

FAQ - Age Limit

Q: Why did the ISU propose to increase the age limit?

A: Based on a report from the ISU Medical Commission and results from a survey conducted by the ISU Athletes Commission, the ISU Council concluded that for the sake of protecting the physical, mental health, and emotional well-being of Skaters, a gradual increase of the Senior category age limit in the Figure Skating Branch, from 15 years to 17 years was urgently needed.

Q: Was the proposal to increase the age limit a direct reaction to the Kamila Valieva case?

A: No, the minimum age limit (for Senior Figure Skating competitions) was already included in the Urgent Matters of the 57th ISU Ordinary Congress 2018 (see Urgent Proposal N°5 in [ISU Communication 2160](#)). However, at that time, the Urgent Matters did not obtain the required four-fifths majority required to be included in the agenda.

The Proposal was again due to be discussed during the ISU Congress 2020, which was cancelled due to the pandemic. The age limit Proposal was therefore subsequently taken up in the 2021 and 2022 ISU Congress Provisional Agenda – this latter being published on January 31st 2022, before the Beijing 2022 Olympic Winter Games.

During the 58th Ordinary ISU Congress 2022, the topic was finally debated (see Proposal 22 in [ISU Communication 2472](#)) and it may be that the Valieva case made many Delegates vote in favor of gradually increasing the age limit to 17 by the season 2024/25 with no change to season 2022/23 and an increase to 16 by 2023/2024. The Congress also agreed to increase the age limit from 14 to 15 at the ISU World Junior Speed Skating and Short Track Speed Skating Championships.

Q: What was the voting requirement on that Proposal during the ISU Congress 2022 and what were the results ?

A: For the Proposal to be accepted a two-thirds majority was required. 100 voted in favor of the Proposal, 16 voted against and there were 2 abstentions. Consequently, there was a landslide vote – well above the required majority – in favor of the gradual age limit increase from 15 to 17.

Q: What medical research has been done in this field?

A: The ISU Medical Commission submitted the following report to the ISU Council:

Competition, training and recovery depend not only on the chronological age but also on:

- *Developmental age (physical, mental, cognitive and emotional maturity)*
- *Skeletal age (degrees of ossification of the bone structure).*

It is both the developmental and skeletal age that must be considered when reviewing the age limit to enter the Senior category. It is conceivable that allowing under-age athletes to compete may subject them to loads and risks that are thought to be inappropriate for their age, not only physically, but in terms of the psychological and social development of the child. (Reference: K.Kapczuk; Minerva Pediatr; 2017 Oct;69(5):415-426. Elite athletes and pubertal delay.)

Junior athletes need to cope with multiple stressors on their pathways towards elite sport. First of all, they are exposed to high physiological loads caused by training and competitions. Secondly, they normally experience social hassles, demanding and high amounts of school tasks, and potential difficulties relating to their peer-groups. Thirdly, they need to participate in competitions and handle competitive stressors. Ultimately, performance enhancements are normally the central concern for ambitious athletes, as athletes themselves and others are continually evaluating their accomplishments.

The ISU must also consider the image they want to project as Junior and Senior Champions.

Developmental age - Physical

Generally, we know that elite athletes may delay their onset of puberty by an average to 2 years compared to the general population. Genetic disposition, intense physical training (training load), nutritional status, participation in competitive sports and psychological stress during childhood and early adolescence determine athletes' pubertal timing of development. Athletes that practice, specifically, esthetic sports, are predisposed to energy deficiency syndrome and delayed development.

The growing evidence indicates that energy deficiency, plays a crucial role in the pathogenesis of functional hypothalamic hypogonadism in female athletes. Metabolic and psychologic stress activate hypothalamic-pituitary-adrenal axis and suppress hypothalamic-pituitary-ovarian axis, which delays development in female athletes.

Chronic negative energy balance resulting from a systemic physical training and inadequate energy intake (common in aesthetic sports) may delay pubertal development in elite athletes. Youth athletes, especially those engaged in competitive sports that emphasize prepubertal or lean appearance, are at risk of developing relative energy deficiency in sport associated with disordered eating or eating disorders.

In a study by Weimann they found that, intensive physical training of elite female gymnasts combined with inadequate nutritional intake markedly affect pubertal development. These peripubertal effects are not observable in male gymnasts due to different training regimes in male and female elite gymnast. Regular monitoring of female gymnast during their vulnerable growth phase is necessary to minimize life-long physiological and psychological side effects of high impact training. (Reference: E Weimann 1, C Witzel, S Schwidergall, H J Böhles; Wien Med Wochenschr; Effect of high performance sports on puberty development of female and male gymnasts 1998;148(10):231- 4.)

Mental, Cognitive and Emotional Maturity

Preliminary data suggest that the risk of psychological injury associated with participation in elite youth sport is high. The concern includes burnout, disordered eating, and long-term consequences of injury. (Reference: Todd M Sabato; Tanis J Walch, Dennis J Caine: J Sports

Med 2016 Aug 31;7:99-113 The elite young athlete: strategies to ensure physical and emotional health.)

The neural development (brain and nervous system) is 95% developed by age 7. This provides children with the opportunity to develop the movement skills of agility, balance, coordination and speed in general training. The Junior athlete who develops the neuromuscular control early is picked up by Coaches and mentored with early success but may be injured because of lack of skeletal or muscular development or is not able to manage the psychological stress that is imposed during that time. The Junior athlete who develops more slowly is not seen as initially talented but when they both reach puberty with equal strength, muscle mass and neuromuscular development and emotional maturity the early developer begins to feel failure as they are no longer have progressed technically and/or not the only one with those skills and they lose interest, become frustrated as their body changes during puberty forcing them to relearn skills that they accomplished early and they drop out or become injured. However, the athlete who develops later but on a steady course in line with their skeletal and muscular development must be encouraged to stay involved early on and not to be discouraged by the other athletes' early develop. They need to stay on the training track in order to reach their full potential. Both of these athletes have the risk of ending participation in the sport but for different reasons.

By remaining in the Junior level and providing time for them to mature psychologically and socially along with their neuro and technical skill development, they are better prepared to cope with the increased psychological pressures of Senior competition, which is important for their emotional health and well-being and in the development of well-rounded athletes.

Skeletal age

There are two aspects to this area:

The epiphysis (growth plates) and the rate of rapid growth that occurs during adolescence. This immature skeleton along with rapid growth spurts are risk factors for certain types of adolescent injuries.

The epiphyseal plates (growth plates/skeletal immaturity) of adolescence are more prone to injury than the fully developed skeleton. The growth plate (epiphysis) is made of cartilage and is the last portion of bone to ossify or harden into solid bone. It can be 2–5 times weaker than other structures (ligaments and tendons) around the end of the bone and joint.

The growth plates most at risk for a stress-related injury are the ones most loaded during repetitive activity. Such as the knee in jumping sports for take-off and when landing, the heel in running sports, the hip in jumping sports when repetitively lifting the knee for take-off, the shoulder and wrist in lifting maneuvers and the back in sports with continued flexion or over extension.

Rapid growth places stress on the muscle-tendon junction, bone-tendon junction ligament and growth plates. The increases in strength needed to accommodate these changes that will enable a child or teenager to continue to generate the same limb speed as before the growth spurt may not occur in a uniform pattern. Such imbalances in growth and strength, coupled with the loading imparted by sport training and competition, create a situation conducive to the development of overuse injuries.

The concern is that during a period of known skeletal vulnerability, the adolescent athlete may be exposed to excessive training and competition loads associated with high-level competition, which places the athlete at greater risk of injury.

In general, closure of the epiphyses and final adult height is achieved at a skeletal age of 17 by the standards of Greulich and Pyle. (Reference: Greulich WW, Pyle SI. Radiographic atlas of skeletal development of the hand and wrist, 2nd edn. Stanford, California, USA: Stanford University Press, 1959)

Summary

There are identified modifiable injury risk factors that include postural control, competition anxiety, life events, previous injury, and volume of training that will protect the elite junior Skater.

There is also adequate evidence arising from injury prevention studies of youth sports participants - including neuromuscular training, protective equipment, mental training to enhance self-esteem, adoption of task-oriented coping mechanisms and sport rules modification - to prevent injuries in elite youth sports settings.

Increasing the age limit to 17 years of age to qualify for entry to the Senior category allows the Junior athlete the time necessary to reach skeletal maturity decreasing risk of epiphyseal injury if training loads are modified during times of rapid growth and to expand on their social and emotional skills development

Most importantly the ISU has a duty of care to protect the physical and psychological health and safety of all athletes including elite adolescent athlete.

Q: What other research has been done in this field?

A: The ISU Athletes Commission conducted a survey in January 2021. 966 responses were received and an overwhelming 86.2% of respondents supported the idea of raising the age limit to 14 years old for the Junior categories and 17 for the Senior categories. Only 13.8% disagreed. The survey is available [here](#).

Q: Why is the age limit increasing gradually?

A: The ISU Council Proposal was based on a gradual increase, i.e. no change (15 years) for the season 2022/23, an increase to 16 years for the season 2023/24 and an increase to 17 years for the season 2024/25 and subsequent seasons. This gradual implementation will:

- Allow Skaters to adapt gradually to the new age limits and avoid that Skaters who already competed internationally in the Senior category would be compelled to return back to the Junior category (grandfather clause).
- Allow the Technical Committees time to adjust the Technical Rules for the Junior category by preparing technical changes to prevent injuries.
- Allow the ISU Council and ISU Members to evaluate if the extended period of the Junior age category and resulting increased number of Junior Skaters requires an increase in the number of Junior category International Competitions.

Q: How can young Skaters stay motivated when they have to wait so long before they can compete at the major senior-level events?

A: It is the passion and love of skating including the skills development, creativity, musicality, camaraderie, success, as well as competing physically and emotionally in a healthy and

stimulating environment, that motivates them to skate not only when they are young but also into their senior years.

Q: What are the advantages of having Skaters who are 17 and older competing at major events?

- It encourages older athletes to remain in the sport as the youthfulness of many elite athletes may make them particularly vulnerable. The competition is therefore made more equal and comparable.
- Older athletes have a better perspective of what is appropriate behavior when it comes to peers, coaches and other adults in their entourage.
- They have developed more socialization with peers and improved coping mechanisms in relationships - both within and outside the sport. Therefore they tend not to be so isolated as younger athletes who are often home-schooled and mostly only surrounded by adults who have ties to the sport.
- Fully mature athletes have less chances of injuries to the growth plates (mostly due to overtraining) as the skeleton is already well developed. They do not experience rapid growth so there is no imbalance between the length of the muscles and tendons relative to the length of the bone.
- They have adapted to the changes in their body that occur with puberty. This adaptation process requires both the physical adjustment to skills as well as the emotional acceptance of a new body image.
- They have had more time to reflect on how they psychologically respond to success and failure, including any injuries and recovery, allowing them to develop more effective strategies to manage these at a higher level of competition.
- The knowledge of nutrition and a healthy lifestyle is also generally more extensive at an age of 17 years old.

Q: Will the junior Skaters now have a higher degree of difficulty in their programs and could it devalue the senior-level events?

A: In principle we would expect junior level skaters to be still in their development phase in regards to their technical abilities as well as for the Components and the artistic interpretation of their programs. It is a balance between the quality of the execution and the maturity of the Skaters that will make the difference between junior and senior and not so much by the degree of difficulty in their programs.