Assessment of intake of macronutrients of Punjabi women

Vibhuti Arya and Vinita Singh

Punjabi cuisine is one of the most distinct and popular Indian cuisine and comes from the region of Punjab situated partially in India and Pakistan. It offers a vast variety of delectable and exotic vegetarian and non-vegetarian dishes that are prepared with varied traditional culinary styles, particularly the tandoori style. The exotic and appetizing tandoor items and various other mouth- watering and finger licking dishes having rich, spicy and buttery flavour savoured with Punjabi Basmati rice of varied forms and special Punjabi breads like *Tandoori roti* and *Naan* have not only made made the gastronomists crave for more but has also garnered the cuisine much fame outside the Punjab region taking it to places around the globe like Canada and the UK. Present investigation was carried out in various areas of Kanpur. The following areas were selected for the survey such as Gumti, Govind Nagar, Ashok Nagar, Lajpat Nagar, Lalbangla. 100 Punjabi women were selected randomly for the study. The anthropometric assessment was done by taking height, weight and body mass index of the respondents. The mean nutrient intake was computed by the 24 recall method. The nutritional awareness level and food habit among the Punjabi women was assessed through the questionnaire. The maximum 15.15 per cent deficient energy was found in 35 to 45 years of age group and 8.43 per cent deficient energy was found in 45 to 55 years of age group. The maximum 18.18 per cent increase protein was found in 45 to 55 years of age group and 8.72 per cent increase fat was found in 35 to 45 years of age group. The maximum 134.0 per cent increase fat was found in 45 to 55 years of age group and 133.2 per cent increase fat was found in 35 to 45 years of age group.

Key Words : Assessment, Energy, Protein, Fat

How to cite this article : Arya, Vibhuti and Singh, Vinita (2019). Assessment of intake of macronutrients of Punjabi women. *Food Sci. Res. J.*, **10**(1): 81-83, **DOI : 10.15740/HAS/FSRJ/10.1/81-83**. Copyright@2019: Hind Agri-Horticultural Society.

INTRODUCTION

The local cuisine of Punjab is heavily influenced by the agriculture and farming lifestyle prevalent from the times of the ancient Harappan Civilization. Locally grown staple foods form the major part of the local cuisine. Distinctively Punjabi cuisine is known for its rich,

MEMBERS OF RESEARCH FORUM

Author for correspondence : Vibhuti Arya, Department of Food Science and Nutrition, College of Home Science, C.S.A. University of Agriculture and Technology, Kanpur (U.P.) India

Associate Authors' :

Vinita Singh, Department of Food Science and Nutrition, College of Home Science, C.S.A. University of Agriculture and Technology, Kanpur (U.P.) India

(Email : svinita2008@gmail.com)

buttery flavours along with the extensive vegetarian and meat dishes. Main dishes include *Sarson da saag* and *Makki di roti*.

There are many styles of cooking in Punjab. In the villages many people still employ the traditional infrastructure for cooking purposes. This includes wood-fired and masonry ovens. In the past many people employed wood-burning stoves. But this method is dying out. One derivation from this type of cooking is the *Tandoori* style of cooking commonly known as *Tandoor*. In India, *Tandoori* cooking is traditionally associated with Punjab as Punjabis embraced the *Tandoor* on a regional level. is common to have communal *Tandoors*, which are also called Kath *Tadoors* inPunjabi.

METHODOLOGY

The study was under taken for period of six months *i.e.* from January to June 2017. The sample consisted of 100 respondents of Punjabi women of the age of 35 to 55 years. Purposive random sampling is used for the study.

This research study focuses on the research methodology and design selected for this proposed study, which incorporates the overall structure of the study of the Punjabi women in Kanpur city age group 35-55 years.

There are two approaches used in research, qualitative and quantitative research. But Quantitative research is unable to consider the individuality of human experience and for this reason qualitative approach is more suited to the proposed study.

Qualitative research aim to help understand social phenomena emphasizing the experience, attitude and view in the form of words, based on observation and interview.

OBSERVATIONS AND ASSESSMENT

Table 1 shows the energy consumption of respondents as compared to recommended dietary allowance (RDA). The maximum 15.15 per cent deficient energy was found in 35 to 45 years of age group and 8.43 per cent deficient energy was found in 45 to 55 years of age group.

Table 2 shows the protein consumption of respondents as compared to recommended dietary

allowance (RDA). The maximum 18.18 per cent increase protein was found in 45 to 55 years of age group and 8.72 per cent increase protein was found in 35 to 45 years of age group.

Table 3 shows the fat consumption of respondents as compared to recommended dietary allowance (RDA). The maximum 134.0 per cent increase fat was found in 45 to 55 years of age group and 133.2 per cent increase fat was found in 35 to 45 years of age group. Similar work related to the present investigation was also carried out by Ann *et al.* (1995); Kaur and Kochhar (2015); Rao and Puttaraj (2015); Sidhu and Tatla (2002) and Singh and Kirchengast (2011).

Conclusion:

It was evident from data that Punjabi women were taking high protein and fat maximum as compared to RDA. Low energy intake was found compared to RDA. Intake of cereals (wheat, maize, rice), potatoes, sugarcane, fruits, table sugar (sucrose), bread, milk, root and tubers was inadequate while that of fats and oils was higher, when compared with suggested intakes given by ICAR. The higher intake of butter and *Ghee*, cheese can be attributed to consumption of fried foods like *Paratha*, burger, samosa, *Pav bhaji* and other fried snacks. The study was conducted in winter, so seasonal vegetables, like carrot, radish, peas, capsicum, cauliflower etc. were frequently consumed in pizza, burger, noodles,

	ergy consumption of Punjabi womer	•			
Sr. No.	Age group	N	Energy (kcal/d)	RDA	Deficient %
1.	35 to 45 years	46	1892.1	2230	15.15
2.	45 to 55 years	54	2042.0	2230	8.43
	Total	100	1973.1	2230	11.52
Table 2 : Pi	otein consumption of Punjabi wome	en as compared to R.L).A.		
Sr. No.	Age group	N	Protein (g/d)	RDA	Deficient %
1.	35 to 45 years	46	59.8	55	-8.72
2.	45 to 55 years	54	65.1	55	-18.18
	Total	100	62.7	55	-12.72
Table 3 : Fa	t consumption of Punjabi women as	compared to R.D.A.			
Sr. No.	Age group	Ν	Fat (g/d)	RDA	Deficient %
1.	35 to 45 years	46	58.5	25	-134
2.	45 to 55 years	54	58.3	25	-133.2
	Total	100	58.4	25	-133.6

Food Sci. Res. J.; 10(1) | Apr., 2019 | 81-83 82 Hind Institute of Science and Technology

Manchurian along with vegetables and salad. Black gram dal and kidney beans were the favourite pulses consumed in addition to other pulses.

LITERATURE CITED

- Anna, Winkvsit, Fehmida, Jaul, Jean -Pierre Habicht and Kathleen, M. Rasmaoessen (1995). Maternal energy depletion is buffered among malnourished women in Punjab, Pakistan 1 0022-3166/94 \$3.00 ©1994 American Institute of Nutrition. Manuscript received 29 November 1993. Initial review completed 4 March 1994. Revision accepted 24 May 1994.
- Kaur, Khushpreet and Kochhar, Anita (2015). Impact of nutrition counselling on the nutritional status of the gestational diabetics *J. Eco-friendly Agric.*, **10**(2): 191-

195.

- **Rao, Sowmya G. and Puttaraj, Shashikala (2015).** A study on nutrient intake and energy balance of women- home makers, gainfully employed non-executives and executives, **2**:2395-2326.
- Sidhu, Sharda and Tatla, Harleen Kaur (2002). Prevalence of overweight and obesity among adult urban females of Punjab: A cross-sectional study *Anthropologist Special Issue*, 1: 101-103.
- Singh, Maryam and Kirchengast, Sylvia (2011). Obesity prevalence and nutritional habits among Indian women: a comparison between Punjabi women living in India and Punjabi migrants in Vienna, *AustriaAnthrop. Anz.*, 68 (3): 239–251.

Received : 17.08.2018; Revised : 02.03.2019; Accepted : 15.03.2019