

Supplementary Table S1

Table S1: Characteristics of cohort studies in the systematic review								
num	Firstauthor_Year_ Gender_Locatio	Cohort size	Numce r of case	Cancer type	Analytical Category	Consumption Categories	Adjusted RR (95CI)	adjusted
1	Arbor J.L. Quis_2018_ M/F_USA_Processed meats	34550	75	Pancrease__	nitrite_ mg/day	0.01-0.03	0.98(0.72-1.35)	reference dose <0.010- adjusted: age, smoking ,calories
			72			0.04-0.06	1.02(0.73-1.41)	
			61			0.07-0.18	1.06(0.74-1.51)	
			22			>0.18	1.66(1-2.75)	
	Arbor J.L. Quis_2018_ M/F_USA_Animal sources	34550	71		nitrite_ mg/day	0.29-0.40	1.06(0.75-1.50)	reference dose <0.29 - adjusted: age, smoking ,calories
			77			0.41-0.56	1.08(0.74-1.57)	
			62			0.57-0.84	1.27(0.81-1.99)	
			18			>0.84	1.65(0.84-3.22)	
	Arbor J.L. Quis_2018_ M/F_USA_Food	34550	67		nitrite_ mg/day	0.86-1.11	0.85(0.59-1.22)	reference dose <0.86 - adjusted: age, smoking ,calories
			70			0.12-1.43	0.94(0.62-1.42)	
			68			1.44-2.05	1.3(0.79-2.14)	
			15			>2.05	1.28(0.59-2.76)	
	Arbor J.L. Quis_2018_ M/F_USA_Food	34550	80		nitrate_ mg/day	16.2-23.9	1.08(0.78-1.48)	reference dose: <16.2 - adjusted: age, smoking ,calories
			73			24-34.2	0.99(0.70-1.39)	
			60			34.3-58.5	1.05(0.72-1.52)	
			17			>58.5	1.25(0.71-2.21)	
	Arbor J.L. Quis_2018_ M/F_USA_Plant sources	34550	62		nitrite_ mg/day	0.51-0.67	0.68(0.48-0.96)	reference dose <0.51 - adjusted: age, smoking ,calories
			83			0.68-0.90	0.89(0.62-1.28)	
			59			0.91-1.39	0.8(0.52-1.24)	
			10			>1.39	0.55(0.25-1.17)	
	Arbor J.L. Quis_2018_ M/F_USA_Water	15862	41		nitrate_ mg/l	0.47-1.08	1.4(0.88-2.24)	reference dose<0.47-adj:age,smoking
			48			1.09-2.97	1.51(0.96-2.37)	
			25			2.98-5.69	1.14(0.67-1.93)	
			7			>797	1.18(0.52-2.67)	
2	Briseis Aschebrook- Kilfoy_2011_F_USA_Animal sources	292391	131	Pancrease__	nitrite_ mg/1000K cal	.15	0.97(0.76-1.23)	reference= 0.1- adjusted: age (continuous), race (non-Hispanic white, non-Hispanic black, other, or missing), total energy intake (continuous), smoking status, family history of cancer, family history of diabetes, body mass index (weight (kg)/height (m)2; <25, 2529.9, 3034.9, or 35), and intakes of saturated fat, folate, and vitamin C
			134			.2	1.06(0.83-1.34)	
			118			.25	0.99(0.77-1.27)	
			99			.36	0.94(0.72-1.22)	
	Briseis Aschebrook- Kilfoy_2011_F_USA_Food	292391	125		nitrite_ mg/1000K cal	.57	0.93(0.72-1.19)	reference= 0.45- adjusted: age (continuous), race (non-Hispanic white, non-Hispanic black, other, or missing), total energy intake (continuous), smoking status, family history of cancer, family history of diabetes, body mass index (weight (kg)/height
			111			.65	0.78(0.60-1.02)	
			138			.74	0.92(0.72-1.19)	
			127			.9	0.81(0.61-1.06)	

		101					(m)2; <25, 2529.9, 3034.9, or 35), and intakes of saturated fat, folate, and vitamin C
		128					
		136					
		171					
Briseis Aschebrook-Kilfoy_2011_F_USA_Plant sources	292391	127					
		116					
		151					
		136					
Briseis Aschebrook-Kilfoy_2011_M/F_USA_Animal sources	293501	340					
		293494	363				
		293529	378				
		293516	347				
Briseis Aschebrook-Kilfoy_2011_M/F_USA_Food	293522	361					
		293462	331				
		293499	348				
		293490	321				
Briseis Aschebrook-Kilfoy_2011_M/F_USA_Plant sources	293541	380					
		293446	315				
		293501	350				
		293472	303				
				nitrate_	29.9	0.89(0.67-1.19)	reference= 19.3- adjusted: age (continuous), race
				mg/1000K	40.9	0.93(0.71-1.23)	(non-Hispanic white, non-Hispanic black, other, or
				cal	57.4	0.84(0.64-1.11)	missing), total energy intake (continuous), smoking
					94.8	0.88(0.66-1.17)	status, family history of cancer, family history of
							diabetes, body mass index (weight (kg)/height
							(m)2; <25, 2529.9, 3034.9, or 35), and intakes of
							saturated fat, folate, and vitamin C
				nitrite_	.34	1.12(0.86-1.47)	reference= 0.25- adjusted: age (continuous), race
				mg/1000K	.42	0.91(0.69-1.21)	(non-Hispanic white, non-Hispanic black, other, or
				cal	.51	1.06(0.80-1.39)	missing), total energy intake (continuous), smoking
					.680	0.89(0.65-1.20)	status, family history of cancer, family history of
							diabetes, body mass index (weight (kg)/height
							(m)2; <25, 2529.9, 3034.9, or 35), and intakes of
							saturated fat, folate, and vitamin C
				nitrite_	.15	1.07(0.92-1.25)	reference= 0.1- adjusted: age (continuous), race
				mg/1000K	.2	1.11(0.95-1.30)	(non-Hispanic white, non-Hispanic black, other, or
				cal	.25	1.11(0.95-1.30)	missing), total energy intake (continuous), smoking
					.36	0.96(0.82-1.13)	status, family history of cancer, family history of
							diabetes, body mass index (weight (kg)/height
							(m)2; <25, 2529.9, 3034.9, or 35), and intakes of
							saturated fat, folate, and vitamin C
				nitrite_	.57	0.99(0.86-1.16)	reference= 0.45- adjusted: age (continuous), race
				mg/1000K	.65	0.92(0.79-1.08)	(non-Hispanic white, non-Hispanic black, other, or
				cal	.74	0.97(0.83-1.14)	missing), total energy intake (continuous), smoking
					.9	0.92(0.78-1.08)	status, family history of cancer, family history of
							diabetes, body mass index (weight (kg)/height
							(m)2; <25, 2529.9, 3034.9, or 35), and intakes of
							saturated fat, folate, and vitamin C
				nitrate_	29.9	0.91(0.78-1.06)	reference= 19.3- adjusted: age (continuous), race
				mg/1000K	40.9	1.02(0.88-1.18)	(non-Hispanic white, non-Hispanic black, other, or
				cal	57.4	0.99(0.85-1.16)	missing), total energy intake (continuous), smoking
					94.8	1.01(0.85-1.20)	status, family history of cancer, family history of
							diabetes, body mass index (weight (kg)/height
							(m)2; <25, 2529.9, 3034.9, or 35), and intakes of
							saturated fat, folate, and vitamin C
				nitrite_	.34	1.02(0.88-1.18)	reference= 0.25- adjusted: age (continuous), race
				mg/1000K	.42	0.87(0.74-1.01)	(non-Hispanic white, non-Hispanic black, other, or
				cal	.51	0.99(0.84-1.16)	missing), total energy intake (continuous), smoking
					.680	0.91(0.76-1.09)	status, family history of cancer, family history of
							diabetes, body mass index (weight (kg)/height

Briseis Aschebrook-Kilfoy_2011_M_USA_Animal sources	292866	209		nitrite_ mg/1000K cal	.15	1.16(0.94-1.44)	(m)2; <25, 2529.9, 3034.9, or 35), and intakes of saturated fat, folate, and vitamin C
		229			.2	1.16(0.94-1.43)	reference= 0.1- adjusted: age (continuous), race (non-Hispanic white, non-Hispanic black, other, or missing), total energy intake (continuous), smoking status, family history of cancer, family history of diabetes, body mass index (weight (kg)/height (m)2; <25, 2529.9, 3034.9, or 35), and intakes of saturated fat, folate, and vitamin C
		260			.25	1.21(0.98-1.48)	
		248			.36	0.99(0.80-1.23)	
		236		nitrite_ mg/1000K cal	.57	1.03(0.86-1.24)	reference= 0.45- adjusted: age (continuous), race (non-Hispanic white, non-Hispanic black, other, or missing), total energy intake (continuous), smoking status, family history of cancer, family history of diabetes, body mass index (weight (kg)/height (m)2; <25, 2529.9, 3034.9, or 35), and intakes of saturated fat, folate, and vitamin C
		220			.65	1(0.82-1.21)	
		210			.74	0.99(0.81-1.20)	
		194			.9	0.97(0.79-1.20)	
	292866	229		nitrate_ mg/1000K cal	29.9	0.91(0.76-1.09)	reference= 19.3- adjusted: age (continuous), race (non-Hispanic white, non-Hispanic black, other, or missing), total energy intake (continuous), smoking status, family history of cancer, family history of diabetes, body mass index (weight (kg)/height (m)2; <25, 2529.9, 3034.9, or 35), and intakes of saturated fat, folate, and vitamin C
		232			40.9	1.05(0.88-1.25)	
		204			57.4	1.07(0.89-1.30)	
		151			94.8	1.07(0.86-1.33)	
Briseis Aschebrook-Kilfoy_2011_M_USA_Plant sources	292866	253		nitrite_ mg/1000K cal	.34	0.98(0.82-1.16)	reference= 0.25- adjusted: age (continuous), race (non-Hispanic white, non-Hispanic black, other, or missing), total energy intake (continuous), smoking status, family history of cancer, family history of diabetes, body mass index (weight (kg)/height (m)2; <25, 2529.9, 3034.9, or 35), and intakes of saturated fat, folate, and vitamin C
		199			.42	0.85(0.70-1.03)	
		199			.51	0.95(0.78-1.17)	
		167			.680	0.94(0.75-1.18)	
3 Cross, A. J._2010_M/F_USA_Animal sources	300948	488	Colorectal__	nitrite_ microg/10 00kcal	34.6	0.99(0.87-1.12)	reference dose:12.1- adjusted: gender, education, BMI, smoking, total energy, fiber, calcium
		554			61.4	1.07(0.94-1.21)	
		603			102.9	1.12(0.98-1.27)	
		617			199.2	1.11(0.97-1.25)	
		470		nitrate_ microg/10 00kcal	66.90	0.96(0.85-1.10)	reference dose:24.2- adjusted: gender, education, BMI, smoking, total energy, fiber, calcium,
		530			112.7	1.04(0.91-1.18)	
	298953	609	Rectum__	nitrite_ microg/10 00kcal	174.5	1.13(1.00-1.29)	
		659			298	1.16(1.02-1.32)	
		129		nitrite_ microg/10 00kcal	34.6	1.07(0.83-1.38)	reference dose:12.1- adjusted: gender, education, BMI, smoking, total energy, fiber, calcium
		157			61.4	1.23(0.96-1.58)	
		162			102.9	1.21(0.94-1.55)	
		163			199.2	1.16(0.90-1.50)	

4	Cross, A. J. _2011_ M/F_USA_Animal sources	300224	Colon__	126	nitrate_ microg/10 00kcal	66.900	1.08(0.83-1.40)	reference dose:24.2- adjusted: gender, education, BMI, smoking, total energy, fiber, calcium,
				144		112.7	1.18(0.91-1.52)	
				170		174.5	1.31(1.01-1.68)	
				174		298	1.26(0.97-1.63)	
				359	nitrite_ microg/10 00kcal	34.6	0.96(0.83-1.12)	reference dose:12.1- adjusted: gender, education, BMI, smoking, total energy, fiber, calcium
				397		61.4	1.01(0.88-1.18)	
				441		102.9	1.09(0.94-1.26)	
				454		199.2	1.09(0.94-1.26)	
				344	nitrate_ microg/10 00kcal	66.900	0.93(0.80-1.08)	reference dose:24.2- adjusted: gender, education, BMI, smoking, total energy, fiber, calcium,
				386		112.7	0.99(0.86-1.16)	
				439		174.5	1.08(0.93-1.25)	
				485		298	1.13(0.97-1.32)	
		337451	Esophagus_Ad enocarcinoma	61	nitrate_ microg/10 00kcal	66.90	0.97(0.66-1.43)	reference dose:24.2
				68		112.7	0.91(0.62-1.35)	
				89		174.5	1.01(0.70-1.47)	
				112		298	1.1(0.75-1.60)	
				60	nitrite_ microg/10 00kcal	34.6	0.89(0.61-1.30)	reference dose:12.1
				66		61.4	0.82(0.56-1.20)	
				81		102.9	0.88(0.61-1.27)	
				120		199.2	1.19(0.84-1.68)	
		337202	Esophagus__ Squamous cell carcinoma	25	nitrate_mi crog/1000 kcal	66.90	1.06(0.59-1.91)	reference dose:24.2
				15		112.7	0.6(0.30-1.18)	
				25		174.5	0.9(0.49-1.67)	
				41		298	1.3(0.72-2.35)	
				30	nitrite_mic rog/1000k cals	34.6	1.36(0.76-2.43)	reference dose:12.1
				19		61.4	0.82(0.43-1.57)	
				28		102.9	1.15(0.63-2.11)	
				31		199.2	1.21(0.67-2.20)	
		337351	Stomach_ Noncardia _	44	nitrite_mic rog/1000k cals	34.6	0.77(0.51-1.15)	reference dose:12.1
				48		61.4	0.79(0.53-1.18)	
				67		102.9	1.04(0.71-1.52)	
				64		199.2	0.93(0.63-1.37)	
				48	nitrate_mi crog/1000 kcal	66.0	0.9(0.60-1.35)	reference dose:24.2
				50		112.7	0.89(0.59-1.33)	
				56		174.5	0.91(0.61-1.37)	
				73		298	1.04(0.69-1.55)	
		337329	Stomach_ Cardia _Adenocarcin oma	40	nitrite_mic rog/1000k cals	34.6	0.72(0.47-1.11)	reference dose:12.1
				55		61.4	0.88(0.58-1.32)	
				61		102.9	0.87(0.58-1.31)	
				55		199.2	0.71(0.47-1.08)	

5				nitrate_mi crog/1000 kcal	57	66.90	1.17(0.77-1.77)	reference dose:24.2	
					36	112.7	0.64(0.40-1.02)		
					61	174.5	0.94(0.61-1.45)		
					62	298	0.81(0.52-1.25)		
	DellaValle, Curt T_2014_M/F__Animal sources	73118	Colorectal__	nitrite_mg /day	121	.08	0.96(0.75-1.23)	reference dose:0.05- adjusted: age, energy intake, education, physical activity, vitamin C, carotene ,folate	
					121	.11	1.06(0.82-1.35)		
					107	.14	0.97(0.75-1.26)		
					119	.19	1.17(0.90-1.51)		
		72882	Colon__		74	.08	0.99(0.72-1.35)		
					78	.11	1.14(0.83-1.56)		
					72	.14	1.09(0.79-1.51)		
					69	.19	1.14(0.81-1.59)		
		72735	Rectum__		47	.08	0.92(0.63-1.36)		
					43	.11	0.93(0.62-1.39)		
					35	.14	0.79(0.51-1.23)		
					50	.19	1.21(0.81-1.82)		
		73118	Colorectal__		142	.85	1.31(1.03-1.66)	reference dose:0.51- adjusted: age, energy intake, education, physical activity, vitamin C, carotene, folate	
					113	1.13	1.12(0.87-1.45)		
					124	1.45	1.28(0.99-1.66)		
					110	2.06	1.15(0.88-1.50)		
		72882	Colon__		86	.85	1.34(0.98-1.82)		
					72	1.13	1.21(0.87-1.68)		
					79	1.45	1.38(1-1.91)		
					69	2.06	1.22(0.87-1.72)		
		72735	Rectum__		56	.85	1.26(0.86-1.85)		
					41	1.13	1(0.66-1.52)		
					45	1.45	1.14(0.76-1.73)		
					41	2.06	1.05(0.68-1.61)		
		DellaValle, Curt T_2014_M/F__Food	73118		Colorectal__	126	.74	1.09(0.85-1.40)	reference dose:0.56- adjusted: age, energy intake, education, physical activity, vitamin C, carotene, folate
						123	.87	1.1(0.85-1.43)	
						122	1.01	1.1(0.84-1.44)	
						119	1.23	1.05(0.77-1.42)	
	72882		Colon__	81	.74	1.27(0.92-1.76)			
				75	.87	1.23(0.88-1.73)			
				80	1.01	1.34(0.94-1.90)			
				75	1.23	1.26(0.85-1.86)			
	72735		Rectum__	45	.74	0.87(0.58-1.29)			
				48	.87	0.94(0.63-1.42)			
				42	1.01	0.81(0.52-1.25)			
				44	1.23	0.8(0.49-1.29)			

6	DellaValle, Curt T_2014_M/F__Plant sources	73118	109	Colorectal__	nitrate_ mg/day	144.1	0.9(0.69-1.17)	reference dose:98.7- adjusted: age, energy intake, education, physical activity, vitamin C, carotene, folate		
			106			182.4	0.88(0.66-1.16)			
			138			229	1.14(0.85-1.54)			
			137			313.2	1.08(0.73-1.59)			
		72882	70	144.1		0.9(0.65-1.25)				
			65	182.4		0.84(0.59-1.20)				
			87	229		1.13(0.77-1.66)				
			78	313.2		0.98(0.59-1.63)				
		72735	39	144.1		0.9(0.58-1.40)				
			41	182.4		0.95(0.60-1.50)				
			51	229		1.17(0.72-1.90)				
			59	313.2		1.26(0.69-2.32)				
		DellaValle, Curt T_2014_M/F__Plant sources	73118	130		Colorectal__	.63		1.17(0.91-1.50)	reference dose:0.47- adjusted: age, energy intake, education, physical activity, vitamin C, carotene ,folate
				133			.75		1.22(0.94-1.58)	
				117			.89		1.06(0.80-1.40)	
				119			1.11		1.03(0.76-1.39)	
	72882		82	Colon__	.63	1.38(0.99-1.93)				
			82		.75	1.43(1.02-2.02)				
			76		.89	1.34(0.93-1.91)				
			78		1.11	1.36(0.92-2.01)				
	72735		48	Rectum__	.63	0.91(0.62-1.35)				
			51		.75	0.97(0.65-1.45)				
			41		.89	0.75(0.48-1.16)				
			41		1.11	0.67(0.41-1.09)				
	Jones, R.R. _2019_ M/F_USA_Processed meats		73118	110	Colorectal__	142.8	0.92(0.70-1.19)	reference dose=0- adjusted: age, heme iron, red meat		
				106		181.1	0.88(0.67-1.17)			
				137		227.8	1.15(0.85-1.55)			
				138		311.9	1.1(0.75-1.63)			
		72882	70	Colon__	142.8	0.9(0.65-1.26)				
			64		181.1	0.83(0.58-1.19)				
			87		227.8	1.15(0.78-1.68)				
			79		311.9	1.01(0.61-1.68)				
		72735	40	Rectum__	142.8	0.94(0.61-1.46)				
			42		181.1	0.99(0.63-1.56)				
			50		227.8	1.17(0.72-1.90)				
			59		311.9	1.28(0.70-2.36)				
Jones, R.R. _2019_ M/F_USA_Processed meats		36032	351	Colon__	nitrite_ mg/day	<=0.02	0.97(0.82-1.15)		reference dose=0- adjusted: age, heme iron, red meat	
			392		0.02-0.04	1.11(0.94-1.31)				
			361		>0.04	1.03(0.86-1.22)				
		35033	86	Rectum__		<=0.02	0.88(0.63-1.23)		reference dose=0- adjusted: age	

Jones, R.R. _2019_ M/F_USA_Animal sources	36032	99	Colon__		0.02-0.04	1.03(0.74-1.43)	reference dose <=0.19 - adjusted: age, heme iron, red meat
		82			>0.04	0.84(0.59-1.19)	
		326			0.20-0.24	0.92(0.79-1.08)	
		345			0.25-0.30	0.94(0.80-1.09)	
		292			>0.30	0.82(0.70-0.97)	
	35033	97	Rectum__		0.20-0.24	1.26(0.94-1.69)	reference dose <=0.19 - adjusted: age
		80			0.25-0.30	1.02(0.75-1.38)	
		66			>0.30	0.89(0.64-1.23)	
Jones, R.R. _2019_ M/F_USA_Food	36032	324	Colon__	nitrate_ mg/day	9.81-13.80	0.98(0.84-1.15)	reference dose: <=9.80 - adjusted: age, heme iron, red meat
		321			13.81-19.29	0.97(0.83-1.13)	
		355			>19.29	1.11(0.94-1.30)	
		342		nitrite_ mg/day	0.58-0.65	0.93(0.80-1.08)	reference dose<=0.57- adjusted: age, heme iron, red meat
		320			0.66-0.74	0.83(0.71-0.97)	
	35033	317	Rectum__	nitrate_ mg/day	>0.74	0.87(0.74-1.02)	reference dose: <=9.80- adjusted: age
		81			9.81-13.80	1.03(0.76-1.41)	
		71			13.81-19.29	0.91(0.66-1.26)	
		94		nitrite_ mg/day	>19.29	1.27(0.93-1.74)	reference dose<=0.57- adjusted: age
		74			0.58-0.65	0.75(0.55-1.02)	
Jones, R.R. _2019_ M/F_USA_Plant sources	36032	91	Colon__	nitrite_ mg/day	0.66-0.74	0.88(0.65-1.18)	reference dose<=0.32- adjusted: age, heme iron, red meat
		67			>0.74	0.68(0.49-0.94)	
		368			0.33-0.39	0.97(0.83-1.13)	
	35033	308	Rectum__	nitrite_ mg/day	0.40-0.48	0.99(0.85-1.18)	reference dose<=0.32- adjusted: age
		339			>0.48	0.96(0.81-1.14)	
		102			0.33-0.39	1.12(0.83-1.52)	
Jones, R.R. _2019_ M/F_USA_Water	12893	75	Colon__		0.40-0.48	1(0.72-1.39)	reference dose<=0.36
		75			>0.48	0.86(0.61-1.21)	
		126			0.37-0.80	1.13(0.88-1.45)	
		146			0.81-1.35	1.32(1.03-1.69)	
	12436	116	Rectum__	nitrate_ mg/l	1.36-3.51	0.98(0.76-1.27)	reference dose<=0.36
		106			>3.51	0.97(0.75-1.26)	
		18			0.37-0.80	0.48(0.28-0.84)	
		35			0.81-1.35	0.86(0.53-1.38)	
	13526	39	Colon__		1.36-3.51	0.94(0.60-1.48)	reference dose:0 years
		24			>3.51	0.93(0.38-1.07)	
		96			>5	0.91(0.73-1.13)	
		69			>5	0.82(0.63-1.06)	
	13654	19	Rectum__		>5	0.86(0.53-1.41)	
		25			>5	0.97(0.63-1.50)	
7	Keszei, András P_2012_	1857	12	Esophagus_	nitrite_	.08	0.92(0.39-2.16)

F_Netherland_Animal sources	7	_Adenocarcinoma	mg/day	.2	0.61(0.25-1.53)	reference dose=0.02- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
Keszei, András P_2012_	10		NDMA_	.04	0.79(0.32-1.91)	reference dose<=0.03- adjusted: age, smoking,
F_Netherland_Food	1938		micro/day	.07	0.92(0.40-2.14)	total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
	4		nitrate_	142.7	0.26(0.05-1.37)	reference dose=66.4- adjusted: age, smoking, total
	1855		mg/day	98.5	0.9(0.35-2.28)	intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
Keszei, András P_2012_	38		nitrite_	.12	0.86(0.53-1.39)	reference dose :0.02 - adjusted: age, smoking, total
M_Netherland_Animal sources	1735		mg/day	.28	0.74(0.43-1.28)	intake energy, BMI, alcohol, vegetable intake ,fruit intake, level of education, physical activity,
	39		NDMA_	.04	0.93(0.57-1.50)	reference dose<=0.03-adj:age, smoking, total
	1754		micro/day	.07	0.87(0.52-1.45)	intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
Keszei, András P_2012_	39		nitrate_	142.7	0.94(0.50-1.77)	reference dose=66.4-adj:age, smoking, total intake
M_Netherland_Food	1736		mg/day	98.5	0.95(0.58-1.55)	energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
Keszei, András P_2012_	18		nitrite_	.08	0.99(0.48-2.03)	reference dose :0.02- adjusted: age, smoking, total
F_Netherland_Animal sources	1874		mg/day	.2	0.85(0.39-1.88)	intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
	14		NDMA_	.04	0.92(0.43-1.97)	reference dose<=0.03- adjusted: age, smoking,
	1954		micro/day	.07	1.21(0.56-2.62)	total intake energy, BMI, alcohol, vegetable intake ,fruit intake, level of education, physical activity,
Keszei, András P_2012_	15		nitrate_	142.7	0.75(0.23-2.40)	reference dose=66.4- adjusted: age, smoking, total
F_Netherland_Food	1872		mg/day	98.5	1.17(0.55-2.47)	intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
	18	Esophagus__ Squamous cell carcinoma	nitrite_	.12	1.27(0.62-2.62)	reference dose: 0.03 - adjusted: age, smoking ,total
Keszei, András P_2012_	19		mg/day	.28	1.92(0.94-3.89)	intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
M_Netherland_Animal sources	1680		NDMA_	.08	1.21(0.54-2.74)	reference dose<=0.04- adjusted: age, smoking,
	15		micro/day	.25	2.43(1.13-5.23)	total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
Keszei, András P_2012_	1697		nitrate_	100.8	1.5(0.72-3.12)	reference dose=68.1- adjusted: age, smoking, total
M_Netherland_Food	1681		mg/day	146.2	1.51(0.49-4.62)	intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
Keszei, András P_2012_	9		nitrite_	.12	0.97(0.36-2.58)	reference dose: 0.03 - adjusted: age, smoking, total
F_Netherland_Animal sources	1850		mg/day	.28	0.62(0.20-1.90)	intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
	6		nitrate_	142.7	1.61(0.32-8.06)	reference dose:66.4 - adjusted: age, smoking, total
Keszei, András P_2012_	10	Stomach_ Cardia _	mg/day	98.5	1.01(0.30-3.42)	intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
F_Netherland_Food	1848		nitrite_	.12	0.8(0.51-1.27)	
Keszei, András P_2012_	1760					

M_Netherland_Animal sources	53		mg/day	.28	1.18(0.75-1.86)	reference dose: 0.02- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake ,fruit intake, level of education, physical activity,	
		47		NDMA_	.08	1(0.64-1.56)	reference dose<=0.04- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake ,fruit intake ,level of education ,physical activity,
Keszei, András P_2012_	1776	45		micro/day	.25	0.94(0.59-1.49)	reference dose<=0.04- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake ,fruit intake ,level of education ,physical activity,
M_Netherland_Food		47		nitrate_	100.8	1.06(0.68-1.65)	reference dose :68.1- adjusted: age, smoking, total intake energy, BMI ,alcohol, vegetable intake, fruit intake, level of education, physical activity,
	1761	43		mg/day	146.2	1.01(0.57-1.77)	reference dose :68.1- adjusted: age, smoking, total intake energy, BMI ,alcohol, vegetable intake, fruit intake, level of education, physical activity,
Keszei, András P_2012_		9	Stomach_	NDMA_	.04	0.97(0.34-2.78)	reference dose<=0.03- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
F_Netherland_Food	1931	10	Cardia	micro/day	.07	1.02(0.33-3.14)	reference dose<=0.03- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
			_Adenocarcinoma				
Keszei, András P_2012_		50		nitrite_	.08	0.94(0.62-1.41)	reference dose: 0.02- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
F_Netherland_Animal sources	1986	54		mg/day	.2	1.08(0.71-1.63)	reference dose: 0.02- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
		70		NDMA_	.04	1.37(0.92-2.02)	reference dose<=0.03- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
	2071	44		micro/day	.07	0.9(0.58-1.42)	reference dose<=0.03- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
Keszei, András P_2012_		55		nitrate_	142.7	0.78(0.44-1.39)	reference dose:66.4 - adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
F_Netherland_Food	1984	46		mg/day	98.5	0.73(0.47-1.11)	reference dose:66.4 - adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
			Stomach_				
Keszei, András P_2012_		109	Noncardia _	nitrite_	.12	1.1(0.80-1.50)	reference dose: 0.02 - adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake ,level of education, physical activity,
M_Netherland_Animal sources	1950	122		mg/day	.28	1.23(0.89-1.70)	reference dose: 0.02 - adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake ,level of education, physical activity,
		105		NDMA_	.04	1.09(0.79-1.50)	reference dose<=0.03- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake ,fruit intake, level of education, physical activity,
	1967	125		micro/day	.07	1.31(0.95-1.81)	reference dose<=0.03- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake ,fruit intake, level of education, physical activity,
Keszei, András P_2012_		93		nitrate_	142.7	1.05(0.70-1.59)	reference dose :66.4- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
M_Netherland_Food	1951	125		mg/day	98.5	1.23(0.90-1.68)	reference dose :66.4- adjusted: age, smoking, total intake energy, BMI, alcohol, vegetable intake, fruit intake, level of education, physical activity,
8		17		nitrite_	Q2	1.1(0.58-2.11)	
		17			Q3	1.88(1.01-3.49)	
		17			Q4	0.71(0.28-1.78)	
		17		nitrate_	Q2	1.01(0.56-1.84)	
	10053	17	Stomach__		Q3	0.52(0.25-1.08)	adjusted: sex, age, municipality, smoking, energy intake
Knekt, P._1999_		17			Q4	0.56(0.27-1.18)	
M/F__Food		17		NDMA_	Q2	1.03(0.55-1.95)	
		17			Q3	0.78(0.39-1.56)	
		17			Q4	0.75(0.37-1.51)	
	10058	19	Colorectal__	nitrite_	Q2	0.82(0.45-1.48)	
		19			Q3	0.94(0.50-1.78)	

			19			Q4	0.74(0.34-1.63)	
			19		nitrate_	Q2	1.01(0.52-1.92)	
			19			Q3	0.98(0.51-1.87)	
			19			Q4	1.04(0.54-2.02)	
			19		NDMA_	Q2	1.47(0.69-3.11)	
			19			Q3	1.95(0.95-3.99)	
			19			Q4	2.12(1.04-4.33)	
9	Larsson, S. C. 2006_ M/F_Sweden_Food	250408	28	Stomach__	NDMA_mi cro/day	.061	1.03(0.61-1.77)	reference dose=0.017-adj:age,education, BMI, total energy, alcohol, fruit, vegetables
			37			.098	1.66(1.00-2.75)	
			32			.151	1.6(0.93-2.76)	
			31			.277	1.96(1.08-3.58)	
10	Loh, Y. H. 2011_ M/F_United Kingdom_Food	22920	137	Rectum__	NDMA_ micro/day		1.46(1.16-1.84)	adjusted: age, sex, BMI, smoking, alcohol, energy intake, physical activity, education, menopausal
			137		nitrite_ mg/day		1.18(0.97-1.44)	
			276	Colon__	NDMA_ micro/day		0.99(0.83-1.18)	
			276		nitrite_ mg/day		0.89(0.77-1.04)	
			64	Esophagus__	NDMA_ micro/day		1.13(0.77-1.68)	
			64		nitrite_ mg/day		1.14(0.84-1.54)	
			55	Stomach__	NDMA_ micro/day		1.13(0.81-1.57)	
			55		nitrite_ mg/day		0.86(0.63-1.19)	
11	Schullehner, J. 2018_ M/F_Denmark_Water	115224 22	8844	Colon__	nitrate_ mg/l	<1.27	1.09(1.03-1.15)	adjusted: age, sex, year of birth, previous cancer diagnosis and highest attained education
			8652			1.27-2.33	1.09(1.02-1.16)	
			6966			2.33-3.87	1.08(1.01-1.16)	
			6025			3.87-9.25	1.11(1.03-1.19)	
			3700	>=9.25		1.14(1.04-1.26)		
		115098	5495	Rectum__		1.27-2.33	1.08(0.99-1.16)	
		04	4384			2.33-3.87	1.1(1.01-1.19)	
			3764			3.87-9.25	1.1(1.01-1.21)	
			5618			<1.27	1.07(0.99-1.15)	
			2308			>=9.25	1.13(1.00-1.27)	
12	van Loon, A. J. 1998_ M/F_netherland_Food	3405	51	Stomach__	nitrite_ mg/day	.04	1.2(0.78-1.86)	reference dose: 0.01 - adjusted: multivariate(age, sex, smoking, education, coffee consumption, vitamin C, beta-carotene, family history, stomach disorder, use of refrigerator and freezer
			58			.09	1.18(0.77-1.82)	
			46			.16	0.88(0.56-1.37)	
			80			.35	1.44(0.95-2.18)	

	van Loon, A. J._1998_ M/F_netherland_Water				nitrate_ mg/day	61	79.4	1.02(0.69-1.51)	reference dose: 55.8 - adjusted: multivariate(age, sex, smoking, education, coffee consumption, vitamin C, beta-carotene, family history, stomach disorder, use of refrigerator and freezer)
						45	98.7	0.71(0.46-1.09)	
						49	120.7	0.8(0.51-1.25)	
						58	172.2	0.8(0.47-1.37)	
					nitrate_ mg/day	54	1.65	0.93(0.62-1.39)	reference dose: 0.02- adjusted: multivariate(age, sex, smoking, education, coffee consumption, vitamin C, beta-carotene, family history, stomach disorder, use of refrigerator and freezer)
						53	3.85	0.87(0.58-1.31)	
						57	6.91	0.83(0.55-1.24)	
						57	16.5	0.88(0.59-1.32)	
13	van Loon, A. J._1997_ M/F_netherland_Water	3750	250	Stomach__	nitrate_ mg/day		4	1.02(0.62-1.68)	adjusted: smoking-education-beta-carotene-vitamin C-family history
	van Loon, A. J._1997_ M/F_netherland_Food	3750	250				99	0.62(0.31-1.22)	adjusted: smoking- education-beta-carotene-vitamin C-family history

Table 2: Characteristics of case-control studies in the systematic review.									
num	Firstauthor_ Year_Gender_Locatio	Numbe r of Cases	Numbe rof Control s	Cancer type	Analytical Category	Consumption Categories	Adjusted OR 95CI	adjusted	
1	Angela Coss_2003_ F_USA_Animal sources	32	164	Pancrase__	Nitrite_ mg/day	0.13-0.18	2.4(1.2-4.7)	reference dose<0.13- adjusted: age, cigarette use, energy	
		26	147			0.19-0.26	1.9(0.94-4.0)		
		51	180			>0.26	3.2(1.6-6.4)		
	Angela Coss_2003_ M_USA_Animal sources	22	282			0.22-0.31	2.1(0.95-4.8)	reference dose<0.22- adjusted: age, cigarette use, energy	
		60	359			0.32-0.53	3.8(1.8-8.0)		
		50	342			>0.53	2.3(1.1-5.1)		
	Angela Coss_2003_ F_USA_Food	32	146		Nitrite_ mg/day	0.56-0.71	1.8(0.94-3.4)	reference dose<0.56- adjusted: age, cigarette use, energy	
		32	168			0.72-0.93	1.4(0.72-2.6)		
		40	181			>0.93	1.3(0.65-2.5)		
		33	157		Nitrate_ mg/day	63-90	0.99(0.58-1.7)	reference dose<63- adjusted: age, cigarette use, energy	
		24	158			91-126	0.64(0.36-1.1)		
		26	160			>126	0.53(0.29-0.97)		
	Angela Coss_2003_ M_USA_Food	22	307		Nitrite_ mg/day	0.75-0.98	1(0.52-2.0)	reference dose<0.75- adjusted: age, cigarette use, energy	
		40	333			0.99-1.30	1.5(0.81-2.9)		
		64	374			>1.30	1.5(0.79-3.0)		
		33	311		Nitrate_ mg/day	58-82	1.1(0.63-1.9)	reference dose<58- adjusted: age, cigarette use, energy	
		39	311			83-117	1.2(0.70-2.0)		
		43	327			>117	1(0.60-1.8)		
2	Buiatti, E._1990_	203	231	Stomach__	Nitrate_	81	0.9(0.7-1.1)		

3	De Roos, A. J. 2003_	M/F__Water	116	380	Colon__	Nitrate_ mg/l	>1 to <=3	1(0.8-1.3)	reference dose:53- adjusted: non-dietary variables and kilocalorie		
			27	124			>3 to <=5	0.7(0.4-1.1)			
			61	174			>5	1.2(0.8-1.7)			
			98	380			>1 to <=3	0.8(0.6-1.1)			
			30	124			>3 to <=5	0.7(0.5-1.2)			
			56	174			>5	1.2(0.8-1.8)			
			4	De Stefani, E. 1998_			M/F_Uruguay_Food	340		698	Stomach__
224	459				1.63(1.39-1.91)						
116	239				1.34(1.08-1.67)						
116	239				0.79(0.62-1.01)						
224	459	Nitrite_			0.52(0.43-0.62)						
340	698				0.55(0.48-0.62)						
5	De Stefani, E. 2001_				M/F_Uruguay_Animal sources	27		88	Stomach__	NDMA_ micro/day	
		57	>2.6	2.2(1.2-4.1)							
		41	Nitrate_ mg/day	524-784		1.1(0.6-1.8)	reference dose<523- adjusted: age, gender, residence, education				
		34		>785		0.9(0.5-1.6)					
		48	Nitrite_ mg/day	6.3-10.0		1.5(0.9-2.6)	reference dose<6.2- adjusted: age, gender, residence, education				
		43		>10.1		1.8(1.0-3.2)					
		6	Espejo-Herrera, N. 2016_	F_spain and italy_Water		158	349				Colorectal_
247	360				>10	1.41(1.04-1.91)					
30	349				>5-10	0.87(0.52-1.45)					
70	360				>10	1.49(0.89-2.48)					
122	349				>5-10	1.33(0.97-1.80)					
174	360				>10	1.46(1.04-2.05)					
Espejo-Herrera, N. 2016_	M_spain and italy_Water		289	454	Colorectal_	>5-10	1.16(0.94-1.44)				
			397	468		>10	1.5(1.21-1.87)				
			80	454		>5-10	0.94(0.68-1.28)				
			133	468		>10	1.55(1.16-2.08)				

		202	454	Colon__		>5-10	1.26(0.99-1.61)	
		260	468			>10	1.51(1.17-1.94)	
Espejo-Herrera, N._ 2016_M/F_spain and italy_Water		447	803	Colorectal__		>5-10	1.17(0.98-1.38)	
		644	828			>10	1.49(1.24-1.78)	
		110	803	Rectum__		>5-10	0.93(0.70-1.23)	
		203	828			>10	1.62(1.23-2.14)	
		324	803	Colon__		>5-10	1.28(1.06-1.55)	
		434	828			>10	1.52(1.24-1.86)	
Espejo-Herrera, N._ 2016_M/F_spain and italy_Food		564	1058	Colorectal__		83-133	0.97(0.83-1.14)	reference dose: <83 - adjusted: sex, age, education, physical activity, NSAID drug, family history, BMI, intake energy, fiber
		527	1057			>133	0.84(0.70-1.00)	
		394	1058	Colon__		83-133	1.04(0.87-1.24)	
		371	1057			>133	0.9(0.74-1.10)	
		161	1058	Rectum__		83-133	0.85(0.66-1.08)	
		151	1057			>133	0.76(0.58-1.00)	
Espejo-Herrera, N._2016_M/F_spain and italy_Animal sources		578	1058	Colorectal__		4.5-6.8	1.15(0.98-1.35)	reference dose: <4.5 - adjusted: sex, age, education, physical activity, NSAID drug, family history, BMI, intake energy
		634	1057			>6.8	1.16(0.98-1.38)	
		191	1058	Rectum__		4.5-6.8	1.59(1.22-2.06)	
		204	1057			>6.8	1.55(1.17-2.05)	
		423	1057	Colon__		>6.8	1.06(0.87-1.30)	
		378	1058			4.5-6.8	1.03(0.86-1.24)	
Espejo-Herrera, N._2016_M/F_spain and italy_Plant sources		575	1058	Colorectal__		68-118	0.99(0.85-1.16)	reference dose: <68 - adjusted: sex, age, education, physical activity, NSAID drug, family history, BMI, intake energy, fiber
		513	1057			>118	0.83(0.70-0.99)	
		169	1058	Rectum__		68-118	1.04(0.71-1.16)	
		144	1057			>118	0.9(0.57-0.99)	
		397	1058	Colon__		68-118	1.04(0.87-1.24)	
		364	1057			>118	0.89(0.73-1.08)	
7	Fathmawati_2017_M/F_Indones ia_Water	3	4	Colorectal__	Nitrate_ mg/l	>50	1.405(0.14-13.67)	adjusted: protein intake, smoking history, age, family history of cancer, diabetic
		16	4			>50	4.312(1.31-14.09)	
8	Hernández-Ramírez, R. U._2009_M/F_Mexico_Food	82	159	Stomach__	Nitrite_ mg/day	>1.0-1.2	1.07(0.69-1.65)	reference dose<1.0- adjusted: energy, age, gender
		82	159			>1.2	1.52(0.99-2.34)	
		76	156		Nitrate_ mg/day	>90.4-141.7	0.93(0.62-1.39)	reference dose: <90.4- adjusted: energy, age, gender
		76	156			>141.7	0.61(0.39-0.96)	
		82	159		Nitrite_ mg/day	>0.2-0.4	0.78(0.50-1.21)	reference dose<0.2- adjusted: energy, age, gender
		82	159			>0.4	1.56(1.02-2.4)	
		76	156		Nitrate_ mg/day	>1.7-3.9	1.28(0.82-2.0)	reference dose: <1.7- adjusted adj: energy, age, gender
		76	156			>3.9	1.92(1.23-3.02)	
		82	159		Nitrite_ mg/day	>0.1-0.2	0.81(0.54-1.21)	reference dose<0.1- adjusted: energy, age, gender
		82	159			>0.2	0.77(0.50-1.18)	
		76	156		Nitrate_ mg/day	>81.7-134.9	0.93(0.62-1.39)	reference dose: <81.7- adjusted: energy, age, gender
		76	156			>134.9	0.62(0.40-0.97)	

9	Jakszyn, P._2006_M/F_European countries_Food	105	146359	Stomach__ NDMA_ micro/day		.09	0.87(0.64–1.2)	reference dose: <0.09- adj:sex,height,weight,education,smoking,physi cal activity, fruits intake, energy, nitrites
		31	146359			.195	0.99(0.69–1.41)	
		31	146359			.09	1.04(0.66–1.63)	
		52	146359			.195	1.09(0.65–1.81)	
		52	146359			.09	0.74(0.41–1.34)	
		105	146359			.195	0.68(0.34–1.37)	
10	Kim, H. J._2007_M/F_Korea_Food	67	68	Stomach__ Nitrate_ mg/day		458	1.13(0.54–2.36)	reference dose: 240- adjusted: age (<50, 50–59, 60–69, and ≥70 yr), sex, socioeconomic status (low, medium, and high status; low status indicates below elementary school in education and \$ 8500 in annual income), family history (yes and no for only first-degree relatives), refrigerator use (<20 yr and ≥20 yr), H. pylori infection, and foods (charcoal grilled beef, Korean cabbage kimchi, Dongchimi, spinach, garlic, mushroom, and salty foods; low, medium, and high intake).
		32	34			811	1.13(0.42–3.06)	
11	La Vecchia, C._1994_M/F_Italy_Food	128	404	Stomach__	Nitrite_ mg/day	2.41	0.98(0.72-1.33)	reference:1.91- adjusted: multiple logistic regression(age, sex, education, family history, BMI, total energy)
		126	405			2.94	0.99(0.72-1.36)	
		153	406			3.64	1.15(0.84-1.59)	
		193	404			>3.64	1.35(0.96-1.88)	
		156	405	Stomach__	Nitrate_ mg/day	80.7	0.64(0.49-0.83)	reference:62.96- adjusted: multiple logistic regression (age, sex, education, family history, BMI, total energy)
		117	404			96.33	0.5(0.38-0.67)	
		117	406			116.88	0.52(0.39-0.70)	
		105	404			>116.88	0.43(0.32-0.59)	
12	La Vecchia, C._1995_M/F_Italy_Food	231	687	Stomach__	NDMA_ micro/day	0.131-0.190	1.11(0.9-1.4)	Reference dose<=0.130- adjusted: age, sex, education, family history. carotene, vitamin C, total calories, nitrite, nitrate
		308	683			>0.191	0.191(1.1-1.7)	
13	La Vecchia, C._1997_M/F_Italy_Food	407	987	Stomach__Car cinoma	Nitrite_ mg/day	>=2.7	1.44(1.2-1.7)	reference dose<2.7-adj:sex,age,education,
14	Lopez-Carrillo, L._2004_M/F_Mexico_Food	60	146	Stomach__	Nitrite_ portions/d ay	0.12–0.26	0.95(0.62-1.46)	reference dose=0-0.11- adjusted: age, gender, energy, socioeconomic ,education, Hp/CagA status and ascorbic acid
		83	148			0.27–2.25	1.24(0.81-1.90)	
15	Mayne, S. T._2001_M/F_USA_Food	255	687	Stomach_ Cardia_Adeno carcinoma	Nitrite_ mg/day		1.12(0.87-1.44)	adjusted: sex; site (Connecticut, Washington, New Jersey); age; race (white versus other); proxy status; income; education; usual body mass index; cigarettes/day; years of consuming beer, wine, and liquor (each); and energy intake.
		352	687	Stomach_Non cardia _Adenocarcin oma			1.64(1.30-2.07)	

	206	687	Esophagus__S quamous cell carcinoma		1.12(0.84-1.51)		
	282	687	Esophagus__A denocarcinom a		1.02(0.80-1.30)		
16	22	19	Colorectal_	Nitrate_ mg/l	0.5-1.9	1.39(1.02-1.89)	reference dose<0.5- adjusted: age, interview period
	29	25			2.5-5.9	1.32(0.99-1.76)	
	12	11			6.0-9.9	1.28(0.88-1.88)	
	7	6			>10.0	1.57(0.97-2.52)	
	23	19	Rectum__		0.5-1.9	1.29(0.73-2.31)	
	28	25			2.5-5.9	1.19(0.69-2.06)	
	10	11			6.0-9.9	1.11(0.52-2.36)	
	5	6			>10.0	1.26(0.47-3.43)	
McElroy, J. A._2008_ M/F_USA_Water	24	19	Colon_ distal _		0.5-1.9	1.58(1.03-2.40)	
	29	25			2.5-5.9	1.38(0.92-2.06)	
	12	11			6.0-9.9	1.43(0.85-2.41)	
	5	6			>10.0	1.23(0.59-2.56)	
	20	19	Colon_ Proximal_		0.5-1.9	1.35(0.81-2.26)	
	28	25			2.5-5.9	1.36(0.85-2.17)	
	12	11			6.0-9.9	1.34(0.73-2.47)	
	11	6			>10.0	2.76(1.42-5.38)	
17	177	207	Colorectal_	Nitrate and Nitrite_ micro/100 0 kcal	114.6-197.0	0.98(0.72-1.32)	reference dose< 114.6 - adjusted: age, sex, total energy intake, body mass index, past regular NSAID use, and fruit and vegetable consumption
	194	207			197.1-310.2	1.07(0.79-1.45)	
	211	207			310.3-496.6	1.09(0.80-1.47)	
	225	207			> 496.6	1.19(0.87-1.61)	
	124	207	Colon__		114.6-197.0	1.02(0.73-1.42)	
	140	207			197.1-310.2	1.15(0.83-1.61)	
	146	207			310.3-496.6	1.14(0.82-1.60)	
	157	207			> 496.6	1.28(0.92-1.80)	
	75	207	Colon_ Proximal_		114.6-197.0	1.05(0.71-1.56)	
	86	207			197.1-310.2	1.25(0.85-1.86)	
	76	207			310.3-496.6	1.06(0.71-1.58)	
	102	207			> 496.6	1.57(1.06-2.34)	
	45	207	Colon_ distal_		114.6-197.0	0.99(0.62-1.59)	
	50	207			197.1-310.2	1.06(0.67-1.70)	
	64	207			310.3-496.6	1.28(0.81-2.01)	
	51	207			> 496.6	0.98(0.61-1.58)	
	52	207	Rectum__	114.6-197.0	0.95(0.61-1.48)		
	54	207		197.1-310.2	0.96(0.62-1.50)		
	63	207		310.3-496.6	1.02(0.66-1.58)		

		67	207			> 496.6	1.04(0.67-1.62)	
18		286	187			NDMA_ micro/day	.2	1.1(0.8-1.6)
		286	187				.33	1.1(0.8-1.5)
	Palli, D._2001_ M/F_Italy_Food	286	187	Stomach__		Nitrate_ mg/day	93.2	0.7(0.5-1.0)
		286	187				132.9	0.6(0.4-0.9)
		286	187			Nitrite_ mg/day	3.5	1.4(1.0-2.0)
		286	187				5.4	1.4(1.0-2.0)
								reference dose: 0.12- adjusted: multiple logistic regressions(age, sex, social class, family history, BMI, total energy)
								reference dose: 62.6- adjusted: multiple logistic regressions(age, sex, social class, family history, BMI, total energy)
								reverence dose: 2.5- adjusted: multiple logistic regressions(age, sex, social class, family history, BMI, total energy)
19						NDMA_ micro/day	.25	4.13(0.93-18.27)
							.51	7(1.85-26.46)
	Pobel, D._1995_ M/F_France_Food					Nitrite_ mg/day	1.98	0.83(0.41-1.67)
							2.26	0.88(0.44-1.79)
		31	43	Stomach__		Nitrate_ mg/day	137.26	0.49(0.24-1.01)
							192.73	0.76(0.38-1.50)
						Nitrite_ mg/day	1.98	0.74(0.37-1.48)
							2.26	0.77(0.38-1.57)
	Pobel, D._1995_ M/F_France_Plant sources					Nitrate_ mg/day	137.26	0.52(0.26-1.07)
							192.73	0.73(0.37-1.45)
								reverence dose:0.20- adjusted: age, sex, occupation , calorie intake
								reverence dose:1.61- adjusted: age, sex, occupation , calorie intake
								reverence dose:89.03- adjusted: age, sex, occupation , calorie intake
								reverence dose:1.61- adjusted: age, sex, occupation , calorie intake
								reverence dose:89.03- adjusted: age, sex, occupation , calorie intake
20		79	197				.03	0.57(0.40-0.83)
		72	197			Nitrate_ mg/day	.06	0.48(0.33-0.70)
	Rick J.Jansen_2013_ M/F_USA_Ainimal sources	60	196	Pancrase__			.12	0.38(0.26-0.57)
		48	196				.26	0.26(0.17-0.40)
								reference dose:Q1:0.01-adjusted: cigarette smoking, pack-years, pack-years squared
21		23	147				0.06-0.179	1.31(0.60-2.85)
		52	147			NDMA_ micro/day	>0.179	1.86(0.87-3.95)
		28	134				1.06-1.60	1.17(0.57-2.38)
	Rogers, MA._1995_ M/F_USA_Food	43	151	Esophagus		Nitrite_ mg/day	>1.60	1.58(0.73-3.44)
								Reference dose: <1.06 - adjusted: age, gender, pack-years of cigarettes .drink alcohol. Energy intake. Ascorbic acid intake, body mass index. Level of education
		39	144			Nitrate_ mg/day	134-226	0.71(0.38-1.33)
		25	140				>226	0.44(0.24-0.93)
								Reference dose: <134 - adjusted: age, gender, pack-years of cigarettes .drink alcohol. Energy intake. Ascorbic acid intake, body mass index. Level of education
22	Taneja,P._2017_M/F_India_Water	41	24	Stomach__		Nitrate_ mg/l	<=45	1(0.98-1.01)
		37	132				>45	1.1(0.99-1.15)
								adjusted: age, gender, tobacco
23		27	57				0.02 - 0.07	1(0.7-2.3)
		39	57			Nitrite_ mg/day	0.08 to <0.16	1.2(0.9-3.2)
	Ward, M. H._2007_ M/F_maryland_Ainimal sources	52	57	Colorectal__			0.16-1.23	1.7(0.8-3.5)
		30	57				0.22 to <0.89	1.1(0.6-2.5)
								adjusted: age, gender, calories, smoking

		34	57		Nitrate and Nitrite_mg/day	0.89 to <1.86	1.3(1.0-3.9)	reference dose:0 to<0.22- adjusted: age, gender, calories, smoking
		57	57			1.86-12.28	2(1.0-1.8)	
24	Ward, M. H._2008_ M/F_USA_Animal sources	17	99	Esophagus_A	Nitrate and Nitrite_mg/day	3.8-<5.7	0.7(0.3-1.6)	reference dose<3.8- adjusted: year of birth, gender, body mass index, smoking, alcohol, total calories, vitamin A, folate, riboflavin, zinc, protein, carbohydrate
		28	99	denocarcinoma		5.7-<8.3	1.7(0.7-4.1)	
		39	100	a		8.3+	2.2(0.9-5.7)	
		31	99	Stomach_Dist		3.8-<5.7	1.6(0.8-3.2)	
		25	99	al_Adenocarci		5.7-<8.3	1.8(0.8-3.8)	
		29	100	noma		8.3+	1.6(0.7-3.7)	
	Ward, M. H._2008_ M/F_USA_Plant sources	28	102	Esophagus_A	Nitrite_mg/day	0.36-<0.52	0.52(0.5-2.3)	reference dose<0.36- adjusted: year of birth, gender, body mass index, smoking, alcohol, total calories, vitamin A, folate, riboflavin, zinc, protein, carbohydrate
		17	101	denocarcinoma		0.52-<0.67	0.6(0.2-1.3)	
		30	100	a		0.67+	1(0.4-2.4)	
		22	102	Stomach_Dist		0.36-<0.52	1.1(0.4-2.7)	
		29	101	al_Adenocarci		0.52-<0.67	0.8(0.3-2.2)	
		30	100	noma		0.67+	1.1(0.3-3.4)	
		27	99	Esophagus_A		16.9-<26.2	0.9(0.5-1.8)	
		18	99	denocarcinoma		16.2-<38.8	0.6(0.3-1.3)	
		24	100	a		>38.8	0.8(0.3-1.8)	
		28	99	Stomach_Dist		16.9-<26.2	1.2(0.6-2.5)	
		26	99	al_Adenocarci		26.2-<38.8	1.4(0.7-2.9)	
		26	100	noma		>38.8	1.6(0.7-3.6)	
	Ward, M. H._2008_M/F_USA_Water	12	55	Stomach_	Nitrate_mg/l	10	1(0.5-2.0)	reference dose= 0 years- adjusted: year of birth, gender, education, smoking, alcohol
		13	48	distal_Adenocarcinoma		10	1.1(0.5-2.3)	
		12	55	Esophagus_		>10	0.8(0.4-1.8)	
		15	48	Adenocarcinoma		>10	0.9(0.4-1.9)	
25	Zhang, T._2018_ M/F_Food	23	27	Esophagus	Nitrite_mg/day	3.73 -7.13	1.175(0.53-2.59)	reference dose: 0 - 3.7350 - adjusted: sex and age
	Zhang, T._2018_ M/F_Food	25	25	Esophagus	Nitrite_mg/day	7.13-17.32	1.373(0.61-3.05)	reference dose: 0 - 3.7350 - adjusted: sex and age
	Zhang, T._2018_ M/F_Food	31	19	Esophagus	Nitrite_mg/day	17.32-71.57	2.256(1.01-5.02)	reference dose: 0 - 3.7350 - adjusted: sex and age
26	Zheng, J._2019_ M/F_USA_Animal sources	234	234	Pancrease_	NDMA_	.33	0.97(0.74-1.28)	reference dose:Q1=0.18- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
		201	235			.43	0.87(0.65-1.15)	
		272	234			.74	1.17(0.89-1.54)	
		196	234		Nitrate_	2.46	0.68(0.52-0.90)	
		220	235			3.05	0.74(0.56-0.97)	
		245	234			4.24	0.82(0.62-1.08)	

Zheng, J. 2019_ M/F_USA_Food	121	234	NDMA_	.45	0.99(0.75-1.31)	diabetic, smoking, family history of pancreatic cancer
	168	235		.58	1.03(0.78-1.37)	reference dose:Q1=0.28- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	249	234		.99	1.03(0.78-1.37)	reference dose:Q1=0.37- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	226	234		.7	0.83(0.63-1.09)	reference dose:Q1=0.37- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	225	235		.99	0.79(0.60-1.04)	reference dose:Q1=0.37- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	215	234		1.55	0.68(0.51-0.91)	reference dose:Q1=0.37- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	236	234		34.37	0.93(0.71-1.23)	reference dose:Q1=21.67- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	192	235		45.54	0.72(0.55-0.96)	reference dose:Q1=21.67- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	271	234		73.29000000000001	1.07(0.81-1.41)	reference dose:Q1=21.67- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	227	234		.06	1.48(1.10-1.99)	reference dose:Q1=0.04- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	300	235		.08	1.97(1.48-2.64)	reference dose:Q1=0.04- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	272	234		.12	1.93(1.42-2.61)	reference dose:Q1=0.04- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	230	234		31.43	0.95(0.72-1.25)	reference dose:Q1=18.97- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	204	235		42.58	0.8(0.61-1.07)	reference dose:Q1=18.97- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	267	234		70.59	1.05(0.79-1.39)	reference dose:Q1=18.97- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
	267	234		70.59	1.05(0.79-1.39)	reference dose:Q1=18.97- adjusted: age, energy, red and processed meat intake, sex, race, education level, BMI, alcohol level, history of diabetic, smoking, family history of pancreatic cancer
27 Zhu, Y. 2014_ M/F_Canada_Food	335	502	Colorectal_	.07	1.06(0.83-1.37)	reference dose: 0.03- adjusted: age, sex, energy intake, BMI, smoking, alcohol, physical activity, education, income, NSAID, folate, supplement, province of residence
	354	493		.2	1.13(0.87-1.47)	
	336	513		.77	1.22(0.92-1.63)	
	407	441		2.29	1.42(1.03-1.96)	
	138	510	Colon_	.07	0.96(0.72-1.28)	
	123	488		.2	1.08(0.79-1.46)	
	132	519		.77	1.11(0.80-1.67)	
	129	446		2.29	1.58(0.80-1.67)	
	117	510	Rectum_	.07	1.06(0.77-1.45)	
	126	488		.2	1.19(0.86-1.66)	
	145	519		.77	1.15(0.81-1.63)	
	141	446		2.29	1.61(1.11-2.35)	
	117	510	Colon_	.07	1.06(0.77-1.45)	
	131	488		.2	1.24(0.89-1.72)	
	101	519		.77	0.97(0.68-1.39)	
	101	519		.77	0.97(0.68-1.39)	

	128	446			2.29	1.37(0.93-2.01)	
	117	496			.89	1.26(0.91-1.73)	
	126	520	Rectum_		1.12	1.2(0.84-1.71)	
	145	474			1.4	1.51(1.02-2.22)	
	141	455			1.92	1.45(0.94-2.24)	
	335	496			.89	1.07(0.83-1.38)	
	354	520	Colorectal_		1.12	0.99(0.75-1.30)	
	336	479			1.4	1.05(0.77-1.43)	
	407	450			1.92	1.09(0.77-1.54)	
	138	496		Nitrite_ mg/day	.89	1.15(0.86-1.54)	reference dose:0.65- adjusted: age, sex, energy intake, BMI, smoking, alcohol, physical activity, education, income, NSAID, folate, supplement, province of residence
	123	520	Colon_		1.12	0.91(0.66-1.26)	
	132	474	Proximal_		1.4	0.81(0.56-1.18)	
	129	455			1.92	0.95(0.63-1.43)	
	117	496			.89	0.97(0.70-1.34)	
	131	520	Colon_		1.12	0.93(0.65-1.32)	
	101	474	distal_		1.4	1.21(0.82-1.78)	
	128	455			1.92	1.32(0.85-2.04)	
	335	477			91.45	1.27(0.99-1.60)	
	354	488	Colorectal_		124.81	1.19(0.93-1.52)	
	336	481			169.59	1.17(0.91-1.51)	
	407	518			264.14	0.89(0.68-1.16)	
	117	480	Rectum_		91.45	1.12(0.83-1.53)	
	126	489			124.81	1.23(0.90-1.69)	
	145	479			169.59	1.34(0.96-1.85)	
	141	516			Nitrate_ mg/day	264.14	1.03(0.73-1.46)
	138	480	Colon_	91.45		1.25(0.93-1.66)	
	123	489	Proximal_	124.81		0.9(0.66-1.23)	
	132	479		169.59		1.06(0.78-1.46)	
	129	516		264.14		0.75(0.54-1.05)	
	117	480	Colon_	91.45		1.07(0.78-1.48)	
	131	489	distal_	124.81		1.24(0.90-1.71)	
	101	479		169.59		1.31(0.94-1.83)	
	128	516		264.14		1.01(0.71-1.45)	