

1. Intensity based strength training should be repeated 2-3 times each week with 48-72hrs rest between sessions. This allows the body sufficient time to recover between training sessions.
2. Maximum of 8-12 exercises per session, utilising the full body. 4-6 exercises lower body, 6-8 upper body.
3. Progress from large muscles to smaller. By training larger muscle groups first you quickly raise the pulse to an effective rate for training. Having raised the pulse rate, training smaller muscle groups is sufficient to keep the pulse rate raised. N.B. in most cases progressing from larger muscle groups to smaller is ideal, however it is not essential. It depends on the objectives of training for the individual and whether training is for rehabilitation, prevention or therapy.
4. Maximum muscle stimulation from one set (8-12 repetitions) continued to the point of momentary muscular failure (until you cannot repeat another full repetition in good form) has been shown to be as effective as multiple sets. This enables you to exercise more muscle groups in one session.
5. Relax muscles not being used in the exercise – i.e. hands, face and neck.
6. Slow speed of movement greatly reduces the possibility of exceeding the structural integrity of tendons, ligaments and joints.

MedStrength recommends three seconds as a safe speed to lift a weight (concentric movement). This allows for focus on:

- form
- full range of available movement
- maximum percentage of muscle fibres recruited
- reduces use of momentum
- reduced chance of injury

**The strength of a muscle corresponds to the maximum possible tension that it can develop.**

There should always be a pause, for no less than one second, at the fully contracted position.

- recruits the highest percentage of muscle fibres
- maintains tension of the muscles
- ensures the exercise is performed slowly

- ensures the movement is performed smoothly
- Reduces use of momentum
- Ensures the weight is at safe and manageable level

Four second lowering of weight (eccentric contraction) is recommended.

**Momentum** - amount or force of movement

7. Avoid fast, explosive movements. This can be dangerous. Working muscles too fast reduces the tension required to gain strength.
8. Keep your breathing steady – do not hold your breath. It is most beneficial to breathe out during the contraction (lifting) phase and breathe in during the eccentric (lowering) phase.
9. Keep the interval between each individual machine to a minimum. This ensures your heart rate stays at a good level for training.
10. Keep your form perfect. Do not increase weight at the expense of poor form.
11. Keep well hydrated before, during and after exercising.
12. Each time you train keep a record of the weight and repetition number achieved. This is essential for monitoring your progress.