Figure 1. The finite element model was created using ABAQUS software.

Figure 2. Normalized knee joint torque in males (solid line) and females (dashed line).

Figure 3. Maximum knee joint torque values in different stop-jump landing strategies. In the first strategy (left) the knee angle at initial contact; in the second (middle) the maximum knee flexion angle; and in the third strategy (right) the maximum hip flexion angle was changed. Solid lines (-) represent males and dashed lines (- -) represent females.

Figure 4. Maximum stress distribution in the ACL over time for males (solid line) and females (dashed line)

**Figure 5** Simulation of the finite element model and the distribution of von Mises stress in the ACL for females (left) and males (right)

Figure 6. The maximum ACL stress distribution over time in different stop-jump landing strategies. In the first strategy (left), the knee angles at initial contact are 14 (solid line) and 39 (dashed line). In the second strategy (middle), the maximum knee flexion angles are 24 (solid line) and 41 (dashed line). In the third strategy (right), the maximum hip angles are 39 (solid line) and 46 (dashed line).