Appendix

Figure 1. Cumulative meta-analysis—Cardiovascular disease mortality

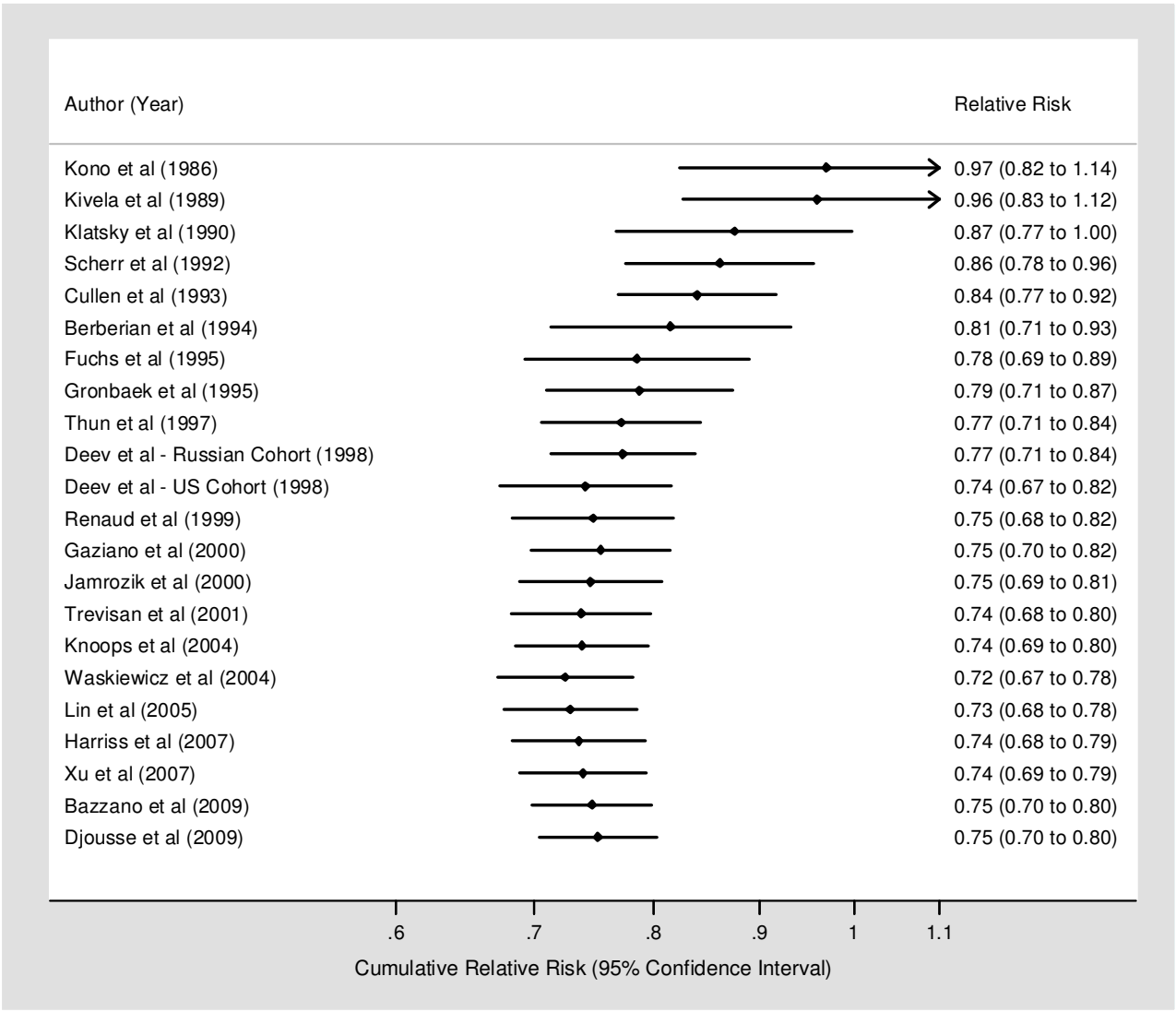

Figure 2. Cumulative meta-analysis—Incident coronary heart disease

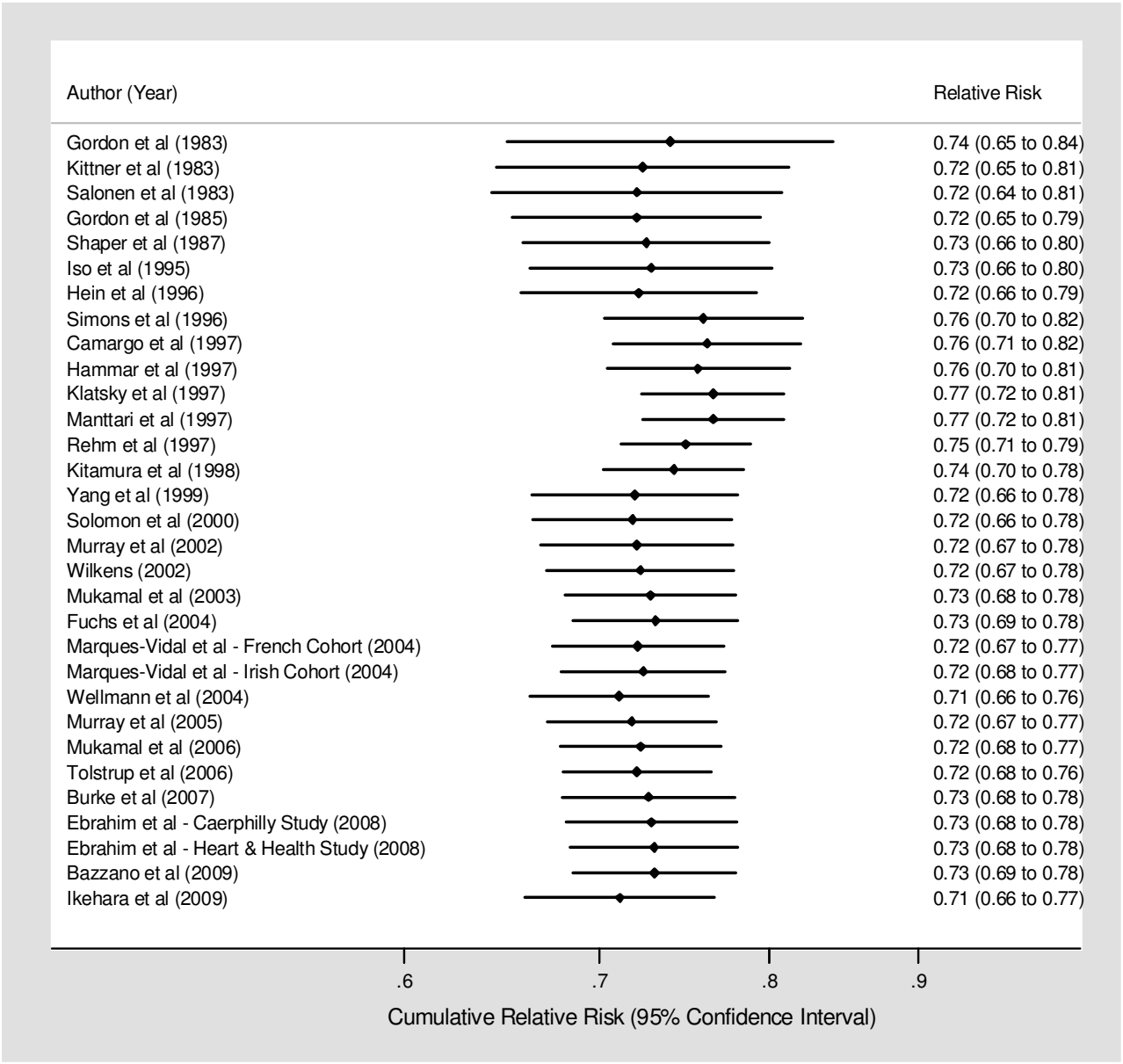

Figure 3. Cumulative meta-analysis—Coronary heart disease mortality

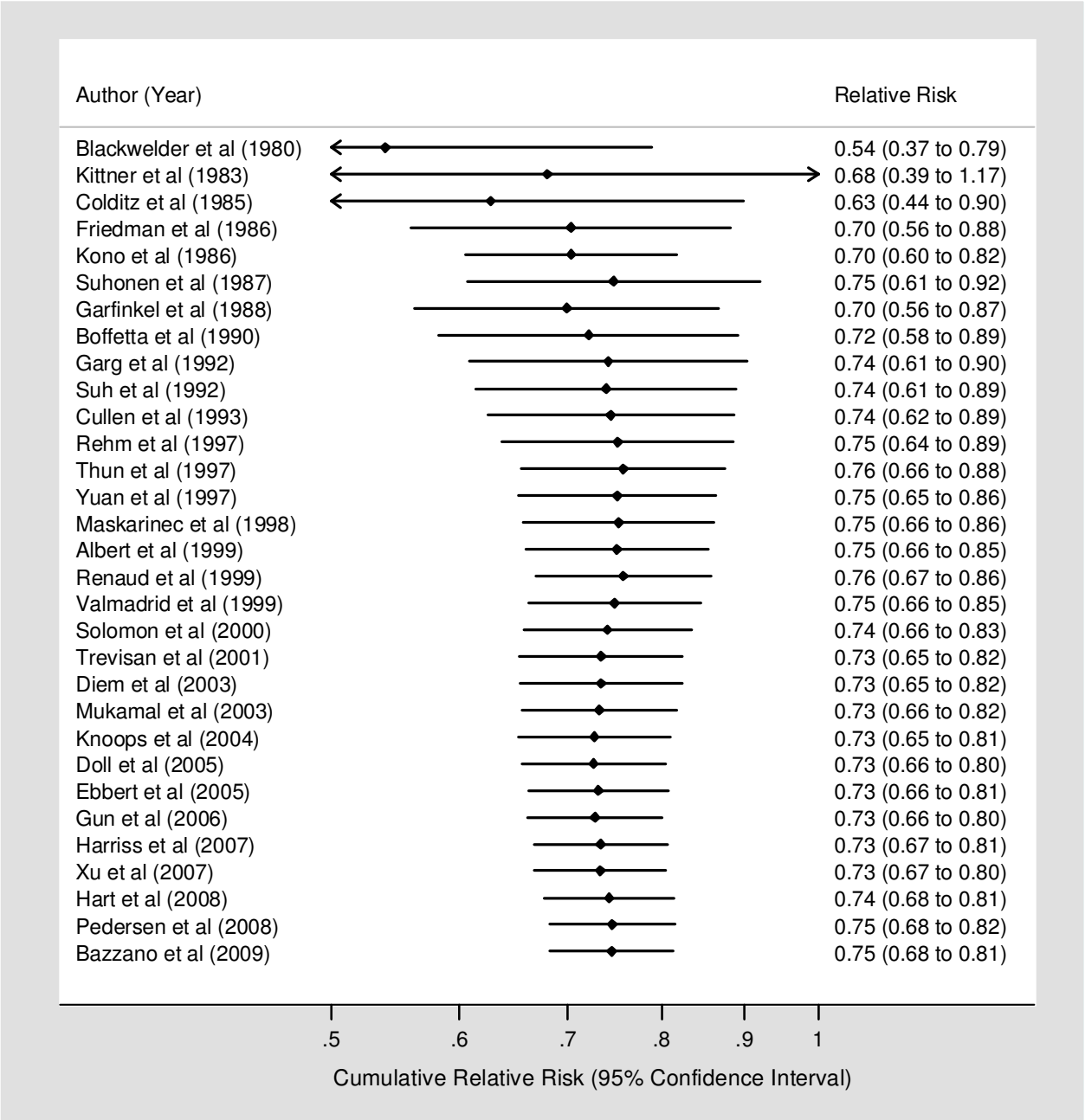

Table 1. Confounding factors and methods for adjustment (cardiovascular disease mortality)

Source	Method for adjustment	Measure of effect	Confounding factors
Bazzano et al (2009)	Proportional Hazards Regression	Relative Risk	Age, body mass index, average systolic blood pressure, physical activity, cigarette smoking, diabetes education, urban or rural residence, and living in North China
Berberian et al (1994)	Proportional Hazards Regression	Relative Risk	Age, body mass index, serum cholesterol, systolic blood pressure, diastolic blood pressure, pulse rate, cigarette smoking, history of antihypertension drug use
Cullen et al (1993)	Proportional Hazards Regression	Relative Risk	Age, sex, occupation, smoking, blood pressure, probable or suspected coronary heart disease, forced expiratory volume, diabetes, cholesterol, uric acid, treatment for hypertension
Deev et al (1998)	Proportional Hazards Regression	Hazard Ratio	Education, heart rate, total cholesterol, body mass index
Djousse et al (2009)	Proportional Hazards Regression	Hazard Ratio	Age, body mass index, smoking, physical activity, fruit and vegetable intake, menopausal status, family history of premature myocardial infarction, treatment for hypertension, systolic blood pressure, history of diabetes mellitus, hemoglobin A1c, high-sensitivity C-reactive protein, fibrinogen, soluble intercellular adhesion molecules, high-density and low-density lipoprotein cholesterol, triglycerides, treatment for hypercholesterolemia
Fuchs et al (1995)	Proportional Hazards Regression	Relative Risk	Age, smoking status, body mass index, regular aspirin use, regular vigorous exercise, high plasma cholesterol level, diabetes, hypertension, myocardial infarction in a parent at ≤60 years of age, past or present oral-contraceptive use, menopausal status, past or present postmenopausal hormone use, energy-adjusted intake of dietary fiber and saturated fat
Gaziano et al (2000)	Proportional Hazards Regression	Relative Risk	Age, smoking, diabetes, exercise, body mass index
Gronbaek et al (1995)	Multiple Poisson Regression	Relative Risk	Age, sex, intakes of beer, wine and spirits, first order interactions between these variables
Harriss et al (2007)	Proportional Hazards Regression	Hazard Ratio	Age, country of birth, smoking, total daily energy, fruit intake, saturated fat intake
Jamrozik et al (2000)	Proportional Hazards Regression	Hazard Ratio	Sex, age

Kivela et al (1989)	Multiple Logistic Regression	Odds Ratio	Age, area, serum cholesterol, systolic blood pressure, body mass index, smoking status, forced expiratory volume, blood hemoglobin
Klatsky et al (1990)	Proportional Hazards Regression	Relative Risk	Age, sex, race, smoking, body mass index, marital status, education
Knoops et al (2004)	Proportional Hazards Regression	Hazard Ratio	Diet, physical activity, smoking, age, sex, number of years of education, body mass index, study
Kono et al (1986)	Multiple Logistic Regression	Relative Risk	Age, smoking
Lin et al (2005)	Proportional Hazards Regression	Relative Risk	Age, body mass index, education, cigarette smoking, exercise, history of diabetes, history of hypertension
Renaud et al (1999)	Proportional Hazards Regression	Relative Risk	Age, smoking, education, body mass index
Scherr et al (1992)	Multiple Logistic Regression	Relative Risk	Sex, age, current smoking, one or more limitations in activities of daily living, mental status score, history of hypertension, history of diabetes
Thun et al (1997)	Proportional Hazards Regression	Relative Risk	Education, body mass index, smoking, a crude index of fat consumption, use or nonuse of estrogen-replacement therapy in women
Trevisan et al (2001)	Proportional Hazards Regression	Relative Risk	Age, current smoking
Waskiewicz et al (2004)	Proportional Hazards Regression	Relative Risk	Age, screening, cigarette smoking, body mass index, level of education, total cholesterol level, ischemic heart disease symptoms at baseline examination, systolic blood pressure, health status self-assessment
Xu et al (2007)	Proportional Hazards Regression	Hazard Ratio	Age, education, body mass index, history of any cancer, chronic bronchitis, diabetes, hypertension, coronary heart disease, stroke

Table 2. Confounding factors and methods for adjustment (incident coronary heart disease events)

Source	Method for adjustment	Measure of effect	Confounding factors
Bazzano et al (2009)	Proportional Hazards Regression	Relative Risk	Age, body mass index, average systolic blood pressure, physical activity, cigarette smoking, diabetes education, urban or rural residence, and living in North China
Burke et al (2007)	Proportional Hazards Regression	Hazard Ratio	Age, sex, accessibility to alcohol, smoking, exercise
Camargo et al (1997)	Proportional Hazards Regression	Relative Risk	Age, Aspirin use, Beta carotene use, smoking, exercise at least once per week, diabetes mellitus, parental history of myocardial infarction
Ebrahim et al (2008)	Proportional Hazards Regression	Relative Risk	None
Fuchs et al (2004)	Proportional Hazards Regression	Hazard Ratio	Age, cigarette-years of smoking, body mass index, low density lipoprotein and high density lipoprotein cholesterol level, waist-to-hip ratio, educational level, income, sport index, diabetes mellitus, systolic blood pressure, use of anti-hypertensive medication
Gordon et al (1983)	Multiple Logistic Regression	Relative Risk	Age, systolic blood pressure, cigarettes/day, relative weight, Sf 0-20 and Sf 20-400 lipoproteins
Gordon et al (1985)	Multiple Logistic Regression	Relative Risk	None
Hammar et al (1997)	Multiple Logistic Regression	Relative Risk	Age, country of residence, calendar year, smoking
Hein et al (1996)	Multiple Logistic Regression	Relative Risk	Age, hypertension, tobacco, high density lipoprotein cholesterol, systolic blood pressure
Ikehara et al (2009)	Proportional Hazards Regression	Hazard Ratio	Age, smoking, body mass index, history of hypertension, history of diabetes, sports at leisure time, levels of mental stress, presence of flushing, presence of job, marital status, medical checkups, area
Iso et al (1995)	Proportional Hazards Regression	Relative Risk	Age, hypertension category, serum total cholesterol level, cigarette smoking, diabetes mellitus
Kitamura et al (1998)	Proportional Hazards Regression	Relative Risk	Age, serum total cholesterol, cigarette smoking, body mass index, left ventricular hypertrophy, history of diabetes mellitus
Kittner et al (1983)	Multiple Logistic Regression	Odds Ratio	Age, number of cigarettes currently smoked, physical activity index, location of residence

Klatsky et al (1997)	Proportional Hazards Regression	Relative Risk	Age, race, body mass index, cigarette smoking, marital status, education, coffee use, baseline coronary heart disease risk
Manttari et al (1997)	Proportional Hazards Regression	Relative Risk	Age, smoking
Marques-Vidal et al (2004)	Multiple Logistic Regression	Relative Risk	Age, marital status, educational level, vigorous exercise, body mass index, systolic blood pressure, diastolic blood pressure, total cholesterol, triglycerides, smoking status, anti-hypertensive drug treatment, hypolipidaemic drug treatment, center
Mukamal et al (2003)	Multiple Logistic Regression	Relative Risk	Age, smoking status, body mass index, diabetes mellitus, hypertension, hypercholesterolemia, parental history of myocardial infarction, aspirin use, physical activity, intake of energy, energy adjusted intake of folate, vitamin E, saturated fat, trans fat, dietary fiber
Mukamal et al (2006)	Proportional Hazards Regression	Relative Risk	Age, sex, race, education, marital status, smoking, exercise intensity, depression scale, frequent aspirin use, body mass index, diabetes mellitus
Murray et al (2002)	Proportional Hazards Regression	Hazard Ratio	Age, education level, married status, cigarette smoking
Murray et al (2005)	Proportional Hazards Regression	Hazard Ratio	Age group, randomized group assignment, forced vital capacity percent predicted, body mass index, level of education, married status, cigarettes per day
Rehm et al (1997)	Proportional Hazards Regression	Relative Risk	Age
Salonen et al (1983)	Multiple Logistic Regression	Relative Risk	Age, smoking, serum cholesterol, serum triglycerides, diastolic blood pressure, interaction between spirit and beer intake
Shaper et al (1987)	Multiple Logistic Regression	Relative Risk	Age, smoking, social class
Simons et al (1996)	Proportional Hazards Regression	Hazard Ratio	Age, prior history of coronary heart disease, use of anti-hypertensive medication, diabetes, serum, low density and high density lipoprotein cholesterol, serum triglycerides, poor self-rating of health
Solomon et al (2000)	Multiple Logistic Regression	Relative Risk	Age, time period, body mass index, cigarette smoking, parental history of myocardial infarction before age 60 years, hypertension, hypercholesterolemia, menopausal status/postmenopausal hormone use, aspirin use, multivitamin use, vitamin E supplement use, physical activity level
Tolstrup et al (2006)	Proportional Hazards Regression	Hazard Ratio	Age, smoking, physical activity, body mass index, total intake of fruit, vegetables, fish, and saturated fat

Wellmann et al (2004)	Proportional Hazards Regression	Hazard Ratio	Age, smoking, physical activity, partner status, education, body mass index, total cholesterol, hypertension
Wilkens (2002)	Multiple Logistic Regression	Odds Ratio	Age, household income, education, diagnosis of diabetes mellitus, hypertension, family history of heart disease, physical activity, body mass index, smoking history, hormone replacement therapy (women only)
Yang et al (1999)	Multiple Logistic Regression	Odds Ratio	Age, sex, coronary calcium, diabetes mellitus, systemic hypertension, cigarette smoking, left ventricular hypertrophy, low and high density lipoprotein cholesterol

Table 3. Confounding factors and methods for adjustment (coronary heart disease mortality)

Source	Method for adjustment	Measure of effect	Confounding factors
Albert et al (1999)	Proportional Hazards Regression	Relative Risk	Age, aspirin and beta-carotene treatment assignment, body mass index, smoking, history of diabetes, history of hypertension, history of hypercholesterolemia, vigorous exercise, vitamin E, vitamin C, multivitamin use at baseline and fish consumption at 12 months
Bazzano et al (2009)	Proportional Hazards Regression	Relative Risk	Age, body mass index, average systolic blood pressure, physical activity, cigarette smoking, diabetes education, urban or rural residence, and living in North China
Blackwelder et al (1980)	Multiple Logistic Regression	Relative Risk	Age
Boffetta et al (1990)	Multiple Logistic Regression	Relative Risk	Age, smoking, education
Colditz et al (1985)	Proportional Hazards Regression	Relative Risk	Age
Cullen et al (1993)	Proportional Hazards Regression	Relative Risk	Age, sex, occupation, smoking, blood pressure, probable or suspected coronary heart disease, forced expiratory volume, diabetes, cholesterol, uric acid, treatment for hypertension
Diem et al (2003)	Proportional Hazards Regression	Relative Risk	None
Doll et al (2005)	Proportional Hazards Regression	Relative Risk	Age, smoking
Ebbert et al (2005)	Proportional Hazards Regression	Hazard Ratio	Age, hypertension, diabetes, education, marital status, physical activity, body mass index, waist-to-hip ratio, hormone replacement therapy, vitamin supplement use, fruit/vegetable consumption, red meat consumption, total caloric intake, whole-grain intake, cholesterol intake, vitamin E intake, pack-years
Friedman et al (1986)	Proportional Hazards Regression	Relative Risk	Age
Garfinkel et al (1988)	Multiple Logistic Regression	Relative Risk	Age
Garg et al (1992)	Proportional Hazards Regression	Relative Risk	Age, race, education, body mass index, history of diabetes, cholesterol, systolic blood pressure, postmenopausal status

Gun et al (2006)	Proportional Hazards Regression	Relative Risk	Age, calendar year, smoking
Harriss et al (2007)	Proportional Hazards Regression	Hazard Ratio	Age, country of birth, smoking, total daily energy, fruit intake, saturated fat intake
Hart et al (2008)	Proportional Hazards Regression	Relative Risk	Age, smoking, cholesterol, body mass index, adjusted forced expiratory volume, social class, father's social class, education, car use, siblings, deprivation category, angina, ischemia on electrocardiogram, bronchitis
Kittner et al (1983)	Multiple Logistic Regression	Odds Ratio	Age, number of cigarettes currently smoked, physical activity index, location of residence
Knoops et al (2004)	Proportional Hazards Regression	Hazard Ratio	Diet, physical activity, smoking, age, sex, number of years of education, body mass index, study
Kono et al (1986)	Multiple Logistic Regression	Relative Risk	Age, smoking
Maskarinec et al (1998)	Proportional Hazards Regression	Relative Risk	Ethnicity, age, years of education, body mass index, smoking status
Mukamal et al (2003)	Multiple Logistic Regression	Relative Risk	Age, smoking status, body mass index, diabetes, hypertension, hypercholesterolemia, parental history of myocardial infarction, aspirin use, physical activity, intake of energy, energy-adjusted intake of folate, vitamin E, saturated fat, trans fat, dietary fiber
Pedersen et al (2008)	Proportional Hazards Regression	Hazard Ratio	Age, smoking habits, body mass index, education, marital status, known diabetes, physical activity, high density lipoprotein cholesterol
Rehm et al (1997)	Proportional Hazards Regression	Relative Risk	Age, smoking status
Renaud et al (1999)	Proportional Hazards Regression	Relative Risk	Age, smoking, education, body mass index
Solomon et al (2000)	Multiple Logistic Regression	Relative Risk	Age, time period, body mass index, cigarette smoking, parental history of myocardial infarction before age 60 years, hypertension, hypercholesterolemia, menopausal status/postmenopausal hormone use, aspirin use, multivitamin use, vitamin E supplement use, physical activity level
Suh et al (1992)	Proportional Hazards Regression	Relative Risk	Age at randomization, serum cholesterol, number of cigarettes per day, serum cholesterol
Suhonen et al (1987)	Proportional Hazards Regression	Relative Risk	Age

Thun et al (1997)	Proportional Hazards Regression	Relative Risk	Education, body mass index, smoking, a crude index of fat consumption, use or nonuse of estrogen-replacement therapy in women
Trevisan et al (2001)	Proportional Hazards Regression	Relative Risk	Age, current smoking
Valmadrid et al (1999)	Proportional Hazards Regression	Relative Risk	Age, sex, cigarette smoking, insulin use, glycosylated hemoglobin level, plasma C-peptide level, digoxin use, presence and severity of diabetic retinopathy
Xu et al (2007)	Proportional Hazards Regression	Hazard Ratio	Age, education, body mass index, history of any cancer, chronic bronchitis, diabetes, hypertension, coronary heart disease, stroke
Yuan et al (1997)	Proportional Hazards Regression	Relative Risk	Age, level of education, cigarette smoking

Table 4. Confounding factors and methods for adjustment (incident stroke events)

Source	Method for adjustment	Measure of effect	Confounding factors
Bazzano et al (2007)	Proportional Hazards Regression	Relative Risk	Age, body mass index, physical activity, urban or rural residence, northern or southern China, cigarette smoking, diabetes, education, average systolic blood pressure
Berger et al (1999)	Proportional Hazards Regression	Relative Risk	Age, treatment assignment (aspirin or beta-carotene), systolic blood pressure, current treatment for hypertension, smoking, history of diabetes, body mass index, exercise
Chiuve et al (2008)	Proportional Hazards Regression	Relative Risk	Age, calendar year, parental history of myocardial infarction at <60 years of age, regular aspirin use, vitamin E supplementation, hormone therapy (women only)
Djousse et al (2002)	Proportional Hazards Regression	Hazard Ratio	Age, sex, body mass index, smoking, diabetes mellitus
Donahue et al (1986)	Proportional Hazards Regression	Relative Risk	Age, hypertensive status, serum cholesterol concentration, body mass index, cigarette smoking, uric acid concentration, glucose concentration, hematocrit
Elkind et al (2006)	Proportional Hazards Regression	Hazard Ratio	Age, sex, race-ethnicity, education, history of hypertension, diabetes mellitus, current cigarette smoking, atrial fibrillation, levels of high density lipoprotein cholesterol
Ikehara et al (2009)	Proportional Hazards Regression	Hazard Ratio	Age, smoking, body mass index, history of hypertension, history of diabetes, sports at leisure time, levels of mental stress, presence of flushing, presence of job, marital status, medical checkups, area
Iso et al (1995)	Proportional Hazards Regression	Relative Risk	Age, hypertension category, serum total cholesterol level, cigarette smoking, diabetes mellitus
Jousilahti et al (2000)	Proportional Hazards Regression	Relative Risk	None
Kiyohara et al (1995)	Proportional Hazards Regression	Relative Risk	Age, sex
Klatsky et al (2002)	Proportional Hazards Regression	Relative Risk	Age, sex, race, body mass index, education, smoking
Leppala et al (1999)	Proportional Hazards Regression	Relative Risk	Age, body mass index, serum total cholesterol, number of cigarettes smoked daily, history of diabetes, history of heart disease, education, leisure-time physical activity, supplementation with alpha-tocopherol or beta-carotene

Mukamal et al (2005)	Proportional Hazards Regression	Relative Risk	Age, sex, race, education, marital status, smoking, exercise intensity, depression score, frequent aspirin use, body mass index, diabetes at baseline
Sankai et al (2000)	Proportional Hazards Regression	Relative Risk	Age, sex, smoking category, blood pressure category, serum total cholesterol, body mass index, history of diabetes mellitus
Truelsen et al (1998)	Multiple Poisson Regression	Relative Risk	Age, sex, smoking, body mass index, physical activity in leisure time, systolic blood pressure, cholesterol, antihypertensive treatment, triglycerides, education, diabetes mellitus
Woo et al (1990)	Multiple Logistic Regression	Relative Risk	None
Zhang et al (2004)	Proportional Hazards Regression	Relative Risk	Age, sex, body mass index, serum total cholesterol, systolic blood pressure

Table 5. Confounding factors and methods for adjustment (stroke mortality)

Source	Method for adjustment	Measure of effect	Confounding factors
Bazzano et al (2007)	Proportional Hazards Regression	Relative Risk	Age, body mass index, physical activity, urban or rural residence, northern or southern China, cigarette smoking, diabetes, education, average systolic blood pressure
Blackwelder et al (1980)	Multiple Logistic Regression	Relative Risk	Age
Gaziano et al (2000)	Proportional Hazards Regression	Relative Risk	Age, smoking, diabetes, exercise, body mass index
Hansagi et al (1995)	Multiple Logistic Regression	Relative Risk	Age, smoking
Hart et al (2008)	Proportional Hazards Regression	Relative Risk	Age, smoking, cholesterol, body mass index, adjusted forced expiratory volume, social class, father's social class, education, car use, siblings, deprivation category, angina, ischemia on electrocardiogram, bronchitis
Jakovljevic et al (2004)	Proportional Hazards Regression	Relative Risk	Sex, smoking, body mass index, blood pressure
Kono et al (1986)	Multiple Logistic Regression	Relative Risk	Age, smoking
Maskarinec et al (1998)	Proportional Hazards Regression	Relative Risk	Ethnicity, age, years of education, body mass index, smoking status
Thun et al (1997)	Proportional Hazards Regression	Relative Risk	Education, body mass index, smoking, a crude index of fat consumption, use or nonuse of estrogen-replacement therapy in women
Yuan et al (1997)	Proportional Hazards Regression	Relative Risk	Age, level of education, cigarette smoking