

Diet and plasma androgens in postmenopausal vegetarian and omnivorous women and postmenopausal women with breast cancer.

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Diet and plasma androgens in postmenopausal vegetarian and omnivorous women and postmenopausal women with breast cancer.

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Abstract

We studied 27 postmenopausal women, 9 vegetarians, 10 omnivores, and 8 apparently healthy women with breast cancer (BC), four times during 1 y. Dietary intakes were recorded and plasma androgens and sex-hormone-binding globulin (SHBG) binding capacity were determined. Androstenedione (A), testosterone (T), free T (FT), and SHBG were higher in omnivores than in vegetarians. In multiple correlation analysis, intakes of protein and fat were positively correlated with A, T, and FT, whereas the intakes of carbohydrate, grain, total fiber, and grain fiber showed the opposite correlations. Protein intake was positively correlated with percentage FT (%FT) and negatively with SHBG. BC patients had a similar pattern to omnivores with even higher levels of A and T (significant compared with vegetarians) and they showed significantly higher FT and lower SHBG than both control groups. We conclude that a Western-type diet in postmenopausal women is associated with high A, T, %FT, FT, and low SHBG and this pattern was apparent in the BC patients.

Reference:

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