



Study of low calcium content in body and causes of low bone density (Osteoporosis) leading to Arthritis

Raj Kumar

Assistant Professor, S.G.G.S. Khalsa College Mahilpur, Hoshiarpur, Punjab, India

Abstract

This study deals with the analysis of low calcium content in the body and to educate causes of Arthritis to adult women (22-45 years), adults men (22-45 Yrs), old women and men (>45 Yrs). For this purpose, research was conducted on 100 people, which includes 25 from each group. The data was collected through questionnaire made by investigation and data was analyzed using descriptive statistics. The finding of the study showed that adult girls are more prone to low iron content in body due to improper diet and menstrual flow. In general, people diet should be consumed so that ill effect of low iron content and anemia can be avoided.

Keywords: Glass ceiling, barriers, advanced, CEO, MNC

Introduction

Calcium content in the body is responsible for strong bones and teeth in our body. Calcium performs a number of basic functions in your body. Your body uses 99 percent of its calcium to keep your bones and teeth strong, thereby supporting skeletal structure and function. The rest of the calcium in your body plays key roles in cell signaling, blood clotting, muscle contraction and nerve function. Cells use calcium to activate certain enzymes, transport ions across the cellular membrane, and send and receive neurotransmitters during communication with other cells. As an electrolyte, or a particle that helps conduct electricity in the body, calcium is also one of the key players in maintaining a regular heartbeat.

Objectives

The main purpose of the study is analysis of low calcium content in body and to make awareness of causes of osteoporosis among people

Methodology

A) Sample collection:

Research is conducted in 100 people from Gurdaspur and nearby villages in vicinity of Gurdaspur district, which includes.

1. Adult Men (22-45)- 25
2. Adult Women (22-45)- 25
3. Old Men (>45)- 25
4. Old Women (>45)- 25

B) Collection of Data

The data was collected through questionnaire the questionnaire was given to 100 people as grouped above by investigator himself. The purpose was briefly explained to them and their cooperation was expected for accurate response they were assured that their information will be kept confidential the response was collected by personal visit of investigator. It was assumed that the responses given in the questionnaire were true.

C) Design of study

For evaluation of low Calcium content in body and causes of Arthritis, descriptive, study has been designed in which survey method was adopted.

D) Statistical procedure

The questionnaire consisted of 11 questions with options and question was grouped into various categories. The results of the questionnaire are regulated below. The subject was asked to tick the answer which they find to be most suitable. Question for pregnant women's with probable response

Table 1: Do you eat calcium rich food?

Total 100	Response	
	Yes (70)	70
	No (30)	30

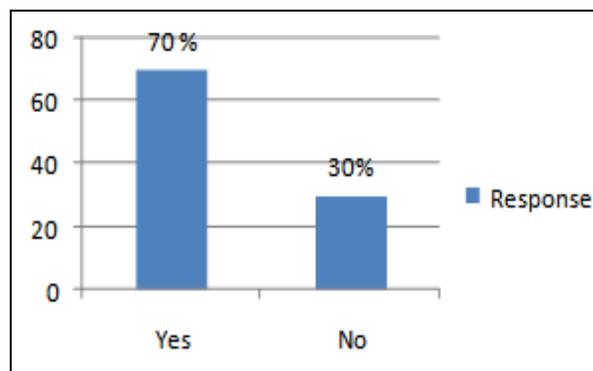


Table 2: Do you consume calcium tablets?

Total 50 (adult men+women)	Response	
	Yes (32)	64
	No (18)	36

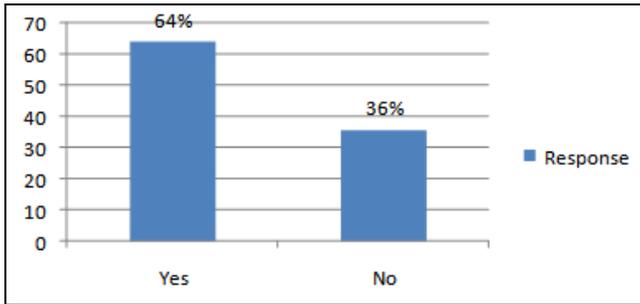


Table 3: Do you regularly consume milk?

Total 100	Response	%
	Yes (39)	39
No (61)	61	

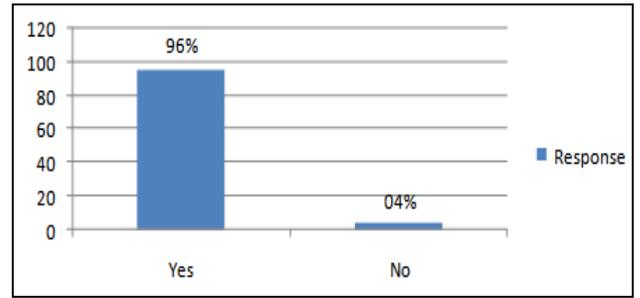


Table 7: Do you eat non-vegetarian diet?

Total 100	Response	%
	Yes (30)	30
No (70)	70	

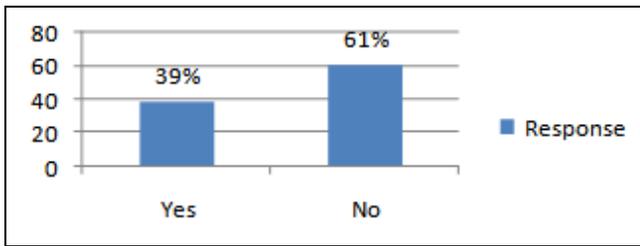


Table 4: Do you consume extra diet?

Total 100	Response	%
	Yes 22	22
No 78	78	

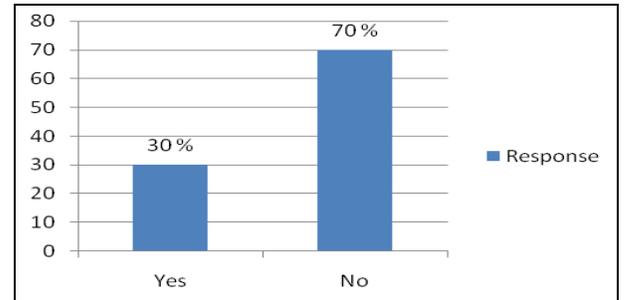


Fig 4

Table 8: Do you know about sources of calcium in food?

Total 100	Response	%
	Yes (77)	77
No (23)	23	

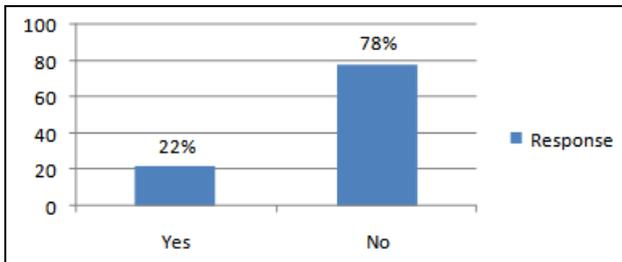


Table 5: Frequency of diet in a day?

Total 100	Response	%
	2-3 times a day 73	73
3-5 times a day 27	27	

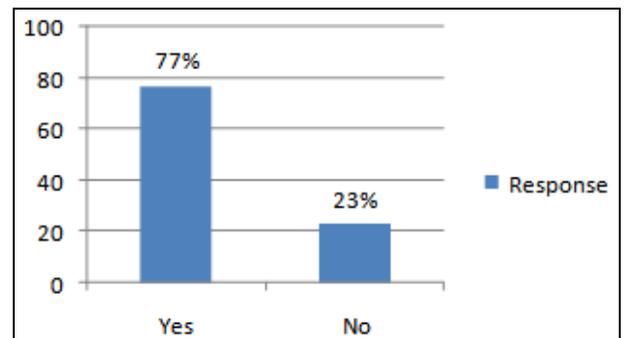


Table 9: Do you know about symptoms of Arthritis?

Total 100	Response	%
	Yes (23)	23
No (77)	77	

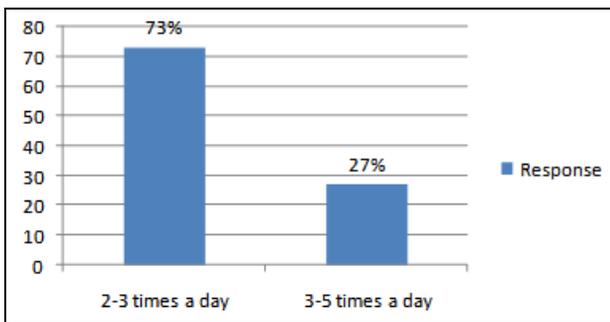


Table 6: Is milk easily available?

Total 100	Response	%
	Yes (96)	96
No (04)	04	

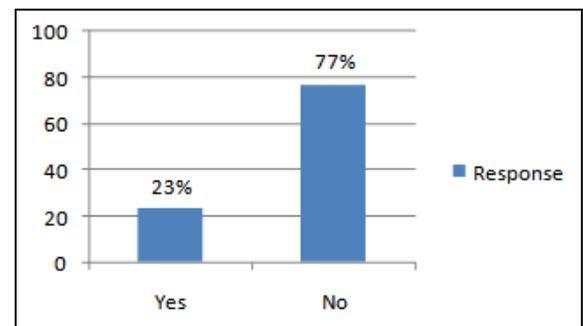


Table 10: Do you know about disease osteoporosis, which is caused by low calcium content in body?

Total 100	Response		%	
	Yes	No	Yes	No
	20	80	20	80

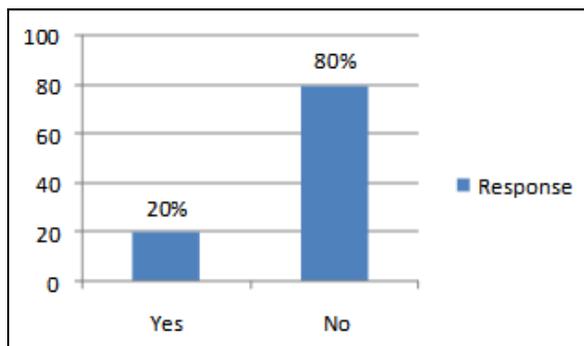
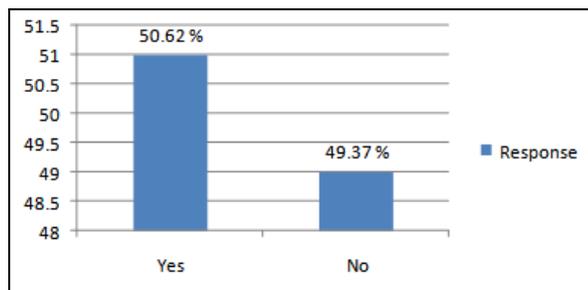


Table 11: Do you get frustrated and less feels hungry?

Total 100	Response		%	
	Yes	No	Yes	No
	51	49	51	49



Analysis of Data

The data to assess the analyses of low calcium content in the body and causes of osteoporosis as collected through questionnaire above was analyses using descriptive statistics.

Result and discussions

Analysis of above questionnaire gives following results: In people, 32% consumed extra diet, 73% ate food 2-3 times a day, 27% ate food 3-5 times a day, 64% adult male and female consumed Calcium tablet, 30% people ate non vegetarian diet and 70% people preferred vegetarian diet. 77%, people know about source of calcium. Only 23% people know about symptoms of arthritis and 20% are aware about diseases Osteoporosis. 70% people consume calcium rich food and only 39% people consume milk daily which is the main problem of osteoporosis.

Hence the problem of Arthritis is Maximum among old aged people since they do not take proper care of their diet and are not aware about arthritis.

Suggestions

1. To create awareness among people about causes and control of arthritis by conducting seminars and skit.
2. To consume calcium rich tablets to increase bone density in body.
3. To consume calcium rich diet.

4. Regular medical checkup for iron content in body should be done in school and colleges.

References

1. Abraham GE, Grewal H. A total dietary program emphasizing magnesium instead of calcium: Effect on the mineral density of calcaneous bone in postmenopausal women on hormonal therapy. *J Reprod Med.* 1990; 35:503-507.
2. Calvo MS. Dietary phosphorus, calcium metabolism and bone. *J Nutr.* 1993; 123:1627-1633.
3. Evans RW, Darvell BW. Refining the estimate of the critical period for susceptibility to enamel fluorosis in human maxillary central incisors. *J Pub Hlth Dent.* 1995; 55:238-249.
4. Fairweather-Tait S, Prentice A, Heumann KG, Landing MAJ, Stirling DM, Wharf SG, *et al.* Turnlund JR. Effect of calcium supplements and stage of lactation on the calcium absorption efficiency of lactating women accustomed to low calcium intakes. *Am J Clin Nutr.* 1995; 62:1188-1192.