



# Role of Low Acid Diet In Chronic Kidney Disease

■ PRAGYA SINGH, HARI SHANKAR, T.B. SINGH, SHIVENDRA SINGH AND R.G. SINGH

See end of the paper for authors' affiliation

**Correspondence to :**

PRAGYA SINGH  
Department of Community  
Medicine, Institute of  
Medical Sciences, Banaras  
Hindu University,  
VARANASI (U.P.) INDIA  
Email: [singhpragya333@gmail.com](mailto:singhpragya333@gmail.com)

**ABSTRACT : Introduction-** Acid-base balance is maintained by normal elimination of carbon dioxide by the lungs (which affects the partial pressure of carbon dioxide (PCO<sub>2</sub>) and normal excretion of non-volatile acid by the kidneys (which affects the plasma bicarbonate concentration). The role of dietary acid also should be given greater consideration in CKD patients. **Objective-** The objective of the study was to know the effect of dietary intervention of Low Acid Diet on (CKD) Chronic kidney disease outcomes. **Methodology-** It is a hospital based interventional study. Patients were recruited from nephrology OPD of Sir Sunderlal Hospital IMS BHU Varanasi, India in the age group of eighteen years and above who were ready to give written consent. Follow-up has been done for six months. Study variables were BMI, Demographic profile, Glomerular filtration rate, bicarbonate level by ABG, Blood levels of Urea, Creatinine. Investigative variables were obtained by standard methods as used in the hospital. Study tools used were Interview Schedule, Electronic weighing scale, Measuring tape, Food frequency questionnaire (FFQ) and 24hr. dietary recall method were applied for dietary assessment. Data were analyzed by trial version of SPSS 16 software. **Results-** Results shows that serum bicarbonate was increased from less than 23mmol/L in 5 patients to more than 23mmol/L in 8 patients. Reduction was found in CKD stages 2 and 5. In dietary habits fruit intake was found increased who were taking 2-4 servings per day likewise frequency of 3 servings per day of vegetable intake was found increased from 4 patients to 12 patients. **Conclusion** -Present study suggest that intervention of low acid diet by increasing fruits and vegetable intake holds promise to be an additional kidney-protective strategy in CKD management.

**KEY WORDS :**

Metabolic acidosis,  
Dietary intake,  
Bicarbonate, Chronic  
kidney disease, ABG  
(Arterial blood gases)

**How to cite this paper :** Singh, Pragya, Shankar, Hari, Singh, T.B., Singh, Shivendra and Singh, R.G. (2016). Role of Low Acid Diet In Chronic Kidney Disease. *Internat. J. Med. Sci.*, 9(1) : 37-42.

**Paper History :**

Received: 20.01.2016;

Accepted: 28.03.2016