**Supplemental table 6.** Results of adjusted multivariable linear regression models investigating associations of tertiles of the score adherence to the World Cancer Research Fund/ American Institute of Cancer Research (WCRF/AICR) lifestyle recommendations, with health related quality of life scores in colorectal cancer survivors for the overall study population, and stratified by gender, body mass index (BMI) and number of comorbidities.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| WCRF adherence score in tertiles *(score range)* | | | | Global QOL  (n=135) | | Physical functioning  (n=135) | | Role functioning  (n=135) | | Social functioning  (n=135) | | Fatigue (CIS)  (n=134) | | Disability (WHODAS)  (n=131) | | Distress (HADS)  (n=133) | |
| Overall1 | | |  | β | (95% CI) | β | (95% CI) | β | (95% CI) | β | (95% CI) | β | (95% CI) | β | (95% CI) | β | (95% CI) |
| T12,3 | | |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  |
| T22,3 | | |  | 4.2 | (-2.9, 11.3) | 4.4 | (-3.5, 12.2) | -2.5 | (-12.6, 7.6) | 0.5 | (-6.8, 7.9) | -10.0 | (-19.9, 0.0) | -3.9 | (-9.8, 2.0) | -1.4 | (-3.8, 1.0) |
| T32,3 | | |  | 2.2 | (-5.2, 9.7) | 7.0 | (-3.5, 12.2) | -4.7 | (-15.3, 5.9) | -0.9 | (-8.6, 6.8) | -11.2 | (-21.6, -0.8) | -2.2 | (-8.5, 4.1) | -0.5 | (-3.0, 2.0) |
| WCRF score adherence without PA recommendation1 | | | | | | | | | | | | | | | | | |
| T14,5 |  | | | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  |
| T24,5 |  | | | 3.3 | (-3.9, 10.5) | 2.6 | (-5.2, 10.4) | -4.3 | (-14.4, 5.9) | -0.0 | (-7.5, 7.5) | -9.1 | (-19.3, 1.0) | -2.8 | (-8.7, 3.1) | -1.4 | (-3.9, 1.0) |
| T34,5 |  | | | -0.4 | (-9.7, 9.0) | 1.8 | (-8.3, 11.9) | -11.1 | (-24.3, 2.1) | -3.9 | (-13.7, 5.8) | -9.5 | (-22.5, 3.6) | -0.2 | (-7.8, 7.4) | -1.2 | (-4.4, 2.0) |
| Overall WCRF score adherence stratified by gender1 | | | | | | | | | | | | | | | | | |
| T16 |  | | | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  |  |  |
| T26 | Male | | | 2.9 | (-5.0, 10.8) | 1.5 | (-8.2, 11.2) | -2.3 | (-14.3, 9.7) | 3.3 | (-7.8, 14.5) | -9.1 | (-21.3, 3.2) | -0.2 | (-7.1, 6.7) | -0.7 | (-3.8, 2.4) |
| T36 | Male | | | -0.7 | (-9.2, 7.8) | 1.5 | (-8.9, 11.9) | -5.8 | (-18.7, 7.0) | 3.9 | (-8.1, 15.8) | -10.5 | (-23.7, 2.6) | 0.9 | (-6.6, 8.3) | 0.7 | (-2.6, 4.1) |
| T26 | Female | | | 6.2 | (-8.8, 21.2) | 9.6 | (-6.2, 25.5) | -0.5 | (-21.2, 20.1) | -2.1 | (-11.3, 7.2) | -10.6 | (-30.0, 8.8) | -9.3 | (-21.7, 3.2) | -1.3 | (-5.5, 2.9) |
| T36 | Female | | | 5.8 | (-9.8, 21.4) | 18.5 | (2.1, 35.0) | 3.8 | (-17.7, 25.2) | -5.9 | (-15.5, 3.7) | -13.9 | (-34.0, 6.2) | -8.2 | (-21.9, 5.4) | -1.8 | (-6.2, 2.5) |
| Overall WCRF score adherence stratified by BMI1 | | | | | | | | | | | | | | | | | |
| T13 | |  | | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  |
| T23 | | BMI<25 | | -12.7 | (-33.1, 7.7) | -9.7 | (-35.4, 15.9) | -20.7 | (-45.2, 3.9) | -8.7 | (-23.2, 5.8) | -8.3 | (-42.0, 25.3) | 5.5 | (-12.3, 23.2) | -3.3 | (-10.6, 4.0) |
| T33 | | BMI<25 | | -16.9 | (-39.1, 5.4) | -5.7 | (-33.7, 22.2) | -16.7 | (-43.5, 10.1) | -10.0 | (-25.7, 5.8) | -1.4 | (-35.7, 38.6) | 6.3 | (-14.9, 27.4) | -4.2 | (-12.1, 3.8) |
| T23 | | BMI≥25 | | 6.0 | (-2.0, 14.0) | 7.2 | (-1.7, 16.2) | 1.7 | (-10.5, 13.8) | 1.6 | (-7.5, 10.8) | -8.5 | (-19.8, 2.9) | -5.3 | (-12.3, 1.7) | -1.3 | (-4.1, 1.4) |
| T33 | | BMI≥25 | | 5.6 | (-2.9, 14.1) | 10.5 | (0.9, 20.0) | -2.8 | (-15.8, 10.2) | 2.3 | (-7.5, 12.0) | -13.4 | (-25.5, -1.3) | -4.2 | (-11.7, 3.2) | -0.5 | (-3.4, 2.5) |
| Overall WCRF score adherence stratified by number of comorbidities1 | | | | | | | | | | | | | | | | | |
| T17 |  | | | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  | Ref. |  |  |  |
| T27 | 0-1 | | | 3.6 | (-6.0, 13.1) | 10.4 | (-1.5, 22.2) | -2.3 | (-15.6, 11.0) | -5.0 | (-11.8, 1.9) | -15.4 | (-29.7, -1.1) | -5.4 | (-12.2, 1.5) | -1.4 | (-5.2, 2.4) |
| T37 | 0-1 | | | 3.7 | (-5.9, 13.4) | 12.6 | (0.6, 24.5) | 1.4 | (-12.0, 14.8) | -2.5 | (-9.4, 4.4) | -19.1 | (-33.5, -4.7) | -6.8 | (-13.7, 0.1) | -2.9 | (-6.7, 0.9) |
| T27 | ≥2 | | | 6.8 | (-4.4, 18.1) | 1.1 | (-10.4, 12.6) | -2.3 | (-18.3, 13.8) | 1.4 | (-11.4, 14.3) | -8.0 | (-23.0, 6.9) | -4.2 | (-13.6, 5.2) | -1.4 | (-4.6, 1.8) |
| T37 | ≥2 | | | 0.8 | (-11.6, 13.1) | 2.4 | (-10.2, 15.0) | -6.4 | (-24.1, 11.2) | 2.7 | (-11.4, 16.8) | -3.2 | (-19.3, 13.0) | 0.1 | (-10.3, 10.5) | 0.3 | (-3.2, 3.8) |

Abbreviations: QOL, quality of life; T, tertile; ref, reference; β, unstandardized regression coefficient; CI, confidence interval; PA, physical activity; BMI, body mass index.

1Regression coefficients indicate the differences in score levels of global quality of life, physical, role and social functioning, disability, fatigue and distress for the comparison of the second or third tertile of the adherence score with the reference score (which is the lowest tertile T1).

2T1, lowest tertile with lowest WCRF score adherence (mean score 3.5 ,range 1.5 – 4.0); T2, middle tertile with moderate WCRF score adherence (mean score 5.0, range 4.5 – 5.5); T3, highest tertile with highest WCRF score adherence (mean score 6.7, range 6.0 – 8.5).

3Adjusted for age, gender, number of comorbidities, smoking, education level, tumour stage, chemotherapy, time since diagnosis, total energy intake, stoma, gastro-intestinal problems.

41T1, lowest tertile with lowest WCRF score adherence (mean score 2.9 ,range 1.0 – 3.5); T2, middle tertile with moderate WCRF score adherence (mean score 4.2, range 4.0 – 4.5); T3, highest tertile with highest WCRF score adherence (mean score 5.4, range 5.0 - 6.5).

5Additionally adjusted for moderate-to-vigorous physical activity, and score prolonged sedentary behaviour.

6Adjusted for age, number of comorbidities, smoking, education level, tumour stage, chemotherapy, time since diagnosis, total energy intake, stoma, gastro-intestinal problems.

7Adjusted for age, gender, smoking, education level, tumour stage, chemotherapy, time since diagnosis, total energy intake, stoma, gastro-intestinal problems.