

Days of Rest and Resistance Training

Summary: Most fitness authorities, including myself, suggest insufficient rest also slows fitness progression and increases the risk of injury. The general consensus is that you should not carry out strength/resistance training on the same muscle group on 2 consecutive days. Recovery period of 48–72 hours between resistance training (RT) sessions is generally recommended to optimize recovery. That is why people should train each muscle groups through resistance training 2-3 x a week with days off in between. Novice exercisers may get away with training on consecutive days and they may see improvement, but improvement may slow as they progress.



Just how many rest days we need each week is not a one-size-fits-all model. One study found that it took 72 hours of rest — or 3 days — between strength training sessions for full muscle recovery, while research from the ACE Scientific Advisory Panel says that a recovery period could be anywhere from two days up to a week depending on the type of exercise. This number will vary based on certain factors like your fitness level, age and type of exercise and intensity of your workouts. **If you feel weak in a muscle or overly sore take an extra rest day. Pushing through soreness and exercising, instead of giving your body adequate rest, can be detrimental.**

Days of Rest and Resistance Training Research for those who want details.

According to MOVE!, an exercise initiative from the U.S. Department of Veterans Affairs, people should not carry out strength training on the same muscle group on 2 consecutive days. Many other authorities, including the ACSM and NSCA, suggest this as well. These recommendations came from two acute studies by Haddad and Adams (2002) and Bickel et al. (2005) which demonstrated that a recovery period of 48–72 h between resistance training (RT) sessions is needed to optimize the molecular responses favorable to gains in muscle size and strength based on two bouts of isometric contraction via electrical stimulation in rats (Haddad and Adams, 2002) and humans (Bickel et al., 2005). Interestingly a study refuted this in humans. The authors suggest that the influence of recovery period between resistance training RT sessions on muscle strength, body composition, and red blood cells (RBCs) are unclear. They examined the effects of three consecutive (C) or non-consecutive (NC) days of RT per week for 12 weeks on strength, body composition, and RBCs. Thirty young, healthy and recreationally active males were randomly assigned to 3 C (~24 h between sessions) or NC (~48–72 h between sessions) days of RT per week for 12 weeks. Both groups performed three sets of 10 repetitions at 10-repetition maximum (RM) of leg press, latissimus pulldown, leg curl, shoulder press, and leg extension for each session. The authors found that both consecutive and nonconsecutive resistance training induced similar improvements in strength and body composition, and changes in RBC parameters. **This may be the case for the novice exerciser, but to improve strength and hypertrophy, lifters beyond the beginner phase should follow a basic periodized program that allows each muscle group to be targeted 2-3 times per week with at least 48 hours of rest between same muscle stimulation, for a total of 4-6 workouts per week. This routine is highly probable to be best for a variety of reasons: maximizes muscle protein synthesis throughout the week, stimulates the muscles with a consistent amount of stress/damage needed for growth, and allows for at least 24 hours of central nervous system rest between workouts.**

What do other studies suggest on this topic: One study showed that 37 consecutive days of high intensity squatting increased the 1RM for squat in two male powerlifters and one male weightlifter (Zourdos et al., 2016). Fat-free mass also increased among all participants but changes in fat mass and quadriceps thickness were inconsistent. Another subsequent study of five resistance-trained men showed that 21 consecutive days of 1RM testing and maximal voluntary isometric contraction of the elbow flexors significantly improved the 1RM strength in both arms to a similar extent, and that the arm that performed three additional sets of elbow flexions daily also significantly increased arm muscle thickness (Dankel et al., 2017). These results suggest that prolonged consecutive days of RT can improve muscle strength and size in individuals that are very experienced in RT, but it remains to be investigated if the results would be applicable to the general population, and if consecutive days of RT would produce differential responses to nonconsecutive days of RT, given the small sample sizes in these studies and lack of direct comparison between C and NC days of RT. Only one recent study compared C and NC days of RT and showed that 3 C ($n = 10$) or NC ($n = 11$) days of RT per week for 7 weeks produced similar adaptations in maximum strength and skinfold-determined body composition (Carvalho and Rodrigues Santos, 2016). However, the authors only reported strength changes for two exercises and did not account for the other exercises that were also performed.

From these studies it does suggest that you can get the same benefit from consecutive days of training, but more has to be done on this topic especially considering individuals who do a high volume of training. All this being said I would stick to the 48-72 hr window of recovery to be safe and maximize results as previously mentioned.

Rest and active recovery days are about doing things that your body needs.

This could be anything from taking an extra nap, going to a mobility class, doing some stretching, or going for an easy walk or hike outside.

Common symptoms of overtraining include:

- Fatigue
- Excessive soreness
- Unexpected weight loss or gain
- Excessive sweating
- Loss of appetite
- Increased thirst
- Irritability
- Difficulty falling asleep or staying asleep