Relative importance of inflammation and cardiorespiratory fitness for all-cause mortality risk in persons with rheumatoid arthritis – the population-based Trøndelag Health Study

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Supplemental material 2: Formulae for estimation of cardiorespiratory fitness

Two formulae were used for estimation of cardiorespiratory fitness (eCRF) in the present study, depending on whether the individual had rheumatoid arthritis (RA) or was a control participant, respectively. These formulae were previously published and a validation of their comparability and suitability for persons with RA has been performed. The formulae include the PA index, which was calculated based on intensity, duration, and frequency of self-reported physical activity as published in.

Calculation of eCRF for persons with RA

Coding: sex: female=0, male=1; smoking: never smoked=0, ever smoked=1.

eCRF = 82.487 + (sex × 28.053) - (age × 0.361) - (age × sex interaction × 0.296) - (BMI × 0.648) - (RHR × 0.095) - (smoking × 2.299) + (PA index × 0.223) - (SBP × 0.079)

Calculation of eCRF for control participants

Men: 100.27 – (age x 0.296) – (WC x 0.369) – (RHR x 0.155) + (PA index x 0.226)
Women: 74.74 – (age x 0.247) – (WC x 0.259) – (RHR x 0.114) + (PA index x 0.198)

Abbreviations:
BMI, body mass index (kg x m-2); eCRF, estimated cardiorespiratory fitness (mL x min-1 x kg-1); PA, physical activity; SBP, systolic blood pressure (mmHg); RHR, resting heart rate (bpm); WC, waist circumference (cm).

REFERENCES