評価対象論文リスト（要因：能動喫煙、アウトカム：早産、低出生体重児、在胎不当過小児）

評価判定日：2023/5/29

①既存の系統的レビュー・メタ解析・統合解析

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3	Avşar TS, McLeod H, Jackson L. Health outcomes of smoking during pregnancy and the postpartum period: an umbrella review. BMC Pregnancy Childbirth. 2021;21(1):254. Published 2021 Mar 26. doi:10.1186/s12884-021-03729-1
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12	Misra P, Srivastava R, Krishnan A, Sreenivaas V, Pandav CS. Indoor air pollution-related acute lower respiratory infections and low birthweight: a systematic review. J Trop Pediatr. 2012;58(6):457-466. doi:10.1093/tropej/fms017
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15	Scholl TO, Hediger ML, Belsky DH. Prenatal care and maternal health during adolescent pregnancy: a review and meta-analysis. J Adolesc Health. 1994;15(6):444-456. doi:10.1016/1054-139x(94)90491-k

②日本人個別研究（ランダム化比較試験、コホート研究、症例対照研究、横断研究などの個別疫学研究）

16	Nishihama Y, Nakayama SF, Tabuchi T; Japan Environment and Children's Study Group. Population attributable fraction of risk factors for low birth weight in the Japan Environment and Children's Study. Environ Int. 2022;170:107560. doi:10.1016/j.envint.2022.107560
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26	Terada M, Matsuda Y, Ogawa M, Matsui H, Satoh S. Effects of maternal factors on birth weight in Japan. J Pregnancy. 2013;2013:172395. doi:10.1155/2013/172395
27	Miyake Y, Tanaka K, Arakawa M. Active and passive maternal smoking during pregnancy and birth outcomes: the Kyushu Okinawa maternal and child health study. BMC Pregnancy Childbirth. 2013;13:157. Published 2013 Aug 6. doi:10.1186/1471-2393-13-157
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■コホート研究（コホートのプール解析含む）

Reference			Study subjects										
Author	Title	Year	Study period	Number of subjects	Source of subjects	Event followed	Number of incident cases or deaths	Participant's race	Category	mean(SE)	p-value	Confounding variables considered	**Magnitude of association**
Suzuki, K., et al.	Association Between Maternal Smoking During Pregnancy and Birth Weight: An Appropriately Adjusted Model From the Japan Environment and Children's Study	2016	2011-2014	7734 NS=4357 QSB=1885 QSD=1078 SM=414	JECS	low birth weight	–	Japanese	Male (infants) (n=3925)			partner's smoking, annual household income, birth order of children, pregnancy-induced hypertension, diabetes mellitus/ gestational diabetes mellitus, maternal weight before pregnancy, maternal weight gain during pregnancy, maternal age group at delivery, and gestational duration	↑ ↑ ↑ or ↓ ↓ ↓
									Never smoker (NS)	3096.2 (16.6)	reference		
									Ex-smokers who quit before pregnancy (QSB)	3089.2 (18.3)	0.9		
									Ex-smokers who quit during early pregnancy (QSD)	3068.4 (20.0)	0.2		
									Current smokers (SM)	2959.8 (27.0)	<0.001		
									Female (infants) (n=3809)	mean(SE)	p-value		
									Never smoker (NS)	3018.2 (16.3)	reference		
									Ex-smokers who quit before pregnancy (QSB)	3030.9 (18.1)	0.7		
									Ex-smokers who quit during early pregnancy (QSD)	2978.6 (20.5)	0.06		
									Current smokers (SM)	2893.7 (27.5)	<0.001		

Reference			Study subjects					
Author	Title	Year	Study period	Number of subjects	Source of subjects	Event followed	Number of incident cases or deaths	Participant's race
Miyake, Y.; K. Tanaka; M. Arakawa	Active and passive maternal smoking during pregnancy and birth outcomes: the Kyushu Okinawa maternal and child health study	2013	2007-2008	1565 1427 71 28 39	one cohort	low birth weight Preterm birth SGA		Japanese

Category	low birth weight			Preterm birth			SGA			Adjusted mean of birth weight, g	Confounding variables considered	Magnitude of association
	Rate(%)	OR	(95% CI)	Rate(%)	OR	(95% CI)	Rate(%)	OR	(95% CI)			
none	7.4	reference		3.5	reference		7.6	reference		3010.7	Adjustment for maternal age; region of residence; number of children; family structure; maternal education; maternal employment; alcohol consumption during the preceding month; body mass index; gestational age; and baby's gender.	↑ ↑ ↑ or ↓ ↓ ↓
first trimester only	7.0	0.52	(0.12 − 1.65)	8.5	2.51	(0.90 -5.98)	4.2	0.53	(0.13 − 1.49)	3027.9		
Second and/or third trimesters	21.4	2.75	(0.71 − 8.89)	10.7	3.14	(0.71 - 9.80)	14.3	1.93	(0.55 − 5.27)	2958.3		
Throughout	10.3	2.17	(0.48 − 7.14)	7.7	2.06	(0.47 - 6.34)	18.0	2.87	(1.11 − 6.56)	2841.1		
p for trend		0.19			0.048			0.04		0.005		

■メタ解析

Reference			Include study						Design		Relative risk (95% CI or p)	Weight	**Magnitude of association**
Author	Title	Year	Ref No.	First author	Year	Study period	Study location	Event (*Definition)		Category			
Di HK et al.,	Maternal smoking status during pregnancy and low birth weight in offspring: systematic review and meta-analysis of 55 cohort studies published from 1986 to 2020	2022				55 studies included		LBW		Overall	1.89 (1.80-1.98)		↑ ↑