**Badminton Europe Centre of Excellence felmérések**

**Minden játékos 3 alkalommal próbálkozhat és a legjobb eredményét írja fel a feladatoknál!**

**Countermovement jump with no arm pull – felugrás páros lábon a kezek segítsége nélkül**

<https://www.youtube.com/watch?v=rSaR_Aq38SQ>

Each player receives 3 attempts and the best is noted as the test result

**Countermovement jump with arm pull – felugrás a kezek segítségével**

<https://www.youtube.com/watch?v=gLeMQVOqYks>

Each player receives 3 attempts and the best is noted as the test result

**Drop jump (from 40 cm) zsámolyról ugrás, érkezés után felugrás (minél kevesebb időt töltsön a földön a játékos)**

<https://www.youtube.com/watch?v=heY0FDWdS2M> –

Players are instructed to jump high and jump fast (minimize ground contact time). The result is the reactive strength index (jump height in meters/ground contact time in seconds). Each player receives 3 attempts and the best is noted as the test result.

**Wingate cycling test - 30 másodperc maximum gyorsaságú biciklizés (1 teszt lehetőség)**

<https://www.youtube.com/watch?v=e-uaKhOAn_A>

30 sec. maximal cycling test. Test is initiated from a “lead-in” steady state of 80 W and 80 RPM. Resistance is set at 8 % of body mass. Peak power, mean power and fatigue index (percentage drop from peak power to minimum power) are noted as the test results. Only 1 attempt is provided.

**Treadmill VO2max test – maximális oxigénfelvétel mérése futással, futógépen**

<https://www.youtube.com/watch?v=A2z0l9B6aGE>

Incremental running test on a motorized treadmill while measurements of oxygen consumption are made. The test is initiated with 3 min at 10 km/h and 1 % incline whereafter speed increases by 1.5 km/h/min and incline by 0.3 %/min. The test is terminated when the player can no longer keep up and chooses to jump on the side of the treadmill. VO2max is determined as the highest value observed over a 30 sec period (5 sec running mean analysis). Time to exhaustion is also noted as a supplementary test result.

A teszt 3 percen keresztül 10 km/h sebességgel megy 1% emelkedőnél. A gyorsaság 1,5 km/h-val nő percenként és 0,3 %-os emelkedővel. A mérés akkor fejeződik be, ha a sportoló nem tud tovább futni és leszáll a futógépről.

**Badminton speed test – Tollaslabda gyorsasági teszt**

No video available (see article for detailed description). <https://www.ncbi.nlm.nih.gov/pubmed/25051008>

Test consists of hitting one of four sensors (one in each corner of the court) 20 times as fast as possible. Each player receives 1 submaximal warm-up attempt and 3 maximal test attempts with 5 min of recovery in between. The best attempt is noted as the test score.

Ennél a tesztnél a 4 szenzor közül kell egyet eltalálni ( a pálya négy sarkában) 20 alkalommal, amilyen gyorsan cssk tudja ( 1 bemelegítés és 3 lehetősége van a játékosoknak).

**Badminton endurance test – Tollaslabda állóképesség teszt**

No video available (see article for detailed description).

<https://www.ncbi.nlm.nih.gov/pubmed/26849789>

Test is performed with the same set-up as the badminton speed test, only this time the goal is to keep up with the tempo of the test as long as possible. Each player receives one attempt and the level completed level is noted as the test score.

Az előző teszten alapul, de a cél minél tovább tartani a teszt sebességét.

**Force-velocity profiling – erő-gyorsaság mérés**

<https://simplifaster.com/articles/force-velocity-profiling/>

Players perform squat jumps from 90 deg of knee flexion against body mass and external loads of +20, +30, +40 and +50 kg. Players receive 3 attempts for each load and the best attempt from each is noted. Force and velocity are calculated by plotting in the relevant data in this spreadsheet. The main test result is the percentage noted in cell G36/37. <https://www.researchgate.net/publication/320146284_JUMP_FVP_profile_spreadsheet>

Video of how to use the spreadsheet <https://www.youtube.com/watch?v=DPHBR6Umb90&t=2s>

A játékos 90 fokos guggolásból ugrik a megadott súlyokkal.

**Isometric single leg squat - egylábas guggolás 45 fokban**

<https://www.youtube.com/watch?v=KOlbk7DOCLo>

Players are positioned in a smith machine rack (with enough weight added so they can’t possible lift it) while standing on a force platform. The knee angle is set at approximately 45 deg. For each leg the players perform maximal lifting actions where they gradually ramp-up the force over a 3 sec period and the produce maximal force for an additional 3 sec. 3 attempts are provided for each leg. For each leg, the maximal force produced over the 3 attempts are noted as the test score.

3 attempts are also performed where the goal is to produce a high rate of force development. The players push with a force of roughly 100 N over body mass for a period of 3 sec and then at their own command produce force as fast as possible for roughly 1 second. The onset of the force production is identified and the increase in force 100 ms after is noted. The test result in then noted in N/sec (increase in force \* 10).