



**Title : Comparative Study of Nutritional Assessment, Dietary Intake and Body Composition in 20-25 Years Age of Gujarati and Punjabi Communities in Mumbai city**

**Author(s) :** Ankita Ghag, Mrs. Anuradha Shekhar

**Institution :** Department of Food Science and Nutrition, Dr B.M.N. College of Home Science, Matunga, Mumbai

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**Introduction:**

Mumbai being a diverse capital of religion and traditions; have varied dietary practices but identical lifestyle habits resulting in similar body composition.

**Methodology:**

About 200 individuals with mean age  $\geq 23$ , were studied i.e. 100 from each community (50 males and 50 females) respectively. A purposive sampling technique was used to collect the samples. A pre-tested questionnaire was used along with body composition analyzer (Tanita BC541) was used to assess body composition, nutritional status and dietary intake.

**Results and Conclusion:**

The male subjects from both the communities were seen to be significant correlated with the age and biological age. The correlation between body composition and eating patterns conclude that, both the communities were at equal risk of metabolic and degenerative diseases, as it was seen that consumption of carbohydrates, fats, sodium and calories was higher in both the communities as compared to RDA. In spite of varied dietary habits and lifestyle practices the body fat percentage in Gujarati and Punjabi was found to be higher than normal ( $p=0.087$ ), also the positive correlation was observed in junk food consumption and anthropometric measurements in both the communities. To some extent physical activities and sleeping patterns has greater influence on health when it came it social and emotional well being. The frequency of physical activity was seen to be significantly correlated with the fat mass in Punjabi females and muscle mass and bone mass in females from both the communities. It was also seen to be significantly correlated with the BMR in females from the Gujarati as well as the Punjabi females.

**Reference:**

- Guigoz, Y. (2006). The Mini Nutritional Assessment (MNA®) review of the literature-what does it tell us?. *Journal of Nutrition Health and Aging*, 10(6), 466.
- Gupta, A., & Sheth, M. K. (2013). Fried foods associated health risks in Gujarati housewives. *Nutrition & Food Science*, 43(5), 444-452.
- Hardikar, P. S., Joshi, S. M., Bhat, D. S., Raut, D. A., Katre, P. A., Lubree, H. G., ... & Yajnik, C. S. (2012). Spuriously high prevalence of prediabetes diagnosed by HbA1c in young Indians partly explained by hematological factors and iron deficiency anemia. *Diabetes Care*, 35(4), 797-802.
- Kaur and Mehta, 2012; Prevalence of hypertension and its association with body fat percentage among government and private schoolgirls in Ludhiana - *Human Biology Review* (ISSN 2277 4424) 1(3) 2012.
- Seneviratne SN, Parry GK, McCowan LM, Ekeroma A, Jiang Y, Gusso S, et al. Antenatal exercise in overweight and obese women and its effects on offspring and maternal health: Design and rationale of the improving maternal and progeny obesity via exercise randomized controlled trial. *BMC Pregnancy and Childbirth*. 2014;14:148.