

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”.