain	20.5%
7	Take Medicines for Pain	20.5%
8	Acidity Problem	18%
9	Got Surgeries	4.5%



**Graph 2:** Represents Percentage of Hotel Cooks Affected by various occupation related health problems.

**4. Discussion**

The results showed that there was more Fat Composition in Abdomen as compared to Buttocks and Forearm. It was also found that majority of the hotel cooks were obese and rest of them were towards obese. Besides that Back-Pain was found major health problem. Also hotel cooks had burnt fingers due to oil and hands while handling hot utensils, cuts in fingers, knee pain, eye sight problem, neck pain and acidity problem. Further some of them were taking medicines for pain relief, while a few had undergone surgery.

**5. Conclusion**

It was concluded that the hotel cooks had health problems due to occupational hazards. Obesity and Back-Pain were the main health problems among them.

**6. Recommendations**

In the light of scope, limitations and suggestions of the study following recommendations were drawn as:

- Occupational health services should be provided to the cooks, which include pre-placement examination.
- Health education and rationalization of the work methods should be given so as to improve the health safety of the workers.
- Routine health check-ups.
- Cooks should use latest equipments, and if possible should be allotted with fire proof dress code.

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