

05 The high jump

The Celts are credited with inventing the high jump as a sporting activity. A form of self-esteem demonstrated by the ability to overcome an unusual obstacle. A metaphor for a rite of passage and elevation.

A warrior in arms had to jump on a horse and leap as high as possible over a low stone wall.

At a wedding, the 'broom hop' marks the beginning of an official married life. Leapfrogging, rope jumping, trampoline jumping... Codified practices have now given rise to the Olympic high jump events. The physical feat of controlled elevation of one's own body remains a real challenge!

The current world records for heights climbed are two meters forty-five for men, set in 1993 by Cuban Javier Sotomayor. And two meters five for women, since 1987, by the Bulgarian Stefka Kostadinova.

The image shows three postures of an essential sequence in today's high jump, the back roll, known as the "fosbury".

At the bottom of the picture, a horizontal line represents the ground, while a vertical line represents one of the two poles, two-thirds of the way up showing the deflector cleat on which the horizontal bar to be cleared rests. After each successful trial, right up to the final, this bar is raised a few centimeters.

Horizontally, below this bar and behind it on the floor, is the "vault", i.e. the six-by-three-meter mat made of high-density foam, seventy centimeters thick, used for the athletes' landing.

In the background, lines showing the phases of the jump indicate the movement in which the body's posture fits.

On the left, under the image number, at the end of a curvilinear run-up, the candidate arrives almost facing us, close to the pole.

Her inclined position reflects both her struggle against centrifugal force and the oval trajectory in preparation for the change of stance. The take-off foot is placed in front of the body's center of gravity. Energy is concentrated to the maximum to produce an optimal relaxation of rotation and elevation.

To the right of the post and in the center of the image, the athlete is in the momentum phase. She remains facing us, with her arms and whole upper body raised above the crossbar. One of her knees is also raised. We are in the crossing movement.

To the right of this representation, you find the following posture of dodging the bar, a strong back arch, the two arms give a momentum, it remains to make pass the basin and the legs above the bar, while ensuring a rotation of the shoulders. The head, which you can feel is in the bun position, is turned back. The athlete is in control of his center of gravity, in a state of struggle against his own gravity.

The two lines in the background of the body reflect the preparation for the back landing on the vaulting mat. The momentum will allow her to roll into a back somersault and land on her legs, off the mat... To jump for joy at her performance!