

# The new DEXA scan tests for cricket player

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**In news**— The Board of Control for Cricket in India (BCCI) re-introduced Yo-Yo test and DEXA scan results as criteria for selection of Indian cricketers.

## **What is DEXA scan tests?**

- A DEXA scan is an imaging test that measures bone density (strength).
- DEXA scan results can provide helpful details about your risk for osteoporosis (bone loss) and fractures (bone breaks).
- Through DEXA tests, the **trainers will be able to measure body fat percentage**, lean muscle mass, water content and bone density.
- It helps to understand where the fat is and whether the training methods are yielding the result. It is all linked to a cycle.
- It is part of testing protocols which should have become mandatory long back. Some teams have been doing this for 10 years. It is a fool-proof method.
- Skinfold can be manipulated and each time different results can show up. But with DEXA it will be uniform and the data can be used for the future as well.

## **What is the Yo-Yo test?**

- The Yo-Yo **intermittent test is aimed at estimating performance in stop-and-go sports like football, cricket**, basketball and the like.
- It was conceived around the early 1990s by Jens Bangsbo, a Danish soccer physiologist.
- The Yo-Yo test is not new to the India team as it was first brought in ahead of the 2019 World Cup during the Virat Kohli-Ravi Shastri era.

- Initially it was not well received by some of the players.
- But once players began to see the difference it made on the field, especially with regards to agility and movement, they increased the desired Yo-Yo test score from 16.1 to 17.
- However, in the post-pandemic world, with Covid protocols in place, the team opted for a 2km run (under 7.30 mins) test which was used as a fitness parameter.
- The new updated yo-yo test involves shuttling over a 20-meter distance at increasing speeds, the two-kilometers time trial has to be accomplished in 8 minutes and 15 seconds for fast bowlers, and 8 minutes and 30 seconds for the rest.

### **What are the types of YoYo Tests?**

There are four versions of the Yo-Yo Intermittent test:

1. Recovery Level 1 (YoYo IR1). This is the most popular version focusing “on the capacity to carry out intermittent exercise leading to a maximal activation of the aerobic system”.
2. Recovery Level 2 (YoYo IR2). This is a tougher version of “Recovery Level 1”. It “determines an individual’s ability to recover from repeated exercise with a high contribution from the anaerobic system”.
3. Endurance Level 1 (YoYo IE1). This may be used to test participants in less vigorous sports that usually last longer.
4. Endurance Level 2 (YoYo IE2). This is a tougher version of “Endurance Level 1”.