

Vitamin B₁₂ and folate depletion in the elderly

Diagnosis, clinical correlates and causes

AKADEMISK AVHANDLING

som för avläggande av medicine doktorsexamen
vid Sahlgrenska Akademin vid Göteborgs Universitet
kommer att offentligen försvaras i föreläsningssalen, Arvid Carlsson,
Medicinaregatan 3, Sahlgrenska Akademin,
fredagen den 1 december 2006 kl. 09.00

av

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Avhandlingen baseras på följande delarbeten:

- I. Catharina Lewerin, Herman Nilsson-Ehle, Michael Matousek, Göran Lindstedt and Bertil Steen. Reduction of plasma homocysteine and serum methylmalonate concentrations in apparently healthy elderly subjects after treatment with folic acid, vitamin B12 and vitamin B6: a randomised trial. *Eur J Clin Nutr* 2003; 57:1426-1436
- II. Catharina Lewerin, Susanne Ljungman, Herman Nilsson-Ehle. Glomerular filtration rate as measured by serum cystatin C is an important determinant of plasma homocysteine and serum methylmalonic acid in the elderly. Accepted *J Int Med* 060926
- III. Catharina Lewerin, Michael Matousek, Gunilla Steen, Boo Johansson, Bertil Steen, Herman Nilsson-Ehle. Significant correlations of plasma homocysteine and serum methylmalonic acid with movement and cognitive performance in elderly subjects but no improvement from short-term vitamin therapy: a placebo-controlled study. *Am J Clin Nutr* 2005;81:1155-62
- IV. Catharina Lewerin, Stefan Jacobsson, Göran Lindstedt and Herman Nilsson-Ehle. Atrophic gastritis and antibodies against *Helicobacter pylori* in the elderly. Implications for vitamin B12, folic acid and iron status, cognitive and movement performance, and response to oral vitamin therapy. In manuskript