



A COMPARITIVE STUDY OF FLUID AND EXCESSIVE SALT INTAKE AMONG COLLEGE STUDENTS

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ABSTRACT

Water is considered most essential nutrition so also salt but in excess may be detrimental. Fluid intake is a prime factor dictated by weather, occupation, age, health condition, exercises or physical or mental exhaustion, excessive sodium intake and loss of fluids due to various reasons. Hundred students each from Ayurveda Medical college and from non professional colleges were randomly selected to take part in the study after oral consent was taken.

All two hundred students were between 19 to 22 years of age, not on any regular medication. A standard questionnaire with specific and simple scoring was given. It included water, milk, coffee, tea, fruit juice intake on an average day, activity including yoga, walking and type of food preferred recorded systematically and observed and conclusions were made.

Comparison between both groups was analyzed. Students who consumed more salt and preferred junk food, required and consumed more water.

Ayurveda medical college students were healthier and more health conscious towards sufficient water intake and limited excessive salt intake. Excessive dietary salt intake awareness was not much in non professionals.

KEYWORDS : healthcare, fluid intake, salt in excess, water.

INTRODUCTION

Today people are highly health conscious with regard to sufficient water intake and deleterious effect of excessive salt intake. WHO issues guidelines about salt intake.¹ Ayurveda considers excessive intake of fluids as one major etiological factor of certain conditions and intense wide scale study about deleterious effects of excessive salt intake has been recorded in charaka samhita.²

Excessive intake of salt has been recorded as above⁽²⁾ to be major cause of baldness which has been proved in the study done at Saurashtra region⁽³⁾

Ayurveda students after studying dinacharya .nityarasayana etc adopt certain health principles inclusive of what dietary products should not be taken in excess. Such similar studies among medical students and non professionals have been done to create awareness about effects of consuming excessive salt⁽⁴⁾⁽⁵⁾

Ati jalpana, ati madya pana and ati lavana rasa sevan and its health effects have been explored⁽⁶⁾

According to World Health Organisation, recommended maximum consumption for an adult is 5 g salt/day⁽¹⁾ Health awareness with regard to sufficient water intake and excessive dietary salt intake has not been extensively studied in comparison between medical students and non professionals of same age group which is essential to create health behavior awareness. Water(all fluids) intake is also considered here as water, the most necessary nutrient helps achieve homeostasis and has huge impact on kidney, heart, cognitive function etc and has huge impact on excessive salt intake but it is recorded by National Academy of Science's Report on Dietary Reference Intakes on Water and Electrolytes as reported in 2005 "While it might appear useful to estimate an average requirement (an EAR) for water, an EAR based on data is not possible"⁽⁷⁾

METHODS FOR DATA COLLECTION

Students from Ayurveda Medical college and hundred students from non professional colleges were selected from age group between 19 to 22, after they were informed about the purpose of the data collection and oral consent was taken.

Common questionnaire was provided to all 200 students which included quantity of water, milk /tea/coffee/fruit juice or any other

fluid consumed per day to be recorded as on an average day (number of cups and specify quantity), and other questions like taste preferred, consumption of chats, junk food, food preference of salted food (to name specific food consumed daily or preferred number of days per week). This also included questions about physical activity, health status, medication taken daily. Easy scoring methods were given and were educated if participants had doubts.

MS excel sheets were used to calculate the quantity of fluid intake per day. The type of salty food was classified and scored.

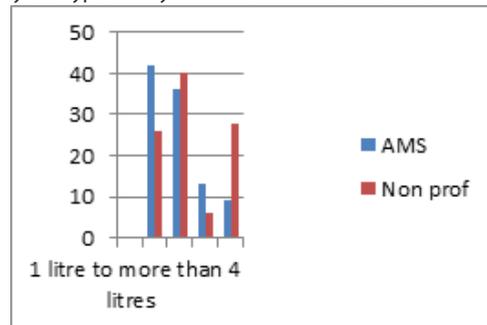


Figure 1 Fluid intake from 1 to 4 liters and above.

OSERVATIONS

Ayurveda medical students seemed to be conscious of health behaviour inclusive of sufficient fluid intake and deleterious effects of excess salt intake. More than 90% were healthy and were not on any regular medication and also more than 70% were either walking daily as a health benefit.

On the contrary students from non professional colleges seemed to be less healthier and 70% were on regular medication for conditions like allergy, sneezing, constipation, gastritis, migraine and stress. Students were not on regular physical activity unlike Ayurveda medical college students. After taking part in this survey students felt benefitted and also agreed to be part of future survey to attain more health awareness. Excessive salt intake demands more fluid intake.

The relationship between fluid intake and excessive salt intake attains greater importance as it is inversely proportionate.

Fluid	1-2 liters	2--3 liters	3 to 4 liters	Above 4 liters
AMS	27	36	13	6
Non prof	10	40	6	20
Salt	Rarely	1per/week	3/week	Daily
AMS	69	23	5	3
Non prof	30	12	18	40

Table 1. Showing fluid intake versus excess salt intake per day.

CONCLUSIONS

This survey study indicates that more serious thoughts and exploration needs to be given to fluid intake, excessive salt intake on every day basis. And this survey needs to be a future data base to continue to monitor these participants for some years and also to create health awareness to prevent cardio vascular and many such health issues.

Funding: No funding.

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