# EFFECT OF VITAMIN A ON TREATMENT OF RATS WITH VINBLASTINE

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The use of vinblastine in the treatment of cancer is frequently associated with weight loss, anorexia and mucosal ulceration.

The effect of vinblastine on body weight, liver weight and food intake was studied in normal healthy male Wistar-Albino rats and compared with rats which were pair-fed and rats fed *ad libitum*. Treatment with vinblastine (0.25 mg/kg body weight, intraperitoneally, for two days) caused a significant reduction in body weight, liver weight and food intake compared to both control groups. The plasma and liver vitamin A and plasma protein levels were also significantly reduced by treatment with vinblastine.

**SECTION A**

Treatment with vitamin A (retinol– 3000 I.U. per animal, intraperitoneally) 3 hours prior to administration of vinblastine, curtailed the loss in body weight and liver weight and significantly ($P < 0.05$) increased the food intake, when compared to animals treated only with vinblastine. Pre-treatment with vitamin A also prevented the fall in plasma total protein ($P < 0.05$) and albumin ($P < 0.01$) levels induced by vinblastine.

It appears that vitamin A alleviates some of the adverse effects of vinblastine. It is possible that vitamin A may have the same beneficial effects in patients treated with vinblastine, either singly or in combination.