Appendix 4. Association between variables and MAR by cutoff value at 0.5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **MAR** | | | | | | | |
| **Male** | | | |  | **Female** |  |  |
| **OR** | **95% CI** | | | **OR** | **95% CI** | | |
| **Eating Behaviour** |  |  |  |  |  |  |  |  |
| Alone | 0.52 | 0.27 | - | 1.01 | 0.84 | 0.54 | - | 1.31 |
| Some Together | 1.07 | 0.66 | - | 1.74 | 0.98 | 0.73 | - | 1.33 |
| Together | 1.00 |  | - |  | 1.00 |  | - |  |
| **Living Arrangement** |  |  |  |  |  |  |  |  |
| Living Alone | 1.40 | 0.65 | - | 3.02 | 0.79 | 0.48 | - | 1.31 |
| Living with Others | 1.00 |  | - |  | 1.00 |  | - |  |
| **Age Group** |  |  |  |  |  |  |  |  |
| Age<30 | 0.68 | 0.25 | - | 1.83 | 0.56 | 0.31 | - | 1.04 |
| Age<40 | 0.37 | 0.14 | - | 0.95 | 0.46 | 0.24 | - | 0.87 |
| Age<50 | 0.31 | 0.11 | - | 0.85 | 0.50 | 0.25 | - | 0.99 |
| Age<60 | 0.25 | 0.08 | - | 0.74 | 0.51 | 0.24 | - | 1.09 |
| Age<70 | 1.00 |  | - |  | 1.00 |  | - |  |
| **Residential Area** |  |  |  |  |  |  |  |  |
| Urban | 0.93 | 0.54 | - | 1.60 | 1.01 | 0.69 | - | 1.47 |
| Rural | 1.00 |  | - |  | 1.00 |  | - |  |
| **BMI** |  |  |  |  |  |  |  |  |
| Underweight | 0.73 | 0.23 | - | 2.27 | 0.77 | 0.44 | - | 1.36 |
| Overweight | 0.91 | 0.58 | - | 1.42 | 1.00 | 0.73 | - | 1.37 |
| Normal | 1.00 |  | - |  | 1.00 |  | - |  |
| **Weight Changes** |  |  |  |  |  |  |  |  |
| Same | 1.00 |  | - |  | 1.00 |  | - |  |
| Decreased | 0.54 | 0.32 | - | 0.92 | 0.83 | 0.56 | - | 1.24 |
| Increased | 0.96 | 0.52 | - | 1.74 | 0.92 | 0.67 | - | 1.27 |
| **Marital Status** |  |  |  |  |  |  |  |  |
| Married | 2.03 | 0.91 | - | 4.54 | 2.55 | 1.48 | - | 4.37 |
| Separated | 0.92 | 0.38 | - | 2.26 | 1.74 | 0.94 | - | 3.23 |
| Single | 1.00 |  | - |  | 1.00 |  | - |  |
| **Education Level** |  |  |  |  |  |  |  |  |
| Primary | 0.27 | 0.12 | - | 0.60 | 0.39 | 0.23 | - | 0.68 |
| Secondary | 0.89 | 0.34 | - | 2.33 | 0.44 | 0.26 | - | 0.75 |
| Upper Secondary | 0.47 | 0.25 | - | 0.88 | 0.73 | 0.49 | - | 1.08 |
| Tertiary | 1.00 |  | - |  | 1.00 |  | - |  |
| **Income Level** |  |  |  |  |  |  |  |  |
| Lowest | 0.35 | 0.16 | - | 0.81 | 0.25 | 0.15 | - | 0.43 |
| Lower-Middle | 0.47 | 0.21 | - | 1.06 | 0.39 | 0.23 | - | 0.66 |
| Upper-Middle | 0.49 | 0.21 | - | 1.16 | 0.47 | 0.27 | - | 0.82 |
| Highest | 1.00 |  | - |  | 1.00 |  | - |  |
| **Occupation** |  |  |  |  |  |  |  |  |
| White | 1.75 | 0.81 | - | 3.79 | 1.30 | 0.84 | - | 2.00 |
| Pink | 3.17 | 1.17 | - | 8.56 | 1.36 | 0.92 | - | 2.01 |
| Blue | 1.71 | 0.98 | - | 2.97 | 1.71 | 1.13 | - | 2.58 |
| Others | 1.00 |  | - |  | 1.00 |  | - |  |
| **Alcohol Consumption** |  |  |  |  |  |  |  |  |
| Yes | 1.09 | 0.37 | - | 3.21 | 1.17 | 0.78 | - | 1.74 |
| No | 1.00 |  | - |  | 1.00 |  | - |  |
| **Cigarettes** |  |  |  |  |  |  |  |  |
| Smoker | 0.53 | 0.28 | - | 1.01 | 1.00 | 0.58 | - | 1.73 |
| Ex-Smoker | 0.96 | 0.47 | - | 1.95 | 0.50 | 0.32 | - | 0.79 |
| Non-Smoker | 1.00 |  | - |  | 1.00 |  | - |  |
| **Stress Level** |  |  |  |  |  |  |  |  |
| High | 1.03 | 0.52 | - | 2.01 | 0.76 | 0.48 | - | 1.22 |
| Medium | 1.21 | 0.66 | - | 2.20 | 0.89 | 0.58 | - | 1.37 |
| Low | 1.00 |  | - |  | 1.00 |  | - |  |
| **Nutritional Education** |  |  |  |  |  |  |  |  |
| No | 1.29 | 0.42 | - | 3.95 | 0.49 | 0.18 | - | 1.35 |
| Yes | 1.00 |  | - |  | 1.00 |  | - |  |
| **Nutrition Supplement Intake (more than2 weeks/year)** | | | | | |  |  |  |
| No | 0.39 | 0.22 | - | 0.68 | 0.65 | 0.49 | - | 0.86 |
| Yes | 1.00 |  | - |  | 1.00 |  | - |  |
| **Nutritional Fact Usage** |  |  |  |  |  |  |  |  |
| No | 0.49 | 0.22 | - | 1.09 | 0.61 | 0.44 | - | 0.86 |
| Yes | 1.00 |  | - |  | 1.00 |  | - |  |

Appendix 5. Results of adjusted and unadjusted model related to socioeconomic factors

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | | | **MAR** | | | | | | | | |
|  | **Male** |  |  | | **Female** | | |  |
| **β** | **S.E** | | | ***p*-VALUE** | **β** | **S.E** | ***p*-VALUE** | |
| **Model 1** | **Eating Behaviour** | | | | | | | | | | |
|  | Alone | | -0.114 | 0.035 | | | 0.001 | -0.076 | 0.024 | 0.002 | |
|  | Some-with others | | -0.002 | 0.018 | | | 0.923 | -0.010 | 0.014 | 0.474 | |
|  | With others | | Ref. |  | | |  | Ref. |  |  | |
| **Model 2** | **Eating Behaviour** | |  |  | | |  |  |  |  | |
|  | Alone | | -0.117 | 0.035 | | | 0.001 | -0.068 | 0.024 | 0.006 | |
|  | Some-with others | | -0.003 | 0.018 | | | 0.887 | -0.007 | 0.014 | 0.593 | |
|  | With others | | Ref. |  | | |  | Ref. |  |  | |
| **Model 3** | **Eating Behaviour** | |  |  | | |  |  |  |  | |
|  | Alone | | -0.115 | 0.035 | | | 0.001 | -0.068 | 0.024 | 0.005 | |
|  | Some-with others | | -0.002 | 0.018 | | | 0.932 | -0.010 | 0.014 | 0.464 | |
|  | With others | | Ref. |  | | |  | Ref. |  |  | |
| **Model 4** | **Eating Behaviour** | |  |  | | |  |  |  |  | |
|  | Alone | | -0.123 | 0.035 | | | 0.000 | -0.075 | 0.025 | 0.002 | |
|  | Some-with others | | -0.003 | 0.018 | | | 0.883 | -0.007 | 0.014 | 0.617 | |
|  | With others | | Ref. |  | | |  | Ref. |  |  | |
| **Model 5** | **Eating Behaviour** | |  |  | | |  |  |  |  | |
|  | Alone | | -0.118 | 0.035 | | | 0.001 | -0.074 | 0.024 | 0.003 | |
|  | Some-with others | | -0.002 | 0.018 | | | 0.930 | -0.010 | 0.014 | 0.474 | |
|  | With others | | Ref. |  | | |  | Ref. |  |  | |
| **Model 6** | **Eating Behaviour** | |  |  | | |  |  |  |  | |
|  | Alone | | -0.125 | 0.035 | | | 0.000 | -0.067 | 0.024 | 0.006 | |
|  | Some-with others | | -0.004 | 0.018 | | | 0.844 | -0.009 | 0.014 | 0.531 | |
|  | With others | | Ref. |  | | |  | Ref. |  |  | |
| **Model 7** | **Eating Behaviour** | |  |  | | |  |  |  |  | |
|  | Alone | | -0.131 | 0.035 | | | 0.000 | -0.074 | 0.024 | 0.002 | |
|  | Some-with others | | -0.004 | 0.018 | | | 0.824 | -0.008 | 0.014 | 0.555 | |
|  | With others | | Ref. |  | | |  | Ref. |  |  | |
|  |  | |  |  | | |  |  |  |  | |
|  |  | |  |  | | |  |  |  |  | |
| Model 1 | | Fully adjusted except education level | | | | | | | | | |
| Model 2 | | Fully adjusted except income level | | | | | | | | | |
| Model 3 | | Fully adjusted except occupation | | | | | | | | | |
| Model 4 | | Fully adjusted except education level and income level | | | | | | | | | |
| Model 5 | | Fully adjusted except education level and occupation | | | | | | | | | |
| Model 6 | | Fully adjusted except income level and occupation | | | | | | | | | |
| Model 7 | | Fully adjusted except education level, income level, and occupation | | | | | | | | | |

Appendix 6. Interaction between variables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Variable** | **Estimate** | **S.D** | **P-value** |
| Male | edu\*EAT | 1.080 | 0.120 | 0.044 |
| Female | edu\*EAT | 4.094 | 0.455 | <.0001 |
|  |  |  |  |  |
| Male | incm\*EAT | 1.690 | 0.188 | 0.001 |
| Female | incm\*EAT | 2.710 | 0.301 | <.0001 |
|  |  |  |  |  |
| Male | occp\*EAT | 1.119 | 0.124 | 0.036 |
| Female | occp\*EAT | 1.708 | 0.190 | 0.008 |

EAT: eating behaviour, edu: education, incm: income, occp: occupation