Table 1: Results for testing the correlation between Schoenfeld residuals and ranked failure times to examine proportional hazard assumption violations for a specification that yielded a significant beneficial effect (HR:0.69, 95% CI:0.48-0.99, pvalue:0.04) of unprocessed red meat consumption on all-cause mortality. The specification used a standard model, continuous red meat, female sex, 60-79 years old, and variables in this table. A global test of proportional hazard assumption is also reported.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | CHISQ | DF | P value | Index |
| Unprocessed red meat standard continuous | 1.59 | 1 | 0.21 |  |
| Marital status | 4.11 | 5 | 0.53 | 3 |
| Alcohol continuous | 0.47 | 1 | 0.49 | 4 |
| Sleep | 1.35 | 2 | 0.51 | 9 |
| Family income | 0.48 | 3 | 0.92 | 10 |
| Socioeconomic status | 7.56 | 4 | 0.11 | 11 |
| BMI Group | 0.85 | 3 | 0.84 | 13 |
| History of hypercholesterolemia | 0.02 | 1 | 0.89 | 16 |
| History of hypertension | 0.05 | 1 | 0.83 | 17 |
| History of depression | 0.34 | 1 | 0.56 | 19 |
| History of cardiovascular disease | 2.40 | 1 | 0.12 | 20 |
| History of cancer or malignancy | 0.88 | 1 | 0.35 | 21 |
| Family history of myocardial infarction | 1.89 | 1 | 0.17 | 23 |
| Use of Aspirin | 1.05 | 1 | 0.31 | 24 |
| Use of Ibuprofen | 1.36 | 1 | 0.24 | 25 |
| Use of Statin | 0.24 | 1 | 0.62 | 27 |
| Use of dietary supplement | 0.02 | 1 | 0.88 | 30 |
| Poultry | 0.07 | 1 | 0.79 | 32 |
| Fruits | 0.01 | 1 | 0.90 | 33 |
| Whole grain | 0.68 | 1 | 0.41 | 36 |
| Eggs | 0.36 | 1 | 0.55 | 37 |
| Nuts seeds | 4.22 | 1 | 0.04 | 38 |
| Legumes | 0.85 | 1 | 0.36 | 39 |
| Total dairy | 4.26 | 1 | 0.04 | 40 |
| Carbohydrates | 7.06 | 1 | 0.01 | 41 |
| Dietary fiber | 0.39 | 1 | 0.53 | 42 |
| Monounsaturated fatty acid | 2.33 | 1 | 0.13 | 44 |
| Magnesium | 4.23 | 1 | 0.04 | 47 |
| Cohort year | 2.71 | 3 | 0.44 |  |
| Age continuous | 0.08 | 1 | 0.78 |  |
| Smoking | 0.13 | 2 | 0.94 |  |
| Total energy | 4.58 | 1 | 0.03 |  |
| Menopausal status | 0.00 | 1 | 0.97 |  |
| Hormone therapy use | 1.75 | 1 | 0.19 |  |
| Parity | 0.86 | 1 | 0.36 |  |
| Oral contraceptive use | 0.10 | 1 | 0.76 |  |
| Global | 58.41 | 51 | 0.22 |  |

Table 2: Results for testing the correlation between Schoenfeld residuals and ranked failure times to examine proportional hazard assumption violations for a specification that yielded a significant beneficial effect (HR:0.56, 95% CI:0.31-0.99, pvalue:0.05) of unprocessed red meat consumption on all-cause mortality. The specification used a multivariable nutrition density model, quintile red meat, male sex, 40-59 years old, and variables in this table. A global test of proportional hazard assumption is also reported.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | CHISQ | DF | P value | Index |
| Unprocessed red meat density quintiles | 6.19 | 4 | 0.19 |  |
| Race Ethnicity | 9.06 | 4 | 0.06 | 1 |
| Alcohol continuous | 2.31 | 1 | 0.13 | 4 |
| Sleep | 4.05 | 2 | 0.13 | 9 |
| Socioeconomic status | 5.86 | 4 | 0.21 | 11 |
| BMI continuous | 1.32 | 1 | 0.25 | 12 |
| Systolic blood pressure | 0.26 | 4 | 0.99 | 14 |
| General health condition | 5.35 | 4 | 0.25 | 15 |
| History of hypertension | 0.07 | 1 | 0.80 | 17 |
| Family history of myocardial infarction | 0.40 | 1 | 0.53 | 23 |
| Use of Aspirin | 2.34 | 1 | 0.13 | 24 |
| Use of Ibuprofen | 0.82 | 1 | 0.37 | 25 |
| Use of Opium | 0.14 | 1 | 0.70 | 26 |
| Use of Valsartan | 0.76 | 1 | 0.38 | 28 |
| On special diet | 1.00 | 1 | 0.32 | 29 |
| Processed meat | 0.28 | 1 | 0.59 | 31 |
| Seafood | 0.60 | 1 | 0.44 | 35 |
| Whole grain | 0.03 | 1 | 0.87 | 36 |
| Eggs | 0.28 | 1 | 0.59 | 37 |
| Nuts seeds | 0.03 | 1 | 0.86 | 38 |
| Legumes | 0.03 | 1 | 0.85 | 39 |
| Total dairy | 0.00 | 1 | 0.99 | 40 |
| Carbohydrates | 2.18 | 1 | 0.14 | 41 |
| Monounsaturated fatty acid | 0.40 | 1 | 0.53 | 44 |
| Polyunsaturated fatty acid | 0.27 | 1 | 0.61 | 45 |
| Cohort year | 2.58 | 3 | 0.46 |  |
| Age continuous | 1.91 | 1 | 0.17 |  |
| Smoking | 0.25 | 2 | 0.88 |  |
| Total energy | 0.27 | 1 | 0.60 |  |
| Global | 62.53 | 48 | 0.08 |  |

Table 3: Results for testing the correlation between Schoenfeld residuals and ranked failure times to examine proportional hazard assumption violations for a specification that yielded a significant harmful effect (HR:1.18, 95% CI:1.00-1.39, pvalue:0.05) of unprocessed red meat consumption on all-cause mortality. The specification used a standard model, continuous red meat, all sex, 60-79 years old, and variables in this table. A global test of proportional hazard assumption is also reported.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | CHISQ | DF | P value | Index |
| Unprocessed red meat standard continuous | 4.09 | 1 | 0.04 |  |
| Race Ethnicity | 6.74 | 4 | 0.15 | 1 |
| Sedentary lifestyle | 8.25 | 4 | 0.08 | 8 |
| Sleep | 1.92 | 2 | 0.38 | 9 |
| BMI continuous | 0.79 | 1 | 0.37 | 12 |
| History of depression | 0.41 | 1 | 0.52 | 19 |
| Family history of diabetes | 2.31 | 1 | 0.13 | 22 |
| Family history of myocardial infarction | 1.97 | 1 | 0.16 | 23 |
| Use of Aspirin | 1.60 | 1 | 0.21 | 24 |
| Use of Ibuprofen | 1.50 | 1 | 0.22 | 25 |
| Use of Opium | 0.88 | 1 | 0.35 | 26 |
| Use of Valsartan | 0.24 | 1 | 0.62 | 28 |
| On special diet | 0.51 | 1 | 0.47 | 29 |
| Processed meat | 0.08 | 1 | 0.78 | 31 |
| Poultry | 0.02 | 1 | 0.88 | 32 |
| Vegetables | 0.01 | 1 | 0.94 | 34 |
| Whole grain | 0.56 | 1 | 0.45 | 36 |
| Nuts seeds | 4.21 | 1 | 0.04 | 38 |
| Legumes | 0.06 | 1 | 0.81 | 39 |
| Carbohydrates | 1.65 | 1 | 0.20 | 41 |
| Dietary fiber | 2.67 | 1 | 0.10 | 42 |
| Saturated fat | 3.89 | 1 | 0.05 | 43 |
| Monounsaturated fatty acid | 2.57 | 1 | 0.11 | 44 |
| Polyunsaturated fatty acid | 0.49 | 1 | 0.48 | 45 |
| Cholesterol | 0.00 | 1 | 1.00 | 46 |
| Cohort year | 8.90 | 3 | 0.03 |  |
| Age continuous | 9.45 | 1 | 0.00 |  |
| Gender | 1.16 | 1 | 0.28 |  |
| Smoking | 3.51 | 2 | 0.17 |  |
| Total energy | 2.60 | 1 | 0.11 |  |
| Global | 74.48 | 40 | 0.00 |  |

Table 4: Results for testing the correlation between Schoenfeld residuals and ranked failure times to examine proportional hazard assumption violations for a specification that yielded a significant harmful effect (HR:1.21, 95% CI:1.01-1.45, pvalue:0.04) of unprocessed red meat consumption on all-cause mortality. The specification used a multivariable nutrition density model, continuous red meat, male sex, 60-79 years old, and variables in this table. A global test of proportional hazard assumption is also reported.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | CHISQ | DF | P value | Index |
| Unprocessed red meat density continuous | 5.98 | 1 | 0.01 |  |
| Race Ethnicity | 11.59 | 4 | 0.02 | 1 |
| Sedentary lifestyle | 13.74 | 4 | 0.01 | 8 |
| Sleep | 3.41 | 2 | 0.18 | 9 |
| BMI continuous | 0.38 | 1 | 0.54 | 12 |
| History of depression | 0.28 | 1 | 0.60 | 19 |
| Family history of diabetes | 1.28 | 1 | 0.26 | 22 |
| Family history of myocardial infarction | 0.91 | 1 | 0.34 | 23 |
| Use of Aspirin | 1.28 | 1 | 0.26 | 24 |
| Use of Ibuprofen | 0.58 | 1 | 0.45 | 25 |
| Use of Opium | 0.36 | 1 | 0.55 | 26 |
| Use of Valsartan | 0.05 | 1 | 0.82 | 28 |
| On special diet | 0.01 | 1 | 0.93 | 29 |
| Processed meat | 0.13 | 1 | 0.72 | 31 |
| Poultry | 0.11 | 1 | 0.74 | 32 |
| Vegetables | 0.12 | 1 | 0.73 | 34 |
| Whole grain | 2.57 | 1 | 0.11 | 36 |
| Nuts seeds | 2.05 | 1 | 0.15 | 38 |
| Legumes | 0.01 | 1 | 0.91 | 39 |
| Carbohydrates | 0.11 | 1 | 0.73 | 41 |
| Dietary fiber | 2.58 | 1 | 0.11 | 42 |
| Saturated fat | 1.48 | 1 | 0.22 | 43 |
| Monounsaturated fatty acid | 0.79 | 1 | 0.37 | 44 |
| Polyunsaturated fatty acid | 0.16 | 1 | 0.69 | 45 |
| Cholesterol | 0.03 | 1 | 0.87 | 46 |
| Cohort year | 8.66 | 3 | 0.03 |  |
| Age continuous | 11.97 | 1 | 0.00 |  |
| Smoking | 6.03 | 2 | 0.05 |  |
| Total energy | 0.20 | 1 | 0.65 |  |
| Global | 92.94 | 39 | 0.00 |  |

Table 5: Results for testing the correlation between Schoenfeld residuals and ranked failure times to examine proportional hazard assumption violations for a specification that yielded a non-significant effect (HR:0.78, 95% CI:0.57-1.09, pvalue:0.14) of unprocessed red meat consumption on all-cause mortality. The specification used a standard model, quartile red meat, female sex, all age, and variables in this table. A global test of proportional hazard assumption is also reported.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | CHISQ | DF | P value | Index |
| Unprocessed red meat standard quartile | 1.64 | 3 | 0.65 |  |
| Education | 5.95 | 4 | 0.20 | 2 |
| Marital status | 4.93 | 5 | 0.42 | 3 |
| Alcohol continuous | 0.35 | 1 | 0.56 | 4 |
| Activity | 2.02 | 1 | 0.15 | 7 |
| Sleep | 0.46 | 2 | 0.79 | 9 |
| Family income | 1.38 | 3 | 0.71 | 10 |
| BMI continuous | 0.45 | 1 | 0.50 | 12 |
| Systolic blood pressure | 6.30 | 4 | 0.18 | 14 |
| General health condition | 3.97 | 4 | 0.41 | 15 |
| History of hypertension | 0.07 | 1 | 0.80 | 17 |
| History of diabetes | 1.97 | 1 | 0.16 | 18 |
| History of depression | 0.02 | 1 | 0.88 | 19 |
| History of cancer or malignancy | 0.09 | 1 | 0.77 | 21 |
| Family history of diabetes | 1.02 | 1 | 0.31 | 22 |
| Family history of myocardial infarction | 1.67 | 1 | 0.20 | 23 |
| On special diet | 0.26 | 1 | 0.61 | 29 |
| Dietary supplement | 0.12 | 1 | 0.73 | 30 |
| Processed meat | 0.12 | 1 | 0.73 | 31 |
| Poultry | 0.16 | 1 | 0.69 | 32 |
| Fruits | 0.02 | 1 | 0.90 | 33 |
| Legumes | 0.04 | 1 | 0.85 | 39 |
| Cholesterol | 2.65 | 1 | 0.10 | 46 |
| Magnesium | 2.10 | 1 | 0.15 | 47 |
| Cohort year | 1.87 | 3 | 0.60 |  |
| Age continuous | 3.20 | 1 | 0.07 |  |
| Smoking | 1.71 | 2 | 0.42 |  |
| Total energy | 0.32 | 1 | 0.57 |  |
| Menopausal status | 0.22 | 1 | 0.64 |  |
| Hormone therapy use | 0.19 | 1 | 0.66 |  |
| Parity | 1.90 | 1 | 0.17 |  |
| Oral contraceptive use | 0.12 | 1 | 0.73 |  |
| Global | 50.11 | 53 | 0.59 |  |