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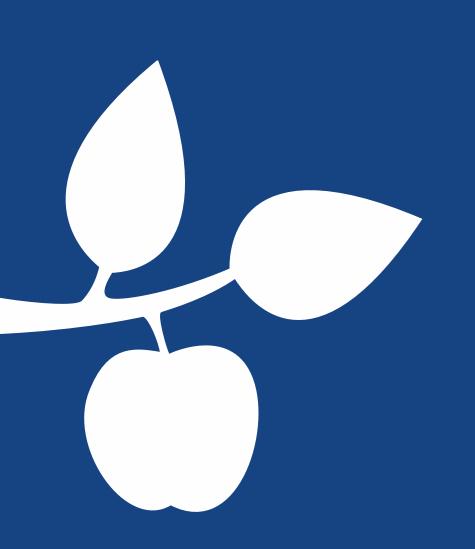
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# Alcohol patients on a treadmill - How fit are they?



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### Purpose

To investigate the effect of physical exercise on alcohol intake, cardio-respiratory fitness and socio-psychological outcomes. Baseline cardio-respiratory fitness (CRF) test results are presented here.

## Background

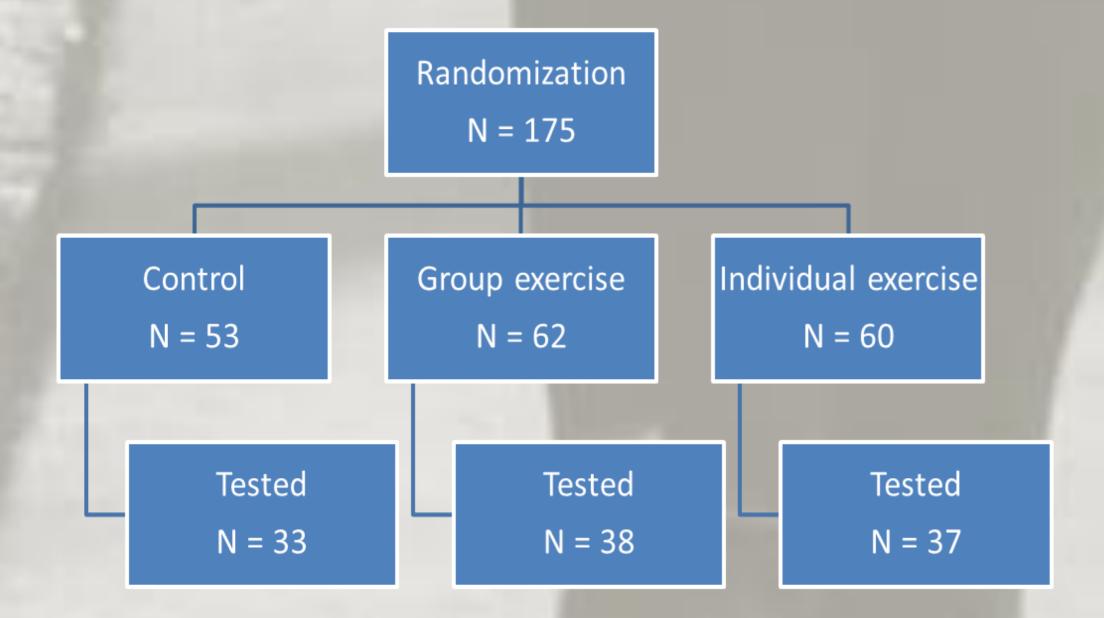
Exercise is a highly recommended lifestyle change activity and a relapse prevention strategy in treatment of alcohol use disorders. The Healthy Lifestyle Study is one out of five projects in the RESCueH research program. In this study we use exercise as add on treatment to understand if it has a preventive effect on relapse.

### Methods

Physical shape of the participants is measured by using:

- 1. The Bruce treadmill protocol for the maximal oxygen uptake (VO<sub>2</sub>max).
- 2. Maximum heart rate (HR<sub>max</sub>)
- 3. Blood lactate concentration by a Lactate Pro.
- Borg scale (1-20) to express the subjective exhaustion.

# Study design



**TABLE 1:** Baseline characteristics, mean (SD)

| Characteristic | Male<br>(n = 76) | Female<br>(n=32) |
|----------------|------------------|------------------|
| Age, yrs       | 42.9 (11.7)      | 50.7 (10.5)      |
| Height, cm     | 178.8 (6.7)      | 164.9 (7.9)      |
| Weight, kg     | 83.1 (12.3)      | 68.3 (11.9)      |
| BMI            | 26.0 (3.8)       | 25.1 (3.9)       |

#### FIGURE 1: Baseline CRF for men

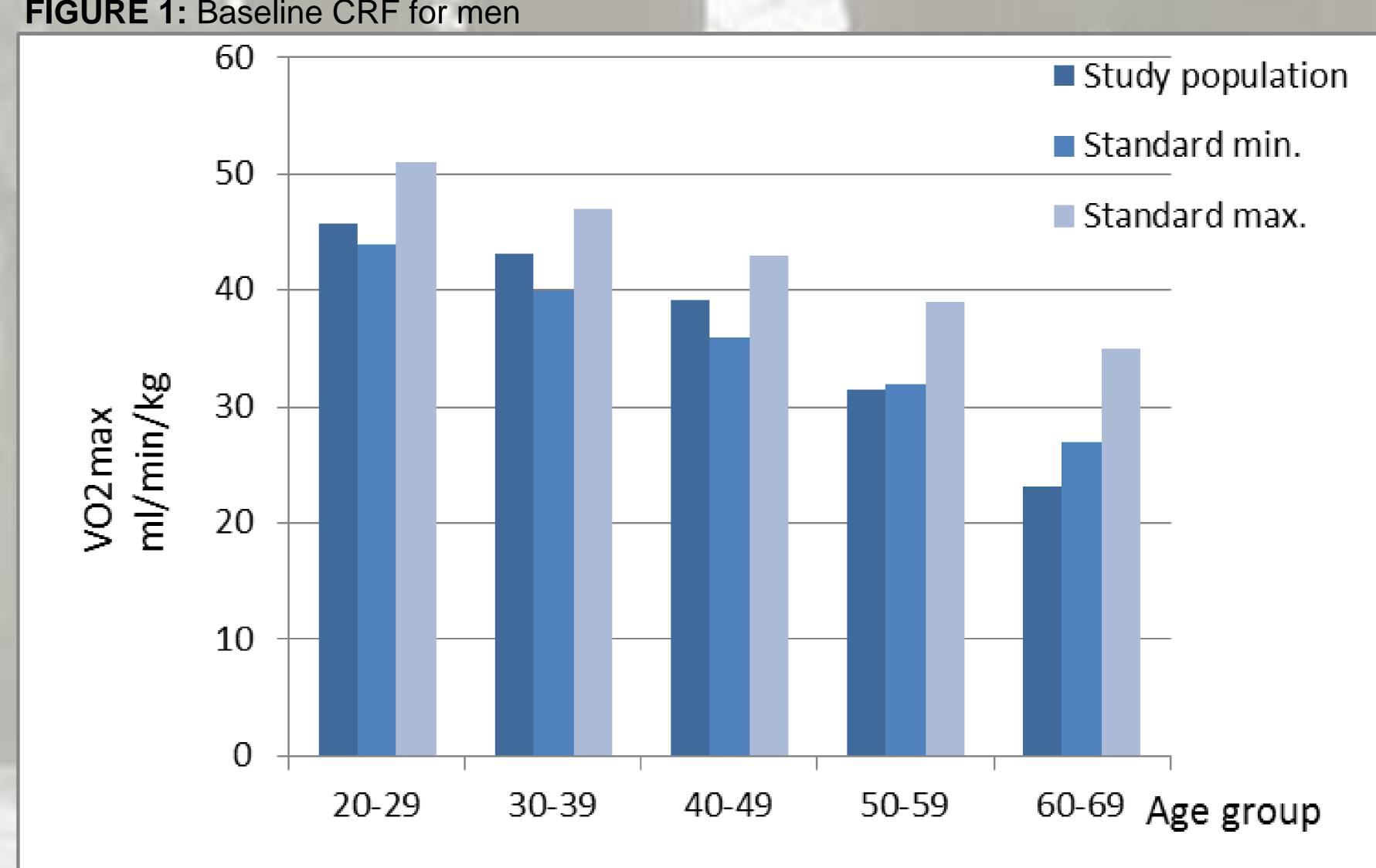
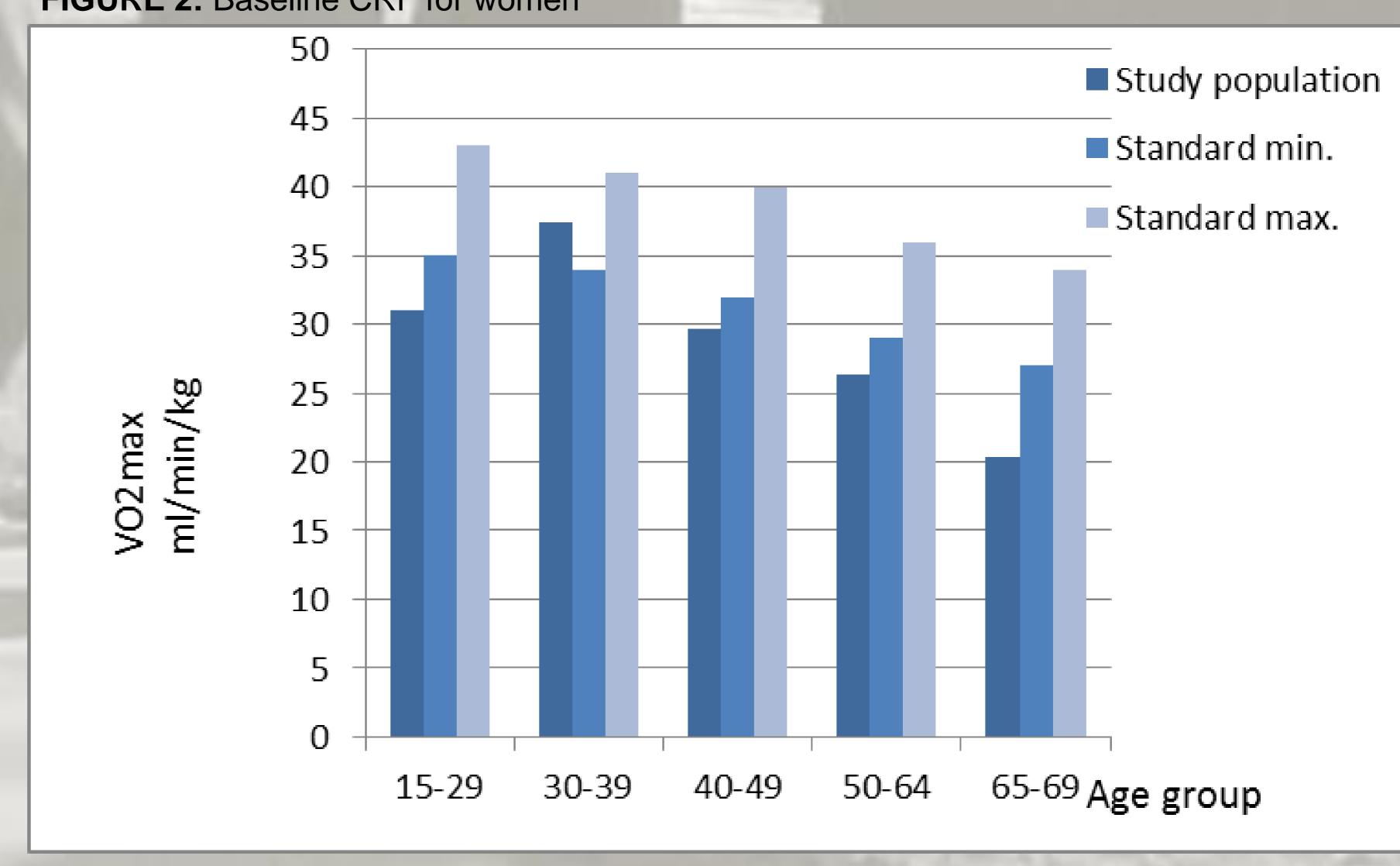


FIGURE 2: Baseline CRF for women



### Results

The sample is representative of patients in treatment of alcohol use disorders because of the distribution of men (70.4 %) and women (29.6 %) and the age group.

Body Mass Index (BMI) indicates sligthly overweight at baseline (BMI> 25) (Table 1).

CRF tests were conducted between May 2013 and May 2015.

20-49 year old men in the sample have medium CRF values compared to CRF of the standard population in the same age groups, while 50-69 year old men in the sample have low CRF values compared to the standard population (Figure 1).

30-39 year old women in this sample have medium CRF values compared to CRF of the standard population in the same age group, while women in all the other age groups in the sample have low CRF values compared to the standard population (Figure 2).

# Discussion

Nearly all test-participants have performed a max-test. We will investigate if there can be observed any changes in the fitness level over time. Changes in cardio respiratory fitness levels may be expected after 6 months in previous untrained subjects if participants exercise moderately at least two days a week.

### Conclusion

Results from the CRF tests show that fitness and shape of female AUD patients are low to medium compared to fitness of the standard population. Younger male AUD patients have medium CRF values and older male AUD patients have low CRF values compared to the standard population at baseline. Follow up tests will be conducted 6 months after baseline to measure if regular exercise improves fitness of AUD patients.

