Table 1. Biomedical and other databases searched.

Database	Years
Allied & Complementary Medicine	1984-2001 Feb
Biosis Previews	1969-2002 Jan
CAB Health	1983-2001 Dec
CancerLit	1975-2001 Oct
Cochrane Library Database of Systematic Reviews Controlled Trials Register	1922- 2001
Elsevier Biobase	1994-2002 Jan
Embase	1974-2002 Jan
MANTIS	1880-2001 Oct
Medline	1966-2002 Jan
SciSearch Cited Ref Sci	1974-1989 Dec
Social SciSearch(R)	1972-2002 Jan
SciSearch Cited Ref Sci	1990-2002 Jan
TGG Health&Wellness DB	1976-2002 Dec

Table 2. Additional search items for antioxidants studied.

Vitamin C	Vitamin E	Co-enzyme Q-10
ascorbic acid	alpha tocopherol	ubiquinone
dehydroascorbic acid		ubidecarenone
ascorbate		ubidecarenon
antiscorbutic vitamin		isoprostane
cevitamic acid		

Table 3. Summary of search strategy.

Name	Description	Number of References
Search 1.1	Focused search on intervention (Co-enzyme Q-10), disease state, and human in on-line databases.	176
Search 1.2	Search on Cochrane databases for intervention (Co-enzyme Q-10).	111
Search 2.1	Focused search on intervention (Vitamin C), disease state, and human in on-line databases.	1987
Search 2.2	Search on Cochrane databases for intervention (Vitamin C) and disease state.	92
Search 3.1	Focused search on intervention (Vitamin E), disease state, type of therapy, and human in on-line databases.	1990
Search 3.2	Search on Cochrane databases for intervention (Vitamin E) and disease state.	112
Search 4.1	Search on synonyms for Co-enzyme Q-10 in on-line databases.	127
Total non-deduplicated references found:		4595

Table 4. Risk Ratios for Death Outcome for ATBC Trial.

Study	Author, Year	Type of death	Intervention	Sample Size	FU Time	# of deaths	RR (95% CI)
ATBC	Albanes, 1996[24]	Lung cancer	AT	7286	6.1 yrs	125	0.93 (0.73, 1.19)
			AT+BC	7278		154	1.15 (0.91, 1.45)
			Placebo	7287		134	
	Heinonen, 1998[30]	Prostate cancer	AT	7286	6.1 yrs	11	0.61 (0.29, 1.29)
			AT+BC	7278		12	0.67 (0.32, 1.38)
			Placebo	7287		18	
	Albanes, 2000[25]	Colorectal cancer	AT	7286	6.1 yrs	12	1.09 (0.48, 2.47)
			AT+BC	7278		13	1.18 (0.53, 2.64)
			Placebo	7287		11	
	Virtamo, 2000[38]	Urothelial cancer	AT	7286	6.1 yrs	6	1.20 (0.37, 3.93)
			AT+BC	7278		8	1.60 (0.52, 4.89)
			Placebo	7287		5	
	Virtamo, 2000[38]	Renal cell cancer	AT	7286	6.1 yrs	11	0.79 (0.36, 1.73)
			AT+BC	7278		10	0.72 (0.32, 1.61)
			Placebo	7287		14	
	Albanes, 1996,[24] 2000[25]; Virtamo, 2000[38]	Combined cancer (lung, colorectal, urothelial, and renal cell)	AT	7286	6.1 yrs	165	0.91 (0.74, 1.12)
			AT+BC	7278		197	1.08 (0.89, 1.32)
			Placebo	7287		182	
	Alpha-Tocopherol, 1994[39]	All cause	AT	14564	6.1 yrs	1798	1.02 (0.96, 1.08)
			no AT	14569		1768	
		Lung cancer	AT	14564	6.1 yrs	285	1.02 (0.87, 1.20)
			no AT	14569		279	
	Rautalahti, 1999[37]	Pancreas cancer	AT	14564	6.1 yrs	49	1.44 (0.93, 2.23)
			no AT	14569		34	

Additional studies for which risk ratios could not be calculated are discussed in the text and displayed in the Evidence Table.
AT: alpha-tocopherol; BC: beta-carotene; CI: confidence interval; RR: risk ratio

Table 5. Risk Ratios for Death Outcome for Linxian and Other Trials.

Study	Author, Year	Type of death	Intervention	Sample Size	FU Time	# of deaths	RR (95% CI)
Linxian Dysplasia	Li, 1993[32]	All cause	Supplement	1657	6 yrs	157	0.94 (0.77, 1.16)
			Placebo	1661		167	
	Li, 1993[32]	Cancer	Supplement	1657		87	0.98 (0.74, 1.31)
			Placebo	1661		89	
	Li, 1993[32]	Esophageal Cancer	Supplement	1657		38	0.87 (0.56, 1.33)
			Placebo	1661		44	
Linxian General Population	Blot, 1993[40]	All cause	*A+B*	3701	5.25 yrs	265	0.94 (0.80, 1.11)
			A+C	3694		296	1.05 (0.90, 1.23)
			A+D	3703		250	0.89 (0.75, 1.05)
			B+C	3691		268	0.95 (0.81, 1.12)
			B+D	3699		263	0.93 (0.79, 1.10)
			C+D	3705		249	0.88 (0.75, 1.04)
			A+B+C+D	3712		256	0.91 (0.77, 1.07)
			Placebo	3679		280	
			C	14802		1069	1.01 (0.93, 1.10)
			No *C*	14782		1058	
			D	14819		1018	0.91 (0.84, 0.99)
			No *D*	14765		1109	
	Blot, 1993[40]	Cancer death	*A+B*	3701	5.25 yrs	94	0.87 (0.66, 1.15)
			A+C	3694		121	1.13 (0.87, 1.45)
			A+D	3703		81	0.75 (0.57, 1.00)
			B+C	3691		101	0.94 (0.72, 1.23)
			B+D	3699		103	0.96 (0.73, 1.25)
			C+D	3705		90	0.84 (0.63, 1.10)
			A+B+C+D	3712		95	0.88 (0.67, 1.16)
			Placebo	3679		107	
			C	14802		407	1.06 (0.92, 1.21)
			No *C*	14782		385	
			D	14819		369	0.87 (0.76, 1.00)
			No *D*	14765		423	
Other trials	Lamm, 1994[31]	All cause	Megadose vitamins	35	45 mos	8	0.86 (0.37, 2.01)
			RDA	30		8	
	MRC/BHF, 2002[34]		Vitamins	10269	5 yrs	1446	1.04 (0.97, 1.11)
	Nutr Rev, 1985[35]	All cause	*C*	25	1 yr	51	1.04 (0.69, 1.57)
			Placebo	23		49	
	Poulter, 1984[36]	All cause	*C*	27	5 yrs	12	1.52 (0.72, 3.23)
			Control	24		7	

Additional studies for which risk ratios could not be calculated are discussed in the text and displayed in the Evidence Table.

A: retinol plus zinc; B: riboflavin plus niacin; C: vitamin C (ascorbic acid) plus molybdenum; CI: confidence interval; D: beta-carotene plus vitamin E and selenium; RR: risk ratio

Table 6. Risk Ratios for New Tumors for ATBC Trial.

Study	Lead Author, Yr	Type of Tumor	Intervention	Sample size	FU time	# of patients with new tumor	RR (95% CI)
ATBC	Albanes, 1996[24]	Lung cancer	AT	7286	6.1 yrs	204	0.98 (0.81, 1.19)
			AT+BC	7278		240	1.16 (0.96, 1.39)
			Placebo	7287		208	
	Albanes, 2000[25]	Colorectal cancer	AT	7286	6.1 yrs	29	0.78 (0.48, 1.27)
			AT+BC	7278		30	0.81 (0.50, 1.31)
			Placebo	7287		37	
	Heinonen, 1998[30]	Prostate cancer	AT	7286	6.1 yrs	43	0.64 (0.44, 0.94)
			AT+BC	7278		56	0.84 (0.59, 1.19)
			Placebo	7287		67	
	Rautalahti, 1999[37]	Pancreas cancer	AT	7286	6.1 yrs	25	0.96 (0.56, 1.66)
			AT+BC	7278		26	1.00 (0.58, 1.72)
			Placebo	7287		26	
			AT	14564		51	1.34 (0.88, 2.04)
			no AT	14569		38	
	Virtamo, 2000[38]	Urothelial cancer	AT	7286	6.1 yrs	47	1.27 (0.83, 1.95)
			AT+BC	7278		42	1.14 (0.73, 1.77)
			Placebo	7287		37	
	Virtamo, 2000[38]	Renal cell cancer	AT	7286	6.1 yrs	27	1.00 (0.59, 1.70)
			AT+BC	7278		27	1.00 (0.59, 1.71)
			Placebo	7287		27	
	Albanes 1996[24] and 2000,[25] Heinonen, 1998,[30] Rautalahti, 1999,[37] Virtamo, 2000[38]	Combined types of tumor: (lung, colorectal, prostate, pancreas, urothelial and renal cell)	AT	7286	6.1 yrs	375	0.93 (0.81, 0.81)
			AT+BC	7278		421	1.05 (0.92, 1.20)
			Placebo	7287		402	
	Alpha-Tocopherol, 1994[39]	Lung cancer	AT	14564	6.1 yrs	433	0.98 (0.86, 1.11)
			no AT	14569		443	
	Varis, 1998[45]	Carcinoma	AT	321	6.1 yrs	2	1.04 (0.15, 7.32)
			BC	329		3	1.52 (0.26, 9.03)
			AT+BC	361		4	1.84 (0.34, 10.01)
			Placebo	333		2	

Additional studies for which risk ratios could not be calculated are discussed in the text and displayed in the evidence table.

AT: alpha-tocopherol; BC: beta-carotene; CI: confidence interval; FU: follow-up; RR: risk ratio

Table 7. Risk Ratios for New Tumor Outcome for Linxian and Other Trials

Study	Lead Author, Year	Type of Tumor	Intervention	Sample size	*FU time*	# of patients with new tumor	RR (95% CI)
Linxian Dysplasia	Dawsey, 1994[43]	Esophageal cancer	Supplement	392	30 mos	16	0.78 (0.41, 1.49)
			Placebo	362		19	
			Supplement	195	6 yrs	8	1.53 (0.51, 4.58)
			Placebo	186		5	
	Dawsey, 1994[43]	Gastric cancer	Supplement	43	30 mos	13	1.63 (0.75, 3.52)
			Placebo	43		8	
			Supplement	202	6 yrs	18	0.91 (0.49, 1.68)
			Placebo	194		19	
	Dawsey, 1994[43]	Overall biopsy	Supplement	400	30 mos	29	0.99 (0.60, 1.64)
			Placebo	368		27	
			Supplement	202	6 yrs	23	0.92 (0.54, 1.57)
			Placebo	194		24	
	Li, 1993[32]	All cancer	Supplement	1657	6 yrs	227	1.03 (0.87, 1.22)
			Placebo	1661		221	
	Li, 1993[32]	Esophageal cancer	Supplement	1657	6 yrs	123	0.96 (0.76, 1.22)
			Placebo	1661		128	
	Li, 1993[32]	Stomach cancer	Supplement	1657	6 yrs	96	1.19 (0.89, 1.58)
			Placebo	1661		81	
Linxian General Population	Taylor, 1994[12]	Esophageal cancer	*C*	201	6 yrs	4	1.18 (0.27, 5.20)
			No *C*	178		3	
			D	173		3	0.71 (0.17, 2.95)
			No *D*	206		5	
	Taylor, 1994[12]	Gastric cancer	*C*	205	6 yrs	6	2.71 (0.55, 13.25)
			No *C*	185		2	
			D	176		4	1.22 (0.31, 4.79)
			No *D*	214		4	
Other Trials	Lamm, 1994[31]		Megadose vitamins	35	6 yrs	14	0.50 (0.32, 0.78)
			RDA	30		24	
	MRC/BHF, 2002[34]		Vitamins	10269	5 yrs	800	0.98 (0.89, 1.08)
			Placebo	10267		817	

Additional studies for which risk ratios could not be calculated are discussed in the text and displayed in the Evidence Table.

C: vitamin C (ascorbic acid) plus additional vitamins; CI: confidence interval; D: vitamin D; FU: follow-up; RR: risk ratio

Table 8. Risk Ratios for Polyps Outcome for Vitamins C + E versus Placebo

Article	Intervention	Total n	Risk Ratio	95% CI	
Greenberg, 1994[47]	C+E only	751	1.06	(0.82,	1.37)
McKeown-Eyssen, 1988[49]	C+E only	137	0.82	(0.57,	1.18)

C: vitamin C (ascorbic acid); CI: confidence interval; E: vitamin E (alpha-tocopherol)

Table 9. Risk Ratios for Polyps Outcome for the use of vitamins C + E with carotenoids versus placebo: Pooled Results

Article	Intervention	Total n	Risk Ratio	95% CI	
Greenberg, 1994[47]	C+AT+BC	751	1.04	(0.79,	1.36)
Hofstad, 1998[48]	C+AT+BC+Ca	93	0.71	(0.50,	1.01)
Roncucci, 1993[50]	C+AT+A	209	0.16	(0.06,	0.43)
Pooled Random Effects Estimate			0.60[(1)]	(0.31,	1.16)

[(1)] Chi-squared test of heterogeneity p-value = 0.001

A: vitamin A; AT: alpha-tocopherol; BC: beta-carotene; C: vitamin C (ascorbic acid); Ca: calcium; CI: confidence interval