

Table 5-15. Dietary effects in passive smoking studies of lung cancer in females

Study	Passive ¹ RR	Diet entity	Lung cancer relative risk by dietary intake quartile, tertile, etc. <u>Lowest</u> <u>Next</u> <u>Next</u> <u>Highest</u>	Remarks
CORR ²	2.07	Carotene Vitamin A	No data given No data given	Never-smokers. Carotene and total vitamin A were examined. "Except for gender, age, and study area, no confounding was detected."
GAO	1.19	Carotene rich Retinol rich Vitamin A index	1.0 1.0 1.3 2.0 ³ 1.0 1.1 1.0 1.1 1.0 1.6 ³ 1.2 2.0 ³	Patterns were similar for smokers and nonsmokers. Passive RR was not adjusted for diet, possibly because the trends were the opposite of those in the literature.
HIRA ⁴	1.53	Green-yellow veg. Fish Meat Milk Soy paste soup	- 1.0 ⁵ - 0.86 ⁶ - 1.0 - 1.87 ³ - 1.0 - 0.62 - 1.0 - 1.30 - 1.0 - 0.93	Never-smokers. Lung cancer risks for wives whose husbands were former smokers plus 1-19 cig./day smokers and 20+ cig./day smokers relative to never-smokers were 1.50 and 1.79 when adjusted for wives' age (Hirayama, 1984). They ranged from 1.53 to 1.69 and 1.66 to 1.91 when adjusted for wives' age, husband's occupation, and each of the various dietary factors.
KALA	1.92	β-carotene Vegetables Fruits Vitamin C Retinol (preformed)	1.0 - - 1.01 1.0 - - 1.09 1.0 - - 0.33 ³ 1.0 - - 0.67 1.0 - - 1.31	Never-smokers. Controlled for age, years of schooling, interviewer, and total energy intake. No confounding was observed between the passive smoking effect and the effect of fruits, or between that of fruits and that of vegetables. Passive risk increased to 2.11 when adjusted for fruit consumption.

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Table 5-15. (continued)

Study	Passive ¹ RR	Diet entity	Lung cancer relative risk by dietary intake				Remarks
			quartile, tertile, etc.	Lowest	Next	Next	
KOO ⁷	1.55	Leafy green veg.	-	1.0	0.49	0.49	Never-smokers. Values are adjusted for age, numbers of live births, and schooling. Diet items are selected to compare with those in other studies. No calculation is shown of confounding effect of diet on the passive smoking risk either in Koo et al. (1987), Koo (1988), Koo et al. (1988), or Koo (1989). Fresh fruit, vitamin C, fresh fish, and retinol showed statistically significant trends.
		Carrots	-	1.0	1.31	0.51	
		β-carotene	-	1.0	0.73	0.73	
		Fresh fruit	-	1.0	0.81	0.42	
		Vitamin C	-	1.0	0.55	0.47	
		Fresh fish	-	1.0	0.46	0.35	
		Smoked/cured meat/poultry	-	1.0	0.82	0.92	
		Milk	-	1.0	1.66	0.92	
		Retinol	-	1.0	0.55	0.42	
SHIM	1.08	Green-yellow veg.	-	1.0 ⁸	-	0.9 ⁸	Never-smokers. No dose response was found. No difference between cases and controls was found regarding intake of green-yellow vegetables.
		Fruit	-	1.0	-	1.2	
		Milk	-	1.0	-	1.0	
		Fish, pork, or lamb	-	1.0	-	1.0	
		Chicken	-	1.0	-	0.7	
SVEN	1.26	Carrots	1.0 ⁹	0.7 ¹⁰	-	0.6 ^{3,11}	Adjusted for age, smoking, cumulative Rn exposure and municipality. The inclusion of carrot consumption in the regression model "had only a slight effect on the risk estimates of the other exposure variables." See Svensson (1988).

5-58

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Table 5-15. (continued)

Study	Passive ¹ RR	Diet entity	Lung cancer relative risk by dietary intake				Remarks
			quartile, tertile, etc. <u>Lowest</u> <u>Next</u> <u>Next</u> <u>Highest</u>				
WU	1.41	β-carotene	1.0	0.52	0.32	0.40 ³	For adenocarcinoma. Risks of 0.67, 1.0, and 0.63, high calf versus low calf, were observed for β-carotene, preformed vitamin A, and dairy and eggs for squamous cell carcinoma. Adjusted for cigarettes smoked per day. No adjustment is shown to the passive risk for diet.
		Preformed Vit. A	1.0	0.92	0.50	0.83	
		Dairy products and eggs	1.0	0.82	0.63 ³	0.37 ³	
WUWI	0.79	Vegetables					Adjusted for age, education, personal smoking, and study area. Eight variables other than smoking were thought to have a significant effect on lung cancer risk. Diet variables were not included in this list, and no adjustment to the passive risk was made for them.
		high-carotene	1.0	1.1	1.0	0.9	
		low-carotene	1.0	1.0	1.0	0.8	
		Fresh fruit	1.0	1.0	1.4 ³	1.5 ³	
Animal protein	1.0	1.6 ³	1.6 ³	2.3 ³			

5-59

¹From Table 5-5.

²As reanalyzed by Dalager et al. (1986).

³Statistically significant at the p = 0.05 level.

⁴Case-control study nested in Hirayama's cohort study, ages 40-69 only (Hirayama, 1989).

⁵Less than daily.

⁶Daily.

⁷From Koo (1988).

⁸Cutoffs various.

⁹Less than once per week.

¹⁰Once per week.

¹¹More than once per week.