Metabolic testing

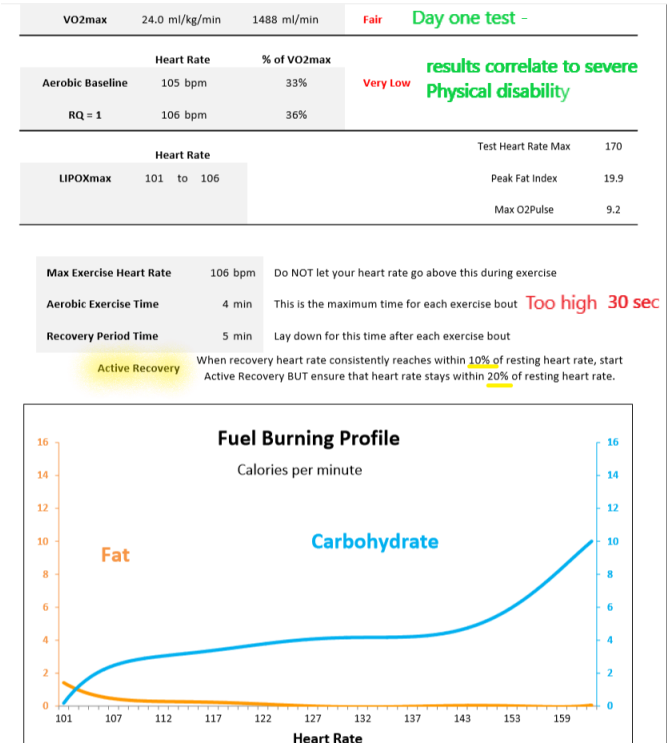
Healthy person's metabolism and training zone.

A chart of fat and carbohydrate calorie burning profile - calories per minute versus heart rate in beats per minute

The red line is carbohydrate burning

The orange line is fat burning

For a person diagnosed as having CFS's the rules are the same but optimum training zone is at a much lower HR. The patient will typically struggle to keep their heart rate under the fat/carbohydrate crossover due to "metabolic" maladaptation associated with the disease. The length of time that they may safely exercise will also be tiny.



The optimal training zone for a person with CFS is abnormally low. This person was over the fat/carbohydrate cross over point, unless lying in bed or on the floor. The pay back for the person doing this test, to exhaustion, was extreme and hit with a vengeance, 10 hours after the test. If a test had been done the next day the test results would be much worse as the person was barely able to walk, by then.

In order to determine the “training zone” it is not necessary to do the test to exhaustion as the location of the fat/carbohydrate cross over is the key information.

In fact for a person suspected to have CFS it is unnecessary and probably not wise to exercise beyond the cross over point.

2 day CPET test

Some clinics such as the Workwell Foundation, Betsy Keller, Nancy Klimas are using a 2-day CPET test to exhaustion protocol. The first day determines the level of physical functional disability based which demonstrates the effect of exertion on the patient and quantifies post exertional malaise (PEM)/ post exertional neuro-immune exhaustion (PENE).

For more details see:

METABOLIC TESTING AND THE RESPIRATORY QUOTIENT (RQ)

https://www.thenaturalnutritionist.com.au/metabolic-testing-and-the-respiratory-quotient-rq/

http://physiologic.com.au/services/

http://jupiterhealth.com.au/

2 – day CPET test protocol

http://www.workwellfoundation.org/testing-for-disability/

Wonder about resting and exercise see:

The Workwell Foundation’s videos and resources

http://www.workwellfoundation.org/research-and-latest-news/

Centre for Disease Control information on CFS

https://www.cdc.gov/me-cfs/index.html