

Homocysteine and B vitamin assays

Of the CVS sample, 881 had sufficient serum sample to perform the assays. B vitamins and tHcy levels were assayed on year data which was all gathered between 1999 and 2000. Samples had been stored for an average of 6 years. Serum tHcy, vitamin B12, holotranscobalamin and folate were measured in collaboration with and under the supervision of Professors A. David Smith and Helga Refsum at the Department of Pharmacology of the University of Oxford. For serum tHcy, a fluorescence polarization immunoassay was used (Nexo et al., 2000). Serum vitamin B12 and folate were measured using microbiological methods (Refsum et al., 2006). Serum holotranscobalamin was measured by a new solid phase radioimmunoassay (Refsum & Smith, 2003) modified for small volumes.

References

Nexo E, Engbaek F, Ueland PM, Westby C, O'Gorman P, Johnston C, Kase BF, Guttormsen AB, Alfheim I, McPartlin J, Smith D, Møller J, Rasmussen K, Clarke R, Scott JM, Refsum H. Evaluation of novel assays in clinical chemistry: quantification of plasma total homocysteine. *Clin Chem.* 2000 46(8 Pt 1):1150-6.

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