

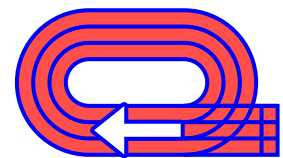
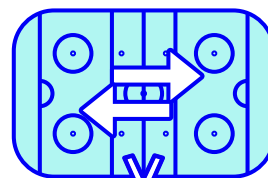
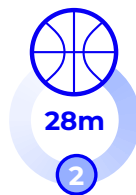
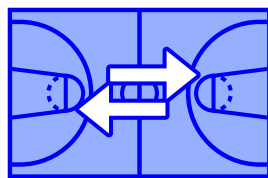
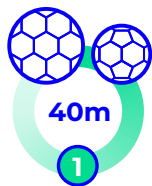
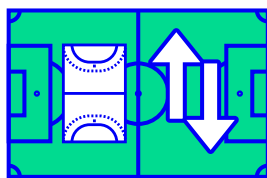


# INTERMITTENT FITNESS TEST



**The 30-15 IFT** is a running test designed in France by Dr Martin Buchheit in the year 2000. It consists of 30 second shuttle runs interspersed with 15 second passive recovery periods. The running commences at a slow pace ( $8 \text{ km}\cdot\text{h}^{-1}$ ) for the first 30 second shuttle and progressively increases in pace by  $0.5 \text{ km}\cdot\text{h}^{-1}$  during each successive running shuttle until the subject reaches exhaustion or fulfils the test termination criteria. The velocity achieved in the last stage of the test is taken as the VIFT (velocity for the intermittent fitness test) and can be used simply as a test result and/or it can be employed to set intensities for training purposes.

**There are 4 versions of the test:**



- 1- the original version with 40-m shuttles
- 2- the version adapted to small spaces with 28-m shuttles
- 3- the ice version with 40-m shuttles
- 4- the straight-line version on a 400-m track without changes of directions.

Mark out a straight line course over a distance of 40 (or 28) metres (Figure 1) taking care to leave enough space for run off (if required) at either end. Use cones of one colour to designate the A (0 metre), B (20 or 14 metre), and C (40 or 28 metre) marks and different colour cones to indicate the points 3 metres in from each end (see Figure 1). If you are setting the test up indoors then you can substitute coloured tape for cones if you wish, although it is important that the athletes can clearly see the tape.

Set up the 30-15 IFT App on your phone and check that the volume is adjusted to a level that can be heard by all athletes that are to be tested.

Instruct the athletes to perform a light warm-up and some stretching prior to the commencement of the test.

Gather the athletes together and explain how the test is performed taking care to highlight the important points.

Have all athletes set up in line with point A (0 metre mark).

Push the start button on the App and on the first beep (usually after a spoken set of test instructions) the athletes must commence running in a direction toward points B and C. At the next beep the athletes should be at approximately the 20 (or 14) metre mark (point B) and by the following beep they must be within the 3 metre zone at the 40 metre end (ideally they would be at point C [40 or 28 metre mark] exactly). Note that when starting the 28-m test directly at  $10 \text{ km/h}$ , athletes need to start from line B.

The athletes then change direction and run back toward point A. At the next beep sound they should be close to point B and so on. This running pattern is continued until the end of the 30 second running stage (which is indicated by a different beep sound from the App).

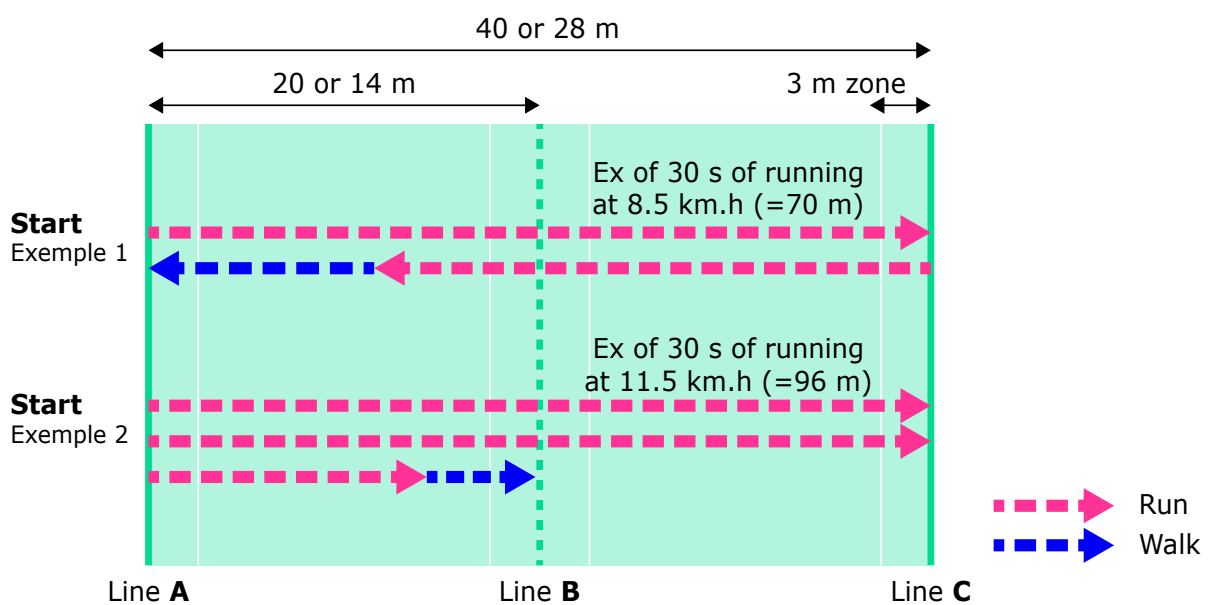
After each 30 second running stage there is a 15 passive recovery where the athletes walk slowly in the same direction that they have been running (i.e., forward direction) until they reach the next mark (A, B, or C).

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Spoken instructions are provided informing the athletes were to commence the next 30 second period of running (i.e., A, B or C). It is extremely important that the athletes **do not walk backward** to the closest marked point (A, B, or C). They must walk in a forward direction to the next marked point in the 15 second passive recovery period. If the athletes are exactly on a marked point when the running stage concludes then they simply stay at that point and wait for the next run stage to begin.

Each successive running stage will increase in pace by  $0.5 \text{ km.h}^{-1}$  and athletes must continue running until either a) they are totally exhausted and stop on their own volition, or b) they fail to be within the 3 metre end zones at the beep on three successive occasions.

When one of these test termination criteria are achieved note down the running pace (in  $\text{km.h}^{-1}$ ) for that particular athlete. This pace is designated as their VIFT (velocity for the intermittent fitness test).



**Figure 1.** Diagram of the layout of the 30-15 IFT (intermittent fitness test) (original 40-m version and Ice). For the 28 m version, turning zones at the extremity of the court and the zone in the middle (14 m) are reduced to 2 m. For the 'straight-line' version on a 400 m track, cones are placed every 20 m and players change direction after each 30 s effort only..

Special thanks to Mike Mc Guigan and Mike Newton

REFERENCE: Buchheit, M. (2008). The 30-15 intermittent fitness test: accuracy for individualizing interval training of young sport players. *Journal of Strength and Conditioning Research*, 22(2), 365-374.