

GENETICS

TIME BOMB – REVISITED

11.08.2006

I revisited a 2005 paper on “[Folic acid – vitamin and panacea or genetic genetic time bomb](#)”. From the abstract: “We live in a health-conscious age – many of us supplement our diet with essential micronutrients ... so-called ‘functional foods’ ... We examine this issue in relation to the B-group vitamin folic acid, and ask whether supplementation with this vitamin could introduce a strong genetic selection pressure...” As I found this paper highly interesting, here is my analysis, how the story goes on:

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3. Kelemen, LE. The role of folate receptor alpha in cancer development, progression and treatment: Cause, consequence or innocent bystander?. *INTERNATIONAL JOURNAL OF CANCER*.
4. Nazarenko, MS. Frequencies of C677T and A1298C polymorphisms of methylenetetrahydrofolate reductase gene at the early stage of human development. *RUSSIAN JOURNAL OF GENETICS*.
5. Ferguson, LR. Nutrigenomics – Integrating genomic approaches into nutrition research. *MOLECULAR DIAGNOSIS & THERAPY*.
6. Soloway, PD. Gene nutrient interactions and evolution. *NUTRITION REVIEWS*.
7. Eichholzer, M.. Folic acid: a public-health challenge. *LANCET*.
8. Houghton, LA. [6S]-5-Methyltetrahydrofolate is at least as effective as folic acid in preventing a decline in blood folate concentrations during lactation. *AMERICAN JOURNAL OF CLINICAL NUTRITION*.
9. Ejarque, I. A bioinformatic approach to epigenetic susceptibility in non-disjunctional diseases. *BIOLOGICAL AND MEDICAL DATA ANALYSIS, PROCEEDINGS*.
10. Sweeney, MR. Evidence of unmetabolised folic acid in cord blood of newborn and serum of 4-day-old infants. *BRITISH JOURNAL OF NUTRITION*.
11. Lucock, MD. The antifolate activity of tea catechins. *CANCER RESEARCH*.
12. Kelemen, LE. Multivitamin and alcohol intake and folate receptor alpha expression in ovarian cancer. *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION*.
13. Allegrucci, C. Human embryonic stem cells as a model for nutritional programming: An evaluation. *REPRODUCTIVE TOXICOLOGY*.

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