

## Letter to Editor

Dear Sir,

### Vitamin D, Neutrophil-to-Lymphocyte Ratio and Cognitive Function

We have read the nice article by Dr. Sasirekha and colleagues in the recent issue of your journal (IJPP 2018; 62(1) : 74–79) They have observed overall prevalence of cognitive impairment in 30% of Type II Diabetes Mellitus patients. Authors have not mentioned about occupation of participants. The people who are engaged in occupation with mathematical skills will have reduced cognitive decline even after retirement (1). Vitamin D deficiency is common in cities of India and other countries. Vitamin D deficiency is identified as a risk factor

for type 2 diabetes and its complications (2). Vitamin D has a significant negative correlation with Neutrophil-to-Lymphocyte ratio (3). The lower vitamin D concentrations in blood are associated with poorer cognitive function (4). The intake of diet with high percentage of energy from fat and protein, and low-energy intake from carbohydrate have been associated with cognitive decline (5). The balanced diet with adequate Vitamin D helps to maintain normal N-L ratio and cognitive function.

### References

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