

Table 5 Linear binomial regression model for the relationship between anaemia and selected variables among Palestinian adolescents in Ramallah and Hebron governorates (n = 1942)

| Variable                  | Boys                 |                  |                      |                | Girls                |                 |                      |                 |
|---------------------------|----------------------|------------------|----------------------|----------------|----------------------|-----------------|----------------------|-----------------|
|                           | Model 1 <sup>a</sup> |                  | Model 2 <sup>b</sup> |                | Model 1 <sup>a</sup> |                 | Model 2 <sup>b</sup> |                 |
|                           | Coefficient          | 95% CI           | Coefficient          | 95% CI         | Coefficient<br>t     | 95% CI          | Coefficient          | 95% CI          |
| <b>Constant</b>           | 0.144*               | 0.025 to 0.262   | 0.143*               | 0.021 to 0.265 | 0.014                | -0.066 to 0.093 | 0.032                | -0.058 to 0.122 |
| <b>Region</b>             |                      |                  |                      |                |                      |                 |                      |                 |
| Ramallah                  | 0                    |                  | -                    | -              | 0                    |                 | -                    | -               |
| Hebron                    | 0.147***             | 0.085 to 0.210   | -                    | -              | -0.004               | -0.054 to 0.046 | -                    | -               |
| <b>Residence</b>          |                      |                  |                      |                |                      |                 |                      |                 |
| Urban                     | 0                    |                  | -                    | -              | 0                    |                 | -                    | -               |
| Rural                     | 0.041                | -0.032 to 0.113  | -                    | -              | -0.004               | -0.054 to 0.047 | -                    | -               |
| <b>Age (years)</b>        |                      |                  |                      |                |                      |                 |                      |                 |
| 13.0-13.9                 | 0                    |                  | -                    | -              | 0                    |                 | -                    | -               |
| 14.0-14.9                 | -0.086*              | -0.161 to -0.012 | -                    | -              | 0.003                | -0.052 to 0.059 | -                    | -               |
| 15.0-16.0                 | -0.069               | -0.157 to 0.019  | -                    | -              | 0.016                | -0.050 to 0.082 | -                    | -               |
| <b>Mother's education</b> |                      |                  |                      |                |                      |                 |                      |                 |
| Low                       | 0                    |                  | -                    | -              | 0                    |                 | -                    | -               |
| Medium                    | -0.051               | -0.175 to 0.072  | -                    | -              | -0.023               | -0.076 to 0.030 | -                    | -               |
| High                      | -0.005               | -0.107 to 0.098  | -                    | -              | -0.014               | -0.088 to 0.060 | -                    | -               |
| <b>Father's education</b> |                      |                  |                      |                |                      |                 |                      |                 |
| Low                       | 0                    |                  | -                    | -              | 0                    |                 | -                    | -               |
| Medium                    | 0.022                | -0.081 to 0.125  | -                    | -              | 0.059*               | 0.012 to 0.107  | -                    | -               |

|                                     |         |                  |        |                 |        |                 |        |                 |
|-------------------------------------|---------|------------------|--------|-----------------|--------|-----------------|--------|-----------------|
| High                                | -0.040  | -0.129 to 0.050  | -      | -               | 0.067* | 0.002 to 0.132  | -      | -               |
| <b>Family size</b>                  |         |                  |        |                 |        |                 |        |                 |
| 1-6 persons                         | 0       |                  | -      | -               | 0      |                 | -      | -               |
| 7-8 persons                         | 0.051   | -0.027 to 0.130  | -      | -               | 0.023  | -0.031 to 0.077 | -      | -               |
| > 8 persons                         | 0.069   | -0.001 to 0.139  | -      | -               | 0.036  | -0.015 to 0.086 | -      | -               |
| <b>Household standard of living</b> |         |                  |        |                 |        |                 |        |                 |
| Low                                 | 0       |                  | -      | -               | 0      |                 | -      | -               |
| Medium                              | -0.035  | -0.102 to 0.032  | -      | -               | 0.029  | -0.009 to 0.067 | -      | -               |
| High                                | -0.090* | -0.166 to -0.015 | -      | -               | -0.006 | -0.065 to 0.053 | -      | -               |
| <b>Onset of puberty</b>             |         |                  |        |                 |        |                 |        |                 |
| No                                  | 0       |                  | -      | -               | 0      |                 | -      | -               |
| Yes                                 | -0.028  | -0.096 to 0.039  | -      | -               | 0.025  | -0.026 to 0.077 | -      | -               |
| <b>Food and tea scores</b>          |         |                  |        |                 |        |                 |        |                 |
| Animal foods                        | -       | -                | -0.021 | -0.046 to 0.005 | -      | -               | -0.009 | -0.027 to 0.010 |
| Legumes                             | -       | -                | 0.005  | -0.013 to 0.023 | -      | -               | -0.011 | -0.024 to 0.002 |
| Green leafy vegetables              | -       | -                | -0.007 | -0.032 to 0.017 | -      | -               | 0.008  | -0.009 to 0.025 |
| Bread                               | -       | -                | 0.031  | -0.004 to 0.067 | -      | -               | 0.005  | -0.011 to 0.021 |
| Tea                                 | -       | -                | 0.002  | -0.001 to 0.004 | -      | -               | 0.000  | -0.001 to 0.002 |

<sup>a</sup>Adjusted for sociodemographic variables.

<sup>b</sup>Adjusted for sociodemographic and nutritional variables.

<sup>c</sup>Household standard of living index was based on the possession of 16 household amenities, each item given a value of 1.

\* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

CI = confidence interval.