Plasma Retinol and Beta-Carotene Levels

Overview

Observational studies have suggested that low dietary intake or low plasma concentrations of retinol, beta-carotene, or other carotenoids might be associated with increased risk of developing certain types of cancer. However, relatively few studies have investigated the determinants of plasma concentrations of these micronutrients. The authors designed a cross-sectional study to investigate the relationship between personal characteristics and dietary factors, and plasma concentrations of retinol, beta-carotene and other carotenoids.

Variables

Variables from left to right on the Plasma.txt file are:

- AGE: Age (years)
- SEX: Sex (1=Male, 2=Female).
- SMOKSTAT: Smoking status (1=Never, 2=Former, 3=Current Smoker)
- QUETELET: Quetelet (weight/(height^2))
- VITUSE: Vitamin Use (1=Yes, fairly often, 2=Yes, not often, 3=No)
- CALORIES: Number of calories consumed per day.
- FAT: Grams of fat consumed per day.
- FIBER: Grams of fiber consumed per day.
- ALCOHOL: Number of alcoholic drinks consumed per week.
- CHOLESTEROL: Cholesterol consumed (mg per day).
- BETADIET: Dietary beta-carotene consumed (mcg per day).
- RETDIET: Dietary retinol consumed (mcg per day)
- BETAPLASMA: Plasma beta-carotene (ng/ml)
- RETPLASMA: Plasma Retinol (ng/ml)

These variables were measured on 315 patients who had an elective surgical procedure during a three-year period to biopsy or remove a lesion of the lung, colon, breast, skin, ovary or uterus that was found to be non-cancerous.

References

- Nierenberg DW, Stukel TA, Baron JA, Dain BJ, Greenberg ER. Determinants of plasma levels of beta-carotene and retinol. American Journal of Epidemiology 1989;130:511-521.

Data Source

CMU Stat Lib