

stimulus by a feedback mechanism⁽⁵⁶⁾. Dietary deficiency of Mg^{2+} results in loss of cellular K^+ and gain of cellular Na^+ and calcium cations^(57,58).

SNaC in Group III(P-IDA): In the present study the SNaC in P-IDA is markedly elevated compared with the pregnant controls of the same gestational period. In the present study, a highly significant direct relationship is found between SNaC and SMnC in the P-IDA, while a significant negative relationship is found between SNaC and SZnC at the this group, and a highly significant direct relationship is found between SNaC SCuC in the P-IDA.

Serum potassium Conc.(SKC) in group I: In the present work, the normal value for SKC in the non-pregnant 14.88 ± 0.73 mg/dl, which confirms the values reported by some investigators⁽⁵⁹⁾. but is inconsistent with other reports from abroad. These differences in the SKC may be attributed to the social and nutritional status and to dietary habits prevailing in Iraq & other countries. In addition to food, other factors may cause differences in the SKC such as the source of water supply, geographical location and socioeconomic and racial status, and temperature⁽⁶⁰⁾. a progressive reduction in maternal SKC with increasing gestational age is observed compared to non-pregnant control group, which confirm the observations of other workers⁽⁶¹⁾

SNaC in Group II: In the present work. A decline in SNaC begins early in pregnant and the greatest decrease is observed in pregnancy. Several physiological factors may contribute to the decrease in SKC during pregnancy. One of such factors may be the increase in SKC. In the present study a significant direct relationship is found between SKC and HbL. A significant inverse relationship is found between SKC and SCuC in the of normal pregnancy. SKC showed a progressive decline while SNaC showed elevation with increasing gestational age. This agrees with the findings of previous workers⁽⁶²⁾. In the Group II, a highly significant positive correlation is found between SKC, SIC, HbL and SCaC, while a highly significant negative correlation is found between SKC-SCuC and SnaC. The most important of these is kidney function. There is no renal threshold for potassium; therefore, the 80 to 200mmol consumed daily may be effectively excreted by the distal tubules⁽²¹⁾.

SKC in Group III(P-IDA): In the present work, it is found that SKC severely declines in the P-IDA. One of these consequences of this hypokalemia is hypernatremia. It is known that there is an inverse relationship between SKC and SNaC⁽⁶²⁾. In the present study, the SKC is markedly declines compared with pregnant controls of the same gestational period. Also pregnant with IDA show a progressive reduction in SKC.

Serum Calcium Conc.(SCaC) in Group 1(Non pregnant Controls): The normal value for SCaC in the non-pregnant healthy women varies from one report to another. In the present study the control women of childbearing age exhibited SCaC with a mean 7.56 ± 0.44 mg/dL. The mean value for SCaC in this study is lower than the mean values in the literatures⁽⁶³⁾. But these results could be compared more favorably with the values reported in other developing countries. This calcium deficiency may be attributed to dietary habit prevail-

ing in these countries. Many Asians including Iraqi's continue to eat either traditional diet based on cereal and pulse. This kind of diet with its low minerals (including calcium).

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