

Table S1 - Characteristics of individual studies in the International Head and Neck Cancer Epidemiology (INHANCE) Consortium pooled data including dietary information.

Study	Recruitment period	Source (cases/controls)	Participation rate, % (cases/controls)	Age eligibility (years)	Number of subjects (cases/ controls)	Questionnaire, administration, reference period for the recall	Frequency	Serving size ^a	# Food items (including non-alcoholic beverages)	Condiments	Information on carotenoids
Italy Multicenter	1990-1999	Hospital/Hospital - unhealthy	>95/>95	18-80	1261/2716	FFQ, interviewer-administered, 2 year before disease	Raw data	S/M/L	78 (including 6 non-alcoholic beverages)	12	β-carotene equivalents, β-cryptoxanthin, Lycopene, Lutein plus zeaxanthin, Total carotenoids
Switzerland	1991-1997	Hospital/Hospital-unhealthy	>95/>95	<80	516/883	FFQ, interviewer-administered, 2 year before disease	Raw data	S/M/L	78 (including 6 non-alcoholic beverages)	12	β-carotene equivalents, β-cryptoxanthin, Lycopene, Lutein plus zeaxanthin, Total carotenoids
Los Angeles, CA, USA	1999-2004	Cancer registry/ Neighborhood	49/68	18-65	417/1005	FFQ, interviewer-administered, during the past year	Raw data	M	73 (including 11 non-alcoholic beverages)	12	β-cryptoxanthin, Lycopene, Lutein plus zeaxanthin, Total carotenoids
Boston, MA, USA	1999-2004	Hospital/ Residential records	88.7/48.7	≥18	584/659	FFQ, self-administered, during the past year	Categories	M	129 (including 12 non-alcoholic beverages)	18	β-cryptoxanthin, Lycopene, Lutein plus zeaxanthin, Total carotenoids
New York, MSKCC, USA	1992-1994	Hospital/Blood donors	NA	NA	134/169	FFQ–diet history, self-administered, during the past year ^c	Raw data	S/M/L	88 (including 5 non-alcoholic beverages)	6	β-cryptoxanthin, Lycopene, Lutein plus zeaxanthin, Total carotenoids
Milan, Italy	2006-2009	Hospital/Hospital-unhealthy	>95/>95	18-80	367/750	FFQ, interviewer-administered, 2 years before disease	Raw data	S/M/L	78 (including 6 non-alcoholic beverages)	12	β-carotene equivalents, β-cryptoxanthin, Lycopene, Lutein plus zeaxanthin, Total carotenoids
Buffalo, NY, USA	1982-1998	Hospital/Hospital	~50/~50	NA	632/1254	FFQ, self-administered, during the past few years	Categories	M	56 (including 12 non-alcoholic beverages)	4	β-cryptoxanthin, Lycopene, Lutein plus zeaxanthin, Total carotenoids
North Carolina, USA	2002-2006	Cancer registry/ DMV files	82/61	20-80	1368/1396	FFQ, interviewer-administered, during the past year	Categories	M	57 (including 5 non-alcoholic beverages) questions	11	β-carotene equivalents, β-cryptoxanthin, Lycopene, Lutein plus zeaxanthin, Total carotenoids
Japan	2001-2005	Cancer hospital/ Hospital-unhealthy	97/97	20-79	526/3102	FFQ, self-administered, during the past year	Categories	NA	51 (including 3 non-alcoholic beverages)	3	β-carotene equivalents
US Multicenter	1983-1984	Cancer registry/ Random digit dialing and health care rosters	75/76	18-79	1114/1268	FFQ, interviewer-administered, during the past year	Raw data	S/M/L	84 (including 13 non-alcoholic beverages)	9	β-cryptoxanthin, Lycopene, Lutein plus zeaxanthin, Total carotenoids