	LC Pump						
Time (min)	% Pump-1	% Pump-2					
	0.1% Acetic acid	Methanol					
0.00	98	2					
0.50	98	2					
3.00	75	25					
3.50	75	25					
3.51	20	80					
4.00	20	80					
4.01	98	2					
6.50	98	2					

Table S1. LC gradient conditions.

Table S2. LC conditions.

LC parameters	
Pump-1	0.1% Acetic acid
Pump-2	Methanol
Flow rate	0.4 mL/min
Injection volume	$10 \ \mu L$
Column temperature	$40^{\circ}C$

Table S3. Monitoring of ion mass transition.

	Target i	on (m/z)	Qualifier ion (m/z)		Declusterin	g Potential (V)	Collision	Ionization	
	Precusor	Product	Precusor	Product	Target ion	Qualifier ion	Target ion	Qualifier ion	mode
Native	177.0	80.0	177.0	98.0	75.0	75.0	28.0	27.0	positive
Internal standard (13C3)	180.0	80.1	_	_	61.0	_	30.0	_	positive

Table S4. Ion source and collision cell conditions.

Parameters	Setting
IonSpray voltage (V)	5000
Heating gas temperature (°C)	650
Nebulizer gas (psi)	50
Heating gas (psi)	80
Curtain gas flow (psi)	30
Collision gas pressure	10

Table S5. Range of calibration curves for cotinine.

Native	Concentrations (ng/mL)						Internal standard	Concentrations (ng/mL)					
Cotinine	0	0.006	0.01	0.02	0.06	0.1	0.2	0.4	0.6	1	2	Cotinine-13C3	0.06

Table S6. UCOV, LCOV and sensitivity and specificity of UCOV in four different datasets.

Operation	Ν	UCOV, LCOV	Sensitivity, specificity of UCOV
Current	89,895	36.7, 0.31	0.523, 0.998
Data <mrl by="" half="" mrl<="" substituted="" td="" the=""><td>89,895</td><td>41.5, 0.34</td><td>0.526, 0.998</td></mrl>	89,895	41.5, 0.34	0.526, 0.998
Excluding data <mrl< td=""><td>80,023</td><td>32.9, 0.36</td><td>0.521, 0.998</td></mrl<>	80,023	32.9, 0.36	0.521, 0.998
Gestational week <26.9	41,310	34.6, 0.30	0.526, 0.999
Gestation week ≥26.9	48,555	38.1, 0.31	0.519, 0.998

UCOV; cut-off value for dividing active smokers from others, LCOV; cut-off value for discriminating passive smokers from non-smokers, MRL; minimum reporting level.

Table S7. The proportion of participants with urinary cotinine concentrations exceeding the UCOV in each ETS exposure group.

		Number of participants (%)					
ETS exposure	Ν	<ucov< th=""><th>UCOV≤</th></ucov<>	UCOV≤				
1 day/week	10,337	9,990	347 (3.4%)				
2-3 days/week	6,887	6,361	526 (7.6%)				
4-6 days/week	3,955	3,582	373 (9.4%)				
7 days/week	8,912	7,483	1,429 (16.0%)				

UCOV; cut-off value for dividing active smokers from others, ETS; environmental tobacco smoke.

All pregnancies in the jecs-ta-20190930 dataset (N = 104,062)

Excluding multiple birth (n = 1,002), missing urinary cotinine data (n = 7,043), registering the incorrect gestational week (n = 563) and participants whose urine samples were collected more than 60 days before or after MT-2 questionnaire response (n = 5,405)

Analyses of urinary cotinine concentration (N = 90,049)

 \rightarrow Excluding participants missing maternal smoking status (n = 154)

Determination of urinary cotinine cut-off concentrations (N = 89,895)

 \rightarrow Excluding participants missing maternal passive smoking status (n = 758)

 \rightarrow Excluding active smoking mothers (n = 4,034)

Evaluation of urinary cotinine cut-off concentrations for passive smokers (N = 85,103)

Figure S1. Flow chart of the study participants.

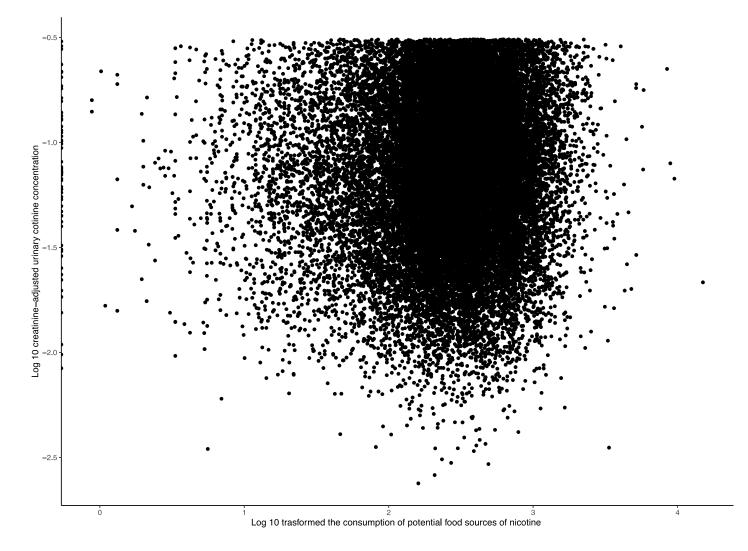


Figure S2. Correlation between the consumption of potential food sources of nicotine and urinary cotinine concentrations among non-smokers (N = 29,908, Spearman's rank correlation r_s = 0.046).

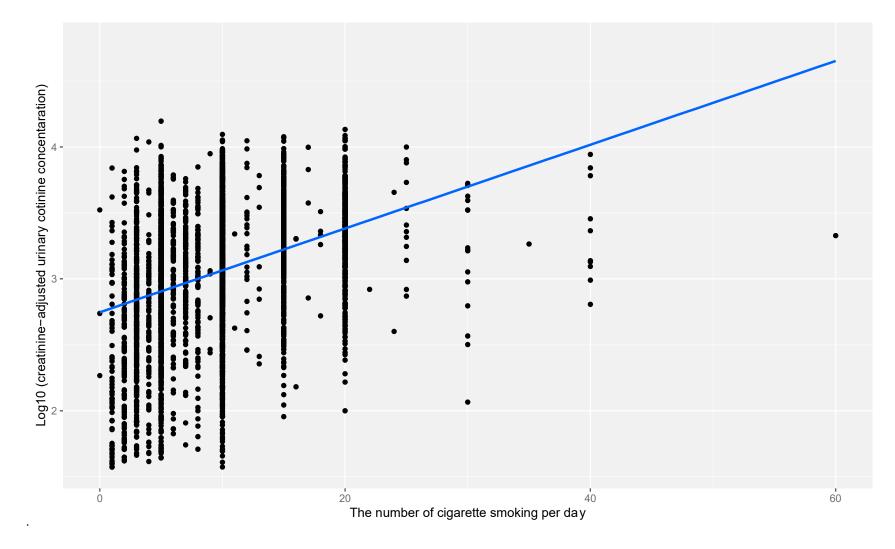


Figure S3. Single regression analysis showing the relationship between the number of cigarettes smoked per day and urinary cotinine concentrations of current smokers (adjusted $R^2 = 0.128$).

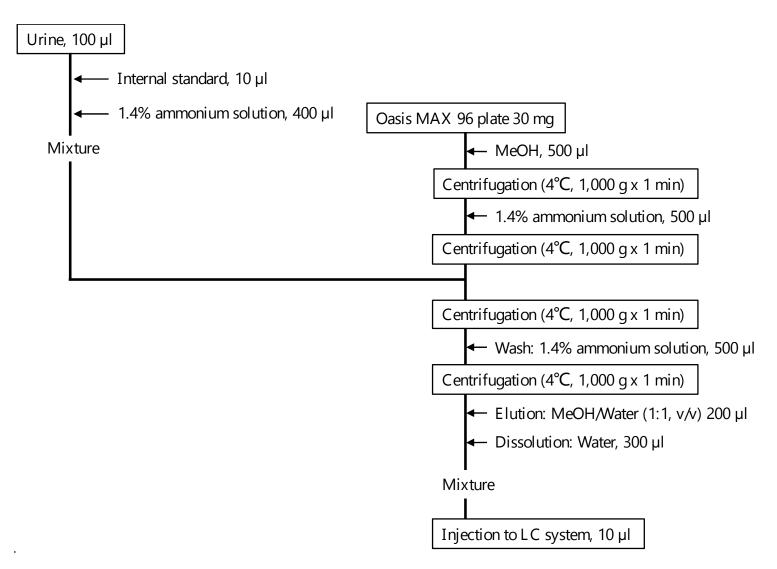


Figure S4. Sample treatment for measurement of urinary cotinine.