CURRICULUM VITAE

Henricus Johannes Blom

Birth:	January 30, 1956 Den Bosch, The Netherlands
Marital Status:	Married May 8, 1985 to Josina HH de Bruijn
Children:	Renske Erin, January 18, 1986 Bart Merijn, July 6, 1990
Nationality:	Dutch
Military Service:	July 1976 - August 1977
Home Address: Working Adress:	Noorddammerlaan 60, 1187 AD, Amstelveen, The Netherlands Sundgauallee 51-3, 79114, Freiburg, Germany
Office Address:	Laboratory of Clinical Biochemistry and Metabolism, Department of General Pediatrics, Adolescent Medicine and Neonatology, University Medical Centre Freiburg, Mathildenstrasse 1, 79106 Freiburg , Germany
Telephone: Fax:	(H) +31 20 3454554 or +31 6 53627269 (W) +49 761 270 43710 / 44821 (W) +49 761 270 45270
E-mail:	(W) henk.blom@uniklinik-freiburg.de

Education:

1976	Atheneum B, Titus Brandsma Lyceum, Oss
1980	Candidate Chemistry, University of Nijmegen
1983	Teacher in Chemistry (first degree) and Physics (second degree), University of Nijmegen
1985	Doctoral in Chemistry, University of Nijmegen
1988	PhD in Medicine, University of Nijmegen
2002	Registered Clinical Biochemical Geneticist
2009	Professor in Biochemistry of Inherited Metabolic Disease

Predoctoral Research Experience:

1981-1982	Prof Dr HCJ Ottenheijm and Prof Dr RMJ Liskamp, Organic Chemistry, Division Bio-organic Chemistry, University of Nijmegen

Synthesis and biologic function of Sparsomycine.

1983-1984 Prof Dr Ir GD Vogels, Microbiology, University of Nijmegen
One-carbon transport in Methanogenic Bacteria.

1984-1985 Prof Dr PT Henderson, Toxicology, University of Nijmegen
Interaction of mutagenic compounds with cytochrome P-450.

Postdoctoral Research and Diagnostic Achievements:

1985-1988 Scientific Researcher at the Department of Gastroenterology and Liver Diseases, University Hospital Nijmegen, Netherlands.
Dr Albert Tangerman and Prof Henderson.
Tasks: Pathobiochemical Aspects of Methionine.

1989 Postdoctoral Fogarty Fellow, Human Genetics Branch, NICHD, National Institutes of Health, Bethesda, Maryland, USA.
Dr William A. Gahl, MD, PhD.
Tasks:
1. Lysosomal storage of glucuronic acid in fibroblasts of patients with a defective transport of N-acetylneuraminic acid.
2. Development of new techniques for determination of lysosomal storage products in mucopolysaccharidosis and glycoproteinosis.

1990-1992 Post-doc at the Laboratory of Pediatrics and Neurology, University Hospital Nijmegen, Netherlands.
Prof Dr Ir Frans J.M. Trijbels.
Tasks:
1. Development of new forms of therapy in patients with severe hyperhomocysteinemia.
2. Enzymatic defects in severe and mild hyperhomocysteinemia.
3. Development of a fast method for total homocysteine determination.

1992-2006 Staff member of Pediatrics and Clinical Genetics Center Nijmegen at Laboratory of Pediatrics and Neurology, University Hospital Nijmegen, Netherlands.
Prof Dr Ron Wevers and Prof Dr Ir Frans J.M. Trijbels (till 2001)
Tasks:
1. Diagnostics of inborn errors of metabolism with special focus on homocysteine metabolism and cystinosis.
2. Biochemical and molecular genetic research of disturbed homocysteine and folate metabolism in relation to complex diseases, especially cardiovascular disease and congenital disorders.
3. Supervisor LC-ESI-MS/MS diagnostics and research.
4. Year 2001: research coordinator UMCN workgroup Disturbed Homocysteine Metabolism and Disease
5. Year 2004: head Section Metabolites and Neurochemistry of Laboratory of Pediatrics and Neurology.

1997-2002 Established Investigator of the Netherlands Heart Foundation (Dr. E. Dekker Program).

2001 Sabbatical (3 months) at Department of Nutritional Science, University of California, Berkeley, CA, USA. Host: Prof Barry Shane.

2002 Registered Clinical Biochemical Geneticist.

2007-2011 Staff member of Metabolic Unit at the Department Clinical Chemistry, VU University Medical Centre Amsterdam, Netherlands.
Prof Karel Jakobs
Tasks:

1. Supervisor Clinical Biochemical Genetics Diagnostics of Inborn Errors of Metabolism
2. Head Vascular Metabolic Research Group (2010-2011)
3. Vice-head of Metabolic Unit, Department of Clinical Chemistry
4. Theme leader Vascular Function of Institute for Cardiovascular Research (ICaR-VU).

2012-2013 1. Head Metabolic Unit at the Department Clinical Chemistry, VU University Medical Centre Amsterdam, Netherlands
2. Supervisor Diagnostics Clinical Biochemical Genetics
3. Head Vascular Metabolic Research Group.

2009 Professor in Biochemistry of Inherited Metabolic Diseases, VU University Medical Centre Amsterdam, The Netherlands

2014 Head Laboratory for Clinical Biochemistry and Metabolism, Department of General Pediatrics, Center for Pediatrics and Adolescent Medicine University Hospital, Freiburg, Germany.
Tasks:
1. Head of laboratory
2. Supervisor Research group Blom
3. Coordinator E-HOD

Main lines of research are:

a. Inherited defects of homocysteine, B12 and folate metabolism
b. Associations between elevated homocysteine and risk for cardiovascular disease
c. Inherited methylation disorders
d. Relation between disturbed homocysteine metabolism and risk for obstetric complications
e. Folate metabolism and methylation in neural tube defects and congenital heart disease
f. Development LC-ESI-MS/MS applications, with focus on inherited diseases

Major contributions to the field of homocysteine, vitamin B12 and folate metabolism include the association of a disturbed homocysteine metabolism with methionine adenosyltransferase deficiency (JCI 1988), pregnancy complications (Lancet 1992), including neural tube defects (Metabolism 1994), thrombosis (Lancet 1995, NEJM 1996) and stroke in children (Circulation 1999). The molecular basis of severe hyperhomocysteinemia in the Netherlands was established (JCI 1996, Blood 1998, AJHG 1999). Subsequently, investigating the genetic etiology of thermolabile MTHFR (AJHG 1995) resulted in the discovery of the MTHFR 677C>T and 1298A>C polymorphisms (Nat Genet 1995, AJHG 1998). The MTHFR 677C>T variant is the first identified genetic risk factor for neural tube defects (Lancet 1995), and to a lesser extend for cardiovascular diseases (AJHG 1996, Circulation 1997, JAMA 2002). Basic research concerned the effect of homocysteine and its metabolites on development of chicken embryos (Birth Defect Res 2003, Nature Neurosc Rev 2006) and endothelial function (Circulation 2004). More recently, his group discovered two new genetic defects: one in folate metabolism: dihydrofolate reductase deficiency (AJHG 2011 (2x)) and one in methylation: adenosine kinase deficiency (AJHG 2011).

Prof Blom was rewarded the grant European Network and Registry for Homocystinurias and Methylation Defects (E-HOD) funded by the European Commission in the framework of the Health Program (No.2012_12_02), running from 15.2.2013 till 15.5.2016. E-HOD concerns 15 different inherited metabolic disorders in homocysteine, folate, cobalamin and methylation metabolism. In June 2016 the consortium consisted of almost 100 partners. Main achievements are the setup of the E-HOD registry (www.EHOD.registry.com) and website (www.EHOD.com) with information for expert as well as patients and their families. In addition four guideline manuscripts have been prepared, teaching courses and Patient - Expert Meetings organized.

Blom has received 37 research grants as lead or Co PI. For his accomplishments in the research field of cardiovascular disease Henk Blom was awarded Established Investigator of the Netherlands Heart Foundation in 1997. Henk J Blom has published more than 350 papers in international peer reviewed journals, which have been cited over 20,000 times. **H-index 2016 = 74.**

Teaching:

1985-present	Various teaching duties on metabolic diseases, vascular disease, analytical chemistry, life sciences and biochemistry to students of medicine and different life sciences directions
1986-present	Supervisor of technicians in training, bachelor and master students of studies including chemistry, biology and medicine, PhD students
2009-2013	Coordinator topmaster programme Cardiovascular Research, part vascular function and metabolic diseases (6 weeks). VUmc, Amsterdam
2013-2014	Coordinator Metabole Fortbildung; Zentrum für Kinderheilkunde und Jugendmedizin, Universitäts Klinikum Freiburg.
2017	SSIEM Academy, faculty member.

Charity:

Founder Metatour and Stofwisseltour (http://www.stofwisseltour.nl/) and chair Wetenschappelijke Adviesraad Stofwisselkracht (www.stofwisselkracht.nl).

(Co)Promotor*:*

1. Dr M Wouters (Gynecology, RUNMC, Nijmegen): Recurrent miscarriage and hyperhomocysteinemia. March 14, 1996.
2. Dr D Franken (General Medicine, RUNMC, Nijmegen): Hyperhomocysteinemia: inherited causes and effects of treatment. December 19, 1996.
3. Dr M den Heijer (Hematology, Leiden University Medical Center): Hyperhomocysteinemia and venous thrombosis. April 17, 1997.
4. Dr L Kluijtmans (Pediatrics, RUNMC, Nijmegen): Molecular genetic analysis in hyper-homocysteinemia. April 21, 1998.
5. Dr N van der Put (Pediatrics, RUNMC, Nijmegen): Homocysteine, folate and neural tube defects. Biochemical and molecular genetic analysis. May 26, 1999.
6. Dr E van der Molen (Pediatrics, RUNMC, Nijmegen): Disturbed homocysteine metabolism, endothelial dysfunction and placental vasculopathy. February 7, 2000.
7. Dr W Nelen (Gynecology, RUNMC, Nijmegen): Risk factors for recurrent early pregnancy loss. Hyperhomocysteinaemia, thrombophilia and impaired detoxification. June 29, 2000.
8. Dr Ir A de Bree (Pediatrics, RUNMC, Nijmegen): Dietary, lifestyle and genetic determinants of homocysteine and its relation with coronary heart disease. December 12, 2001.
9. Dr D van Asselt (Geriatrics, RUNMC, Nijmegen): Clinical aspects of vitamin B12 deficiency in older persons. December 14, 2001.
10. Dr K Lievers (Pediatrics, RUNMC, Nijmegen): Genetics of hyperhomocysteinemia in vascular disease. November 6, 2002.
11. Dr Ir L Afman (Pediatrics, RUNMC, Nijmegen): Homocysteine metabolism and neural tube defects. Genetic, metabolic and functional studies. September 24, 2003.
12. Dr F Willems (Cardiology, RUNMC, Nijmegen): Homocysteine in coronary artery disease. October 15, 2003.
13. Dr R Castro (Faculty of Pharmacy, University of Lisbon, Portugal): Homocysteine, S-adenosylhomocysteine and DNA methylation: their implication for vascular disease. July 26, 2004
14. Ing S Heil (Pediatrics, RUNMC, Nijmegen): Unraveling the mystery of homocysteine – a genomic approach. February 2, 2005.
15. Dr E Levtchenko (Pediatrics, RUNMC, Nijmegen): Cystinosis: therapy and prognosis. March 30, 2006
16. Dr JW Muntjewerff (Psychiatry, PCN, Nijmegen): Homocysteine metabolism and risk of schizofrenia. November 22, 2006.
17. Dr H Gellekink (Endocrinology and Pediatrics, RUNMC, Nijmegen): Molecular genetic analysis of hyperhomocysteinemia. January 11, 2007.
18. Dr G van der Vleuten (General Medicine and Pediatrics, RUNMC, Nijmegen): Familial combined hyperlipidemia: molecular characterization and assessment of genetic cardiovascular risk. January 18, 2007.
19. Dr M Keizer (Endocrinology, RUNMC, Nijmegen): Homocysteine and venous thrombosis. Epidemiological studies on causality, pathophysiology and risk prediction. March 29, 2007

20. Dr I van der Linden (Pediatrics, RUNMC, Nijmegen): One carbon metabolism and neural tube defects. Case open or closed? January 10, 2008.
21. Dr SH Vermeulen (Endocrinology and Pediatrics, RUNMC, Nijmegen): Genetic epidemiology of homocysteine and related diseases. September 30, 2009.
22. Dr M Hogeveen (Pediatrics, RUNMC, Nijmegen): One carbon metabolism in infancy. July 5, 2011.
23. Dr I van Beijnum (Pediatrics, RUNMC, Nijmegen): Folate and congenital heart defects. October 11, 2011.
24. Dr Monica Rocha (Metabolic Unit, VUMC, Amsterdam and Faculty of Pharmacy, University of Lisbon, Portugal): Crossroads of homocysteine, nitric oxide and asymmetric dimethylarginine metabolisms. October 19, 2012.
25. Dr Ir Mariska Davids. (Metabolic Unit, VUMC, Amsterdam): Intracellular asymmetric dimethylarginine (ADMA) and homoarginine: metabolism and relation to plasma levels. May 7, 2013.
26. Dr Desiree Smith (Metabolic Unit and General Medicine, VUMC, Amsterdam): C. A closer look at the homocysteine paradox. October 31, 2013.
27. Drs Ruben Esse (Metabolic Unit, VUMC, Amsterdam and Faculty of Pharmacy, University of Lisbon, Portugal): Disturbed protein arginine methylation in hyperhomocysteinemia. November, 2014.
28. Dr Audrey Jung (Epidemiology and Gastroenterology, RUNMC, Nijmegen and Metabolic Unit, VUMC, Amsterdam): B-vitamins and DNA methylation in colorectal carcinogenesis. April 25, 2014.
29. Dr Marisa Mendes. (Metabolic Unit, VUMC, Amsterdam and Faculty of Pharmacy, University of Lisbon, Portugal): Cystathionine beta-synthase variants. Identification, characterization and modulation. November 20, 2014.
30. Dr Apolline Imbard (Hôpital Robert Debré, Paris, France and Department of General Pediatrics, Adolescent Medicine and Neonatology, University Medical Centre Freiburg). Choline metabolism and neural tube defects. October 2016.
31. Dr Carlijn Bergwerff (Department of Clinical Neuropsychology, VU and Department of General Pediatrics, Adolescent Medicine and Neonatology, University Medical Centre Freiburg). Food for thought: Novel insights into childhood ADHD. February 10, 2017

Collaborations:

Prof I Smulders: homocysteine and vascular disease (VUMC, Amsterdam, The Netherlands), Prof Dr L Kluijtmans: metabolomics (RUMC Nijmegen, The Netherlands), Prof I Schwartz: homocystinuria, biotinidase deficiency (Porto Alegre, Brazil), Dr JF Benoist and Dr M Schiff: betaine and choline (Debre Hosp, Paris, France), Dr WA Gahl: undiagnosed inherited metabolic diseases (NIH, Bethesda, USA), Prof I de Almeida and Prof P Leandro: DNA and protein methylation (Lisbon, Portugal), Dr. T Ben Omran: repair Arg to Cys mutations (HMC, Doha, Qatar), Prof S Koelker: E-HOD registry (Heidelberg, Germany), Prof R Finnell: folate and neural tube defects (Austin, Texas, USA), Prof J Loscalzo: homocysteine and vascular function (Boston, USA).

Societies and Awards:

1983 Member Koninklijke Nederlandse Chemische Vereniging.
1988 Visiting Fellow Award of the National Institutes of Health Visiting Program, Bethesda, Maryland, USA.
1989 Inborn Errors of Metabolism Course at the National Institutes of Health, Bethesda, Maryland, USA.
1989 Glaxo Aanmoedigings Award.
1990 Member Society for the Study of Inborn Errors of Metabolism.
1990 Member Vereniging Erfelijke Stofwisselingsziekten Nederland.
1993 Member Dutch Society of Biochemistry.
1996 Member Nederlandse Vereniging voor Klinische Chemie.
1997 Established Investigator of the Netherlands Heart Foundation.
1998 Secretary of Vereniging Erfelijke Stofwisselingsziekten Nederland.
1998 Chairman of Dutch Homocysteine Working Group of the Netherlands Heart Foundation.
1999 Member Nederlandse Antropogenetica Vereniging.
2000 Co-founder Topcenter Genetic and Metabolic Diseases.
2001 Chairman of the report "Homocysteine en hart- en vaatziekten" of the Netherlands Heart Foundation.
2002 Vice-president Topcenter Genetic and Metabolic Diseases.
2002 Chairman Homocysteine Working Group Nijmegen.
2003 Registered Clinical Biochemical Geneticist.
2006 Member registratiecommissie Vereniging Klinisch Genetische Laboratoriumdiagnostiek.

2007 Reward best article in 2006 of Dutch Society of Clinical Chemistry.
2007 Member Adviescommissie Neonatale Hielprikscreening – Metabole Ziekten.
2007 Member Gezondheidsraad Adviescommissie Microvoedingsstoffen.
2008 Member Programmacommissie Neonatale Hielprikscreening.
2008 Theme leader Improvement of Vascular Function in Metabolic Disease of Institute of Cardiovascular Research, VU University Medical Centre Amsterdam.
2009 Professor in Biochemistry of Inherited Metabolic Diseases, VU University Medical Centre Amsterdam.
2011 Member EMZ commissie Nederlandse Vereniging voor Klinische Chemie.
2012 Member bestuur Vereniging Klinisch Genetische Laboratoriumdiagnostiek.
2012 DB bestuur Vereniging Klinisch Genetische Laboratoriumdiagnostiek.
2013 Coordinator E-HOD (European Network and Registry for Homocystinurias and Methylation Defects)
2014 Mitglied Arbeitsgemeinschaft für pädiatrische Stoffwechselstörungen (APS).
2016 MetabERN Advisory Board Member.
2016 MetabERN Sub-groupleader Amino and Organic Acid Related Disorders.

1989-present Reviewer of research grants of organisations like NIH, Wellcome Trust, Nederlandse Hartstichting, NWO and of journals including Lancet, New England Journal of Medicine, American Journal of Human Genetics, Blood, FASEB Journal, Clinical Chemistry, American Journal of Clinical Nutrition, Life Sciences, Arteriosclerosis Thrombosis and Vascular Biology, Circulation, Journal of Clinical Investigation, Science.

1994-present Invited speaker at numerous international conferences.

Organizing Committees:

- Member of the Scientific Committee of the International Symposium, “Disorders of Homocysteine Metabolism”, Fulda, Germany, November 20-22, 1996.
- Member of the National Scientific Committee of the 2nd International Conference on Homocysteine Metabolism, Nijmegen, The Netherlands, April 26-29, 1998.
- Member Organizing Committee ESN-Meeting 1998.
- Member Organizing Committee 6th International Congress on Amino Acids, Bonn. August 3-7, 1999.
- Member of the Scientific Organizing Committee of the 3rd International Conference on Homocysteine Metabolism, Naples, Italy, July 4-7, 2001.
- Chairman and organizer Symposium Homocysteine, Folate and Vitamin B12 in Cardiovascular and Neurological Diseases, Ravenstein, The Netherlands, December 13, 2001.
- Chairman and organizer Symposium Genetics of Homocysteine in Vascular and Congenital Diseases, Ravenstein, The Netherlands, November 7, 2002.
- Chairman and organizer Symposium Neural Tube Defects: folate and beyond, Ravenstein, The Netherlands, September 23, 2003.
- Chairman Symposium Homocysteine, Pathophysiology, Genetics and Intervention, Ravenstein, The Netherlands, February 3, 2005.
- Chairman and member International Scientific Committee Homocysteine 2005 congress, Milan, Italy, June 26, 2005.
- Organizing committee 13th International Symposium on Chemistry and Biology of Pteridines and Folates. Egmond aan Zee, The Netherlands, June 20-24, 2005.
- Chairman Symposium Neural Tube Defects, Palm Springs, U.S.A., September 9, 2005.
- Chairman and member International Scientific Committee 6th Conference on Homocysteine Metabolism, World Congress on Hyperhomocysteinemia, Saarbruecken, Germany, June 5-9, 2007.
- Scientific Organizing Committee 7th International Conference on Homocysteine Metabolism, Prague, Czech Republic, June 21-25, 2009.
- Scientific Organizing Committee of the International Fulda Symposium, “Homocysteine, Folate and Cobalamin Disorders”, Fulda, Germany, November 11-13, 2009.
- Scientific Organizing Committee 8th International Conference on Homocysteine Metabolism, Lisbon, Portugal Republic, June 19-22, 2011.
- Scientific Organising Committee, Advances and Controversies in B-Vitamins and Choline, Leipzig, Germany, March 5-8, 2012.
- International Scientific Committee, 9th International Conference on Homocysteine and One-Carbon Metabolism, Dublin, Ireland, September 8-12, 2013.

- International Scientific Committee, 10th International Conference on One-Carbon Metabolism, Vitamin B and Homocysteine, Nancy, France, July 7-11, 2015.
- International Organising Committee SSIEM 2015, Lyon, France.
- RRD Course: Homocystinurias and Defects of Folate and Methylation Metabolism: Practical Approaches to Diagnosis and Treatment. February 29-March 2, 2016. Organisers: Henk Blom (Freiburg, Germany) and Viktor Kožich (Praha, Czech Republic).
- International Organising Committee SSIEM 2016, Rome, Italy.
- Steering and scientific committee of the 11th International Conference on Homocysteine and One-Carbon Metabolism, May 14-18 2017, Aarhus, Denmark.
- 2nd International Patient-Expert Meeting for Homocystinuria. September 4, 2017, Rio de Janeiro, Brazil.

Grants:

1988	Ter Meulen Fonds Stipendium, fellow, 1 year.
1989	Netherlands Heart Foundation (89.121), post-doc, 3 years.
1991	Preventiefonds (28-1006), PhD-student (MD), 3 years.
1993	Netherlands Heart Foundation (93.176), PhD-student + technician, 4 years.
1993	Ter Meulen Fonds Stipendium, MD, 0.5 years.
1993	Prinses Beatrix Fonds (93-1104), PhD-student , 4 years
1993	Preventiefonds (28-2263), PhD-student (MD) + technician, 2 years.
1994	Netherlands Heart Foundation (94.029), PhD-student (MD), 3 years.
1994	Netherlands Heart Foundation (94.141), PhD-student (MD) + technician, 3 years.
1995	EU BIOMED II, post-doc + technician, 3 years. Demonstration Project "Capillary electrophoresis with laser-induced fluorescence detection as a novel tool in molecular genetic analyses of human disease".
1996	Netherlands Heart Foundation (96.071), PhD-student (MD), 3 years.
1996	Noyons Stichting, PhD-student, 4 years.
1997	Netherlands Heart Foundation (96.147), PhD-student, 4 years.
1997	Netherlands Heart Foundation (97.071), PhD-student, 4 years.
1997	Netherlands Heart Foundation (D97.021), Established Investigator HJ Blom, 5 years.
1998	Preventiefonds (28-3011), PhD-student, 3 years.
1998	NWO, PhD-student, 3 years.
1998	Prinses Beatrix Fonds (98-0109), PhD-student + technician, 2 years.
1999	Netherlands Heart Foundation (D99.023), post-doc + PhD-student, 5 years.
2000	Nierstichting Nederland, PhD-student (MD) + technician, 3 years.
2000	Prinses Beatrix Fonds (98-0109), PhD-student + technician, 2 years.
2001	Nierstichting Nederland (PC 151), PhD-student + technician, 3 years.
2004	Nederlandse Hartstichting (D99.023), continuation project
2004	Prinses Beatrix Fonds (04-0121), PhD-student + technician, 2 years.
2004	Nierstichting (C04.2083), post-doc + technician, 2 years.
2005	National Institute of Neurological Disorders and Stroke, USA (1RNS050249A), technician
2006	Nierstichting (2180), Post-doc, 2 years.
2007	SFRH/BD/41970/2007 to Mónica Rocha, PhD 4 years.
2008	March of Dimes, USA (#07-0015), consultant, technician 1 year.
2008	Cystinosis Research Network, USA, technician 1.5 year.
2008	SFRH/BD/48585/2008 to Ruben Esse, PhD 4 years.
2008	SFRH/BD/43934/2008 to Marisa Mendes, PhD 4 years.
2011	Homocystinuria in Qatar. Diagnosis and treatment. Internal Research Grants Program at Hamad Medical Corporation. $70,000.-.
2012	European network and registry for homocystinurias and methylation defects. EU Health Programme 2008-2013, DG SANCO. € 1,100,000.-.
2014	Qatar national Research Foundation: Novel Therapies for Qatar Patients with Homocystinuria. $822,901.-.
2014	National Coordination for Improvement of Higher Education Personnel - CAPES (12785-11).
2014	Synageva BioPharm Corp: Establishing a European Screening Centre for Cholesteryl ester storage disease (CESD). €195,000.-
2015	Orphan Europe: Myopia and homocystinuria. €198,000.-

LIST OF PUBLICATIONS

1. RMJ Liskamp, HJ Blom, RJF Nivard, HCJ Ottenheijm. Flash vacuum thermolysis of functionalized sultines. J Org Chem, 1983; 48: 2733-36.

2. WA Gahl, I Bernardini, JD Finkelstein, A Tangerman, JJ Martin, HJ Blom, KD Mullen, SH Mudd. Transsulfuration in an adult with hepatic methionine adenosyltransferase deficiency. J Clin Invest, 1988; 81: 390-97.

3. HJ Blom, A Tangerman, JPAM van den Elzen, WA Gahl, KD Mullen. Evidence for formation of methanethiol via transamination of methionine. In: Advances in ammonia metabolism and hepatic encephalopathy. Elsevier Science Publishers Amsterdam, 1988; 573-80.

4. HJ Blom, GHJ Boers, JPAM van den Elzen, WA Gahl, A Tangerman. Transamination of methionine in humans. Clin Science, 1989; 76: 43-49.

5. HJ Blom, A Tangerman. Methanethiol metabolism in whole blood. J Lab Clin Med, 1988; 111: 606-10.

6. HJ Blom, JPAM van den Elzen, SH Yap, A Tangerman. Methanethiol and dimethylsulfide formation from 3-methylthiopropionate in human and rat hepatocytes. Biochim Biophys Acta, 1988; 972: 131-36.

7. HJ Blom, GHJ Boers, JPAM van den Elzen, JMM van Roesel, JMF Trijbels, A Tangerman. Differences between premenopausal women and young men in the transamination pathway of methionine catabolism, and the protection against vascular disease. Eur J Clin Invest, 1988; 18: 633-39.

8. HJ Blom, GHJ Boers, JMF Trijbels, JMM van Roesel, A Tangerman. Cystathionine synthase deficient patients do not use the transamination pathway of methionine to reduce hypermethioninemia and homocysteinemia. Metabolism, 1989; 38: 577-82.

9. HJ Blom. Pathobiochemical aspects of methionine. Ph.D. Thesis, University of Nijmegen, The Netherlands, 1989.

10. HJ Blom, RAFM Chamuleau, J Rothuizen, NEP Deutz, A Tangerman. Methanethiol metabolism and its role in the pathogenesis of hepatic encephalopathy in rat and dog. Hepatology, 1990; 11: 682-89.

11. HJ Blom, P Ferenci, G Grimm, SH Yap, A Tangerman. The role of methanethiol in the pathogenesis of hepatic encephalopathy. Hepatology, 1991; 13: 445-54.

12. HC Andersson, LD Kohn, I Bernardini, HJ Blom, F Tietze, WA Gahl. Characterization of lysosomal monoiodotyrosine transport in rat thyroid cells: evidence for transport by system h. J Biol Chem, 1990; 265: 10950-54.

13. HJ Blom, HC Andersson, R Seppala, F Tietze, WA Gahl. Defective glucuronic acid transport from lysosomes of infantile free sialic acid storage disease fibroblasts. Biochem J, 1990; 268: 621-25.

14. HJ Blom, HC Andersson, DM Krasnewich, WA Gahl. Quantitative analysis of carbohydrates in lysosomal storage disease fibroblasts. J Chromat, 1990; 533: 11-21.

15. HJ Blom, GHJ Boers, A Tangerman, WA Gahl, JMF Trijbels. Alternative methionine degradation via the transamination pathway: an option for therapy for homocystinuria due to cystathionine synthase deficiency. J Inherit Metab Dis, 1991; 14: 375-78.

16. HJ Blom, AJ Davidson, JD Finkelstein, AS Luder, I Bernardini, JJ Martin, A Tangerman, JMF Trijbels, SH Mudd, SI Goodman, WA Gahl. Persistent hypermethioninaemia with dominant inheritance. J Inherit Metab Dis, 1992; 15: 188-97.

17. HJ Blom, DPE Engelen, GHJ Boers, AM Stadhouders, RCA Sengers, R de Abreu, MTWB te Poele-Pothoff, JMF Trijbels. Lipid peroxidation in homocysteinemia. J Inherit Metab Dis, 1992; 15: 419-22.

18. RPM Steegers-Theunissen, GHJ Boers, HJ Blom, JMF Trijbels, TKAD Eskes. Hyperhomocysteinaemia and recurrent spontaneous abortion or abruptio placentae. Lancet,1992; 339: 1122-23.

19. HJ Blom, RA Wevers, A Verrips, JMF Trijbels. Cerebrospinal fluid homocysteine and the cobalamin status of the brain. J Inherit Metab Dis, 1993; 16: 517-19.

20. MGAJ Wouters, GHJ Boers, HJ Blom, JMF Trijbels, CMG Thomas, GF Borm, RPM Steegers-Theunissen, TKAB Eskes. Hyperhomocysteinemia: a risk factor in women with unexplained recurrent early pregnancy loss. Fertil Steril, 1993; 60: 820-25.

21. DG Franken, A Vreugdenhil, GHJ Boers, A Verrips, HJ Blom, IRO Novakova. Familial cerebrovascular accidents due to concomitant hyperhomocysteinemia and protein C deficiency type 1. Stroke, 1993; 24: 1599-1600.

22. RPM Steegers-Theunissen, GHJ Boers, JMF Trijbels, JD Finkelstein, HJ Blom, CMG Thomas, GF Borm, MGAJ Wouters, TKAB Eskes. Maternal hyperhomocysteinemia: a risk factor for neural tube defects. Metabolism, 1994; 43: 1475-80.

23. DG Franken, GHJ Boers, HJ Blom, JMF Trijbels, PWC Kloppenborg. Treatment of mild hyperhomocysteinemia in vascular disease patients. Arterioscler Thromb Vasc Biol, 1994; 14: 465-70.

24. MJ van der Mooren, MGAJ Wouters, HJ Blom, LA Schellekens, TKAB Eskes, R. Rolland. Postmenopausal hormone replacement therapy decreases serum homocysteine. Eur J Clin Invest, 1994; 24: 733-36.

25. DG Franken, GHJ Boers, HJ Blom, JMF Trijbels. Effect of various regimens of vitamin B6 and folic acid on mild hyperhomocysteinemia in vascular patients. J Inherit Metab Dis, 1994; 17: 159-62.

26. M den Heijer, GMJ Bos, WBJ Gerrits, HJ Blom. Will a decrease of blood homocysteine by vitamin supplementation reduce the risk for vascular disease? Fibrinolysis, 1994; 8, suppl 2: 91-92.

27. HJ Blom, E van der Molen. Pathobiochemical implications of hyperhomocysteinemia. Fibrinolysis, 1994; 8, suppl 2: 86-87.

28. M van den Berg, DG Franken, GHJ Boers, HJ Blom, C Jakobs, CDA Stehouwer, JA Rauwerda. Combined vitamin B6 plus folic acid therapy in young patients with arteriosclerosis and hyper-homocysteinemia. J Vascul Surg, 1994; 20: 933-40.

29. GHJ Boers, DG Franken, HJ Blom, A Tangerman. Effect of folate deficiency on methyl group metabolism. In: Methionine metabolism: molecular mechanisms and clinical implications. Editors: JM Mato and A Caballero. Proceedings of a workshop held at Sierra Nevada (Granada), Spain, March 6-9, Bouncopy, S.A. Madrid, Spain; 1994: 160-65.

30. EH Stet, RA de Abreu, JPM Bokkerink, HJ Blom, HJ Lambooy, TM Vogels-Mentink, AC de Graaf-Hess, A van Raay-Selten, JMF Trijbels. Decrease in S-adenosylmethionine synthesis by 6-mercaptopurine and methylmercaptopurine ribonucleoside in Molt F4 malignant lymphoblasts. Biochem J, 1994; 304: 163-68.

31. LA van Aerts, HJ Blom, RA de Abreu, FJ Trijbels, TK Eskes, JH Copius Peereboom-Stegeman, J Noordhoek. Prevention of neural tube defects by and toxicity of L-homocysteine in cultured post-implantation rat embryos. Teratology, 1994; 50: 348-60.

32. AM Engbersen, DG Franken, GH Boers, EM Stevens, FJ Trijbels, HJ Blom. Thermolabile 5,10-methylenetetrahydrofolate reductase as a cause of mild hyperhomocysteinemia. Am J Hum Genet, 1995; 56: 142-50.

33. LAJ Kluijtmans, HJ Blom, GHJ Boers, BA van Oost, JMF Trijbels, LPWJ van den Heuvel. Two novel missense mutations in the cystathionine ß-synthase gene in homocystinuric patients. Hum Genet, 1995; 96: 249-50.

34. MTWB te Poele-Pothoff, M van den Berg, DG Franken, GHJ Boers, C Jacobs, IFI de Kroon, TKAB Eskes, JMF Trijbels, HJ Blom. Three different methods for the determination of total homocysteine in plasma. Ann Clin Biochem, 1995; 32: 218-20.

35. HJ Blom, HA Kleinveld, GHJ Boers, PNM Demacker, HLM Hak-Lemmers, MTWB te Poele-Pothoff, JMF Trijbels. Lipid Peroxidation and Susceptibility of Low-Density Lipoprotein to In Vitro Oxidation in Hyperhomocysteinemia. Eur J Clin Invest, 1995; 25: 149-54.

36. M van den Berg, GHJ Boers, DG Franken, HJ Blom, GJ van Kamp, C Jakobs, JA Rauwerda JA, C Kluft, CDA Stehouwer. Hyperhomocysteinemia and endothelial dysfunction in young patients with peripheral arterial occlusive disease. Eur J Clin Invest, 1995; 25: 176-81.

37. RPM Steegers-Theunissen, GHJ Boers, HJ Blom, JG Nijhuis, CMG Thomas, JMF Trijbels, GF Borm, TKAB Eskes. Neural-tube defects and elevated homocysteine levels in amniotic fluid. Am J Obstet Gynecol, 1995; 172: 1436-41.

38. M den Heijer, HJ Blom, WBJ Gerrits, FR Rosendaal, GMJ Bos. Is hyperhomocysteinemia a risk factor for recurrent venous thrombosis? Lancet, 1995; 345: 882-85.

39. P Frosst, HJ Blom, R Milos, P Goyette, CA Sheppard, RG Matthews, GHJ Boers, M den Heijer, LAJ Kluijtmans, LP van den Heuvel, R Rozen. Identification of a candidate genetic risk factor for vascular disease: A common mutation in methylene-tetrahydrofolate reductase. Nat Genet, 1995; 10: 111-13.

40. HJ Blom, GHJ Boers, TKAB Eskes, JMF Trijbels. Hyperhomocysteinemie. Ned Tijdschr Klin Chem, 1995; 20: 20-26.

41. LAGJM van Aerts, CM Poirot, CA Herberts, HJ Blom, RA de Abreu, JMF Trijbels, TKAB Eskes, JHJ Copius Peereboom-Stegeman, J Noordhoek. Development of methionine synthase, cystathionine-ß-synthase and S-adenosyl-homocysteine hydrolase during gestation in rats. J Reprod Fertil, 1995; 103: 227-32.

42. NMJ van der Put, RPM Steegers-Theunissen, P Frosst, JMF Trijbels, TKAB Eskes, LP van den Heuvel, ECM Mariman, M den Heijer, R Rozen, HJ Blom. Mutated methylenetetrahydrofolate reductase as a risk factor for spina bifida. Lancet, 1995; 346: 1070-71.

43. MGAJ Wouters, MTEC Moorrees, MJ van der Mooren, HJ Blom, GHJ Boers, LA Schellekens, CMG Thomas, TKAB Eskes. Plasma homocysteine and menopausal status. Eur J Clin Invest, 1995; 25: 801-05.

44. M den Heijer, HJ Blom, GMJ Bos, FR Rosendaal, HL Haak, PW Wyermans, WBJ Gerrits. Hyperhomocysteinemie is een risicofactor voor venouse trombose. Tromnibus, 1995; 2: 17-19.

45. HWM van Straaten, HJ Blom, MCE Peeters, AMJ Rousseau, KJ Cole, MJ Seller. Dietary methionine does not reduce penetrance in curly tail mouse but causes a phenotype-specific decrease in embryonic growth. J Nutr, 1995; 125: 2733-40.

46. M den Heijer, HJ Blom. Hyperhomocysteinemie: achtergrond, diagnostiek en behandeling. Ned Tijdschr Klin Chem, 1996; 21: 35-38.

47. LAJ Kluijtmans, LPWJ van den Heuvel, GHJ Boers, P Frosst, BA van Oost, M den Heijer, EMB Stevens, JMF Trijbels, R Rozen, HJ Blom. Molecular genetic analysis in mild hyperhomocysteinemia: A common mutation in the methylenetetrahydrofolate reductase gene is a genetic risk factor for cardiovascular disease. Am J Hum Genet, 1996; 58: 35-41.

48. M den Heijer, T Koster, HJ Blom, GMJ Bos, E Briët, JP Vandenbroucke and FR Rosendaal. Hyperhomocysteinemia as a risk factor for deep-vein thrombosis-Leiden thrombophilia study (LETS). N Eng J Med, 1996; 334: 759-62.

49. M den Heijer, GMJ Bos, IA Brouwer, WBJ Gerrits, HJ Blom. Variability of the methionine loading test: no effect of a protein diet. Ann Clin Biochem, 1996; 33: 551-54.

50. EF van der Molen, LPWJ van den Heuvel, MTWB te Poele-Pothoff, LAH Monnens, TKAB Eskes, HJ Blom. The effect of folic acid on the homocysteine metabolism in human umbilical vein endothelial cells (HUVECs). Eur J Clin Invest, 1996; 26: 304-09.

51. CW Keuzenkamp-Jansen, RA De Abreu, HJ Blom, JPM Bökkerink, JMF Trijbels. Effects on transmethylation by high-dose 6-mercaptopurine and methotrexate infusions during consolidation treatment of acute lymphoblastic leukemia. Biochem Pharmacol, 1996; 51: 1165-71.

52. B Lubec, S Fang-Fircher, GHJ Boers, HJ Blom. Evidence for McKusick's hypothesis of deficient collagen cross linking in patients with homocystinuria. Biochem Biophys Acta, 1996; 1315: 159-62.

53. HJ Blom, MJ van der Mooren. Hyperhomocysteinemia: a risk factor for cardiovascular disease-Influence of sex hormones on homocysteine metabolism. Gynecol Endocrinol, 1996; 10: Suppl. 2: 75-79.

54. TAW Goddijn-Wessel, MGAJ Wouters, EF van der Molen, MDEM Spuybroek, RPM Steegers-Theunissen, HJ Blom, GHJ Boers, TKAB Eskes. Hyperhomocysteinemia: a risk factor for placental abruption or infarction. Eur J Obst Gyn Reprod Biol, 1996; 66: 23-29.

55. DG Franken, GHJ Boers, HJ Blom, JRM Cruysberg, JMF Trijbels, BCJ Hamel. Prevalence of familial mild hyperhomocysteinemia. Atherosclerosis, 1996; 125: 71-80.

56. LAJ Kluijtmans, GHJ Boers, EMB Stevens, WO Renier, JP Kraus, JMF Trijbels, LPWJ van den Heuvel, HJ Blom. Defective cystathionine ß-synthase regulation by S-adenosylmethionine in a partially pyridoxine responsive homocystinuria patient. J Clin Invest, 1996; 98: 285-89.

57. NMJ van der Put, LP van den Heuvel, RPM Steegers-Theunissen, FJM Trijbels et al. Decreased methylenetetrahydrofolate reductase activity due to the C677CT mutation in families with spina bifida offspring. J Mol Med, 1996; 74: 691-94.

58. M den Heijer, HJ Blom, FR Rosendaal, Hyperhomocysteinemia as a risk factor for deep-vein thrombosis. N Eng J Med, 1996; 335: 975-76 (letter).

59. Consensus Statement. Consensus development meeting 1995: combined oral contraceptives and cardiovascular disease. The Consensus Statement issued after the Second European Conference on Sex Steroids and Metabolism, Amsterdam, November 1995. Gynaecol Endocrinol, 1996; 10: 1-5.

60. NMJ van der Put, JMF Trijbels, F Hol, TKAB Eskes, RPM Steegers-Theunissen, LPWJ van den Heuvel, ECM Mariman, HJ Blom. Mutated methylenetetrahydrofolate reductase in sporadic and hereditary spina bifida offspring. III Workshop on Methionine Metabolism, Molecular Mechanism and Clinical Implications, Proceedings of a Workshop held at Sierra Nevada (Granada, Spain) on March 3-7, 1996; 185-91.

61. LAJ Kluijtmans, LPWJ van den Heuvel, GHJ Boers, JMF Trijbels, HJ Blom. Molecular genetic analysis of the cystathionine ß-synthase and methylenetetrahydrofolate reductase genes in mild hyperhomocysteinemia related cardiovascular disease. III Workshop on Methionine Metabolism, Molecular Mechanism and Clinical Implications, Proceedings of a Workshop held at Sierra Nevada (Granada, Spain) on March 3-7, 1996; 169-76.

62. DG Franken, HJ Blom, GHJ Boers, A. Tangerman, CMG Thomas, FJM Trijbels. Thiamine (vitamin B1) supplementation does not reduce fasting blood homocysteine concentration in most homozygotes for homocystinuria. Biochim Biophys Acta, 1996; 1317: 101-04.

63. PM Ueland, H Refsum, HJ Blom, MR Malinow. Assessment of Homocysteine. Diagnostics of Vascular Diseases. In: Principles and Technology, 1997: 218-25.

64. MJ van der Mooren, PNM Demacker, HJ Blom, YB de Rijke, R Rolland. The effect of sequential three-monthly hormone replacement therapy on several cardiovascular risk estimators in postmenopausal women. Fertil Steril, 1997; 67: 67-73.

65. NMJ van der Put, TKAB Eskes, HJ Blom. Is the common 677C T mutation in the methylenetetrahydrofolate reductase gene a risk factor for neural tube defects? A meta-analysis. QJMed, 1997; 90: 111-15.

66. NMJ van der Put, CMG Thomas, TKAB Eskes, JMF Trijbels, RPM Steegers-Theunissen, ECM Mariman, A de Graaf-Hess, JAM Smeitink, HJ Blom. Altered folate and vitamin B12 metabolism in families with spina bifida offspring. QJMed, 1997; 90: 505-10.

67. NMJ van der Put, EF van der Molen, LAJ Kluijtmans, SG Heil, JMF Trijbels, TKAB Eskes, D van Oppenraaij-Emmerzaal, R Banerjee, HJ Blom. Sequence analysis of the coding region of human methionine synthase: relevance to hyperhomocysteinaemia in neural-tube defects and vascular disease. QJMed, 1997; 90: 511-17.

68. EF van der Molen, MJ Hiipakka, H van Lith-Zanders, GHJ Boers, LPWJ van den Heuvel, LAH Monnens, HJ Blom. Homocysteine metabolism in endothelial cells of a patient homozygous for cystathionine ß-synthase (CS) deficiency. J Thromb Haemost, 1997; 78: 827-33.

69. P Verhoef, FJ Kok, LAJ Kluijtmans, HJ Blom, H Refsum, PM Ueland, DACM Kruyssen. The 677C->T mutation in the methylenetetrahydrofolate reductase gene: associations with plasma total homocysteine levels and risk of coronary atherosclerotic disease. Atherosclerosis, 1997; 132: 105-13.

70. LAJ Kluijtmans, JJP Kastelein, J Lindemans, GHJ Boers, SG Heil, AVG Bruschke, JW Jukema, LPWJ van den Heuvel, JMF Trijbels, GJM Boerma, FWA Verheugt, F Willems, HJ Blom. Thermolabile methylenetetrahydrofolate reductase in coronary artery disease. Circulation, 1997; 96: 2573-77.

71. WLDM Nelen, EAP Steegers, TKAB Eskes, HJ Blom. Genetic risk factor for unexplained recurrent early pregnancy loss. Lancet, 1997; 350: 861. (Research letter)

72. HJ Blom. Mutated 5,10-methylenetetrahydrofolate reductase and moderate hyperhomocysteinemia. Conceptuur, 1997; 14: 32-34.

73. LAJ Kluijtmans, GHJ Boers, JMF Trijbels, HMA van Lith-Zanders, LPWJ van den Heuvel, HJ Blom. A common 844ins68 insertion variant in the cystathionine ß-synthase gene. Biochem Mol Med, 1997; 62: 23-25.

74. BAJ Giesendorf, HJ Blom, JMF Trijbels. Nieuwe ontwikkelingen in de automatisering van moleculaire diagnostiek: mutatie-analyse. Ned Tijdschr Klin Chem, 1997; 22: 215-18.

75. WLDM Nelen, EF van der Molen, HJ Blom, SG Heil, EAP Steegers, TKAB Eskes. Recurrent early pregnancy loss and genetic-related disturbances in folate and homocysteine metabolism. Brit J Hosp Med, 1997; 58: 511-13.

76. A de Bree, WMM Verschuren, HJ Blom. Genetische factoren, voeding en hart- en vaatziekten. Homocysteïne, een mogelijk gunstig effect van foliumzuur? Voeding, 1997; 58: 22-25.

77. LAJ Kluijtmans, U Wendel, EMB Stevens, LPWJ van den Heuvel, JMF Trijbels, HJ Blom. Identification of four novel mutations in severe methylenetetrahydrofolate reductase deficiency. Eur J Hum Genet, 1998; 6: 257-65.

78. LAJ Kluijtmans, GHJ Boers, B Verbruggen, JMF Trijbels, IRO Nováková, HJ Blom. Homozygous cystathionine ß-synthase deficiency, combined with factor V Leiden or thermolabile methylenetetrahydrofolate reductase in the risk of venous thrombosis. Blood, 1998; 91: 2015-18.

79. SG Heil, BAJ Giesendorf, JMF Trijbels, HJ Blom. Volledig geautomatiseerde isolatie van DNA uit bloed m.b.v. een pipetteerrobot. Ned Tijdschr Klin Chem, 1998; 23: 58-61.

80. LAJ Kluijtmans, M den Heijer, PH Reitsma, SG Heil, HJ Blom, FR Rosendaal. Thermolabile methylenetetrahydorofolate reductase and factor V Leiden in the risk of deep-vein thrombosis. J Thromb Haemost, 1998; 79: 254-58.

81. HJ Blom. Determinants of plasma homocysteine. Am J Clin Nutr, 1998; 67: 190-91 (Editorial).

82. BAJ Giesendorf, JAM Vet, S Tyagi, EJMG Mensink, JMF Trijbels, HJ Blom. Molecular beacons: a new approach for semiautomated mutation analysis. Clin Chem, 1998; 44: 482-86.

83. HPJ Willems, GMJ Bos, WBJ Gerrits, M den Heijer, S Vloet, HJ Blom. Acidic citrate stabilizes blood samples for assay of total homocysteine. Clin Chem, 1998; 44: 342-45.

84. M den Heijer, IA Brouwer, GMJ Bos, HJ Blom, NMJ van der Put, AP Spaans, FR Rosendaal, CMG Thomas, HL Haak, PW Wijermans, WBJ Gerrits. Vitamin supplementation reduces blood homocysteine

levels. A controlled trial in patients with venous thrombosis and healthy volunteers. Arterioscler Thromb Vasc Biol, 1998; 18: 356-61.

85. BAJ Giesendorf, JAM Vet, S Tyagi, E Mensink, JMF Trijbels, HJ Blom. Allel-discriminerende fluorescerende probes voor (semi)geautomatiseerde mutatiedetectie in hyperhomocysteinemie. Ned Tijdschr Geneeskd, 1998; 142: 495.

86. AJAM van der Ven, HJ Blom, W Peters, LEH Jacobs, TJG Verver, PP Koopmans, P Demacker, JWM van der Meer. Glutathionine homeostasis is disturbed in CD4-positive lymphocytes of HIV-seropositive individuals. Eur J Clin Invest, 1998; 28: 187-93.

87. AE van Ede, RFJM Laan, HJ Blom, RA de Abreu, LBA van de Putte. Methotrexate in rheumatoid arthritis: an update with focus on mechanisms involved in toxicity. Semin Arthritis Rheum, 1998; 27: 277-92.

88. H Blom, B Fowler, C Jakobs, H-G Koch. Disorders of homocysteine metabolism. From rare genetic defects to common risk factors. Eur J Pediatr, 1998; 157 (suppl 2): S39.

89. HJ Blom. Mutated 5,10-methylenetetrahydrofolate reductase and moderate hyperhomocysteinaemia. Eur J Pediatr, 1998; 157 (suppl 2): S131-S134.

90. H Blom, B Fowler, C Jakobs, H-G Koch. Concluding remarks. Eur J Pediatr, 1998; 157 (suppl 2): S142.

91. L Brattstrom, F Landgren, B Israelsson, A Lindgren, B Hultberg, A Andersson, G Cuskelly, H McNulty, SS Strain, J McPartlin, DG Weir, JM Scott, M den Heijer, IA Brouwer, HJ. Blom, GMJ Bos, A Spaans, FR Rosendaal, CMG Thomas, HL Haak, PW Wijermans, WBJ Gerrits, HJ Naurath, E Joosten, R Riezler, SP Stabler, RH Allen, J Lindenbaum, K Pietrzik, R PrinzLangenohl, J Dierkes, E Saltzman, JB Mason, P Jacques, J Selhub, D Salem, E Schaefer, IH Rosenberg, J Ubbink, A VanderMere, WJH Vermack, R Delport, PJ Becker, HC Potgieter, JV Woodside, JWG Yarnell, D McMaster, IS Young, EE McCrum, SS Patterson, KF Gey, AE Evans, R Clarke, P Appleby, P Harding, P Sherliker, R Collins, C Frost, V Leroy. Lowering blood homocysteine with folic acid based supplements: meta-analysis of randomised trials. Br Med J, 1998; 316: 894-98.

92. FA Hol, NMJ van der Put, MPA Geurds, SG Heil, JMF Trijbels, BCJ Hamel, ECM Mariman, HJ Blom. Molecular genetic analysis of the gene encoding the trifunctional enzyme MTHFD (methylenetetrahydrofolate-dehydrogenase, methenyltetrahydrofolate-cyclohydrolase, formyltetrahydrofolate synthetase) in patients with neural tube defects. Clin Genet, 1998; 53: 119-25.

93. NMJ van der Put, F Gabreëls, EMB.Stevens, JAM Smeitink, JMF Trijbels, TKAB Eskes, LP van den Heuvel, HJ Blom. A second common mutation in the methylenetetrahydrofolate reductase gene: an additional risk factor for neural-tube defects? Am J Hum Genet, 1998; 62: 1044-51.

94. M Gaustadnes, LAJ Kluijtmans, OK Jensen, K Rasmussen, SG Heil, JP Kraus, HJ Blom, J Ingerslev, N Rüdiger. Detection of a novel deletion in the cystathionine ß-synthase (CBS) gene using an improved genomic DNA based method. FEBS Letters, 1998; 431: 175-79.

95. DZB van Asselt, LCPGM de Groot, WA van Staveren, HJ Blom, RA Wevers, I Biemond, WHL Hoefnagels. Role of cobalamin intake and atrophic gastritis in mild cobalamin deficiency in older Dutch subjects. Am J Clin Nutr, 1998; 68: 328-34.

96. M Fritzer-Szekeres, HJ Blom, GHJ Boers, Th Szekeres, B Lubec. Growth promotion by homocysteine but not by homocysteic acid: a role for excessive growth in homocystinuria or proliferation in hyperhomocysteinemia? Biochim Biophys Acta, 1998; 1407: 1-6.

97. HJ Blom. Am J Clin Nutr, 1998; 68: 920-21 (Letter to the Editor).

98. WL Nelen, HJ Blom, CM Thomas, EA Steegers, GH Boers, TK Eskes. Methylenetetrahydrofolate reductase polymorphism affects the change in homocysteine and folate concentrations resulting from low dose folic acid supplementation in women with unexplained recurrent miscarriages. J Nutr, 1998; 128: 1336-41.

99. LAJ Kluijtmans, HJ Blom, GHJ Boers, F Willems. Methylenetetrahydrofolate reductase mutation and coronary artery disease. Circulation, 1998; 98: 2932-33. (Response)

100. M den Heijer, FR Rosendaal, HJ Blom, WBJ Gerrits, GMJ Bos. Hyperhomocysteinemia and venous thrombosis: a meta-analysis. J Thromb Haemost, 1998; 80: 874-77.

101. W Kuhn, R Roebroek, H Blom, D van Oppenraaij, H Przuntek, A Kretschmer, T Buttner, D Woitalla, T Muller. Elevated plasma levels of homocysteine in Parkinson's disease. Eur Neurol, 1998; 40: 225-27.

102. W Kuhn, R Roebroek, H Blom, D van Oppenraaij, T Muller. Hyperhomocysteinemia in Parkinson's disease. J Neurol, 1998; 245: 811-12.

103. JB Ubbink, A Christianson, MJ Bester, MI van Allen, PA Venter, R Delport, HJ Blom, A van der Merwe, H Potgieter, WJH Vermaak. Folate status, homocysteine metabolism, and methylene tetrahydrofolate reductase genotype in rural South African blacks with a history of pregnancy complicated by neural tube defects. Metabolism, 1999; 48: 269-74.

104. HPJ Willems, M den Heijer, HJ Blom, WBJ Gerrits, FR Rosendaal, GMJ Bos. Hyperhomocysteinemie als risicofactor voor veneuze trombose. Ned Tijdschr Geneeskd, 1999; 143: 552-56.

105. NGGM Abeling, AH van Gennip, H Blom, RA Wevers, P Vreken, HLG van Tinteren, HD Bakker. Rapid diagnosis and methionine administration: basis for a favourable outcome in a patient with methylenetetrahydrofolate reductase deficiency. J Inherit Metab Dis, 1999; 22: 240-42.

106. SG Heil, NMJ van der Put, FJM Trijbels, FJM Gabreëls, HJ Blom. Molecular genetic analysis of human folate receptors in neural tube defects. Eur J Hum Genet, 1999; 7: 393-96.

107. JP Kraus, M Janošik, V Kozich, R Mandell, V Shih, MP Sperandeo, G Sebastio, R de Franchis, G Andria, LAJ Kluijtmans, H Blom, GHJ Boers, RB Gordon, P Kamoun, MY Tsai, WD Kruger, HG Koch, T Ohura, M Gaustadnes. Cystathionine ß-synthase mutations in homocystinuria. Hum Mutat, 1999; 13: 362-75.

108. IM van Beynum, JAM Smeitink, M den Heijer, MTWB te Poele-Pothoff, HJ Blom. Hyperhomocysteinemia. A risk factor for ischemic stroke in children. Circulation, 1999; 99: 2070-72.

109. CH Schroder, AW de Boer, AM Giesen, LA Monnens, H Blom. Treatment of hyperhomocysteinemia in children on dialysis by folic acid. Pediatr Nephrol, 1999; 13: 583-85.

110. LA Kluijtmans, GH Boers, JP Kraus, LP van den Heuvel, JR Cruysberg, FJ Trijbels, HJ Blom. The moleculair basis of cystathionine beta-synthase deficiency in Dutch patients with homocystinuria: effect of CBS genotype on biochemical and clinical phenotype and on response to treatment. Am J Hum Genet, 1999; 65: 59-67.

111. WY Wong, TK Eskes, AM Kuijpers-Jagtman, PH Spauwen, EA Steegers, CM Thomas, BC Hamel, HJ Blom, RP Steegers-Theunissen. Nonsyndromic orofacial clefts: association with maternal hyperhomocysteinemia. Teratol, 1999; 60: 253-57.

112. CJ Haagsma, HJ Blom, PL van Riel, MA van 't Hof, BA Giesendorf, D van Oppenraaij-Emmerzaal, LB van de Putte. Influence of sulphasalazine, methotrexate, and the combination of both on plasma homocysteine concentrations in patients with rheumatoid arthritis. Ann Rheum Dis, 1999; 58: 79-84.

113. ML Smit, BAJ Giesendorf, JMF Trijbels, JAM Vet, HJ Blom. Automatisering van mutatie analyse. Ned Tijdschr Klin Chem, 1999; 24: 341-43.

114. L Kapusta, MLM Haagmans, EAP Steegers, MHM Cuypers, HJ Blom, TKAB Eskes. Congenital heart defects and maternal derangement of homocysteine metabolism. J Pediatr, 1999; 135: 773-74.

115. A de Graaf-Hess, F Trijbels, H Blom. New method for determining cystine in leukocytes and fibroblasts. Clin Chem, 1999; 45: 2224-28.

116. E Cardo, J Campistol, J Caritg, S Ruiz, MA Vilaseca, F Kirkham, HJ Blom. Fatal haemorrhagic infarct in an infant with homocystinuria. Dev Med Child Neurol, 1999; 41: 132-35.

117. WLDM Nelen, HJ Blom, EAP Steegers, M den Heijer, CMG Thomas, TKAB Eskes. Homocysteine and folate levels as risk factors for recurrent early pregnancy loss. Obst Gynecol, 2000; 95: 519-24.

118. PLM Zusterzeel, WLDM Nelen, HMJ Roelofs, WHM Peters, HJ Blom, EAP Steegers. Polymorphisms in biotransformation enzymes and the risk for recurrent early pregnancy loss. Mol Hum Reprod, 2000; 6: 474-78.

119. MJ Grubben, GH Boers, HJ Blom, R Broekhuizen, R de Jong, L van Rijt, E de Ruijter, DW Swinkels, FM Nagengast, MB Katan. Unfiltered coffee increases plasma homocysteine concentrations in healthy volunteers: a randomized trial. Am J Clin Nutr, 2000; 71: 480-84.

120. HJ Blom. Consequences of homocysteine export and oxidation in the vascular system. Sem Thromb Hemost, 2000; 26: 227-32.

121. EF van der Molen, B Verbruggen, I Nováková, TKAB Eskes, LAH Monnens, HJ Blom. Hyperhomocysteinemia and other thrombotic risk factors in women with placental vasculopathy. Br J Obstet Gynaecol, 2000; 107: 785-91.

122. ML Smit, PCM Linssen, BAJ Giesendorf, JMF Trijbels, HJ Blom, AWHM Kuypers. Capillaire elektroforese en DNA-fragmentanalyse. Ned Tijdschr Klin Chem, 2000; 25: 239-43.

123. WL Nelen, J Bulten, EA Steegers, HJ Blom, AG Hanselaar, TK Eskes. Maternal homocysteine and chorionic vascularization in recurrent early pregnancy loss. Hum Reprod, 2000; 15: 954-60.

124. EF van der Molen, GE Arends, WLDM Nelen, NMJ van der Put, SG Heil, TKAB Eskes, HJ Blom. A common mutation in the 5,10-methylenetetrahydrofolate reductase gene as a new risk factor for placental vasculopathy. Am J Obstet Gynecol, 2000; 182: 1258-63.

125. HJ Blom, P Verhoef. Hyperhomocysteinemie, MTHFR, and risk of vascular disease. Circulation, 2000; 101: E171.

126. SH Mudd, JD Finkelstein, H Refsum, PM Ueland, MR Malinow, SR Lentz, DW Jacobsen, L Brattstrom, B Wilcken, DE Wilcken, HJ Blom, SP Stabler, RH Allen, J Selhub, IH Rosenberg. Homocysteine and its disulfide derivatives: a suggested consensus terminology. Arterioscler Thromb Vasc Biol, 2000; 20: 1704-06.

127. DZ van Asselt, HJ Blom, R Zuiderent, RA Wevers, C Jakobs, WJ van den Broek, CB Lamers, FH Corstens, WH Hoefnagels. Clinical significance of low cobalamin levels in older hospital patients. Neth J Med, 2000; 57: 41-49.

128. ML Smit, BAJ Giesendorf, SG Heil, JAM Vet, JMF Trijbels, HJ Blom. Automated extraction and amplification of DNA from whole blood using a robotic workstation and an integrated thermocycler. Biotechnol Appl Biochem, 2000; 32: 121-25.

129. NMJ van der Put, HJ Blom. Neural tube defects and a disturbed folate dependent homocysteine metabolism. Eur J Obstet Gynecol Reprod Biol, 2000; 92: 57-61.

130. AS De Vriese, J Van de Voorde, HJ Blom, PM Vanhoutte, M Verbeke, NH Lameire. The impaired renal vasodilator response attributed to endothelium-derived hyperpolarizing factor in streptozotocin-induced diabetic rats is restored by 5-methyltetrahydrofolate. Diabetologia, 2000; 43: 1116-25.

131. PLM Zusterzeel, W Visser, HJ Blom, WHM Peters, SG Heil, EAP Steegers. Methylenetetrahydrofolate reductase polymorphisms in preeclampsia and the HELLP syndrome. Hyperten Pregn, 2000; 19: 299-307.

132. SG Heil, KJA Lievers, GH Boers, P Verhoef, M den Heijer, JMF Trijbels, HJ Blom. Betaine-homocysteine methyltransferase (BHMT): genomic sequencing and relevance to hyperhomocysteinemia and vascular disease in humans. Mol Genet Metab, 2000; 71: 511-19.

133. WL Nelen, HJ Blom, EA Steegers, M den Heijer, TK Eskes. Hyperhomocysteinemia and recurrent early pregnancy loss analysis. Fertil Steril, 2000; 74: 1196-99.

134. NMJ van der Put, HJ Blom. Reply to Donnelly. Am J Hum Genet, 2000; 66: 744-45.

135. IA Brouwer, IA van Rooij, M van Dusseldorp, CM Thomas, HJ Blom, JG Hautvast, TK Eskes, RP Steegers-Theunissen. Homocysteine-lowering effect of 500 microg folic acid every day versus 250 microg/day. Ann Nutr Metab, 2000; 44: 194-97.

136. HJ Blom. Genetic determinants of hyperhomocysteinaemia: the roles of cystathionine ß-synthase and 5,10-methylenetetrahydrofolate reductase. Eur J Pediatr, 2000; 159: 208-12.

137. M Baethmann, U Wendel, GF Hoffmann, G Göhlich-Ratmann, B Kleinlein, P Seiffert, H Blom, T Voit. Hydrocephalus internus in two patients with 5,10-methylenetetrahydrofolate reductase deficiency. Neuropediatrics, 2000; 31: 314-17.

138. HJ Blom. Mutated 5,10-methylenetetrahydrofolate reductase, hyperhomocysteinemia and risk for cardiovascular disease. Nature, nurture or nonsense? Eur J Clin Invest, 2001; 31: 6-8. (Editorial).

139. A de Bree, WMM Verschuren, D Kromhout, HJ Blom. Biological cardiovascular risk factors and plasma homocysteine levels in the general Dutch population. Atherosclerosis, 2001; 154: 513-14.

140. MJM Diekman, NM van der Put, HJ Blom, JGP Tijssen, WM Wiersinga. Determinants of changes in plasma homocysteine in hyperthyroidism and hypothyroidism. Clin Endocrinol, 2001; 54: 197-204.

141. ML Smit, BAJ Giesendorf, JAM Vet, JMF Trijbels, HJ Blom. Semiautomated DNA mutation analysis using a robotic workstation and molecular beacons. Clin Chem, 2001; 47: 739-44.

142. LA Afman, NMJ van der Put, CMG Thomas, JMF Trijbels, HJ Blom. Reduced vitamin B12 binding by transcobalamin II increases the risk of neural tube defects. QJMed, 2001; 94: 159-66.

143. NMJ van der Put, HWM van Straaten, JMF Trijbels, HJ Blom. Folate, homocysteine and neural tube defects: an overview. Exp Biol Med, 2001; 226: 243-70.

144. A de Bree, WMM Verschuren, HJ Blom, A de Graaf-Hess, JMF Trijbels, D Kromhout. The homocysteine distribution: (mis)judging the burden. J Clin. Epidemiol, 2001; 54: 462-69.

145. A de Bree, WMM Verschuren, HJ Blom, D Kromhout. Association between B vitamin intake and plasma homocysteine concentration in the general Dutch population aged 20-65 y. Am J Clin Nutr, 2001; 73: 1027-33.

146. KJA Lievers, GHJ Boers, P Verhoef, M den Heijer, LAJ Kluijtmans, NMJ van der Put, FJM Trijbels, HJ Blom. A second common variant in the methylenetetrahydrofolate reductase (MTHFR) gene and its relationship to MTHFR enzyme activity, homocysteine, and cardiovascular disease risk. J Mol Med, 2001; 79: 522-28.

147. HJ Blom. Diseases and drugs associated with hyperhomocysteinemia. In: Homocysteine in Health and Disease (Eds R Carmel and DW Jacobsen), Cambridge University Press, 2001; 331-40.

148. AE van Ede, RFJM Laan, HJ Blom, TWJ Huizinga, CJ Haagsma, BAJ Giesendorf, TM de Boo, LBA van de Putte. The C677T mutation in the methylenetetrahydrofolate gene. A genetic risk factor for methotrexate-related elevation of liver enzymes in rheumatoid arthritis patients. Arthritis & Rheumatism, 2001; 44: 2525-30.

149. KJA Lievers, LAJ Kluijtmans, SG Heil, GHJ Boers, P Verhoef, D van Oppenraaij-Emmerzaal, M den Heijer, JMF Trijbels, HJ Blom. A 31 bp VNTR in the cystathionine ß-synthase (CBS) gene is associated with reduced CBS activity and elevated post-load homocysteine levels. Eur J Hum Genet, 2001; 9: 583-89.

150. SG Heil, NMJ van der Put, ET Waas, M den Heijer, JMF Trijbels, HJ Blom. Is mutated serine hydroxymethyltransferase (SHMT) involved in the etiology of neural tube defects? Mol Genet Metab, 2001; 73: 164-72.

151. A de Bree, WM Verschuren, HJ Blom, D Kromhout. Alcohol consumption and plasma homocysteine: what's brewing? Int J Epidemiol, 2001; 30: 626-27.

152. A de Bree, WM Verschuren, HJ Blom, D Kromhout. Lifestyle factors and plasma homocysteine concentrations in a general population sample. Am J Epidemiol, 2001; 154: 150-54.

153. SG Heil, E Levtchenko, LA Monnens, FJ Trijbels, NM van der Put, HJ Blom. The molecular basis of Dutch infantile nephropathic cystinosis. Nephron, 2001; 89: 50-55.

154. R Castro, SG Heil, I Rivera, C Jakobs, IT de Almeida, HJ Blom. Molecular genetic analysis of the cystathionine beta-synthase gene in Portuguese homocystinuria patients: three novel mutations. Clin Genet, 2001; 60: 161-63.

155. DZ van Asselt, JW Pasman, HJ van Lier, DM Vingerhoets, PJ Poels, Y Kuin, H Blom, WH Hoefnagels. Cobalamin supplementation improves cognitive and cerebral function in older, cobalamin-deficient persons. J Gerontol A Biol Sci Med Sci, 2001; 56: M775-79.

156. JAM Vet, BJM van der Rijt, HJ Blom. Molecular beacons: colorful analysis of nucleic acids. Expert Rev Mol Diagn, 2002; 2: 77-86.

157. HJ Blom. Methylenetetrahydrofolate dehydrogenase: a trifunctional enzyme of tetrahydrofolate metabolism. Wiley Encyclopedia of Molecular Medicine, 2002; 5 Vol. Set.

158. EN Levtchenko, A de Graaf-Hess, HJ Blom, LAH Monnens. Negligible urinary cysteamine loss in cystinosis patients with Fanconi syndrome. Clin Nephrol, 2002; 57: 349-51.

159. HJ Blom, AS de Vriese. Why are homocysteine levels increased in kidney failure? A metabolic approach. J Lab Clin Med, 2002; 139: 262-68.

160. J van Binsbergen, WMM Verschuren, HJ Blom. Hyperhomocysteinemie: opsporen en behandelen? Huisarts en Wetenschap, 2002; 45: 406-09.

161. JAM Vet, S Tyagi, F Russell Kramer, HJ Blom, BAJ Giesendorf. Commentary - New applications of molecular beacons: from living cells to microarrays. In: Molecular Testing in Laboratory Medicine, 2002; 28-29.

162. MA Artz, JMM Boots, G Ligtenberg, JI Roodnat, MHL Christiaans, RJ Hené, HJ Blom, PNM Demacker, LB Hilbrands. Randomized conversion from cyclosporine to tacrolimus in renal transplant patients: improved lipid profile and unchanged plasma homocysteine levels. Transplant Proc, 2002; 34: 1793-94.

163. KJA Lievers, LA Afman, LAJ Kluijtmans, GHJ Boers, P Verhoef, M den Heijer, FJM Trijbels, HJ Blom. Polymorphisms in the transcobalamin gene: association with plasma homocysteine in healthy individuals and vascular disease patients. Clin Chem, 2002; 48: 1383-89.

164. M Klerk, P Verhoef, B Verbruggen, EG Schouten, HJ Blom, GM Bos, M den Heijer. Effect of homocysteine reduction by B-vitamin supplementation on markers of clotting activation. J Thromb Haemost, 2002; 88: 230-35.

165. KJA Lievers, LAJ Kluijtmans, GHJ Boers, P Verhoef, M den Heijer, FJM Trijbels, HJ Blom. Influence of a glutamate carboxypeptidase II (GCPII) polymorphism (1561C→T) on plasma homocysteine, folate and vitamin B12 levels and its relationship to cardiovascular disease risk. Atherosclerosis, 2002; 164: 269-73.

166. FF Willems, WRM Aengevaeren, GHJ Boers, HJ Blom, FWA Verheugt. Coronary endothelial function in hyperhomocysteinemia: improvement after treatment with folic acid and cobalamin in patients with coronary artery disease. J Am Coll Cardiol, 2002; 40: 766-72.

167. M Hogeveen, HJ Blom, M van Amerongen, B Boogmans, IM van Beynum, M van de Bor. Hyperhomocysteinemia as risk factor for ischemic and hemorrhagic stroke in newborn infants. J Pediatr, 2002; 141: 429-31.

168. R Evande, H Blom, GH Boers, R Banerjee. Alleviation of intrasteric inhibition by the pathogenic activation domain mutation, D444N, in human cystathionine beta-synthase. Biochemistry, 2002; 41: 11832-37.

169. MBAJ Keijzer, M den Heijer, HJ Blom, GMJ Bos, HPJ Willems, WBJ Gerrits, FR Rosendaal. Interaction between hyperhomocysteinemia, mutated methylenetetrahydrofolatereductase (MTHFR) and inherited thrombophilic factors in recurrent venous thrombosis. J Thromb Haemost, 2002; 88: 723-28.

170. A de Bree, WMM Verschuren, D Kromhout, LAJ Kluijtmans, HJ Blom. Homocysteine determinants and the evidence to what extent homocysteine determines the risk of coronary heart disease. Pharmacol Rev, 2002; 54: 599-618.

171. M Klerk, P Verhoef, R Clarke, HJ Blom, FJ Kok, EG Schouten and the MTHFR Studies Collaboration Group. MTHFR 677C→T polymorphism and risk of coronary heart disease. JAMA, 2002; 288: 2023-31.

172. H Mönkemann, AS de Vriese, HJ Blom, LAJ Kluijtmans, SG Heil, HH Schild, O Golubnitschaja. Early molecular events in the development of the diabetic cardiomyopathy. Amino Acids, 2002; 23: 331-36.

173. R Castro, EA Struys, EE Jansen, HJ Blom, IT de Almeida, C Jakobs. Quantification of plasma S-adenosylmethionine and S-adenosylhomocysteine as their fluorescent 1,N(6)-etheno derivatives: an adaptation of previously described methodology. J Pharm Biomed Anal, 2002; 29: 963-68.

174. A de Bree, WMM Verschuren, D Kromhout, LI Mennen, HJ Blom. Homocysteine and coronary heart disease: the importance of a distinction between low and high risk subjects. Int J Epidemiol, 2002; 31: 1268-77.

175. LA Afman, KJA Lievers, NMJ van der Put, JMF Trijbels, HJ Blom. Single nucleotide polymorphisms in the transcobalamin gene: relationship with transcobalamin concentrations and risk for neural tube defects. Eur J Hum Genet, 2002; 10: 433-38.

176. R Meleady, PM Ueland, H Blom, AS Whitehead, H Refsum, LE Daly, SE Vollset, C Donohue, B Giesendorf, IM Graham, A Ulvik, Y Zhang, AB Monsen, EC Concerted Action Project: Homocysteine and Vascular Disease. Thermolabile methylenetetrahydrofolate reductase, homocysteine, and cardiovascular disease risk: the European Concerted Action Project. Am J Clin Nutr, 2003; 77: 63-70.

177. A de Bree, WMM Verschuren, HJ Blom, M Nadeau, FJM Trijbels, D Kromhout. Coronary heart disease mortality, plasma homocysteine, and B-vitamins: a prospective study. Atherosclerosis, 2003; 166: 369-77.

178. KJA Lievers, LAJ Kluijtmans, SG Heil, GHJ Boers, P Verhoef, M den Heijer, JMF Trijbels, HJ Blom. Cystathionine ß-synthase (CBS) polymorphisms and hyperhomocysteinemia: an association study. Eur J Hum Genet, 2003; 11: 23-29.

179. KJA Lievers, LAJ Kluijtmans, HJ Blom. Genetics of hyperhomocysteinemia in vascular disease. Ann Clin Biochem, 2003; 40: 46-59.

180. A de Bree, WMM Verschuren, AL Bjørke-Monsen, NMJ van der Put, SG Heil, JMF Trijbels, HJ Blom. Effect of the methylenetetrahydrofolate reductase 677C→T mutation on the relations among folate intake and plasma folate and homocysteine concentrations in a general population sample. Am J Clin Nutr, 2003; 77: 687-93.

181. JG Ray, HJ Blom. Vitamin B12 insufficiency and the risk of fetal neural tube defects. QJMed, 2003; 96: 289-95.

182. R Castro, I Rivera, P Ravasco, C Jakobs, HJ Blom, ME Camilo, IT De Almeida. 5,10-Methylenetetrahydrofolate reductase 677C→ T and 1298A→C mutations are genetic determinants of elevated homocysteine. QJMed, 2003; 96: 297-303.

183. LA Afman, KJA Lievers, LAJ Kluijtmans, JMF Trijbels, HJ Blom. Gene-gene interaction between the cystathionine ß-synthase 31 base pair variable number of tandem repeats and the methylenetetra-hydrofolate reductase 677C>T polymorphism on homocysteine levels and risk for neural tube defects. Mol Genet Metab, 2003; 78: 211-15.

184. MJ Pouwels, M den Heijer, HJ Blom, CJ Tack, AR Hermus. Improved insulin sensitivity and metabolic control in type 2 diabetes does not influence plasma homocysteine. Diabetes Care, 2003; 26: 1637-39.

185. MA Artz, JMM Boots, G Ligtenberg, JI Roodnat, MHL Christiaans, PF Vos, HJ Blom, FCGJ Sweep, PNM Demacker, LB Hilbrands. Improved cardiovascular risk profile and renal function in renal transplant patients after randomized conversion from cyclosporine to tacrolimus. J Am Soc Nephrol, 2003; 14: 1880-88.

186. NP Riksen, GA Rongen, HJ Blom, FGM Russel, GHJ Boers, P Smits. Potential role of adenosine in the pathogenesis of the vascular complications of hyperhomocysteinemia. Cardiovascular Res, 2003; 59: 271-76.

187. M Klerk, KJA Lievers, LAJ Kluijtmans, HJ Blom, M den Heijer, EG Schouten, FJ Kok, P Verhoef. The 2756A>G variant in the gene encoding methionine synthase: its relation with plasma homocysteine levels and risk of coronary heart disease in a Dutch case-control study. Thromb Res, 2003; 110: 87-91.

188. LA Afman, HJ Blom, NMJ van der Put, HWM van Straaten. Homocysteine interference in neurulation: a chick embryo model. Birth Defects Res, 2003; 67: 421-28.

189. SG Heil, LAJ Kluijtmans, O Spiegelstein, RH Finnell, HJ Blom. Gene-specific monitoring of T7-based RNA amplification by real-time quantitative PCR. BioTechniques, 2003; 35: 502-08.

190. IALM van Rooij, DW Swinkels, HJ Blom, HMWM Merkus, RPM Steegers-Theunissen. Vitamin and homocysteine status of mothers and infants and the risk of nonsyndromic orofacial clefts. Am J Obstet Gynecol, 2003; 189: 1155-60.

191. JW Muntjewerff, N van der Put, T Eskes, B Ellenbroek, E Steegers, H Blom, F Zitman. Homocysteine metabolism and B-vitamins in schizophrenic patients: low plasma folate as a possible independent risk factor for schizophrenia. Psychiatry Res, 2003; 121: 1-9.

192. R Castro, I Rivera, EA Struys, EEW Jansen, P Ravasco, ME Camilo, HJ Blom, C Jakobs, I Tavares de Almeida. Increased Homocysteine and S-adenosylhomocysteine concentrations and DNA hypomethylation in vascular disease. Clin Chem, 2003; 49: 1292-96.

193. CE Teunissen, MP van Boxtel, H Bosma, J Jolles, D Lutjohann, K von Bergmann, A Wauters, E Bosmans, M Maes, J Delanghe, C de Bruijn, HW Steinbusch, HJ Blom, J de Vente. Serum markers in relation to cognitive functioning in an aging population: results of the Maastricht Aging Study (MAAS). Tijdschr Gerontol Geriatr, 2003; 34: 6-12.

194. CE Teunissen, D Lutjohann, K von Bergmann, F Verhey, F Vreeling, A Wauters, E Bosmans, H Bosma, MP van Boxtel, M Maes, J Delanghe, HJ Blom, MM Verbeek, P Rieckmann, C de Bruijn, HW Steinbusch, J de Vente. Combination of serum markers related to several mechanisms in Alzheimer disease. Neurobiol Aging, 2003; 24: 893-902.

195. DZ van Asselt, CM Thomas, MF Segers, HJ Blom, RA Wevers, WH Hoefnagels. Cobalamin-binding proteins in normal and cobalamin-deficient older subjects. Ann Clin Biochem, 2003; 40: 65-69.

196. LA Afman, FJ Trijbels, HJ Blom. The H475Y polymorphism in the glutamate carboxypeptidase II gene increases plasma folate without affecting the risk for neural tube defects in humans. J. Nutr, 2003; 133: 75-77.

197. MJ Veerkamp, J de Graaf, M den Heijer, HJ Blom, AF Stalenhoef. Plasma homocysteine in subjects with familial combined hyperlipidemia. Atherosclerosis, 2003; 166: 111-17.

198. E Levtchenko, H Blom, M Wilmer, L van den Heuvel, L Monnens. ACE inhibitorenalapril diminishes albuminuria in patients with cystinosis. Clin Nephrol, 2003; 60: 386-89.

199. BC Tanis, HJ Blom, DG Bloemenkamp, MA van den Bosch, A Algra, Y van der Graaf, FR Rosendaal. Folate, homocysteine levels, methylenetetrahydrofolate reductase (MTHFR) 677C->T variant, and the risk of myocardial infarction in young women: effect of female hormones on homocysteine levels. J Thromb Haemost, 2004; 2: 35-41.

200. FF Willems, GHJ Boers, HJ Blom, WRM Aengevaeren, FWA Verheugt. Pharmacokinetic study on the utilisation of 5-methyltetrahydrofolate and folic acid in patients with coronary artery disease. Br J Pharmacol, 2004; 141: 825-30.

201. EN Levtchenko, M Wilmer, AC de Graaf-Hess, LPW van den Heuvel, H Blom, LA Monnens. Van gen naar ziekte; cystinose. Ned Tijdschr Geneeskd, 2004; 148: 476-78.

202. SG Heil, M. den Heijer, BJ van der Rijt-Pisa, LA Kluijtmans, HJ Blom. The 894 G>T variant of endothelial nitric oxide synthase (eNOS) increases the risk of recurrent venous thrombosis through interaction with elevated homocysteine levels. J Thromb Haemost, 2004; 2: 750-53.

203. WLDM Nelen, HJ Blom. Pregnancy complications. In: MTHFR Polymorphisms and Disease (eds. PM Ueland, R Rozen). Eurekah/Landes Bioscience, 2004.

204. R Castro, I Rivera, P Ravasco, ME Camilo, C Jakobs, HJ Blom, IT de Almeida. 5,10-methylenetetrahydrofolate reductase (MTHFR) 677C->T and 1298A->C mutations are associated with DNA hypomethylation. J Med Genet, 2004; 41: 454-58.

205. H Gellekink, M den Heijer, LA Kluijtmans, HJ Blom. Effect of genetic variation in the human S-adenosylhomocysteine hydrolase gene on total homocysteine concentrations and risk of recurrent venous thrombosis. Eur J Hum Genet, 2004; 12: 942-48.

206. AS De Vriese, HJ Blom, SG Heil, S Mortier, LA Kluijtmans, J van de Voorde, NH Lameire. Endothelium-derived hyperpolarizing factor-mediated renal vasodilatory response is impaired during acute and chronic hyperhomocysteinemia. Circulation, 2004; 109: 2331-36.

207. GM van der Vleuten, A Hijmans, LAJ Kluijtmans, HJ Blom, AFH Stalenhoef, J de Graaf. Thioredoxin interacting protein in Dutch families with familial combined hyperlipidemia. Am J Med Genet, 2004; 130A: 73-75.

208. HPJ Willems, M den Heijer, J Lindemans, HWA Berenschot, WBJ Gerrits, GMJ Bos, HJ Blom. Measurement of total homocysteine concentrations in acidic citrate- and EDTA-containing tubes by different methods. Clin Chem, 2004; 50: 1181-83.

209. NJ Leschot, DL Willems (redactie). Hoofdstuk 2: De genetische achtergrond van neuralebuisdefecten (LA Afman en HJ Blom). In: De genetische ontrafeling van veelvoorkomende aandoeningen. Elsevier gezondheidszorg, 2004: 29-37.

210. BAJ Veldman, G Vervoort, H Blom, P Smits. Reduced plasma total homocysteine concentrations in Type 1 diabetes mellitus is determined by increased renal clearance. Diabetic Medicine, 2004; 22: 301-05.

211. SG Heil, AS De Vriese, LAJ Kluijtmans, S Mortier, M den Heijer, HJ Blom. The role of hyperhomocysteinemia in nitric oxide (NO) and endothelium-derived hyperpolarizing factor (EDHF)-mediated vasodilatation. Cell Mol Biol, 2004; 50: 911-16.

212. A Melse-Boonstra, KJ Lievers, HJ Blom, P Verhoef. Bioavailability of polyglutamyl folic acid relative to that of monoglutamyl folic acid in subjects with different genotypes of the glutamate carboxypeptidase II gene. Am J Clin Nutr, 2004; 80: 700-04.

213. NP Riksen, GA Rongen, GHJ Boers, HJ Blom, PHH van den Broek, P Smits. Enhanced cellular adenosine uptake limits adenosine receptor stimulation in patients with hyperhomocysteinemia. Arterioscler Thromb Vasc Biol, 2005; 25: 1-6.

214. Den Heijer M, Graafsma S, Lee SY, van Landeghem B, Kluijtmans L, Verhoef P, Beaty TH, Blom H. Homocysteine levels--before and after methionine loading--in 51 Dutch families. Eur J Hum Genet, 2005; 13: 753-62.

215. PI Holm, PM Ueland, SE Vollset, Ø Midttun, HJ Blom, MBAJ Keijzer, M den Heijer. Betaine and folate status as cooperative determinants of plasma homocysteine in humans. Arterioscler Thromb Vasc Biol, 2005; 25: 379-85.

216. SG Heil, AS De Vriese, LAJ Kluijtmans, H Dijkman, D van Strien, R Akkers, HJ Blom. Cytochrome P450-2C11 mRNA is not expressed in endothelial cells dissected from rat renal arterioles. Nephron Physiol, 2005; 99: 43-49.

217. A de Bree, NMJ van der Put, LI Mennen, WMM Verschuren, HJ Blom, P Galan, CJ Bates, W Herrmann, M Ullrich, J Dierkes, S Westphal, LM Bouter, RJ Heine, CDA Stehouwer, JM Dekker, GN Nijpels, F Araujo, LM Cunha-Ribeiro, H Refsum, S Vollset, O Nygard, PM Ueland. Prevalences of

hyperhomocysteinemia, unfavorable cholesterol profile and hypertension in European populations. Eur J Clin Nutr, 2005; 59: 480-88.

218. IM van Beynum, M den Heijer, CMG Thomas, L Afman, D Oppenraay-van Emmerzaal, HJ Blom. Total homocysteine and its predictors in Dutch children. Am J Clin Nutr, 2005; 81: 1110-16.

219. E Levtchenko, A de Graaf-Hess, M Wilmer, L van den Heuvel, L Monnens, H Blom. Altered status of glutathione and its metabolites in cystinotic cells. Nephrol Dial Transplant, 2005; 20: 1828-32.

220. H Gellekink, M den Heijer, SG Heil, HJ Blom. Genetic determinants of plasma total homocysteine. Seminars in Vascular Medicine, 2005; 5: 98-109.

221. R Castro, I Rivera, C Martins, EA Struys, EEW Jansen, N Clode, LM Graça, HJ Blom, C Jakobs, I Tavares de Almeida. Intracellular S-adenosylhomocysteine increased levels are associated with DNA hypomethylation in HUVEC. J Mol Med, 2005; 83: 831-36.

222. SG Heil, JMF Trijbels, HJ Blom. De rol van hyperhomocysteïne in endotheel-afhankelijke vaatverwijding. Ned Tijdschr Klin Chem Labgeneesk, 2005; 30: 203-07.

223. Homocysteine Lowering Trialists Collaboration. Dose-dependent effects of folic acid on blood concentrations of homocysteine: a meta-analysis of the randomized trials. Am J Clin Nutr, 2005; 82: 806-12.

224. MJ Wilmer, A de Graaf-Hess, HJ Blom, HB Dijkman, LA Monnens, LP van den Heuvel, EN Levtchenko. Elevated oxidized glutathione in cystinotic proximal tubular epithelial cells. Biochem Biophys Res Commun, 2005; 337: 610-14.

225. CE Teunissen, MP van Boxtel, J Jolles, J de Vente, F Vreeling, F Verhey, CH Polman, CD Dijkstra, HJ Blom. Homocysteine in relation to cognitive performance in pathological and non-pathological conditions. Clin Chem Lab Med, 2005; 43: 1089-95.

226. NP Riksen, GA Rongen, HJ Blom, GH Boers, P Smits. Reduced adenosine receptor stimulation as a pathogenic factor in hyperhomocysteinemia. Clin Chem Lab Med, 2005; 43: 1001-06.

227. JW Muntjewerff, HJ Blom. Aberrant folate status in schizophrenic patients: what is the evidence? Prog Neuropsychopharmacol Biol Psychiatry, 2005; 29: 1133-39.

228. LA Afman, HJ Blom, MJ Drittij, MR Brouns, HW van Straaten. Inhibition of transmethylation disturbs neurulation in chick embryos. Brain Res Dev Brain Res, 2005; 158: 59-65.

229. HJ Gellekink, D van Oppenraaij-Emmerzaal, A van Rooij, EA Struys, M den Heijer, HJ Blom. Stable-isotope dilution liquid chromatography-electrospray injection tandem mass spectrometry method for fast, selective measurement of S-adenosylmethionine and S-adenosylhomocysteine in plasma. Clin Chem, 2005; 51: 1487-92.

230. JW Muntjewerff, ML Hoogendoorn, RS Kahn, RJ Sinke, M den Heijer, LA Kluijtmans, HJ Blom. Hyperhomocysteinemia, methylenetetrahydrofolate reductase 677TT genotype, and the risk for schizophrenia: a Dutch population based case-control study. Am J Med Genet B Neuropsychiatr Genet, 2005; 135: 69-72.

231. RAM Dhonukshe-Rutten, M van Zutphen, LCPGM de Groot, SJPM Eussen, HJ Blom WA van Staveren. Effect of supplementation with cobalamin carried either by a milk product or a capsule in mildly cobalamin-deficient elderly Dutch persons. Am J Clin Nutr, 2005; 82: 568–74.

232. EN Levtchenko, CM van Dael, AC de Graaf-Hess, MJ Wilmer, LP van den Heuvel, LA Monnens, HJ Blom. Strict cysteamine dose regimen is required to prevent nocturnal cystine accumulation in cystinosis. Pediatr Nephrol, 2006; 21: 110-13.

233. M Manders, E Vasse, LCPGM de Groot, WA van Staveren, JG Bindels, HJ Blom, WHL Hoefnagels. Homocysteine and cognitive function in institutionalised elderly. Eur J Nutr, 2006; 45 : 70-78.

234. AI Scher, GM Terwindt, WMM Verschuren, MC Kruit, HJ Blom, H Kowa, RR Frants, AMJM van den Maagdenberg, M van Buchem, MD Ferrari, LJ Launer. Migraine and MTHFR C677T genotype in a population-based sample. Annals of Neurol, 2006; 59: 372-75.

235. MB Keijzer, P Verhoef, GF Borm, HJ Blom, M den Heijer. No added value of the methionine loading task in assessment for venous thrombosis and cardiovascular disease risk. J Thromb Haemost, 2006; 95: 380-85.

236. HPJ Willems, M de Heijer, WBJ Gerrits, LJ Schurgers, M. Havekes, HJ Blom, GMJ Bos. Oral anticoagulant treatment with coumarin derivatives does not influence plasma homocysteine concentration. Eur J Intern Med, 2006; 17: 120-24.

237. O Golubnitschaja, H. Moenkemann, DB Trog, HJ Blom, AS de Vriese. Activation of genes inducing cell-cycle arrest and of increased DNA repair in the hearts of rats with early streptozotocin-induced diabetes mellitus. Med Sci Monit, 2006; 12: BR68-74.

238. JW Muntjewerff, RS Kahn, HJ Blom, M den Heijer. Homocysteine, methylenetetrahydrofolate reductase and risk of schizophrenia: a meta-analysis. Mol Psychiatry, 2006; 11: 143-49.

239. IM van Beynum, L Kapusta, M den Heijer, SHHM Vermeulen, M Kouwenberg, O Daniëls, HJ Blom. Maternal MTHFR 677C>T is a risk factor for congenital heart defects: effect modification by periconcetional folate supplementation. Eur Heart J, 2006; 27: 981-87.

239. IJM van de Linden, LA Afman, SG Heil, HJ Blom. Genetic variation in genes of folate metabolism and neural-tube defect risk. Proc Nutr Soc, 2006; 65: 204-15.

240. SH Vermeulen, GM van der Vleuten, J de Graaf, AR Hermus, HJ Blom, AF Stalenhoef, M. den Heijer. A genome-wide linkage scan for homocysteine levels suggests three regions of interest. J Thromb Haemost, 2006; 4: 1303-07.

241. SJ Eussen, LC de Groot, LW Joosten, RJ Bloo, R Clarke, PM Ueland, J Schneede, HJ Blom, WH Hoefnagels, WA van Staveren. Effect of oral vitamin B12 with or without folic acid on cognitive function in older people with mild vitamin B12 deficiency: a randomized, placebo-controlled trial. Am J Clin Nutr, 2006; 84: 361-70.

242. HJ Blom, GM Shaw, M den Heijer, RH Finnell. Neural tube defects and folate: case far from closed. Nat Rev Neuroscience, 2006; 7: 724-31.

243. EL van der Kooi, JC de Greef, M Wohlgemuth, RR Frants, RJGP van Asseldonk, HJ Blom, BGM van Engelen, SM van der Maarel, GW Padberg. No effect of folic acid and methionine supplementation on D4Z4 methylation in patients with facioscapulohumeral muscular dystrophy. Neuromuscular Disorders, 2006; 16: 766-69.

244. MBAJ Keijzer, M den Heijer, GF Borm, HJ Blom, SE Vollset, ARMM Hermus, PM Ueland. Low fasting methionine concentration as a novel risk factor for recurrent venous thrombosis. J Thromb Haemost, 2006; 96: 492-97.

245. IM van Beynum, M Kouwenberg, L Kapusta, M den Heijer, IJM van der Linden, O Daniels, HJ Blom. MTRR 66A>G polymorphism in relation to congenital hear defects. Clin Chem Lab Med, 2006; 44: 1317-23.

246. H Gellekink, HJ Blom, IJ van de Linden, M den Heijer. Molecular genetic analysis of the human dihydrofolate reductase gene: relation wtih plasma total homocysteine, serum and red blood cell folate levels. Eur J Hum Genet, 2007; 14: 103-09.

247. EN Levtchenko, MJ Wilmer, AJ Janssen, JB Koenderink, HJ Visch, PH Willems, A de Graaf-Hess, HJ Blom, LP van de Heuvel, LA Monnens. Decreased intracellular ATP content and intact mitochondrial energy generating capacity in human cystinotic fibroblasts. Pediatr Res, 2006; 59: 287-92.

248. KJ Lievers, LA Kluijtmans, HJ Blom, PW Wilson, J Selhub, JM Ordovas. Association of a 31 bp VNTR in the CBS gene with postload homocysteine concentrations in the Framingham Offspring Study. Eur J Hum Genet, 2006; 14: 1125-29.

249. IJ van der Linden, M den Heijer, LA Afman, H Gellekink, SH Vermeulen, LA Kluijtmans, HJ Blom. The methionine synthase reductase 66A>G polymorphism is a maternal risk factor for spina bifida. J Mol Med, 2006; 84: 1047-54.

250. GM van der Vleuten, A Hijmans, S Heil, HJ Blom AF Stalenhoef, J de Graaf. Can we exclude the TXNIP gene as a candidate gene for familial combined hyperlipidemia? Am J Med Genet A, 2006; 140: 1010-12.

251. GM van der Vleuten, LA Kluijtmans, A Hijmans, HJ Blom, AF Stalenhoef, J de Graaf. The Gln223Arg polymorphism in the leptin receptor is associated with familial combined hyperlipidemia. Int J Obes (Lond), 2006; 30: 892-98.

252. M den Heijer, HP Willems, HJ Blom, WB Gerrits, M Cattaneo, S Eichinger, F Rosendaal, GM Bos. Homocysteine lowering by B vitamins and the secondary prevention of deep-vein thrombosis and pulmonary embolism. A randomized, placebo-controlled, double blind trial. Blood, 2007; 109: 139-44.

253. HJ Blom, A van Rooij, M Hogeveen. A simple high-throughput method for the determination of plasma methylmalonic acid by liquid chromatography-tandem mass spectrometry. Clin Chem Lab Med, 2007; 45; 645-50.

254. H Gellekink, HJ Blom, M den Heijer. Associations of common polymorphisms in the thymidylate synthase, reduced folate carrier and 5-aminoimidazole-4-carboxamide ribonucleotide transformylase/inosine monophosphate cyclohydrolase genes with folate and homocysteine levels and venous thrombosis risk. Clin Chem Lab Med, 2007; 45: 471-76.

255. AC Peeters, BA van Landeghem, SJ Graafsma, SE Kranendonk, AR Hermus, HJ Blom, M den Heijer. Low vitamin B6, and not plasma homocysteine concentration, as risk factor for abdominal aortic aneurysm: A retrospective case-control study. J Vasc Surg, 2007; 45: 701-05.

256. SG Heil, M Hogeveen, LA Kluijtmans, PJ van Dijken, GB van de Berg, HJ Blom, E Morava. Marfanoid features in a child with combined methylmalonic aciduria and homocystinuria (CblC type). J Inher Metab Dis, 2007; 30: 811.

257. H Gellekink, JW Muntjewerff, SH Vermeulen, AR Hermus, HJ Blom, M den Heijer. Catecho-O-methyltransferase genotype is associated with plasma total homocysteine levels and may increase venous thrombosis risk. J Thromb Haemost, 2007; 98: 1226-31.

258. IM van Beynum, M den Heijer, HJ Blom, L Kapusta. The MTHFR 677C->T polymorphism and the risk of congenital heart defects: a literature review and meta-analysis. QJMed, 2007; 100: 743-53.

259. IJ van der Linden, SG Heil, IC Kouwenberg, M den Heijer, HJ Blom. The Methylenetetrahydrofolate dehydrogenase (MTHFD1) 1958>A variant is not associated with spina bifida risk in the Dutch population. Clin Genet, 2007; 72: 599-600.

260. MJ Wilmer, PH Willems, S Verkaart, HJ Visch, A de Graaf-Hess, HJ Blom, LA Monnens, LP van den Heuvel, EN Levtchenko. Cystine dimethylester model of cystinosis: still reliable? Pediatr Res, 2007; 62: 151-55.

261. SJ Eussen, PM Ueland, R Clarke, HJ Blom, WH Hoefnagels, WA van Staveren, LC de Groot. The association of betaine, homocysteine and related metabolites with cognitive function in Dutch elderly people. Br J Nutr, 2007; 98: 960-68.

262. JW Muntjewerff, ML Hoogendoorn, MF Aukes, RS Kahn, RJ Sinke, HJ Blom, M den Heijer. No evidence for a preferential transmission of the methylenetetrahydrofolate reductase 677T allele in families with schizophrenia offspring. Am J Med Genet B Neuropsychiatr Genet, 2007; 144: 891-94.

263. IJ van der Linden, SG Heil, M den Heijer, HJ Blom. The 894G>T variant in the endothelial nitric oxide synthase gene and spina bifida risk. J Hum Genet, 2007; 52: 516-20.

264. SG Heil, NP Riksen, GH Boers, Y Smulders, HJ Blom. DNA methylation status is not impaired in treated cystathionine beta-synthase (CBS) deficient patients. Mol Genet Metab, 2007; 91: 55-60.

265. IJ van der Linden, U Nguyen, SG Heil, B Franke, S Vloet, H Gellekink, M den Heijer, HJ Blom. Variation and expression of dihydrofolate reductase (DHFR) in relation to spina bifida. Mol Genet Metab, 2007; 91: 98-103.

266. AC Peeters, BE van Aken, HJ Blom, PH Reitsma, M den Heijer. The effect of homocysteine reduction by B-vitamin supplementation on inflammatory markers. Clin Chem Lab Med, 2007; 45: 54-58.

267. MB Keijzer, GF Borm, HJ Blom, GM Bos, FR Rosendaal, M den Heijer. No interaction between factor V Leiden and hyperhomocysteinemia or MTHFR 677TT genotype in venous thrombosis. Results of a meta-analysis of published studies and a large case-only study. J Thromb Haemost, 2007; 97: 32-37.

268. P Vyletal, J Sokolová, DN Cooper, JP Kraus, M Krawczak, G Pepe, O Rickards, HG Koch, M Linnebank, LA Kluijtmans, HJ Blom, GH Boers, M Gaustadnes, F Skovby, B Wilcken, DE Wilcken, G Andria, G Sebastio, ER Naughten, S Yap, T Ohura, E Pronicka, A Laszlo, V Kozich. Diversity of cystathionine beta-synthase haplotypes bearing the most common homocystinuria mutation c.833T>C: a possible role for gene conversion. Hum Mutat, 2007; 28: 255-264.

269. SG Heil, LA Kluijtmans, AS De Vriese, R Pfundt, HJ Blom. Diet-induced hyperhomocysteinemia does not lead to large gene-expression differences in rat aorta. Atherosclerosis, 2007; 193: 452-54.

270. H Gellekink, HJ Blom, IJ van der Linden, M den Heijer. Molecular genetic analysis of the human dihydrofolate reductase gene: relation with plasma total homocysteine, serum and red blood cell folate levels. Eur J Hum Genet, 2007; 15: 103-09.

271. M Hogeveen, I van Beynum, A van Rooij, L Kluijtmans, M den Heijer, HJ Blom. Methylmalonic acid values in healthy Dutch children. Eur J Nutr, 2008; 47: 26-31.

272. IA Naess, SC Christiansen, PR Romunstad, C Cannegieter, HJ Blom, FR Rosendaal, J Hammerström. Prospective study of homocysteine and MTHFR 677TT genotype and risk for venous thrombosis in a general population – results from the HUNT 2 study. British Journal of Haematology, 2008; 141: 529-35.

273. PWB Nanayakkara, JC Kiefte-de Jong, CDA Stehouwer, FJ van Ittersum, MR Olthof, RM Kok, HJ Blom, C van Guldener, PM ter Wee, YM Smulders. Association between global leukocyte DNA methylation, renal function, carotid intima-media thickness and plasma homocysteine in patients with stage 2-4 chronic kidney disease. Nephrol Dial Transplant, 2008; 23: 2586-92.

274. GMJ Bos, HPJ Willems, HJ Blom, WBJ Gerrits, FR Rosendaal, M den Heijer. Vitaminetherapie voor hyperhomocysteïnemie reduceert het risico op recidief veneuze trombose niet. Ned. Tijdschrift voor Hematologie, 2008.

275. SG Heil, SH Vermeulen, BJM vd Rijs-Pisa, M den Heijer, HJ Blom. Role for mitochondrial uncoupling protein-2 (UCP2) in hyperhomocysteinemia and venous trombosis risk? Clin Chem Lab Med, 2008; 46: 655-59.

276. FG Debray, Y Boulanger, A Khiat, JC Decarie, F Orquin, MS Roy, A Lortie, F Ramos, NM Verhoeven, E Struys, HJ Blom, C Jakobs, E Levy, GA Mitchell, M Lambert. Reduced brain choline in homocystinuria due to remethylation defects. Neurology, 2008; 71: 44-49.

277. JW Muntjewerff, H Gellekink, M den Heijer, ML Hoogendoorn, RS Kahn, RJ Sinke, HJ Blom. Polymorphisms in catechol-O-methyltransferase and methylenetetrahydrofolate reduction in relation to the risk of schizophrenia. Eur Neuropsychopharmacol, 2008; 18: 99-106.

278. SJ Eussen, PM Ueland, GJ Hiddink, J Schneede, HJ Blom, WH Hoefnagels, WA van Staveren, LC Groot. Changes in markers of cobalamin status after cessation of oral B-vitamin supplements in elderly people with mild cobalamin deficiency. Eur J Clin Nutr, 2008; 62: 1248-51.

279. IJ van der Linden, SG Heil, M van Egmont Petersen, HW van Straaten, M den Heijer, HJ Blom. Inhibition of methylation and changes in gene expression in relation to neural tube defects. Birth Defects Res A Clin Mol Teratol, 2008; 82: 676-83.

280. IM van Beynum, C Mooij, L Kapusta, S Heil, M den Heijer, HJ Blom. Common 894G>T single nucleotide polymorphism in the gene coding for endothelial nitric oxide synthase (eNOS) and risk of congenital heart defects. Clin Chem Lab Med, 2008; 46: 1369-75.

281. CE Teunissen, J Killestein, JJ Kragt, C Polman, CD Dijkstra, HJ Blom. Serum homocysteine levels in relation to clinical progression in MS. J Neurol Neurosurg Psychiatry, 2008; 79: 1349-53.

282. T Birnbaum, HJ Blom, H Prokisch, M Hartig, T Klopstock. Methylenetetrahydrofolate reductase deficiency (homocystinuria type II) as a rare cause of rapidly progressive tetraspasticity and psychosis in a previously healthy adult. J Neurol, 2008; 255: 1845-6.

283. A Semmler, Y Smulders, E Struys, D Smith, S Moskau, H Blom, M Linnebank. Methionine metabolism in an animal model of sepsis. Clin Chem Lab Med, 2008; 46: 1398-402.

284. KA Burren, D Savery, V Massa, RM Kok, JM Scott, HJ Blom, AJ Copp, ND Greene. Gene-environment interactions in the causation of neural tube defects: folate deficiency increases susceptibility conferred by loss of Pax3 function. Hum Mol Genet, 2008; 17: 3675-85.

285. CE Teunissen, E Iacobaeus, M Khademi, L Brundin, N Norgren, MJA Koel-Simmelink, M Schepens, F Bouwman, HAM Twaalhoven, HJ Blom, C Jakobs, CD Dijkstra. Combination of CSF N-acetylaspartate and neurofilaments in multiple sclerosis. Neurology, 2009; 72: 1322-29.

286. SM Ucar, ÖA Koroglu, Ö Berk, M Yalaz, N Kultursay, HJ Blom, M Coker. Titration of betaine therapy to optimize therapy in an infant with 5,10-methylenetetrahydrofolate reductase deficiency. Eur J Pediatr, 2009; 169: 241-3.

287. B Franke, SHHM Vermeulen, RPM Steegers-Theunissen, MJ Coenen, MMVAP Schijvenaars, H Scheffer, M den Heijer, HJ Blom. An association study of 45 folate-related genes in spina bifida: involvement of cublin (CUBN) and tRNA aspartic acid methyltransferase 1 (TRDMT1). Birth Defects Res A Clin Mol Teratol, 2009; 85: 216-26.

288. G. Visser, FJ van Spronsen, MG de Sain-van der Velden, HJ Blom, FA Wijburg. Uitgebreide neonatale hielprikscreening op stofwisselingsziekten in Nederland. Evaluatie van de eerste 2 jaar. Ned. Tijdschrift Geneeskunde, 2009; 153: 359-66.

289. GM Shaw, SE Vollset, SL Carmichael, W Yang, RH Finell, H Blom, PM Ueland. Nested case-controll study of one-carbon metabolites in mid-pregnancy and risks of cleft lip with and without cleft-pallet. Pediatr Res, 2009; 66: 501-06.

290. M Hogeveen, I van Beijnum, A van Rooij, L. Kluijtmans, M den Heijer, H Blom. Methylmalonzuurconcentraties bij gezonde Nederlandse kinderen. Ned Tijdschr Klin Chem Labgeneesk 2009; 34: 227-29.

291. CR Hooijmans, HJ Blom, D. Oppenraaij-Emmerzaal, M Ritskes-Hoitinga, AJ Kiliaan. S-adenosylmethionine and S-adenosylhomocysteine levels in the aging brain of APP/PS1 Alzheimer mice. Neurol Sci, 2009; 30: 439-45.

292. GM Shaw, RH Finnell, HJ Blom, SL Carmichael, SE Vollset, W Yang, PM Ueland. Choline and risk of neural tube defects in a folate-fortified population. Epidemiology, 2009; 20: 714-19.

293. HJ Blom. Folic acid, methylation and neural tube closure in humans. Birth defects Res A Clin Mol Teratol, 2009; 85: 295-302.

294. M Coen, RA Wevers, JC Lindon, HJ Blom. High-resolution 1H NMR spectroscopic investigation of a chick embryo model of neural tube development. Magn Reson Chem, 2009; 47 Suppl 1: S62-S67.

295. E Kolwijck, UF Engelke, M van der Graaf, A Heerschap, HJ Blom, M Hadfoune, WA Buurman, LF Massuger, RA Wevers. N-acetyl resonances in in vivo and in vitro NMR spectroscopy of cystic ovarian tumors. NMR Biomed, 2009; 22: 1093-99.

296. GM Shaw, SL Carmichael, SE Vollset, W Yang, RH Finnell, H Blom, O Midttun, PM Ueland. Mid-pregnancy cotinine and risks of orofacial clefts and neural tube defects. J Pediatr, 2009; 154: 17-19.

297. BL Vaes, C Lute, HJ Blom, N Bravenboer, TJ de Vries, V Everts, RA Dhonukshe-Tutten, M Muller, LC de Groot, WT Steengenga. Vitamine B(12) deficiency stimulates osteoclastogenesis via increased homocysteine and methylmalonic acid. Calcif Tissue Int, 2009; 84: 413-422.

298. IM van Beynum, L Kapusta, MK Bakker, M den Heijer, HJ Blom, HEK de Walle. Protective effect of periconceptional folic aid supplements on the risk of congenital heart defects: a registry-based case-control study in the northern Netherlands. Eur Heart J, 2010; 31: 464-71.

299. RH Finnel, HJ Blom, GM Shaw. Does global hypomethylation contribute to susceptibility to neural tube defects? Am J Clin Nutr, 2010; 91: 1153-54.

300. A Semmler, S Moskau, A Grigull, S Farmand, T Klockgether, Y Smulders, H Blom, B Zur, B Stoffel-Wagner, M Linnebank. Plasma folate levels are associated with the lipoprotein profile: a retrospective database analysis. Nutr J, 2010; 9: 31.

301. BL Vaes, C Lute, SP van der Woning, E Piek, J Vermeer, HJ Blom, JC Mathers, M Müller, LC de Groot, WT Steegenga. Inhibition of methylation decreases osteoblast differentiation via a non-DNA-dependent methylation mechanism. Bone, 2010; 46: 514-23.

302. M Hogeveen, HJ Blom, EH van der Heijden, BA Semmekrot, JM Sporken, PM Ueland, M den Heijer. Maternal homocysteine and related B vitamins as risk factors for low birthweight. Am J Obstet Gynecol, 2010; 202: 572.e1-6.

303. E Kolwijck, RA Wevers, UF Engelke, J Woudenberg, J Bulten, HJ Blom, LF Massuger. Ovarian cyst fluid of serous ovarian tumors large quantities of the brain amino acid N-acetylaspartate. PLoS One, 2010; 5: e10293.

304. M Hogeveen, M den Heijer, Y Schonbeck, M IJland, D van Oppenraaij, JK Gunnewiek, HJ Blom. The effect of folinic acid supplementation on homocysteine concentrations in newborns. Eur J Clin Nutr, 2010; 64: 1266-71.

305. SD Sie, RC de Jonge, HJ Blom, MF Mulder, J Reiss, RJ Vermeulen, CM Peeters-Scholte. Chronological changes of the amplitude-integrated EEG in a neonate with molybdenum cofactor deficiency. J Inherit Metab Dis, 2010; 33 Suppl 3:S401-7.

306. M Linnebank, J Popp, Y Smulders, D Smith, A Semmler, M Farkas, L Kulic, G Cvetanovska, H Blom, B Stoffel-Wagner, H Kölsch, M Weller, F Jessen. S-Adenosylmethionine is discreased in the cerebrospinal fluid of patients with Alzheimer's disease. Neurodegener Dis, 2010; 7: 373-8.

307. MS Rocha, R Castro, I Rivera, RM Kok, YM Smulders, C Jakobs, IT de Almeida, HJ Blom. Global DNA methylation: comparison of enzymatic- and non-enzymatic-based methods. Clin Chem Lab Med, 2010; 48: 1793-98.

308. MK Bjursell, HJ Blom, JA Cayuela, ML Engvall, N Lesko, S Balasubramaniam, G Brandberg, M Halldin, M Falkenberg, Jakobs, D Smith, E Struys, U von Döbeln, CM Gustafsson, J Lundeber, A Wedell. Adenosine Kinase Deficiency Disrupts the Methionine Cycle and Causes Hypermethioninemia, Encephalopathy, and Abnormal Liver Function. Am J Hum Genet, 2011; 89: 507-15.

309. NM Wamelink, EA Struys, EE Jansen, HJ Blom, T Vilboux, WA Gahl, M Kömhoff, C Jakobs, EN Levtchenko. Elevated concentrations of sedoheptulose in bloodspots of patients with cystinosis caused by the 57-kb deletion: implications for diagnostics and neonatal screening. Mol Genet Metab, 2011; 102: 339-42.

310. AY Jung, Y Smulders, P Verhoef, FJ Kok, H Blom, RM Kok, E Kampman, J Durga. No effect of folic acid supplementation on global DNA methylation in men and women with moderately elevated homocysteine. PLoS One, 2011; 6(9): e24976.

311. YM Smulders, HJ Blom. The homocysteine controversy. J Inherit Metab Dis, 2011; 34: 93-9.

312. HJ Blom, YM Smulders. Overview of homocysteine and folate metabolism. With special references to cardiovascular disease and neural tube defects. J Inherit Metab Dis, 2011; 34: 75-81.

313. H Cario, DE Smith, H Blom, N Blau, H Bode, K Holzmann, U Pannicke, KP Hopfner, EM Rump, Z Ayric, E Kohne, KM Debatin, Y Smulders, K Schwarz. Dihydrofolate reductase deficiency due to a homozygous DHFR mutation causes megaloblastic anemia and cerebral folate deficiency leading to severe neurologic disease. Am J Hum Genet, 2011; 88: 226-31.

314. S Banka, HJ Blom, J Walter, M Aziz, J Urquhart, CM Clouthier, GI Rice, AP de Brouwer, E Hilton, G Vassallo, A Will, DE Smith, YM Smulders, RA Wevers, R Steinfeld, S Heales, YJ Crow, JN Pelletier, S Jones, WG Newman. Identification and characterization of an inborn error of metabolism caused by dihydrofolate reductase deficiency. Am J Hum Genet, 2011; 88: 216-25.

315. CA Wijsman, D van Heemst, MP Rozing, PE Slagboom, M Beekman, AJ de Craen, AB Maier, RG Westendorp, HJ Blom, SP Mooijaart. Homocysteine and familial longevity: the Leiden Longevity Study. PLoS One, 2011; 6: e17543.

316. F Pizzolo, HJ Blom, SW Choi, D Girelli, P Guarini, N Martinelli, AM Stanzial, R Corrocher, O Olivieri, S Friso. Folic Acids effects on s-adenosylmethionine, s-adenosylcysteine, and DNA methylation in patients with intermediate hyperhomocysteinemia. J Am Coll Nutr. 2011; 30: 11-18

317. AI Scher, H Wu, JW Tsao, HJ Blom, P Feit, RL Nevin, K Schwab. MTHFR C677T Genotype as a Risk factor for Epilepsy Including Post-Traumatic Epilepsy in a Representative Military Cohort. J Neurotrauma, 2011; 28: 1739-45.

318. M Barroso, MS Rocha, R esse, I Gonçalves Jr, AQ Gomes, T Teerlink, C Jakobs, HJ Blom, J Loscalzo, I Rivera, IT de Almeida, R Castro. Cellular hypomethylation is associated with impaired nitric oxide production by cultured human endothelial cells. Amino Acids, 2012; 42:1903-11.

319. KMA Swart, NM van Schoor, HJ Blom, YM Smulders, P Lips. Homocysteine and the risk of nursing home admission and mortality in older persons. Eur J Clin Nutr, 2012; 66:188-95.

320. JA Sipkens, NE Hahn, HJ Blom, SM Lougheed, CD Stehouwer, HA Rauwerda, PA Krijnen, VW van Hinsbergh, HW Niessen,. S-Adenosylhomocysteine induces apoptis and phosphatidylserine exposure in endothelial cells independent of homocysteine. Atherosclerosis, 2012; 221: 48-54.

321. A Semmler, C Frisch, D Smith, H Blom, M Linnebank. The ratio of S-adenosylmethione and S-adenosyl-homocysteine is increased in the brains of newborn rats in a model of valproic acid teratogenicity. Toxicology, 2012; 293: 132-3.

322. MS Rocha, T Teerlink, MC Janssen, LA Kluijtmans, Y Smulders, C Jakobs, I Tavares de Almeida, I Rivera, R Castro, HJ Blom. Asymmetric dimethylarginine in adults with cystathionine β-synthase deficiency. Atherosclerosis, 2012; 222: 509-11.

323. M Davids, E Swieringa, F Palm, DE Smith, YM Smulders, PG Scheffer, HJ Blom, T Teerlink. Simultaneous determination of asymmetric and symmetric dimethylarginine, l-monomethylarginine, l-arginine, and l-homoarginine in biological samples using stable isotope dilution liquid chromatography tandem mass spectrometry. J Chromatogr B Analyt Technol Biomed Life Sci, 2012; 900: 38-47.

324. DEC Smith, YM Smulders, HJ Blom, J Popp, F Jessen, A Semmler, M Farkas, M Linnebank. Determinants of the essential one-carbon metabolism metabolites, homocysteine, S-adenosylmethionine, S-adenosylhomocysteine and folate, in cerebrospinal fluid. Clin Chem Lab Med, 2012; 50: 1641-7.

325. M Hogeveen, HJ Blom, M den Heijer. Maternal homocysteine and small-forgestational-age offspring: systematic review and meta-analysis. Am J Clin Nutr, 2012: 95:130-6.

326. M Davids, JDT Ndika, GS Salomons, HJ Blom, T Teerlink. Promiscuous activity of arginine:glycine amidinotransferase is responsible for the synthesis of the novel cardiovascular risk factor homoarginine. FEBS Letters, 2012; 586: 3653-7.

327. DE Smith, MI Mendes, LA Kluijtmans, MC Janssen, YM Smulders, HJ Blom. A liquid chromatography mass spectrometry method for the measurement of cystathionine β-synthase activity in cell extracts. J Chromatogr B Analyt Technol Biomed Life Sci, 2012; 911:186-91.

328. M Schiff and HJ Blom. Treatment of inherited homocystinurias. Neuropediatrics. 2012; 43: 295-304.

329. M Hogeveen, M den Heijer, BA Semmekrot, JM Sporken, PM Ueland, HJ Blom. Umbilical choline and related methylamines betaine and dimethylglycine in relation to birth weight. Pediatr Res, 2013; 73: 783-7.

330. R Esse, MS Rocha, M Barroso, C Florindo, TTeerlink, RM Kok, YM Smulders, I Rivera, P Leandro, P Koolwijk, R Castro, HJ Blom, I Tavares de Almeida. Protein arginine methylation is more prone to inhibition by S-Adenosylhomocysteine than DNA methylation in vascular endothelial cells. PLoS ONE, 2013; 8: e55483.

331. RP Juni, HJ Blom, HH Schmidt, AL Moens. Folic acid enlarges the armamentarium for the treatment of coronary vasospasm. J Cell Physiol, 2013; 228: 1627-8.

332. SC van Dijk, YM Smulders, AW Enneman, KM Swart, JP van Wijngaarden, AC Ham, NM van Schoor, RA Dhonukshe-Rutten, LC de Groot, P Lips, AG Uitterlinden, HJ Blom, JM Geleijnse, EJ Feskens, AH van den Meiracker, FM Raso, N van der Velde. Homocysteine level is associated with aortic stiffness in elderly: cross-sectional results from the B-PROOF study. J Hypertens, 2013; 31: 952-9.

333. AY Jung, A Botma, C Lute, HJ Blom, PM Ueland, G Kvalheim, O Midttun, F Nagengast, W Steegenga, E Kampman. Plasma B vitamins and LINE-1 DNA methylation in leukocytes of patients with a history of colorectal adenomas. Mol Nutr Food Res, 2013; 57: 698-708.

334. JC Harteman, F Groenendaal, MJ Benders, A Huisman, HJ Blom, LS de Vries LS. Role of thrombophilic factors in full-term infants with neonatal encephalopathy. Pediatr Res, 2013; 73: 80-6.

335. M Farkas, S Keskitalo, DE Smith, N Bain, A Semmler, B Ineichen, Y Smulders, H Blom, L Kulic, M Linnebank. Hyperhomocysteinemia in Alzheimer's disease: the hen and the egg? J Alzheimers Dis, 2013; 33: 1097-104.

336. van Meurs JB, Pare G, Schwartz SM, Hazra A, Tanaka T, Vermeulen SH, CotlarciucI, Yuan X, Mälarstig A, Bandinelli S, Bis JC, Blom H, Brown MJ, Chen C, Chen YD, Clarke RJ, Dehghan A, Erdmann J, Ferrucci L, Hamsten A, Hofman A, Hunter DJ, Goel A, Johnson AD, Kathiresan S, Kampman E, Kiel DP, Kiemeney LA, Chambers JC, Kraft P, Lindemans J, McKnight B, Nelson CP, O'Donnell CJ, Psaty BM, Ridker PM, Rivadeneira F, Rose LM, Seedorf U, Siscovick DS, Schunkert H, Selhub J, Ueland PM, Vollenweider P, Waeber G, Waterworth DM, Watkins H, Witteman JC, den Heijer M, Jacques P, Uitterlinden AG, Kooner JS, Rader DJ, Reilly MP, Mooser V, Chasman DI, Samani NJ, Ahmadi KR. Common genetic loci influencing plasma homocysteine concentrations and their effect on risk of coronary artery disease. Am J Clin Nutr, 2013; 98: 668-76.

337. Smith DE, Hornstra JM, Kok RM, Blom HJ, Smulders YM. Folic acid supplementation does not reduce intracellular homocysteine, and may disturb intracellular one-carbon metabolism. Clin Chem Lab Med, 2013; 51: 1643-50.

338. Esse R, Florindo C, Imbard A, Rocha MS, de Vriese AS, Smulders YM, Teerlink T, Tavares de Almeida I, Castro R, Blom HJ. Global protein and histone arginine methylation are affected in a tissue-specific manner in a rat model of diet-induced hyperhomocysteinemia. Biochim Biophys Acta, 2013; 1832: 1708-14.

339. Imbard A, Blom HJ, Schlemmer D, Barto R, Czerkiewicz I, Rigal O, Muller F, Benoist JF. Methylation metabolites in amniotic fluid depend on gestational age. Prenat Diagn, 2013; 33: 848-55.

340. Semmler A, Prost JC, Smulders Y, Smith D, Blom H, Bigler L, Linnebank M. Methylation metabolism in sepsis and systemic inflammatory response syndrome. Scand J Clin Lab Invest, 2013, 73: 368-72.

341. Smulders YM, den Heijer M, Blom HJ Homocysteine levels: measure or not? Ned Tijdschr Geneeskd, 2013; 157: A6265.

342. Imbard A, Benoist JF, Blom HJ. Neural tube defects, folic acid and methylation. Int J Environ Res Public Health, 2013; 10: 4352-89.

343. Luttmer R, Spijkerman AM, Kok RM, Jakobs C, Blom HJ, Serne EH, Dekker JM, Smulders YM. Metabolic syndrome components are associated with DNA hypomethylation. Obes Res Clin Pract, 2013; 7:e89-e164.

344. Sipkens JA, Hahn N, van den Brand CS, Meischl C, Cillessen SA, Smith DE, Juffermans LJ, Musters RJ, Roos D, Jakobs C, Blom HJ, Smulders YM, Krijnen PA, Stehouwer CD, Rauwerda JA, van

Hinsbergh VW, Niessen HW. Homocysteine-induced apoptosis in endothelial cells coincides with nuclear NOX2 and peri-nuclear NOX4 activity. Cell Biochem Biophys, 2013; 67: 341-52.

345. Hornstra JM, Hoekstra T, Serné EH, Eringa EC, Wijnstok NJ, Blom HJ, Twisk JW, Smulders YM. Homocysteine levels are inversely associated with capillary density in men, not in premenopausal women. Eur J Clin Invest, 2014; 44: 333-40.

346. Drewes YM, Poortvliet RK, Blom JW, de Ruijter W, Westendorp RG, Stott DJ, Blom HJ, Ford I, Sattar N, Wouter Jukema J, Assendelft WJ, de Craen AJ, Gussekloo J. Homocysteine levels and treatment effect in the PROspective Study of Pravastatin in the Elderly at Risk. J Am Geriatr Soc, 2014; 62: 213-21.

347. Mendes MI, Colaço HG, Smith DE, Ramos RJ, Pop A, van Dooren SJ, Tavares d Almeida I, Kluijtmans LA, Janssen MC, Rivera I, Salomons GS, Leandro P, Blom HJ. Reduced response of Cystathionine Beta-Synthase (CBS) to S-adenosylmethionine (SAM): Identification and functional analysis of CBS gene mutations in homocystinuria patients. J Inherit Metab Dis, 2014; 37: 245-54.

348. Capuano F, Mülleder M, Kok R, Blom HJ, Ralser M. Cytosine DNA methylation is found in Drosophila melanogaster but absent in Saccharomyces cerevisiae, Schizosaccharomyces pombe, and other yeast species. Anal Chem, 2014; 86: 3697-702.

349. Barroso M, Florindo C, Kalwa H, Silva Z, Turanov AA, Carlson BA, Tavares de Almeida I, Blom HJ, Gladyshev VN, Hatfield DL, Michel T, Castro R, Loscalzo J,Handy DE. Inhibition of Cellular Methyltransferases Promotes Endothelial Cell Activation by Suppressing Glutathione Peroxidase-1 Expression. J Biol Chem, 2014; 289: 15350-62.

350. van Dijk SC, Enneman AW, van Meurs J, Swart KM, Ham AH, van Wijngaarden JP, Brouwer-Brolsma EM, van der Zwaluw NL, van Schoor NM, Dhonukshe-Rutten RA, de Groot LC, Lips P, Uitterlinden AG, Blom H, Geleijnse JM, Feskens E, de Jongh RT, Smulders YM, van den Meiracker AH, Mattace-Raso FU, van der Velde N. B-vitamin levels and genetics of hyperhomocysteinemia are not associated with arterial stiffness. Nutr Metab Cardiovasc Dis, 2014; 24: 760-6.

351. Esse R, Imbard A, Florindo C, Gupta S, Quinlivan EP, Davids M, Teerlink T, Tavares de Almeida I, Kruger WD, Blom HJ, Castro R. Protein arginine hypomethylation in a mouse model of cystathionine β-synthase deficiency. FASEB J. 2014; 28: 2686-95.

352. Poloni S, Leistner-Segal S, Bandeira IC, D'Almeida V, de Souza CF, Spritzer PM, Castro K, Tonon T, Nalin T, Imbard A, Blom HJ, Schwartz IV. Body composition in patients with classical homocystinuria: body mass relates to homocysteine and choline metabolism. Gene, 2014; 546: 443-7.

353. Mendes MI, Santos AS, Smith DE, Lino PR, Colaço HG, de Almeida IT, Vicente JB,Salomons GS, Rivera I, Blom HJ, Leandro P. Insights into the regulatory domain of cystathionine Beta-synthase: characterization of six variant proteins. Hum Mutat, 2014; 35: 1195-202.

354. van Dijk SC, Sohl E, Oudshoorn C, Enneman AW, Ham AC, Swart KM, van Wijngaarden JP, Brouwer-Brolsma EM, van der Zwaluw NL, Uitterlinden AG, de Groot LC, Dhonukshe-Rutten RA, Lips P, van Schoor NM, Blom HJ, Geleijnse JM, Feskens EJ, Smulders YM, Zillikens MC, de Jongh RT, van den Meiracker AH, Mattace Raso FU, van der Velde N. Non-linear associations between serum 25-OH vitamin D and indices of arterial stiffness and arteriosclerosis in an older population. Age Ageing, 2015; 44: 136-42.

355. Visser S, Hermes W, Blom HJ, Heijboer AC, Franx A, Van Pampus MG, Bloemenkamp KW, Koopmans C, Mol BW, De Groot CJ. Homocysteinemia After Hypertensive Pregnancy Disorders at Term. J Womens Health (Larchmt), 2015; 24: 524-9.

356. Poloni S, Blom HJ, Schwartz IV. Stearoyl-CoA Desaturase-1: Is It the Link between Sulfur Amino Acids and Lipid Metabolism? Biology (Basel), 2015; 4: 383-96.

357. Blom HJ, Stabler S, Wagner C. In memoriam: S. Harvey Mudd. Am J Med Genet A, 2015; 167A: 994-6.

358. Imbard A, Benoist JF, Esse R, Gupta S, Lebon S, De Vriese AS, Ogier De Baulny H, Kruger W, Schiff M, Blom HJ. High homocysteine induces betaine depletion. Biosci Rep, 2015; 35: e00222.

359. Huemer M, Kožich V, Rinaldo P, Baumgartner MR, Merinero B, Pasquini E, Ribes A, Blom HJ. Newborn screening for homocystinurias and methylation disorders: systematic review and proposed guidelines. J Inherit Metab Dis, 2015, 38: 1007-19.

360. van Dijk SC, Enneman AW, Swart KM, van Wijngaarden JP, Ham AC, Brouwer-Brolsma EM, van der Zwaluw NL, Blom HJ, Feskens EJ, Geleijnse JM, van Schoor NM,Dhonukshe-Rutten RA, de Jongh RT, Lips P, de Groot LC, Uitterlinden AG, Smulders YM, van den Meiracker AH, Mattace Raso FU, van der Velde N. Effects of 2-year vitamin B12 and folic acid supplementation in hyperhomocysteinemic elderly on arterial stiffness and cardiovascular outcomes within the B-PROOF trial. J Hypertens, 2015; 33: 1897-906

361. Barroso M, Kao D, Blom HJ, Tavares de Almeida I, Castro R, Loscalzo J, Handy DE. S-adenosylhomocysteine induces inflammation through NFkB: A possible role for EZH2 in endothelial cell activation. Biochim Biophys Acta, 2015; 1862: 82-92.

362. van Dijk SC, Swart KM, Ham AC, Enneman AW, van Wijngaarden JP, Feskens EJ,Geleijnse JM, de Jongh RT, Blom HJ, Dhonukshe-Rutten RA, de Groot LC, van Schoor NM, Lips P, Uitterlinden AG, Mattace Raso FU, Smulders YM, van den Meiracker AH, van der Velde N. Physical Fitness, Activity and Hand-Grip Strength Are Not Associated with Arterial Stiffness in Older Individuals. J Nutr Health Aging, 2015; 19: 779-84.

363. Chien YH, Abdenur JE, Baronio F, Bannick AA, Corrales F, Couce M, Donner MG,Ficicioglu C, Freehauf C, Frithiof D, Gotway G, Hirabayashi K, Hofstede F,Hoganson G, Hwu WL, James P, Kim S, Korman SH, Lachmann R, Levy H, Lindner M,Lykopoulou L, Mayatepek E, Muntau A, Okano Y, Raymond K, Rubio-Gozalbo E,Scholl-Bürgi S, Schulze A, Singh R, Stabler S, Stuy M, Thomas J, Wagner C, Wilson WG, Wortmann S, Yamamoto S, Pao M, Blom HJ. Mudd's disease (MAT I/III deficiency): a survey of data for MAT1A homozygotes and compound heterozygotes. Orphanet J Rare Dis, 2015; 10: 99.

364. Mendes MI, Smith DE, Vicente JB, Tavares De Almeida I, Ben-Omran T, Salomons GS, Rivera IA, Leandro P, Blom HJ. Small aminothiol compounds improve the function of Arg to Cys variant proteins: effect on the human cystathionine β-synthase p.R336C. Hum Mol Genet, 2015; 24: 7339-48

365. van Dijk SC, Enneman AW, Swart KM, van Wijngaarden JP, Ham AC, de Jonge R, Blom HJ, Feskens EJ, Geleijnse JM, van Schoor NM, Dhonukshe-Rutten RA, de Jongh RT, Lips P, de Groot LC, Uitterlinden AG, van den Meiracker TH, Mattace-Raso FU, van der Velde N, Smulders YM. Effect of vitamin B12 and folic acid supplementation on biomarkers of endothelial function and inflammation among elderly individuals with hyperhomocysteinemia. Vasc Med, 2016; 21:91-8.

366. van Dijk SC, de Jongh RT, Enneman AW, Ham AC, Swart KM, van Wijngaarden JP,van der Zwaluw NL, Brouwer-Brolsma EM, van Schoor NM, Dhonukshe-Rutten RA, Lips P, de Groot CP, Smulders YM, Blom HJ, Feskens EJ, Geleijnse JM, van den Meiracker AH, Mattace Raso FU, Uitterlinden AG, Zillikens MC, van der Velde N. Arterial stiffness is not associated with bone parameters in an elderly hyperhomocysteinemic population. J Bone Miner Metab, 2016; 34: 99-108.

367. Barroso M, Kao D, Blom HJ, Tavares de Almeida I, Castro R, Loscalzo J, Handy DE. S-adenosylhomocysteine induces inflammation through NFkB: A possible role for EZH2 in endothelial cell activation. Biochim Biophys Acta, 2016; 1862: 82-92.

368. Bergwerff CE, Luman M, Blom HJ, Oosterlaan J. No Tryptophan, Tyrosine and Phenylalanine Abnormalities in Children with Attention-Deficit/Hyperactivity Disorder. PLoS One, 2016; 11: e0151100

369. Staufner C, Lindner M, Dionisi-Vici C, Freisinger P, Dobbelaere D, Douillard C, Makhseed N, Straub BK, Kahrizi K, Ballhausen D, la Marca G, Kölker S, Haas D, Hoffmann GF, Grünert SC, Blom HJ. Adenosine kinase deficiency: expanding the clinical spectrum and evaluating therapeutic options. J Inherit Metab Dis, 2016; 39: 273-83.

370. Inauen C, Rüfenacht V, Pandey AV, Hu L, Blom H, Nuoffer JM, Häberle J. Effect of Cysteamine on Mutant ASL Proteins with Cysteine for Arginine Substitutions. Mol Diagn Ther, 2016; 20: 125-33.

371. Staufner C, Blom HJ, Dionisi-Vici C, Freisinger P, Makhseed N, Ballhausen D,Kölker S, Hoffmann GF, Harting I. MRI and (1)H-MRS in adenosine kinase deficiency. Neuroradiology, 2016; 58: 697-703

372. Hannibal L, Lysne V, Bjørke-Monsen AL, Behringer S, Grünert SC, Spiekerkoetter U, Jacobsen DW, Blom HJ. Biomarkers and Algorithms for the Diagnosis of Vitamin B12 Deficiency. Front Mol Biosci, 2016; 3: 27.

373. Barić I, Erdol S, Saglam H, Lovrić M, Belužić R, Vugrek O, Blom HJ, Fumić K. Glycine N-Methyltransferase Deficiency: A Member of Dysmethylating Liver Disorders? JIMD Rep, 2017; 31: 101-10.

374. Barić I, Staufner C, Augoustides-Savvopoulou P, Chien YH, Dobbelaere D, Grünert SC, Opladen T, Ramadža DP, Rakić B, Wedell A, Blom HJ. Consensus recommendations for the diagnosis, treatment and follow-up of inherited methylation disorders. J Inherit Metab Dis, 2017; 40: 5-20.

375. Morris AA, Kožich V, Santra S, Andria G, Ben-Omran TI, Chakrapani AB, Crushell E, Henderson MJ, Hochuli M, Huemer M, Janssen MC, Maillot F, Mayne PD, McNulty J, Morrison TM, Ogier H, O'Sullivan S, Pavlíková M, de Almeida IT, Terry A, Yap S, Blom HJ, Chapman KA. Guidelines for the diagnosis and management of cystathionine beta-synthase deficiency. J Inherit Metab Dis, 2017; 40: 49-74.

376. Huemer M, Diodato D, Schwahn B, Schiff M, Bandeira A, Benoist JF, Burlina A, Cerone R, Couce ML, Garcia-Cazorla A, la Marca G, Pasquini E, Vilarinho L, Weisfeld-Adams JD, Kožich V, Blom H, Baumgartner MR, Dionisi-Vici C. Guidelines for diagnosis and management of the cobalamin-related remethylation disorders cblC, cblD, cblE, cblF, cblG, cblJ and MTHFR deficiency. J Inherit Metab Dis, 2017; 40: 21-48.

377. Semmler A, Frisch C, Bleul C, Smith D, Bigler L, Prost JC, Blom H, Linnebank M. Intrauterine valproate exposure is associated with alterations in hippocampal cell numbers and folate metabolism in a rat model of valproate teratogenicity. Seizure, 2017; 46: 7-12.

378. Hannibal L, Blom HJ. Homocysteine and disease: Causal associations or epiphenomenons? Mol Aspects Med, 2017; 53: 36-42.