

**Supplemental table 2: Crude <sup>1,2</sup> semen quality indicators in 155 men (338 semen samples) according to intake of different meat types from the Environment and Reproductive Health Study**

Meat intake [range, servings/d]	N <sup>3</sup>	Total sperm count	Sperm concentration	Progressive motility	Sperm morphology	Ejaculate volume
		<i>million</i>	<i>million/mL</i>	<i>% motile</i>	<i>% normal</i>	<i>mL</i>
<b>Total meat</b>						
Quartile 1 [0.00-0.96]	38	130 (100-169)	57.3 (44.2-74.3)	27.8 (22.3-33.3)	6.8 (5.5-8.2)	2.6 (2.2-3.1)
Quartile 2 [0.97-1.38]	39	132 (104-168)	49.9 (38.9-64.0)	25.6 (20.5-30.7)	6.3 (5.3-7.3)	2.9 (2.6-3.3)
Quartile 3 [1.40-1.80]	39	103 (79-134)	42.8 (32.2-56.9)	23.2 (18.8-27.7)	5.7 (4.8-6.7)	2.7 (2.3-3.1)
Quartile 4 [1.81-4.97]	39	116 (85-159)	47.7 (34.8-65.3)	28.7 (24.0-33.3)	6.1 (5.1-7.1)	2.7 (2.3-3.2)
<i>P</i> -trend		0.53	0.44	0.72	0.43	0.99
<b>Processed red meat <sup>4</sup></b>						
Quartile 1 [0.00-0.22]	39	118 (91-155)	51.2 (39.2-66.9)	26.5 (22.1-30.8)	7.2 (6.1-8.4)	2.7 (2.3-3.1)
Quartile 2 [0.24-0.36]	37	154 (123-193)	61.9 (49.3-77.7)	31.2 (24.9-37.6)	6.6 (5.4-7.8)	2.8 (2.4-3.1)
Quartile 3 [0.38-0.55]	39	133 (105-169)	50.4 (38.5-65.9)	24.2 (20.3-28.1)	5.5 (4.6-6.3)	2.9 (2.5-3.3)
Quartile 4 [0.56-2.79]	40	86 (65-114)	37.0 (27.6-49.6)	23.6 (19.0-28.3)	5.6 (4.8-6.5)	2.6 (2.2-3.0)
<i>P</i> -trend		0.06	0.05	0.19	0.02	0.87
<b>Unprocessed red meat <sup>5</sup></b>						
Quartile 1 [0.00-0.12]	44	116 (92-148)	48.3 (37.7-61.8)	24.0 (20.2-27.8)	6.1 (5.1-7.2)	2.7 (2.4-3.1)
Quartile 2 [0.16-0.22]	27	141 (107-184)	56.6 (42.2-76.0)	30.0 (22.1-37.9)	6.8 (5.5-8.2)	2.9 (2.3-3.4)
Quartile 3 [0.24-0.30]	42	127 (102-159)	54.5 (42.6-69.7)	28.2 (24.2-32.2)	6.3 (5.5-7.1)	2.6 (2.2-2.9)
Quartile 4 [0.36-1.29]	42	105 (76-144)	41.1 (29.8-56.7)	24.7 (20.0-29.4)	5.9 (4.9-6.9)	2.8 (2.4-3.3)
<i>P</i> -trend		0.49	0.35	0.93	0.64	0.72
<b>Organ meat <sup>6</sup></b>						
None	125	118 (102-136)	49.1 (42.2-57.1)	25.8 (23.2-28.5)	5.9 (5.4-6.5)	2.7 (2.5-2.9)
Any [0.02-0.94]	30	128 (94-174)	49.6 (37.2-66.2)	28.5 (23.4-33.5)	7.6 (6.4-8.8)	2.9 (2.4-3.3)
<i>P</i> -value (comparing two groups)		0.64	0.95	0.36	0.01	0.60
<b>Poultry <sup>7</sup></b>						
Quartile 1 [0.00-0.18]	42	106 (82-137)	47.6 (36.8-61.6)	26.8 (21.9-31.7)	7.1 (6.0-8.2)	2.6 (2.2-3.0)
Quartile 2 [0.22-0.36]	37	146 (115-185)	51.3 (38.9-67.7)	25.5 (21.3-29.6)	5.9 (5.0-6.8)	3.1 (2.7-3.5)
Quartile 3 [0.42-0.59]	36	111 (82-150)	46.6 (33.9-64.1)	25.6 (20.0-31.2)	5.7 (4.6-6.7)	2.7 (2.3-3.1)
Quartile 4 [0.65-2.82]	40	122 (95-158)	51.5 (40.1-66.1)	27.3 (23.2-31.4)	6.1 (5.1-7.1)	2.7 (2.3-3.0)

<i>P</i> -trend	0.52	0.66	0.76	0.46	0.72
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<sup>1</sup> Values are mean (95% CIs). \* Different from men in the lowest category,  $P < 0.05$ .

<sup>2</sup> Adjusted for total energy intake

<sup>3</sup> Number of participants per category of meat intake

<sup>4</sup> Includes hamburgers, hot dogs, bacon, and other processed meats (e.g. salami, bologna, etc.)

<sup>5</sup> Includes beef, pork, and ham consumed as mixed dish or main dish

<sup>6</sup> Includes liver and chicken liver

<sup>7</sup> Includes chicken or turkey cooked with or without skin, as main dish, sandwich, or frozen dinner