

Exercise Responders & Nonresponders: A better way to look at the effect that exercise has on weight loss.

The amount of weight you will lose through exercise will vary drastically depending on whether you are a responder or nonresponder. This amazing 10 month [study](#) not only tracked exercise, but also energy intake, total energy expenditure (TDEE) resting metabolic rate (RMR), non-exercise energy expenditure (NEEX) and more. What they found was drastic differences in the way people respond to exercise in terms of weight loss. Even more amazing, while they were able to find some of the reasons that some men were nonresponders, **they could not find any reason that women were nonresponders**. Even more surprising was that **nearly half** (46%) were nonresponders! With the exact same nonresponder percentage occurring in both women and men! The study had overweight and obese young people (23 years old on average) exercise enough to burn either 400 or 600 calories a day for 5 days a week. The responders lost an average of about 9.5% of their body weight with no difference between men and women. The non-responding men actually **ADDED** about 1% of their body weight. While the non-responding women stayed about the same. The researchers found that the way the bodies of men responded to exercise varied drastically. The responding men ate less and increased their NEEX while the nonresponders ate more and decreased their NEEX. **The nonreponding men actually had a greater energy surplus while exercising than they did before they started exercising**. As surprising as that is the nonresponding women were downright bizarre. You see both groups of women had about the same energy deficit throughout the 10 months of exercise. There were no significant differences in energy intake, RMR, and NEEX. Any differences there were added up to about the same energy deficit for the 2 groups. The nonresponding women *should* have lost the same amount of weight as the responders. Unlike the men, the researchers could not offer any scientific explanation as to why the the nonresponding women did not lose weight. See my article titled "[Is losing weight as simple as calories in calories out?](#)" for more on this topic.

What's the takeaways from this study?

1. Just looking at averages in regards to what to expect from exercise in regards to weight loss is not enough. In other articles I have shown that aerobic exercise only produces, on average, a modest amount of weight loss. However, what this study shows is that chances are you

will either get a significant amount of weight loss or none at all, depending on whether you are a responder or non-responder.

2. Men nonresponders may be able to achieve weight loss by being careful not to increase their food intake. However, one of the observations of the nonresponders was that their NEEEX also decreased significantly because their non-exercise physical activity decreased (NEPA). While the responders increased their NEPA and their NEEEX. So their increased food intake was only partially responsible for their lack of weight loss. So nonresponding men should also be sure to try to increase their NEPA as well.

3. Since there was no reason found that women nonresponders did not lose weight, they should continue to exercise, but for fitness and not weight loss and should seek weight loss through diet. See my article titled "[Is it better to be fit & fat or unfit & thin?](#)" for the importance of increasing your aerobic fitness.