

PMID	First Author	Title	Year	Study Type	CVD	RF by CQ	Study Origin	Setting	Search Range	Data Sources	Study Eligibility Criteria	Number of Studies	Main Study Objective	Study Pop. (N)	Target Population	Patient Characteristics	Study Characteristics	Interv. Type	Specific Intervention Examined	Observational Relationship Assessed	Outcomes Measured	Treatment Effect and Statistical Significance	Main Reported Findings by Critical Question	Limitations of Studies Reviewed	Quality of MA
15615909	Martin RM	Breastfeeding in infancy and blood pressure in later life: systematic review and meta-analysis	2005	MA	None	Q6 (RF2, RF4) Q11 (RF4) Q13 (RF4)	UK	Don't know/NR	Through May 2004	MEDLINE EMBASE Manual searches of reference lists	Studies in which having been breastfed in infancy was compared with bottle (artificial) feeding Studies in which SBP or DBP was measured as an outcome Studies in which an estimate of the mean difference in BP between breast- and bottle-fed groups could be extracted from the article Studies with human subjects Exclusions: Studies presenting duplicate data Studies where authors were unable to extract an estimate of mean difference (breast minus bottle) Studies in which breast versus bottle feeding was not investigated Studies in which BP was measured in infancy Studies in which BP was not an outcome	15 studies (17 estimates)	Estimate the mean difference (standard error) in BP between breastfed and bottle-fed subjects	17,503	Pediatric/ Young Adults	Year of birth of subjects range: 1918-1994	NR	Behavioral	NR	Breastfeeding and BP later in life	SBP DBP	Mean SBP was lower among breastfed infants (mean difference: -1.4 mmHg; 95% CI: -2.2 to -0.6; p: 0.001). There was also evidence of marked heterogeneity between studies (χ^2 : 42.0, P < 0.001) In a stratified meta-analysis, a smaller effect of breastfeeding on later SBP was observed in the larger studies (n ≥ 1,000) (difference: -0.6 mmHg; 95% CI: -1.2 to 0.02; P: 0.06) compared with the smaller studies (n < 1,000) (difference: -2.3 mmHg; 95% CI: -3.7 to -0.9; P: 0.001). This difference was unlikely to be due to chance (P: 0.02). There was evidence of heterogeneity in models restricted to small studies (χ^2 : 27.1, P: 0.007) but less evidence among the 4 larger studies (χ^2 : 6.1; P: 0.1) In studies where the duration of breastfeeding was at least 2 months, the pooled SBP difference between breast- and bottle-fed groups (-2.0 mmHg) was on average 1.6 mmHg larger (95% CI: -0.4 to 3.3; P: 0.1) than in studies with a shorter duration of breastfeeding (pooled difference: -0.6 mmHg) The difference in SBP between breast- and bottle-fed groups was 1.4 mmHg greater (95% CI: -0.4 to 3.2; P: 0.1) in those born up to 1980 (pooled difference: -2.7 mmHg) compared with those born after 1980 (pooled difference: -0.8 mmHg) There was weak evidence that studies not controlling for socioeconomic factors (pooled difference: -2.0 mmHg) had mean differences in SBP 1.4 mmHg higher (95% CI: -0.6 to 3.3; P: 0.17) than in studies controlling for socioeconomic factors (pooled difference: -0.9 mmHg)	Q6: Studies that formally tested for interaction found little evidence of sex differences in the association between breastfeeding and SBP and DBP Q11, Q13: Breastfeeding was associated with a 1.4- and 0.5-mmHg reduction in SBP and DBP, respectively, although differences in SBP between feeding groups were reduced in large (difference: -0.6 mmHg) compared with smaller (difference: -2.3 mmHg) studies. The effect of breastfeeding on later DBP was similar in 4 larger studies (n ≥ 1,000) (difference: -0.4 mmHg) compared with the smaller studies (difference: -0.6 mmHg)	Publication bias Possibility of selection bias Retrospective reporting of exclusive or any breastfeeding Few studies controlled for potential confounding factors	
15615909	Martin RM	Breastfeeding in infancy and blood pressure in later life: systematic review and meta-analysis	2005																		For SBP, there was little evidence that heterogeneity was explained by reliance on maternal recall of breastfeeding (P: 0.9), age at measurement of BP (P: 0.8), whether breastfeeding was exclusive for at least 2 months (P: 0.6), method of BP measurement (P: 0.2), or proportion of the target population included in the main analysis (P: 0.9) The pooled mean DBP was lower among breastfed infants (difference: -0.5 mmHg; 95% CI: -0.9 to -0.04; P: 0.03). There was less evidence of heterogeneity between estimates (χ^2 : 20.2; P: 0.06) than in the analysis of breastfeeding and SBP The effect of breastfeeding on later DBP was similar in the 4 larger studies (n ≥ 1,000) (difference: -0.4 mmHg; 95% CI: -0.9 to 0.1; P: 0.16) compared with the smaller studies (n < 1,000) (difference: -0.6 mmHg; 95% CI: -1.3 to 0.2; P: 0.15) There was little evidence that between-study heterogeneity in estimates was explained by age at measurement of BP (P: 0.5), decade of birth (P: 0.2), stipulation of a minimum duration of breastfeeding (P: 0.5), proportion of the target population in the main analysis (P: 0.2), whether breastfeeding was exclusive for at least 2 months (P: 0.2), method of BP measurement (P: 0.4), or whether effect estimates controlled for socioeconomic factors (P: 0.9), maternal factors in pregnancy (P: 0.9), or current weight (P: 0.9) Studies that formally tested for interaction found little evidence of sex differences in the association between breastfeeding and SBP and DBP.				
15615909	Martin RM	Breastfeeding in infancy and blood pressure in later life: systematic review and meta-analysis	2005																		The pooled SBP difference in infancy associated with breastfeeding was -1.7 mmHg (95% CI: -4.0 to 0.6; P: 0.15), although there was some evidence of heterogeneity (χ^2 : 11.8; P: 0.04). The pooled DBP difference in infancy associated with breastfeeding was -1.1 (95% CI: -4.0 to 1.8; P: 0.4; χ^2 : 8.2; P: 0.04)				
17000923	He FJ	Importance of salt in determining blood pressure in children: meta-analysis of controlled trials	2006	MA	None	Q13 (RF4)	UK	Don't know/NR	MEDLINE: 1996-January 2006 EMBASE: 1980-January 2006 Cochrane Library original and review articles	Published full articles English language Participants ≤ 18 yr Studies aimed to reduce salt intake Study had control group or control period Duration of salt reduction lasting for ≥ 2 wk Exclusions: Studies in which salt reduction was combined with other interventions Studies in which participants were > 18 yr Studies in which participants were taking antihypertensive drugs or other medications Studies in which there was no control group or control period	13 Children and adolescents: 10 Infants: 3	Assess the effect of reducing salt intake on BP in children	Children and adolescents: 966 Infants: 551	Median age: Children and adolescents: 13 yr	RCTs: 11 Controlled trials: 2	Behavioral	Reduced salt diet	N/A	Change in salt intake SBP DBP	The median net change in salt intake for 9 out of 10 trials in children and adolescents was a reduction of 42% (interquartile range: 7-56%) The pooled analysis for children and adolescents showed a significant reduction in both SBP and DBP with a reduction in salt intake. The net change in SBP was -1.17 mmHg (95% CI: -1.78 to -0.56; P < 0.001), and it was -1.29 mmHg (-1.94 to -0.65; P < 0.0001) for DBP. There was no significant heterogeneity between studies (P: 0.64, I ² : 0% for SBP; P: 0.60, I ² : 0% for DBP) After excluding the 1 nonrandomized trial for children and adolescents, the net change in SBP was -0.93 mmHg (95% CI: -1.66 to -0.20; P: 0.01), and it was -1.07 mmHg (95% CI: -2.00 to -0.14; P: 0.02) for DBP. There was no significant heterogeneity between studies (P: 0.68, I ² : 0% for SBP; P: 0.54, I ² : 0% for DBP) Reanalyzing the data by excluding the 2 trials for children and adolescents with poor compliance showed that the net change in BP was -1.16 mmHg (95% CI: -1.82 to -0.55; P: 0.0003) for SBP and -1.20 mmHg (95% CI: -1.86 to -0.54; P: 0.0003) for DBP. There was no significant heterogeneity between studies (P: 0.78, I ² : 0% for SBP; P: 0.85, I ² : 0% for DBP) The median reduction in salt intake among studies of infants was 54% (interquartile range: 51-79%) The pooled analysis for infants showed a significant decrease in SBP (-2.47 mmHg; 95% CI: -4.00 to -0.94; P < 0.01). The test for heterogeneity showed no significant heterogeneity between studies (P: 0.33, I ² : 8.7%)	Q13: From a population view point, a reduction in BP of 1/1 mmHg in children and adolescents observed in the study would have major public health implications in terms of preventing CVD. The meta-analysis in infants also showed a significant effect of salt reduction on BP	NR			
18556702	Chen X	Tracking of blood pressure from childhood to adulthood: a systematic review and meta-regression analysis	2008	MA	None	Q5 (RF4) Q8 (RF4)	USA	Clinical	Jan 1970 - Jul 2006	PubMed	Cohort studies examining BP tracking from childhood to adulthood. Studies published between Jan 1970 & July 2006. BP tracking correlation coefficients reported. Cohort's baseline age <18 yr. Sample size > 50 Studies published in English, Chinese or Japanese.	50 studies	Systematically evaluate epidemiological evidence on BP tracking from childhood to adulthood.	Pediatric/ Young Adults	< 18 yr at baseline	US: 39 Europe: 11 Asia: 6 Other: 4 Length of follow-up ranged from 0.5 to 47 years. Recorded BP once per visit: 3 studies Recorded BP twice per visit: 11 studies Recorded BP 3+ times per visit: 25 Did not provide detailed information: 11	None	N/A	Serial BPs Gender Baseline age Length of follow-up Number of BP measurements per visit Ethnic/population difference	SBP DBP	BP tracked moderately well from childhood to adulthood with correlation coefficients ranging from -0.12 to 0.80 for SBP (p=0.38) and -0.16 to 0.70 for DBP with a mean of 0.28 BP tracking increased with increasing baseline age by 0.012 for SBP (p=5**) and 0.009 for DBP (p=5**) The strength of BP tracking decreased as follow-up duration increased, 0.008 for SBP (p=5**) and 0.005 for DBP (p=5**) Strength of correlation did not vary significantly with the number of measurements. BP tracking did not significantly vary across race/population groups. There was little sex difference in SBP tracking, but men had stronger DBP tracking than women.	Q8: BP tracked moderately well from childhood to adulthood with correlation coefficients ranging from -0.12 to 0.80 for SBP with a mean of 0.38; and -0.16 to 0.70 for DBP with a mean of 0.28 Q5: BP tracking did not significantly vary across race/population groups.	Potential selection bias Inability to study additional predictors or adjust for some potential confounders	Good.	