

HIIT

(High Intensity Interval Training)

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History & Types of HIIT

High intensity interval training has been around since the early 1900's but got noticed in the 1970's when athletic Coach Peter Coe implemented a rudimentary interval training routine for his son. The routine involved doing 200 meter sprints followed by 30 seconds of recovery time (Wikipedia, 2015). With this training routine Peter's son Sebastian Coe went on to win four Olympic medals. Then in the mid 90's Japanese doctor Izumi Tabata and a team of his colleagues came up with the Tabata protocol. The structure for a Tabata work out consists of pushing yourself hard for 20 seconds followed by 10 seconds of rest and doing that for 8 rounds (Rosenzweig, 2016). A workout routine using Tabata could use push ups, body weight lunges, Turkish get ups, and pikes. The latest interval training program is called 4x4 HIIT. The 4x4 HIIT is a recent interval training program that is becoming popular amongst athletes. The 4x4 Norwegian HIIT program is a mixture of endurance and high intensity. This workout is around 35 minutes with a 5 minute warm-up and 5 minute cool down. The exerciser does 4 minutes of high intensity followed by 3 minutes of active recovery 7 times (Venuto, n.d.). The 4x4 HIIT workout can be done through running, biking and swimming. Please see Appendix A for a chart on proper energy expenditure for the 4x4 HIIT workouts.

Benefits

When it comes to working out more people are leaning towards high intensity training over the common endurance workouts. People often wonder if endurance training such as long distance running is more effective at burning fat than high intensity interval training. The Norwegians have done a lot of research into interval training and its benefits. The one type of interval training they have put their research into is the 4x4 HIIT. Studies have shown that doing four by four high intensity training 3 times a week for 12 weeks reduces cardio vascular disease, improves vascular functions and lowers body fat (Ramos, et al., 2015, p. 690). In the study that showed these results the participants were using the Norwegian 4X4 workout routine. This 4X4 routine involves the participant to go at high intensity for 4 minutes usually around 85-95% of maximum heart rate, followed by 3 minutes of active recovery at 60% of maximum heart rate. Another type of interval training is the Tabata Protocol. Research into this has shown great results. It has been shown that participants doing Tabata for over five weeks increased their aerobic capacity by 14%, their anaerobic capacity by 28% (Koch, 2004). There was another similar study done comparing "traditional aerobic training--running at 70% of aerobic capacity for 60 minutes--for the same number of weeks showed an improvement in aerobic capacity of 9.5% and no effect on anaerobic capacity" (Koch, 2004, p. 142). This shows how Tabata is more effective at aerobic capacity as well as anaerobic capacity than traditional endurance training. The greatest benefit about Tabata is that

you can do the training in the pool! This is great because it is low impact on the joints. All you need is 30 minutes, music and a workout routine. Workout routines can consist of leg kicks, running, jogging, cross country skiing, jumping jacks in place and countless others exercises (McCormick, 2014). If you are looking to get into shape or want to increase your aerobic and anaerobic capacity HIIT is the best place to start.

References

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Appendix A

