

Adaptation of the Phosphotungstate Method for the Determination of Vitamin C Contents in Animal and Human Tissues

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The usefulness of phosphotungstate reagent for vitamin C determination in tissue homogenates has been confirmed. An optimal homogenization medium was selected: 1.8 M solution of HPO_3 in 1.3 M CH_3COOH . With this medium the analytical curve (at 700 nm) demonstrated the right linearity, correlation and recovery coefficients were appropriately high (0.999 and 99.8%) and the values of intraserial and interserial variation coefficient were low (< 5% and < 10%, respectively). It makes this method sensitive, easily repeatable, and useful for vitamin C determination in animal and human tissues, including neoplastic ones.