

ADHERENCE TO THE WCRF/AICR RECOMMENDATIONS FOR CANCER PREVENTION IS ASSOCIATED WITH BETTER HEALTH-RELATED QUALITY OF LIFE AMONG COLORECTAL CANCER SURVIVORS

Merel van Veen, Floortje Mols, Martijn Bours, Matty Weijnenberg,
Ellen Kampman, Sandra Beijer

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Background

- Long-term adverse health effects of cancer and its treatment → negative impact on health-related quality of life (HRQL).
- Lower physical functioning and more fatigue and psychological problems.
- Better adherence to general lifestyle scores → better HRQL in CRC

Inoue-Choi 2013, Jansen 2010, Marventano 2013, Miller 2016, Schlesinger 2014



Objective

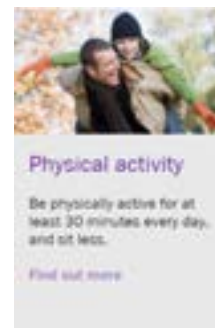
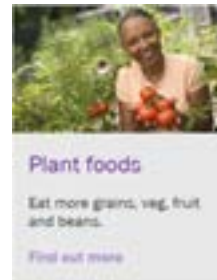
To investigate the association between adherence to the WCRF/AICR recommendations and HRQL for all recommendations together

and for physical activity, body composition and diet separately

in a large cohort of CRC survivors.

WCRF/AICR adherence score

- 8 recommendations
- Per recommendation max 1 point
- Three recommendations 0 / 0,5 / 1 point
- All other recommendations 0 / 1 point
- Total score between 0 and 8 points

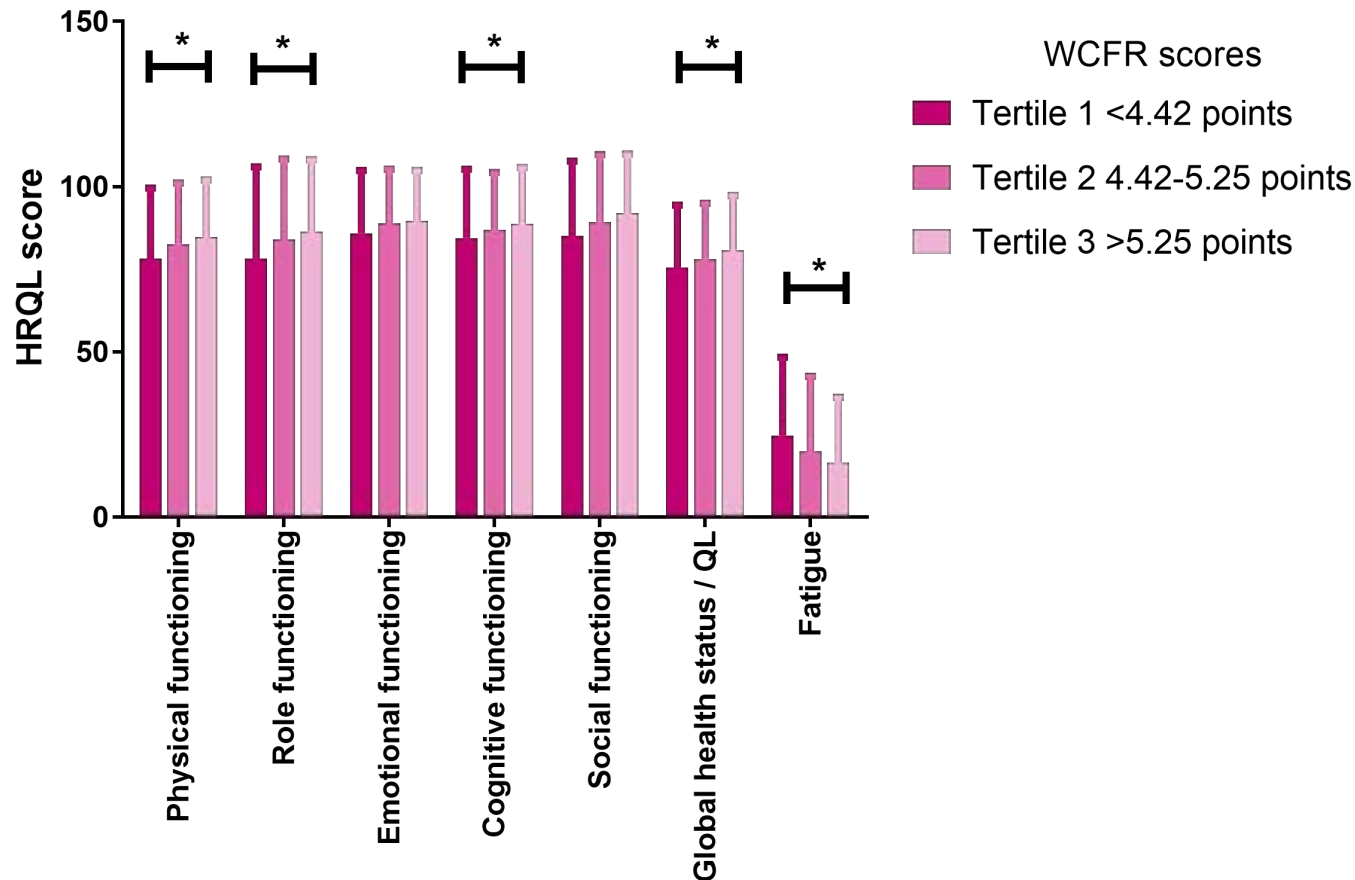


Study design

- Cross-sectional study
- Use of PROFILES registry
- Diagnosed with stage I-IV CRC between 2000-2009, living in south-eastern part of the Netherlands
- Selected via Netherlands Cancer Registry
- Data collected August 2013 (short FFQ, SQUASH and length/bodyweight) / January 2014 (EORTC QLQ-C30)
- 1,096 CRC survivors included

profiles

Mean HRQL scores per tertile of WCRF score



Association between WCRF score and HRQL

HRQL	Continuous WCRF adherence score β (95% CI)
Physical Functioning	2.71 (1.73, 3.68)*
Role Functioning	2.87 (1.53, 4.21)*
Emotional Functioning	0.85 (-0.11, 1.81)
Cognitive Functioning	1.25 (0.19, 2.32)*
Social Functioning	2.01 (0.85, 3.16)*
Global health status / QL	1.64 (0.69, 2.59)*
Fatigue	-2.81 (-4.02, -1.60)*

Adjusted for age, gender, comorbidities and smoking

The association between HRQL and physical activity, diet and BMI

		Physical Functioning	Role Functioning	Emotional Functioning	Cognitive Functioning	Social Functioning	Global health status / QL	Fatigue
Physical activity	0	REF	REF	REF	REF	REF	REF	REF
	1	10.30 (8.01; 12.59)*	10.50 (7.31; 13.67)*	2.75 (0.45; 5.06)*	2.49 (-0.07; 5.04)	6.20 (3.45; 8.95)*	6.27 (4.02; 8.53)*	-7.43 (-10.32; -4.54)*
Diet	0 - <3	REF	REF	REF	REF	REF	REF	REF
	3 - <4	0.42 (-1.98; 2.82)	1.55 (-1.79; 4.89)	1.05 (-1.38; 3.47)	1.52 (-1.53; 3.83)	1.64 (-1.25; 4.54)	1.96 (-0.41; 4.33)	-2.87 (-5.91; 0.16)
	≥ 4	0.09 (-2.45; 2.64)	0.38 (-3.17; 3.92)	0.39 (-2.18; 2.96)	1.71 (-1.14; 4.55)	0.70 (-2.37; 3.77)	0.26 (-2.25; 2.78)	-3.12 (-6.34; 0.10)
BMI	Normal weight	REF	REF	REF	REF	REF	REF	REF
	Over weight	-0.24 (-2.46; 1.98)	0.29 (-2.80; 3.37)	0.97 (-1.27; 3.20)	-0.58 (-3.06; 1.90)	0.22 (-2.45; 2.89)	1.74 (-0.45; 3.93)	-0.49 (-3.23; 2.32)
	Obese	-4.15 (-7.16; -1.15)*	1.73 (-5.91; 2.46)	-0.92 (-3.95; 2.11)	-2.80 (-6.15; 0.55)	-1.93 (-5.54; 1.69)	-0.29 (-3.25; 2.67)	2.81 (-0.98; 6.60)

Discussion & conclusion

- Better adherence to the WCRF/AICR recommendations was positively associated with global health status, most functioning scales and less fatigue among CRC survivors, in line with literature.
- First study to look at diet, physical activity and body composition separately.
- Need for tools to motivate and help CRC survivors to adhere to the recommendations.



Physical activity

Be physically active for at least 30 minutes every day, and sit less.



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m.vanveen@iknl.nl