Table 1: Summary table of final articles included in review

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author** | **Year** | **Setting/Country** | **n** | **Age Group** | **Early-life Factor(s)** | **Outcome(s)** | **Newcastle-Ottawa Quality Assessment** |
| Andersen et al.1 | 2011 | Denmark | 9869 | Children | Maternal gestational weight gain | BMI | \*\*\*\*\*\*\*\* |
| Aris et al.2 | 2018 | Singapore | 858 | Children | Maternal gestational weight gain Raised maternal fasting glucose | BMI Waist-to-height ratio Fat mass index Overweight/obesity Sum of skinfolds | \*\*\*\*\*\*\*\* |
| Bammann et al.3 | 2014 | Belgium, Cyprus, Estonia, Germany, Hungary, Italy, Spain, Sweden | 1024 | Children | Maternal gestational weight gain Birth weight | Overweight/obesity | \*\*\*\*\*\*\*\* |
| Bann et al.4 | 2014 | United Kingdom | 1558 | Adults | Birth weight | Lean mass Fat mass | \*\*\*\*\*\*\*\* |
| Bekkers et al.5 | 2011 | The Netherlands | 751 | Children | Birth weight Gestational diabetes | Total cholesterol HDL cholesterol | \*\*\*\*\*\*\* |
| Bercovich et al.6 | 2014 | Israel | 300 | Adults | Maternal nutritional deficit (Holocaust exposure) | BMI Hypertension Diabetes Cancer Dyslipidemia | \*\*\*\*\*\*\* |
| Bettiol et al.7 | 2007 | Brazil | 519 | Adolescents | Intrauterine growth restriction | BMI | \*\*\*\*\*\*\*\* |
| Bhattacharya et al.8 | 2016 | United Kingdom | 3781 | Adults | Maternal gestational weight gain | Cardiovascular morbidity Cerebrovascular morbidity Mortality | \*\*\*\*\*\*\*\*\* |
| Boone-Heinonen et al.9 | 2018 | United States | 13413 | Adults | Birth weight | (Pre)diabetes BMI | \*\*\*\*\*\*\*\* |
| Borja10 | 2013 | Philippines | 1709 | Children, adolescents, adults | Birth weight Maternal nutritional status | Stunting Blood pressure Cardiovascular disease BMI Insulin resistance Triglyceride levels | \*\*\*\*\*\*\* |
| Brei et al.11 | 2018 | Germany | 208 | Children | Maternal nutritional status | BMI Abdominal fat Fat mass | \*\*\*\*\*\*\*\*\* |
| Chen et al12 | 2017 | Singapore | 910 | Children | Maternal nutritional status | BMI | \*\*\*\*\*\*\*\*\* |
| Chen et al.13 | 2016 | Singapore | 1048 | Children | Maternal diet | BMI Abdominal circumference  Subscapular skinfold Triceps skinfold | \*\*\*\*\*\*\*\* |
| Christensen et al.14 | 2016 | Norway | 61 | Children, Adolescents | Maternal LDL cholesterol | LDL Blood pressure BMI | \*\*\*\*\*\*\* |
| Class et al.15 | 2014 | Sweden | 2133504 | Adolescents, Adults | Birth weight | Cardiac-related death Hypertension Ischemic heart disease Stroke Pulmonary circulation problems Type 2 diabetes mellitus | \*\*\*\*\*\*\*\* |
| Crozier et al.16 | 2012 | United Kingdom | 977 | Children | Maternal nutritional status (vitamin D) | Fat mass Lean mass | \*\*\*\*\*\*\*\* |
| Curhan et al.17 | 1996 | United States | 22846 | Adults | Birth weight | Hypertension Obesity Diabetes mellitus | \*\*\*\*\*\*\* |
| Curhan et al.18 | 1996 | United States | 164040 | Adults | Birth weight | Blood pressure Hypertension BMI | \*\*\*\*\*\*\* |
| Davis et al.19 | 2015 | Australia | 2868 | Adults | Maternal hypertension during pregnancy | Cardiovascular risk Hypertension Metabolic disease | \*\*\*\*\*\*\*\* |
| Dubois et al.20 | 2006 | Canada | 1550 | Children | Birth weight | Overweight | \*\*\*\*\*\*\*\* |
| Eriksson et al.21 | 2015 | Finland | 2003 | Adults | Maternal BMI during pregnancy Birth weight | BMI Fat mass Lean body mass Cholesterol Blood glucose | \*\*\*\*\*\*\*\* |
| Eriksson et al.22 | 2003 | Finland | 4515 | Adults | Birth size Maternal BMI during pregnancy | Obesity | \*\*\*\*\*\*\*\* |
| Fairley et al.23 | 2015 | United Kingdom | 987 | Children | Maternal BMI  Gestational diabetes | BMI | \*\*\*\*\*\*\*\* |
| Finer et al.24 | 2016 | Bangladesh | 333 | Adults | Maternal nutritional deficit (famine) | Weight BMI Blood glucose | \*\*\*\*\*\*\*\* |
| Francis-Emmanuel et al.25 | 2014 | Jamaica | 191 | Adolescents, Adults | Maternal nutritional deficit (marasmus, kwashiorkor) | Blood glucose Insulin Resistance | \*\*\*\*\*\*\*\* |
| Frankel et al.26 | 1996 | United Kingdom | 1258 | Adults | Birth weight | BMI Coronary heart disease | \*\*\*\*\*\*\*\* |
| Gale et al.27 | 2007 | United Kingdom | 216 | Children | Maternal size during pregnancy | Fat mass | \*\*\*\*\*\*\*\* |
| Goldani et al.28 | 2007 | Brazil | 1189 | Adolescents | Birth weight Gestational age | BMI | \*\*\*\*\*\*\*\* |
| Gomes et al.29 | 2013 | Brazil | 297 | Adolescents, Adults | Birth weight | BMI Waist to hip ratio Blood pressure Blood glucose  Total cholesterol | \*\*\*\*\*\*\* |
| Graversen et al.30 | 2014 | Finland | 9525 | Children, Adolescents | Maternal BMI Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Griffiths et al.31 | 2010 | United Kingdom | 11653 | Children | Birth weight | Rapid weight gain | \*\*\*\*\*\*\*\* |
| Haga et al.32 | 2012 | Japan | 1518 | Adolescents | Maternal weight Maternal nutritional deficit (skipping breakfast) | BMI | \*\*\*\*\*\*\*\*\* |
| Hakola et al.33 | 2016 | Finland | 3807 | Children | Maternal BMI Maternal nutritional intake (fatty acid intake) Glucose tolerance | BMI | \*\*\*\*\*\*\*\* |
| Heppe et al.34 | 2013 | The Netherlands | 3610 | Children | Maternal BMI Birth weight Gestational weight-gain Maternal nutritional intake | Overweight | \*\*\*\*\*\*\*\* |
| Hrolfsdottir et al.35 | 2015 | Denmark | 308 | Adults | Gestational weight gain | BMI Waist circumference Blood lipids Glucose metabolism | \*\*\*\*\*\*\*\* |
| Huang et al.36 | 2007 | Australia | 406 | Children | Birth weight | BMI Blood pressure Lipids Serum glucose | \*\*\*\*\*\*\*\* |
| Hui et al.37 | 2003 | Hong Kong | 343 | Children | Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Iguacel et al.38 | 2018 | Spain | 1031 | Children | Gestational weight-gain Parental overweight/obesity Birth weight | Overweight/Obesity | \*\*\*\*\*\*\*\* |
| Innes et al.39 | 2002 | United States | 23395 | Adolescents, Adults | Birth weight | Gestational diabetes mellitus | \*\*\*\*\*\*\*\*\* |
| Jacota et al.40 | 2017 | France | 1069 | Children | Gestational weight gain | BMI Abdominal adiposity | \*\*\*\*\*\*\*\* |
| Jarvelin et al.41 | 2004 | Finland | 5960 | Adults | Birth weight Birth length | Blood pressure | \*\*\*\*\*\*\*\* |
| Jen et al.42 | 2017 | The Netherlands | 3312 | Children | Maternal diet during pregnancy (sugar-containing beverages) | BMI Fat mass index Fat-free index | \*\*\*\*\*\*\*\*\* |
| Joglekar et al.43 | 2007 | India | 698 | Children | Birth weight | Fat mass Lean mass Insulin resistance Blood pressure  Glucose tolerance Plasma lipids | \*\*\*\*\*\*\*\*\* |
| Jones et al.44 | 1998 | United Kingdom | 315 | Children, Adolescents, Adults | Birth weight Gestational diabetes Pre-eclampsia | Adolescent onset diabetes mellitus | \*\*\*\*\*\*\*\* |
| Jones-Smith et al.45 | 2013 | Mexico | 586 | Children | Birth size Stunting BMI | Overweight | \*\*\*\*\*\*\*\* |
| Keinan-Boker et al.46 | 2015 | Israel | 1086 | Adults | Maternal nutritional deficit (Holocaust survivors) | Hyperlipidemia Hypertension Diabetes mellitus Coronary heart disease Cancer Vascular disease | \*\*\*\*\*\*\*\* |
| Kensara et al.47 | 2005 | United Kingdom | 32 | Adults | Birth weight | Body fat Fat mass Trunk to limb fat ratio | \*\*\*\*\*\*\*\* |
| Kerkhof et al.48 | 2012 | The Netherlands | 280 | Adolescents, Adults | Birth weight | Fat mass Blood pressure HDL LDL Insulin sensitivity Metabolic syndrome | \*\*\*\*\*\*\*\* |
| Kerr et al.49 | 2017 | Australia | 363 | Adolescents | Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Kim et al.50 | 2006 | South Korea | 152 | Adolescents | Birth weight | Insulin Resistance Blood pressure | \*\*\*\*\*\*\*\* |
| Koupil & Toivanen51 | 2008 | Sweden | 6535 | Adolescents | Birth weight Birth weight for gestational age | BMI | \*\*\*\*\*\*\*\*\* |
| Krishnaveni et al.52 | 2014 | India | 654 | Children, Adolescents | Maternal nutritional status (B12, folate) | Birth size Insulin resistance | \*\*\*\*\*\*\*\*\* |
| Kuhle et al.53 | 2017 | Canada | 2016 | Children, Adolescents | Birth weight | BMI WHtR Blood pressure Total cholesterol HDL HbA1c | \*\*\*\*\*\*\* |
| Labayen et al.54 | 2009 | Spain | 284 | Adolescents | Birth weight | Abdominal adiposity Fat mass | \*\*\*\*\*\*\* |
| Laitinen et al.55 | 2012 | Finland | 6637 | Adolescents | Maternal gestational weight gain | BMI Abdominal obesity | \*\*\*\*\*\*\*\*\* |
| Lamb et al.56 | 2010 | United States | 1178 | Children, Adolescents | Birth size Diabetes exposure in utero | BMI Weight gain | \*\*\*\*\*\*\*\*\* |
| Lapidus et al.57 | 2008 | Sweden | 642 | Adults | Birth weight Birth length | Diabetes | \*\*\*\*\*\*\*\* |
| Law et al.58 | 2000 | China, Guatemala, Chile, Nigeria, Sweden | 1570 | Children | Birth weight Birth length Head circumference | Blood pressure | \*\*\*\*\*\*\*\* |
| Lawlor et al.59 | 2003 | United Kingdom | 1394 | Adults | Birth weight | Insulin resistance BMI | \*\*\*\*\*\*\*\* |
| Lawlor et al.60 | 2004 | Australia | 3864 | Children | Maternal BMI Birth size | Blood pressure | \*\*\*\*\*\*\*\* |
| Leermakers et al.61 | 2017 | The Netherlands | 2592 | Children | Maternal diet | Blood pressure Insulin HDL Triglycerides | \*\*\*\*\*\*\*\*\* |
| Leong et al.62 | 2013 | United States | 1851 | Adults | Birth weight | BMI | \*\*\*\*\*\* |
| Li et al.63 | 2007 | United States | 1739 | Children, Adolescents | Gestational weight gain Birth weight | Overweight/obesity | \*\*\*\*\*\*\* |
| Li et al.64 | 2010 | China | 7874 | Adults | Maternal nutrition deficit (Chinese famine) | Hyperglycemia Type 2 diabetes | \*\*\*\*\*\*\* |
| Li et al.65 | 2011 | China | 7874 | Adults | Maternal nutrition deficit (Chinese famine) | Hypertension | \*\*\*\*\*\*\* |
| Liu et al.66 | 2017 | China | 8185 | Adults | Maternal nutritional deficit (famine) | BMI | \*\*\*\*\*\*\*\* |
| Lourenco et al.67 | 2015 | Brazil | 255 | Children, Adolescents | Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Maftei et al.68 | 2015 | Australia | 163 | Children, Adolescents | Gestational diabetes Pregnancy weight gain | Insulin resistance | \*\*\*\*\*\*\*\* |
| Mangrio et al.69 | 2010 | Sweden | 9009 | Children | Birth weight | Overweight/obesity | \*\*\*\*\*\*\* |
| Mardones et al.70 | 2012 | Chile | 2152 | Adolescents | Birth weight Birth length | Blood pressure Lipids Glucose Insulin | \*\*\*\*\*\*\*\* |
| Massion et al.71 | 2016 | United Kingdom | 11764 | Adolescents | Birth weight | BMI | \*\*\*\*\*\*\*\*\* |
| McCarthy et al.72 | 2007 | United Kingdom | 679 | Adults | Birth weight | BMI Waist to hip ratio Waist circumference | \*\*\*\*\*\*\*\* |
| Mi et al.73 | 2000 | China | 627 | Adults | Birth weight Maternal BMI during pregnancy | Blood pressure Plasma glucose Lipids | \*\*\*\*\*\*\*\*\* |
| Monterio et al.74 | 2003 | Brazil | 1076 | Adolescents | Birth weight | BMI | \*\*\*\*\*\*\*\*\* |
| Musa et al.75 | 2016 | South Africa | 1935 | Adolescents | Birth weight | Serum lipids Fat mass Fat free mass | \*\*\*\*\*\*\* |
| Nilsson et al.76 | 2014 | Sweden | 232 | Children, Adolescents | Gestational diabetes | BMI | \*\*\*\*\*\*\*\* |
| Okosun et al.77 | 2002 | United States | 666 | Children, Adolescents | Birth weight | Serum lipoprotein | \*\*\*\*\*\*\*\* |
| Okubo et al.78 | 2014 | United Kingdom | 906 | Children | Maternal dietary glycemic index Maternal dietary glycemic load | Fat mass | \*\*\*\*\*\*\*\* |
| Oster et al.79 | 2013 | Canada | 1439 | Children, Adolescents, Adults | Birth weight | Diabetes Hypertension BMI | \*\*\*\*\*\*\* |
| Painter et al.80 | 2008 | The Netherlands | 855 | Adults | Maternal nutritional deficit (Dutch famine) | BMI Glucose LDL HDL Triglycerides | \*\*\*\*\*\*\*\* |
| Parrino et al.81 | 2016 | Italy | 1521 | Children, Adolescents | Birth weight | BMI | \*\*\*\*\*\*\* |
| Parsons et al.82 | 2001 | United Kingdom | 10683 | Children, Adolescents, Adults | Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Pearce et al.83 | 2005 | United Kingdom | 388 | Adults | Birth weight | Blood glucose | \*\*\*\*\*\*\*\* |
| Pei et al.84 | 2013 | Germany | 3121 | Adolescents | Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Perng et al.85 | 2016 | United States | 963 | Children, Adolescents | Birth weight | BMI Fat mass Fat free mass | \*\*\*\*\*\*\*\* |
| Pettitt & Knowler86 | 1998 | United States | 1536 | Children, Adolescents | Gestational diabetes Birth weight | Hyperglycemia Diabetes Obesity | \*\*\*\*\*\*\*\* |
| Phillips & Young87 | 2000 | United Kingdom | 1750 | Adults | Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Plachta-Danielzik et al.88 | 2012 | Germany | 34230 | Children, Adolescents | Low weight gain during pregnancy Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Portrait et al.89 | 2011 | The Netherlands | 799 | Adults | Maternal nutritional deficit (Dutch famine) | Heart disease Diabetes mellitus | \*\*\*\*\*\*\*\*\* |
| Potter & Ulijaszek90 | 2013 | United Kingdom | 11752 | Adolescents | Birth weight | BMI | \*\*\*\*\*\*\* |
| Ravelli et al.91 | 1998 | The Netherlands | 702 | Adults | Maternal nutritional deficit (Dutch famine) | Blood glucose BMI | \*\*\*\*\*\*\*\* |
| Ravelli et al.92 | 1999 | The Netherlands | 741 | Adults | Maternal nutritional deficit (Dutch famine) | BMI | \*\*\*\*\*\*\*\* |
| Reilly et al.93 | 2005 | United Kingdom | 7758 | Children | Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Relton et al.94 | 2008 | United Kingdom | 483 | Children, Adolescents | Gestational age | Blood pressure | \*\*\*\*\*\*\* |
| Reynolds et al.95 | 2010 | United Kingdom | 276 | Adults | Gestational weight-gain Maternal body composition Dietary intake during pregnancy | BMI Waist circumference Skinfold thickness Percentage body fat Fat mass index | \*\*\*\*\*\*\*\* |
| Rios-Castillo et al.96 | 2015 | Chile | 652 | Children | Gestational weight gain Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Robinson et al.97 | 2015 | United Kingdom | 991 | Children | Gestational weight gain Vitamin D status | BMI Fat mass | \*\*\*\*\*\*\*\* |
| Roseboom et al.98 | 1999 | The Netherlands | 739 | Adults | Maternal nutritional deficit (Dutch famine) | Blood pressure | \*\*\*\*\*\*\*\*\* |
| Roseboom et al.99 | 2001 | The Netherlands | 2414 | Adults | Maternal nutritional deficit (Dutch famine) Maternal diet Maternal weight gain | Blood pressure | \*\*\*\*\*\*\*\*\* |
| Rotar et al.100 | 2015 | Russian Federation | 356 | Adults | Maternal nutritional deficit (Leningrad siege) | Blood pressure Anthropometry Lipids Glucose | \*\*\*\*\*\*\*\*\* |
| Sachdev et al.101 | 2005 | India | 1526 | Adults | Birth weight | BMI Waist circumference Hip circumference Central obesity Skinfold thickness Lean mass | \*\*\*\*\*\*\*\* |
| Sayer et al.102 | 2004 | United Kingdom | 737 | Adults | Birth weight | BMI Fat free mass Fat mass | \*\*\*\*\*\*\* |
| Sen et al.103 | 2018 | United States | 992 | Children, Adolescents | Maternal diet | BMI Waist circumference Skin fold thickness | \*\*\*\*\*\*\*\* |
| Shi et al.104 | 2013 | Canada | 968 | Children, Adolescents | Birth weight | BMI | \*\*\*\*\*\*\* |
| Shi et al.105 | 2018 | China | 5772 | Adults | Maternal nutritional deficit (Chinese famine) | Hypertension Heart attack Coronary heart disease Angina Congestive heart failure Stroke | \*\*\*\*\*\*\*\*\* |
| Sipola-Leppänen et al.106 | 2015 | Finland | 720 | Adults | Birth weight Preterm birth | Body fat Waist circumference Blood pressure | \*\*\*\*\*\*\*\*\* |
| Skogen et al.107 | 2014 | Norway | 480 | Adults | Birth weight Gestational age Birth length | Cardiovascular risk BMI Waist circumference Hip circumference HDL Blood pressure | \*\*\*\*\*\*\*\*\* |
| Smith et al.108 | 2016 | United States | 63815 | Adults | Birth weight | BMI Coronary heart disease risk Cardiovascular disease | \*\*\*\*\*\*\*\* |
| Stettler et al.109 | 2002 | Seychelles | 5514 | Children, Adolescents | Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Stratakis et al.110 | 2016 | The Netherlands, France, Belgium, Italy, Portugal, Norway, Spain, Ireland, United States, Poland, Greece | 26184 | Children | Maternal diet (fish intake) | BMI | \*\*\*\*\*\*\*\* |
| Sun et al.111 | 2018 | China | 7262 | Adults | Maternal nutritional deficit (Chinese famine) | Type 2 diabetes | \*\*\*\*\*\*\*\*\* |
| Tauzin et al.112 | 2014 | France | 31 | Adults | Preterm | Blood pressure | \*\*\*\*\*\*\* |
| Terry et al.113 | 2007 | United States | 261 | Adults | Maternal weight gain Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Terry et al.114 | 2011 | United States | 20523 | Children | Maternal weight gain Birth weight Maternal BMI | BMI | \*\*\*\*\*\*\*\* |
| Theodore et al.115 | 2015 | New Zealand | 975 | Children, Adolescents, Adults | Birth weight | Blood pressure | \*\*\*\*\*\*\*\*\* |
| Thurber et al.116 | 2015 | Australia | 682 | Children | Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Tome et al.117 | 2007 | Brazil | 2797 | Children | Birth weight | BMI | \*\*\*\*\*\*\*\* |
| Van Den Broek et al.118 | 2015 | The Netherlands | 2695 | Children | Maternal diet | BMI Fat mass | \*\*\*\*\*\*\* |
| Van Den Hil et al.119 | 2013 | The Netherlands | 2863 | Children | Maternal diet | Blood pressure | \*\*\*\*\*\*\* |
| Veena et al.120 | 2009 | India | 229 | Adults | Birth length | Type 2 diabetes | \*\*\*\*\*\*\*\* |
| Wang et al.121 | 2017 | Hong Kong | 894 | Children, Adolescents | Birth weight  Gestational age | BMI | \*\*\*\*\*\*\* |
| Wang et al.122 | 2016 | China | 1966 | Adults | Maternal nutritional deficit (Chinese famine) | Hypertension | \*\*\*\*\*\*\*\* |
| Wang et al.123 | 2017 | China | 6445 | Adults | Maternal nutritional deficit (Chinese famine) | Metabolic syndrome | \*\*\*\*\*\*\*\* |
| Wang et al.124 | 2015 | China | 6897 | Adults | Maternal nutritional deficit (Chinese famine) | Diabetes | \*\*\*\*\*\*\*\* |
| Wang et al.125 | 2016 | China | 7801 | Adults | Maternal nutritional deficit (Chinese famine) | Type 2 diabetes Hyperglycemia | \*\*\*\*\*\*\*\*\* |
| Wang et al.126 | 2012 | China | 12065 | Adults | Maternal nutritional deficit (Chinese famine) | Hypertension BMI | \*\*\*\*\*\*\*\*\* |
| Werneck et al.127 | 2017 | Brazil | 981 | Adolescents | Birth weight | BMI Waist circumference Body fat | \*\*\*\*\*\*\*\* |
| West et al.128 | 2011 | United States | 99 | Children, Adolescents | Gestational diabetes | BMI Waist circumference Blood pressure | \*\*\*\*\*\*\*\* |
| Whitrow et al.129 | 2013 | Australia | 151 | Children | Birth size | Insulin resistance | \*\*\*\*\*\*\*\* |
| Yu et al.130 | 2018 | China | 7915 | Adults | Maternal nutritional deficit (Chinese famine) | Metabolic syndrome | \*\*\*\*\*\*\*\* |
| Yuan et al.131 | 2015 | China | 16580 | Children, Adolescents | Birth weight | BMI WHtR | \*\*\*\*\*\*\*\* |
| Zadzinska & Rosset132 | 2013 | Poland | 812 | Children, Adolescents | Birth weight | BMI | \*\*\*\*\*\*\* |
| Zarrati et al.133 | 2013 | Iran | 1184 | Adolescents | Birth weight | BMI Blood pressure Abdominal obesity | \*\*\*\*\*\*\* |
| Zhang et al.134 | 2016 | China | 3766 | Children, Adolescents | Birth weight Gestational age | BMI | \*\*\*\*\*\*\*\* |
| Zhao et al.135 | 2015 | China | 2824 | Children, Adolescents | Gestational diabetes | BMI | \*\*\*\*\*\*\* |
| Zheng et al.136 | 2012 | China | 5040 | Adults | Maternal nutritional deficit (Chinese famine) | Metabolic syndrome | \*\*\*\*\*\*\* |

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