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| **Author, Year** | **Meta-Analysis (MA), and/or Systematic Review (SR)** | **Country** | **Number of Summary Statistics** | **Pooled Estimate Data** | **Age Range** | **Quality Assessment Tools / Results** | **EQUATOR Network guideline followed?** | **Overall Quality Assessment Rating** |
| Alvarez-Bueno et al., 201723 | SR/MA | UK (2), Denmark (1), Netherlands (2), Spain (2), Greece (2), USA (5), Poland (1) | 2 | Odds ratio for pre-pregnancy overweight: -0.02 (95% CI: -0.05 to 0.02)  Odds ratio for obese mothers: -0.06 (95% CI: -0.09 to -0.03) | 6 months to 14 years | Studies met 57.58% to 84.84% of the quality criteria, as assessed by the Quality of Reporting of Observational Longitudinal Research instrument | MOOSE guidelines and Cochrane Collaboration Handbook followed. Only use of PRISMA flowchart specified | high |
| Andersson et al.,  201624 | SR | Italy (1), Austrailia (1), USA (4), UK (1), Netherlands (1), France (1), Sweden (2), Germany (1), Denmark (1),Taiwan (3) | ranges reported | N/A | 0 to 14 years | Performed: made own ranking  average: 5.8/10 | Search performed according to PRISMA criteria | moderate |
| Birks et al., 201625 | MA | Netherlands (2), Sweden (1), Denmark (1), Portugal (1), Spain(2), Lithuania (1), Norway (1), Italy (1), France (1), Poland (1), Greece (1) | 1 | Odds ratio for occupational exposure to one or more EDC: 1.25; 95% CI: 1.04, 1.49 | Birth (0 years) | no quality assessment | Not specified | N/A |
| Bleker et al., 201826 | SR | USA (3), UK (5), Canada (3), China (1), India (1) | 0 | N/A | 1 month to 15 years | Newcastle–Ottawa Scale (NOS) Quality ranking (low, high intermediate): most studies were intermediate | PRISMA guidelines followed | moderate |
| Burke et al., 201227 | SR/MA | UK (21), Sweden (5), USA (20), Finland (3), Poland, Denmark (4), Australia (6), Taiwan (1), Japan (1), Thailand (1), Tasmania (1), Canada (3), Brazil (2), Chile (1), Germany (2), Poland (1), Norway (2), New Zealand (3), Czech Republic (1), Greece (1) | more than 10 (2 significant) | Odds ratio for risk of wheeze in children aged ≤2: 1.70, 95% CI = 1.24–2.3,  Odds ratio for risk of asthma in children aged ≤2: 1.85, 95% CI = 1.35-2.53 | <2 to 18 years | Newcastle–Ottawa Scale (NOS) for the 71 included studies ranged from 5 to 7 with a median of 6. Thirty-one of the 71 studies (44%) were scored as being of moderate or high level (>6) methodological quality | MOOSE guidelines followed | moderate |
| Bussières et al., 201528 | MA | Netherlands (6), Sweden (4), Germany (3), USA (47), Norway (3), UK (5), Canada (2), France (1), Denmark (8), Italy (1), Israel (2), India (1), South Africa (1), Brazil (1), China(2) | 1 | Cohen's d for all studies: −0.12; 95% CI: −0.17, −0.08 | Birth (0 years) | no quality assessment | Not specified | N/A |
| Cook et al., 201829 | SR | UK (5), USA (11), Canada (1), Switzerland (1), Italy (1), Israel (1), Brazil (1) | 0 | N/A | 0 to 1.5 years | Down's and Black feasibility checklist Methodological quality was poor to medium with scores ranging from 8 to 16 on a 30-point scale, and over 19% of papers scoring over 15. | PRISMA guidelines followed | low |
| Crider et al., 201330 | SR/MA | Netherlands (2), Norway (1), Austrailia (1), USA (1) | 1 | Risk ratio (risk of asthma): 1.01; 95% CI: 0.78, 1.30 | 6 months to 7 years | Newcastle–Ottawa Scale (NOS) Scores >=6 | PRISMA guidelines followed | moderate |
| Dalrymple et al., 201831 | SR | Ireland (1), Germany (1), Finland (2), Sweden (1), UK (1), USA (1), Denmark (1) | 0 | N/A | 29 weeks to 7 years | The Cochrane Handbook for Systematic Reviews of Interventions tool (Higgins & Altman, 2008) was used low to moderate | PRISMA guidelines followed | low |
| Davidsen et al., 201532 | SR | USA (7), UK (2), Norway (1) | 0 | N/A | 0 to 6 years | assessed for risk of bias | PRISMA guidelines followed | moderate |
| Delgado-Noguera et al., 201533 | SR/MA | Denmark (1), Norway (1), USA (1), Australia (1), Sweden (1), Netherlands (1), Germany (2) | 0 | N/A | 0 to 2 years; 4 to 7 years | the evidence from the studies was of moderate to low quality | Cochrane Handbook for Systematic Reviews of Interventions followed | low |
| Doherty et al., 201834 | SR | Zambia (1), USA (1), Finland (2), Sweden (1), Mexico (1) | 0 | N/A | 12 weeks to 2 years; 5 to 6 years | Newcastle–Ottawa Scale (NOS) | PRISMA guidelines followed | moderate |
| Ejaredar et al., 201535 | SR | South Korea (3), USA(6), Mexico (1), Italy (1) | 0 | N/A | 0 to 11 years | A modified version of the quality assessment tool, designed by Hayden et al. (2006) | MOOSE guidelines followed | moderate |
| Faucher et al., 201636 | SR/MA | USA (5), Peru (1) | 5 (1 significant) | Odds ratio for risk of medically indicated preterm birth: 1.54; 95% CI: 1.09, –2.16 | Birth (0 years) | Newcastle–Ottawa Scale (NOS) | MOOSE guidelines followed | moderate |
| Figueiró-Filho et al., 201737 | SR | UK (1), Denmark (1), Switzerland (1), Italy (1), Finland (1) | 0 | N/A | 0 to 11.5 years; 17 to 19 years; 25 to 70 years | no quality assessment | Only use of PRISMA flowchart specified | N/A |
| Garcia-Larsen et al., 201838 | SR/MA | Belarus (2), Finland (6), Australia (6), Sweden (6), Greece (1), Denmark (5), Germany (5), UK (16), Slovenia (1), Denmark (1), Italy (2), Spain (3), Netherlands (1), Taiwan (1), Brazil (2), Canada (1), New Zealand (2), USA (8), Central Europe (1), France (1), Belgium (1), Japan (2), China (1), South Korea (1), Serbia (1), Iraq (1), Czech Republic (1), Norway (1), Luxembourg (1), Romania (1), Lithuania (1), Bulgaria (1), Israel (1), Qatar (1), Iran (1), Switzerland (1),Austria (1), Mexico (1), Taiwan (1), Tasmania (1), Poland (1), Slovakia (1), Guinea-Bissau (1), Nepal (1), Hungary (1), Singapore (1), Philippines (1), Ukraine (1), Thailand (1), India (1), Chile (1), Ethiopia (1), Iceland (1), Turkey (1) | more than 10 (2 significant) | Risk ratio for risk of eczema: 0.78; 95% CI: 0.68–0.90, Risk ratio for risk of allergic sensitisation to egg: 0.69, 95% CI: 0.53–0.90 | 0 to 18 years | GRADE assessment of risk of bias | PRISMA guidelines followed | moderate |
| Grot et al., 201039 | MA | Sweden (1), Norway (1), Hong Kong (1), USA (16), France (2), Germany (1), UK (1), Brazil (1), Pakistan (1), India (1), Netherlands (1), Denmark(2) | 3 | Risk ratio for preterm birth: 1.13; 95% CI: 1.06-1.21 Risk ratio for low birth weight: 1.18; 95% CI: 1.07-1.30, Risk ratio for intrauterine growth restriction: 1.03; 95% CI: 0.99-1.08 | Birth (0 years) | modified Downs and Black instrument | QUORUM and MOOSE guidelines followed | high |
| Gruzieva et al., 201740 | MA | Sweden (1), Netherlands (1), France (1), Spain (1), USA (1), Norway (1) | 0 | N/A | 4 to 5 years; 8 years; 16 years | no quality assessment | Not specified | N/A |
| Guillemette et al., 201841 | SR/MA | USA (6), Denmark (5), England (2), Canada (1), Australia (1) RCTs: Finland (1), USA (6), Sweden (2), Iran (2), Brazil (7), Spain (7), New Zealand (2), Norway (3), Netherlands (1), Columbia (1), Kosovo (1), UK (1), Australia (1), Ireland (1), Canada (1), Croatia (1), China (1) | 2 | Mean difference of birth weight: - 22.1 g, 95% CI: - 51.5 gto 7.3 g Risk ratio for large-for-gestational age status: 0.85; 95% CI: 0.51 to 1.44 | Birth to 6 months; 7 years; 15 years | risk of bias assessment using Cochrane tools | PRISMA guidelines followed | moderate |
| Gunaratne et al., 201542 | SR/MA | Australia (3), Denmark (2), Sweden (1), Mexico (1), UK (1) | 4 | For any allergy (medically diagnosed IgE mediated and/or parental report),(LCPUFA supplementation vs none or placebo) either at 12 to 36 months (RR 0.89, 95% CI 0.71 to 1.11; two RCTs, 823 children) or beyond 36 months of age (RR 0.96, 95% CI 0.84 to 1.09; three RCTs, 1765 children)  For IgE mediated allergies only, N-3 LCPUFA supplementation showed in children aged 12 to 36 months (risk ratio (RR) 0.66, 95% confidence interval (CI) 0.44 to 0.98; two RCTs; 823 children), but not beyond 36 months (RR 0.86, 95% CI 0.61 to 1.20; one RCT, 706 children) | 0 to 17 years | risk of bias assessment | Cochrane Handbook for Systematic Reviews of Interventions followed | high |
| Hoang et al., 201843 | SR | USA (5), France (1), Scotland (UK) (1),Sweden (1), Czech Republic (1) | ranges reported (2 significant) | Risk ratio range for birth defects (excluding neural tube defect): 1.4–1.8 Odds Ratio ranges for risk of neural tube defects: 1.2; 95% CI: 0.7–2.0 | Birth (0 years) | modified version of the Newcastle–Ottawa Scale (NOS) (ranged from 2-6 rating) | Not specified | low |
| Jiang et al., 201644 | SR/MA | Australia (2), Denmark (4), Sweden (2), Canada (1), India (1), Netherlands (1), USA (2), China (1), Taiwan (1) | 1 | Odds ratio = 1.13, 95% confidence interval (CI): 1.03–1.23 [risk of autism spectrum disorders (ASD)] | 0 to 14 years | Newcastle–Ottawa Scale (NOS) range: 3-9 | MOOSE guidelines followed | moderate |
| Joubert et al., 201645 | MA | Netherlands (1), Norway (1) | 0 | N/A | Birth (0 years); 4 to 8 years | no quality assessment | Not specified | N/A |
| Joubert et al., 201646 | MA | Not Available | 0 | N/A | 0 to 4 years | no quality assessment | Not specified | N/A |
| Kingston et al., 201247 | SR | New Zealand (1), Finland (1), Netherlands (8), US (4), Australia (4), Sweden (1), Israel (1), Spain (1), UK (2) | 0 | N/A | 0 to 1 years | modified version of the critical appraisal form for observational studies developed by the Scottish Intercollegiate Guideline Network (http://www.sign.ac.uk/methodology/checklists.html) was used | Not specified | moderate |
| Klimentopoulou et al., 201248 | MA | USA (1), Italy (1), Canada (1), France (1), Sweden (1), UK (1), Greece (1), Australia (1), Netherlands (1) | 2 | Odds ratio for risk of childhhod acute lymphatic leukemia: 1.03; 95% CI: 0.95–1.1, Odds ratio for risk of acute myelocytic leukemia: 0.99; 95% CI: 0.90–1.09 | 0 to 20 years | no quality assessment | PRISMA guidelines followed | N/A |
| Krishna et al., 201949 | SR | UK (3), Finland (2), USA (2), Norway (1), China (1), Netherlands (1), Iceland (1) | 0 | N/A | 50 to 89 years | Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist | PRISMA guidelines followed | high |
| Lean et al., 201750 | SR/MA | Not Available | 2 | Odds ratio for risk of still birth: 1.75; 95%CI: 1.62 - 1.89, Odds ratio for risk of fetal growth restriction: 1.23; 95%CI: 1.01–1.52 | Birth (0 years) | assessed the quality of studies in eight specific domains that were relevant to the studies in question developed from Sanderson et al. | PRISMA guidelines followed | high |
| Lee et al., 201851 | SR | Bangladesh (1), Nepal (1), China (1), Netherlands (1), Canada (1), Egypt (1) | 0 | N/A | 3 days to 50 years | American Dietetic Association (ADA) Quality Criteria Checklist | PRISMA guidelines followed | high |
| Leventakou et al., 201452 | MA | Netherlands (5), Denmark (1), France (2), Belgium (1), Italy (2), Portugal (1), Norway (2), Spain (1), Ireland (1), Poland (1), Greece (1), UK (1) | 4 | Beta for birth weight related to fish consumption >1 but <3 times/wk: 8.9 g; 95% CI: 3.3, 14.6 g  Beta for Birth Weight related to fish consumption ≥3 times/wk: 15.2 g; 95% CI: 8.9, 21.5 g, Risk ratio for preterm birth related to fish intake >1 but <3 times/wk: 0.87; 95% CI: 0.82, 0.92, Risk ratio for preterm birth related to fish intake ≥3 times/wk: 0.89; 95% CI: 0.84, 0.96 | Birth (0 years) | no quality assessment | Not specified | N/A |
| Lucas-Thompson et al., 201053 | MA | USA | 2 | r for achievement outcomes: 0.001; 95% CI: -0.011, 0.013 r for behavioural outcomes: -0.005; 95% CI: -0.20, 0.011 | 0 to 18 years | performed quality assessment but did not report | Not specified | N/A |
| Ludwig-Walz et al., 201854 | SR | Greece (1), New Zealand (1), USA (5), UK (2), Netherlands (2), Australia (2), Israel (2), Canada (1) | 0 | N/A | 0 to 32 years | WCRF criteria for grading evidence | PRISMA guidelines followed | low |
| McNamara et al., 201255 | SR | Australia (1), Canada (1), USA (1), New Zealand (1) | 0 | N/A | 0 to 77 years | Quality of studies was independently assessed by two reviewers using a risk of bias assessment tool | Not specified | low |
| Mech et al., 201656 | SR | Not Available | 0 | N/A | 9 months to 15 years | A scoring system adapted from the review of Cohen et al. (Cohen et al. 2013) was used | PRISMA guidelines followed | moderate |
| Melody et al., 201957 | SR | Brazil, USA, Uruguay, Indonesia, Australia, China | 0 | N/A | Birth (0 years) | Newcastle–Ottawa Scale (NOS)  Range: 5-8 | PRISMA guidelines followed | moderate |
| Miller et al., 201858 | SR/MA | Not Available | more than 10 | N/A | 0 to 4 years | Grade system | Only use of PRISMA flowchart specified | low |
| Molina Lima et al., 201859 | SR/MA | Congo (1), Australia (2), Taiwan (1), Denmark (2), USA (n=2) | 5 (2 primary) | Odds ratio for birth weight: 1.68; 95%CI: 1.19, 2.38, Odds ratio for preterm birth: 1.42; 95% CI: 1.05, 1.92 | 0 to 4 years; 10 years; 13 years | For cohort studies, reviewers independently assessed risk of bias with a modified version of the Newcastle–Ottawa Scale (NOS) | PRISMA guidelines followed | high |
| Oh et al., 201860 | SR | UK (12), USA (19), Australia (1), Canada (3), Germany (1), Puerto Rico (1) | 0 | N/A | 0 to 53 years | risk of bias assessment | PRISMA guidelines followed | moderate |
| Pastorino et al., 201961 | MA | UK (2), Netherlands (2), Denmark (1), USA (1), Poland (1), Ireland (1) | 10 (4 significant) | Risk ratio for birth weight: −6.43; 95% CI: −9.12, −3.74), Risk ratio for macrosmia: 0.96; 95% CI: 0.94, 0.98, Risk ratio for large for gestational age birth: 0.97; 95% CI: 0.96, 0.98, Beta for ponderal index birth: −0.02; 95% CI: −0.03, 0.00 | Birth (0 years) | no quality assessment | Not specified | N/A |
| Pearson et al., 201562 | MA | Canada (2),USA (14), Netherlands (1), South Africa (1), Austrailia (1) | 1 | Standard difference in means for relationship between programming variables (maternal prenatal stress, alcohol or drug use or cigarette smoking and child cortisol secretion: d = 0.36; CI = 0.211, 0.510 | <1 month to 1.5 years | no quality assessment | Not specified | N/A |
| Roth et al., 201763 | SR/MA | UK (3), France (2), India (5), US (4), Iran (18), Bangladesh (1), UAE (1), Pakistan (2), Australia (2), New Zealand (1), Turkey (1), Canada (1), Denmark (1), China (1) | more than 10 (3 significant) | Weighted mean difference: 58.33; 95% CI: 18.88, 97.78, Risk ratio for small for gestational age: 0.60; 95% CI: 0.40, 0.90, Risk ratio for asthma/wheeze at 3 years: 0.81; 95% CI: 0.67, 0.98 | Birth (0 years) | Two reviewers used the Cochrane Collaboration tool for assessing risk of bias to independently assign quality scores to the trials. | PRISMA guidelines followed | low |
| Ruiz et al., 201564 | MA | France, Netherlands, UK, Czech Republic, Ukraine, Finland, Norway, Sweden, Greece, Italy, Portugal, Spain | 2 | Relative index of inequality for preterm birth: 1.48; 95%CI: 1.29, 1.69 Relative index of inequality for small for gestational age birth: 1.55; 95%CI: 1.28, 1.87 | Birth ( 0 years) | no quality assessment | Not specified | N/A |
| Santamaria et al., 201865 | SR/MA | Turkey (1), USA (6), Australia (4), New Zealand (1), China (3), South Korea (1), Denmark (1), Spain(2), India (1), Netherlands (1), Brazil (1), Canada (2), Singapore (1), Germany (1), Finland (1), UK(2), Norway (1) | 7 (3 significant) | Mean difference for birth weight: -100.69; 95%CI: -162.25, -39.13 Odds Ratio for small for gestational age: 1.55; 95%CI: 1.16, 2.07 Mean Difference for infant weight at 9 months: 119.75; 95%CI: 32.97, 206.52 | 0 to 9 years | Newcastle–Ottawa Scale (NOS) | MOOSE guidelines followed | high |
| Sharp et al., 201766 | MA | UK (ALSPAC), USA (CBC cohorts 1 and 2, chamacos, EARLI, NEST, NHBCS, RICHS, VIVA), Denmark (goya), Netherlands (Gecko, genr, piama), Canada (genR 3G), UK (IOW f1, IOW f2), Spain and France (Medall), Norway (moba 1, moba 2, moba 3), Finland (nfbc), Australia (raine), Sweden (Bamse) | 0 | N/A | Birth (0 years); 15 to 18 years | no quality assessment | Not specified | N/A |
| Smith et al., 201767 | MA | Tanzania (2), Nepal (2), Mexico (1), Zimbabwe (1), Ginuea-Bissau (1), India (1), Niger (1). Indonesia (1), China (1), Burkina Faso (1), Pakistan (1), Bangladesh (2), Malawi (1), Ghana (1) | 8 | N/A | Birth to 6 months | assessed study quality using the Child Health Epidemiology Reference Group standards | Not specified | moderate |
| Sweeney et al., 201668 | SR | Netherlands (3), UK (11), Australia, USA (7) | 0 | N/A | 2 months to 21 years | Quality assessment was conducted with an adapted version of the Agency for Healthcare Research and Quality (AHRQ) methodology checklist | PRISMA guidelines followed | moderate |
| Taylor et al., 201769 | SR/MA | Germany(2), Spain (3), Hungary (1), Nepal (1), Bangadesh (4), Taiwan (1), Indonesia (2), Colombia (2), Tanzania (1), India (1), US (3), Peru (1), Australia (5), China (2), Vietnam (1), Norway (3), Canada (1), Mexico (1), Netherlands (1) | 9 (1 significant) | Standard mean difference for crystallized intelligence associated with long chain polyunsaturated fatty acid supplementation: 0.25; 95% CI: -0.04; 0.53 | 15 days to 9 years | assessed study eligibility and quality using the American Dietetic Association quality criteria checklist for primary research | PRISMA guidelines followed | high |
| Thomopoulos et al., 201570 | SR/MA | USA (3), France (5), Australia (1), Greece (3) | 4 | Odds ratio associated with maternal coffee consumption = 1.14; 95% CI: 0.095, 1.37, Odds ratio associated with maternal tea consumption = 0.91; 95% CI: 0.82, 1.01, Odds ratio associated with maternal cola consumption = 1.25; 95% CI: 1.06, 1.48, Odds ratio associated with childhood cola consumption = 1.49; 95% CI: 0.90, 2.47 | 0 to 14 years | The quality of the included studies was evaluated using the nine-item Newcastle-Ottawa Quality scale range: 6-8 | PRISMA guidelines followed | moderate | |
| Tsuji et al., 201571 | SR | Bangladesh (11), USA (4), Mexico (3), Spain (2), Nepal (3), Taiwan (1) | 0 | N/A | Birth to 16 years | studies evaluated, based on professional judgment | Not specified | moderate |
| Veena et al., 201672 | SR | USA (12),Finland (2), UK (7), Netherlands (1), Greece (1), Australia (2), Spain (4), Canada (3), USA (1), India (4), Africa (1), Mexico (2), Norway, (1) Germany (1), Hungary (1), Republic of Seychelles (1), Vietnam (1), China (1), Gambia (1) | 0 | N/A | 1 month to 22 years | Quality assessment and risk of bias was assessed using a standardized form consisting of 22 criteria | PRISMA guidelines followed | moderate |
| Wang et al., 201773 | MA | Tunisia (1), Sweden (2), China (1), Australia (3), Canada (2), USA (6), Turkey (1), Spain (1) | more than 10 | N/A | 0 to 20 years | modified Newcastle–Ottawa scale to assess the quality of observational studies range: 7-9 | PRISMA guidelines followed | high |
| Wei et al., 201674 | SR/MA | France (2), New Zealand (2), UK (2), Finland (2), Australia (2), Germany (1) | 3 | Odds ratio for childhood asthma = 0.98; 95% CI: 0.94,1.02, Odds ratio for childhood wheeze = 1.00; 95% CI: 0.98, 1.01, Odds ratio for childhood eczema = 0.90; 95% CI: 0.83, 0.98 | 1 to 6 years | Newcastle–Ottawa Scale (NOS) | PRISMA guidelines followed | high |
| Xuan et al., 201675 | MA | Not Available | 3 | Odds ratio for cleft lip with or without cleft palate: 1.37; 95% CI: 1.26, 1.49, Odds ratio for cleft palate: 1.24; 95% CI: 1.12, 1.38, Odds ratio for oral clefts: 1.40; 95% CI: 1.26, 1.56, | Birth (0 years) | no quality assessment | Not specified | N/A |
| Zhang et al., 201876 | MA | Australia (5), USA (2), Ireland (1), Mexico (1), Canada (1), China (1) | more than 10 (2 significant) | Weighted mean difference between birth weight: -0.10; 95% CI: -0.23, 0.03  Risk ratio for large for gestational age = 0.52; 95% CI: 0.31, 0.89 | Birth (0 years) | Jadad scale was used to assess the methodological quality | PRISMA guidelines followed | moderate |
| Zijlmans et al., 201577 | SR | USA (10), Germany (2), Mexico (1), Denmark (1), Netherlands (11), Brazil (2), | 0 | N/A | 0 to 7.5 years | defined ‘high quality’ papers as papers that carried out multivariate analyses and included two or more confounding variables in their analyses | PRISMA guidelines followed | high |
| Zwink et al., 201178 | SR/MA | USA (12), Spain (2), Sweden (2), the Netherlands (2), Japan (1), France (1), Germany (1), Hungary (1) | 9 (4 significant) | Odds ratio for paternal smoking:1.53; 95% CI: 1.04-2.26 Odds Ratio for maternal overweight: 1.25; 95% CI:1.07-1.47, Odds ratio for maternal obesity: 1.64; 95% CI: 1.35-2.00, Odds ratio for gestational diabetes: 1.81; 95% CI: 1.23-2.65 | Birth (0 years) | no quality assessment | Not specified | N/A |