

Effect of smoking on health, nutrition and diseased condition of an adult man

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ABSTRACT

The present study was conducted to find the effect of smoking on health, nutrition and diseased condition of an adult man. A total sample of 40 smokers was selected from Yamunanagar (Haryana) by judgment sampling technique. An open end and a structural questionnaire was formulated to get the relevant information. Results of the study reveal that the actual dietary intake of respondents was inadequate in terms of every nutrient as compared to RDA's. Majority of them were suffering from diseases like cough and asthma. Respondents had one or the other kind of dental ailment also which increased the possibility of throat cancer in future. Most of the smokers were suffering from high blood pressure and high cholesterol and were prone to have serious diseases like cardiovascular malfunction and cancer in later years of their life.

Key Words : Asthma, Cough, RDA, Nutrition, Smoking

INTRODUCTION

It is a strange thing that a few brown leaves rolled up in a small wrapper or packed down in a bowl of a pipe should have such a profound effect on a person's life. It is true that many heavy smokers are neurotics. Smoking slowly weakens their health and ultimately their lives. The risk of developing cancer is more in smokers. Lung cancer is the most common and incurable form and causes death. Chronic cough called cigarette cough is a dangerous signal following other symptoms like chest pain, sweats, loss of weight, streak of blood in cough. The mouth and oral cavity are subject to cancer of tongue, cheeks, tonsils, kidneys, bladder and lung. Cardiovascular system also has a damaging effect due to inhaled nicotine. Nicotine stimulates the release of organic compounds that may cause the heart to speed up or beat irregularly thereby increasing blood pressure. It is also seen that cigarette smokers are about twice more likely to get peptic ulcers than non smokers. The recommended dietary allowance (RDA) of ascorbic acid increases from 60 mg/day to 100 – 150 mg/day due to increase requirement for this antioxidant in smokers. Dietary intake of fibre and

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energy is low in smokers. Smokers usually take intakes of total fat, cholesterol and lower intake of poly unsaturated Fat, Fibre, Vitamin 'C', Vitamin 'E' and B carotene.

Objectives :

1. Prevalence of common diseases in smokers.
2. Imbalance of RDAs in smokers.

METHODOLOGY

The present study was conducted on a representative group of 40 respondents. Survey methodology was used to study the nutritional status of the people by a questionnaire. Dietary intake included information regarding food intake of the respondent. It was calculated for the amount of protein, carbohydrate fat Energy and Fibres were made using the book on "Nutritive Value of Indian Foods". The 3 day food intake of each subject converted into raw ingredients was computed from "Nutritive Value of Indian Foods". The nutrients calculated were compared with the recommended dietary allowances. The information regarding the type and frequency of illness suffered and suffering was collected information was also gathered in context to the nature of the subject regarding anxiety, depression, stress, confidence and anger. To analyze the responses, simple frequencies, percentages and arithmetic mean were taken.

RESULTS AND DISCUSSION

It reveals that most of the respondents suffered from blood pressure disorders and high Cholestrol. Elevated levels of low density lipoprotein (LDL) and smoking have long been recognized as risk factors for atherosclerosis and coronary heart disease (Table 1).

Respiratory diseases were also common due to inhalation of nicotine while smoking like cough, asthma, cold and throat infection. Reported respiratory problems include dry cough, breathless and bronchial asthma. Dental ailments were also common in regular smokers. Jette (1998) reported that cigarette smoking is a risk factor for tooth loss and root caries.

It shows, the mean intake of energy was 2246.004 kcal as compared with the recommended allowance of 2425 kcal hence the respondents were consuming 178.99 kcal less than the required amount *i.e.* they were consuming only 92.61% of their RDA for energy. The difference between the mean intakes of RDA's was found significant. When the energy intake is low there is possible behavioral adaption to adjust work output to the energy intake. The mean protein of the respondents was more *i.e.* it was 92.11 gm protein more than required. The difference was found to be significant. The respondents were consuming 153% more of their RDA's for protein. Thus, the diets were inadequate in the terms of both quality and quantity. Since the diet was some what inadequate in energy, whatever extra protein was present was being used to meet the energy need and adequately performed its primary function of the repair and maintenance of tissues (Table 2).

The mean total fat consumption by the respondents was 60.88 gm as compared with the RDA of 46.9 gm. The respondents were consuming 13.98 gm more than the RDA. The consumption of sodium was less than the recommended 182.06 mg as compared with the RDA of 500-1000 mg. the difference is of 317.94 mg was found to be significant. The

Sr. No.	Type of disease	No. of respondents	Percentage
1.	Cough	8	20
2.	Asthma	1	2.5
3.	High blood pressure	38	95
4.	Cholesterol	38	95
5.	Cancer	4	10
6.	Wrinkles	4	10
7.	Gastric ulcer	1	2.5
8.	Indigestion	3	7.5
9.	Burning	3	7.5
10.	Gas	3	7.5
11.	Cavities	7	17.5
12.	Decay of tooth	1	2.5
13.	Yellow tooth	1	2.5
14.	Throat infection	2	5
15.	Cold	2	5
16.	Stone	2	5

Sr. No.	Nutrients	RDA	Mean actual value	Deviation from RDA	% age intake FRM RDA	Total value
1.	Energy (Kcal)	2425	2246.004	-178.99	92.61	0.495
2.	Protein (gm)	60	92.11	+32.11	153.51	1.482
3.	Fat (gm)	46.9	60.88	+13.98	129.80	0.93
4.	Carbohydrates (g)	440.6	316.25	-124.35	71.77	-2.02
5.	Sodium (mg)	5-10g (500-1000mg)	182.06	-317.94	36.41	-7.26

subject consumed 36.41% of their RDA. Rest of the sodium was added as table salt and fluctuation on Blood Pressure was noted.

Conclusion :

Some of the smokers suffered from respiratory troubles like cough, asthma, cholesterol and blood pressure. Respondents were consuming diets less in carbohydrates and energy and high protein. They were found to be very low in sodium which was fulfilled by adding table salt. Mostly the respondents were prone to diseases like blood pressure and cardiovascular.

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