From VOA Learning English, this is Science in the News.

I'm Mario Ritter.

And I'm Kelly Jean Kelly.

Today we tell about a decision to strengthen rules on doping in sports -- the use of drugs or other substances to improve athletic performance. We will talk with an athletic competitor whose life was affected by doping, and we will tell about something called "accidental doping."

A Clear Vote to Strengthen Sports Doping Rules

Representatives of anti-doping agencies from around the world met last month in the South African city of Johannesburg. The meeting was called so that the delegates could discuss proposals to reform sports doping rules. The conference followed evidence of doping in almost every sport.

The World Anti-Doping Code is the central document of the World Anti-Doping Agency, the WADA. The code lists the anti-doping

policies and rules for athletic competitions. It was last amended in 2009. The WADA has held meetings over the past 18 months about possible changes to the document and other anti-doping rules.

In September, a WADA committee approved changes to the code and presented them to the Johannesburg meeting. Conference delegates approved the changes. The amendments were then presented to the WADA Foundation Board for final approval. Every member of the board voted to accept the changes.

The new World Anti-Doping Code will take effect in January 2015, more than a year before the 2016 Olympics in Rio de Janeiro, Brazil. Anti-doping officials say they hope the new rules will help make that event the cleanest Olympics ever.

John Fahey is the chairman and president of the WADA. He supports the changes.

"We now have more intelligent and comprehensive testing programs in place that I believe will be further enhanced upon the ratification of the revised code. We have a code compliance

reporting process and numerous education tools available to help stakeholders, and inform and guide the youth of the world."

More than 2,000 amendments were suggested. But some delegates are not sure they will have any more effect than the rules established in 2009.

The changes include a four-year suspension from competition for athletes who knowingly take banned substances to improve their performance. Coaches and trainers who help athletes break the rules will also be punished.

The new code says testing and punishment of those suspected of doping should be done within acceptable human rights principles. And it says investigations and intelligence-gathering should be combined with testing of athletes.

Other changes include making the code shorter and clearer, and balancing the interests of international sports partnerships and national anti-doping organizations. The new code would also give laboratories the right to test for substances other than those requested by testing officials.

Hezekiel Sepeng is the Grassroots and Development Athletes Coordinator at Athletics South Africa. He notes that many poor athletes in Africa eat foods that could cause them to fail some tests for banned substances.

He says anti-doping officials should create a strong campaign to help such athletes understand the doping dangers caused by some of the foods they grew up eating.

"Education, education, education -- we need to educate our athletes, with all the things that are changing. You know these things should not only change up there, you know, especially in Europe or in symposiums, and should filter down to, to rural areas."

There is a reason Hezekiel Sepeng feels strongly about this issue. He was South Africa's first black Olympic medalist. He won the silver medal in a surprise ending to the 800-meter race at the 1996 Olympics in Atlanta, Georgia. But he was banned from competition in 2005 after he failed a test for a banned substance. He says the laboratory made a mistake. We will hear more from him later in the program.

But Is the New Code Too Strong?

After the Johannesburg conference approved the changes, some critics feared the new rules might be too strong. But others wondered if they were strong enough. WADA officials say they believe the new code will make it more difficult than ever before for athletes to cheat with performance-enhancing drugs.

One change is the doubling of the ban in cases of intentional doping from two to four years. Another is punishment for trainers and supporters of the athletes who help them cheat. The Code also punishes athletes who refuse to help in doping investigations. However, those who do help may be punished less than those who do not.

John Fahey of the WADA says the new Code is strong but fair.

"We've got stronger sanctions for those who intentionally dope. We've also got greater flexibility when it comes to sanctioning of athletes. All has been done with fair consideration of human rights with an understanding of the principle of proportionality. There will be a greater emphasis on intelligent processes in the future, and on investigations. Investigations in particular are

seen as essential if we are to do what we must do as effectively as we can."

He also told VOA the new code will protect athletes from developing countries from their competitors in richer countries.

"It applies equally to athletes no matter what country they come from, what sport they're involved in, whether they're male or female. It says you will be treated equally if you offend under the rules known as the anti-doping code. What I say to those in emerging nations is that they ought to go forward with confidence, knowing that if there are cheats in bigger countries, stronger countries, the likelihood is that they will be caught, because we are becoming more effective. So there may not well be the disadvantage they think there is."

Mr. Fahey noted that it was the athletes themselves who asked for stronger punishments.

"The overwhelming majority of athletes around the world have said there must be tougher penalties. The standard two-year penalty that we've been used to so far is not good enough in the

eyes of athletes. The punishment doesn't particularly suit what they believe is important to stamp out cheating."

David Howman is the secretary-general of the WADA. He says the idea of a four-year-long ban was first discussed 10 years ago.

"The learning since then, and the desire, I think, of many clean athletes is that we should have looked at it again. So we did that when we started this process at the beginning of 2012. We asked everyone what they thought. We had a huge amount of consensus in relation to the imposition of a four-year penalty."

Travis Tygart heads the American anti-doping agency. He supports the new code. But he says anti-doping agencies in each country must enforce them.

"It's a Lamborghini without an engine. If we don't have the resources and the people to put in place, then it's going to go nowhere, and that's a failure for clean athletes and the integrity of sport if we allow that to happen."

A Positive Drug Test Ends a Career

Now, as promised earlier, we talk with former Olympian Hezekiel Sepeng of South Africa. In 1996, he became the country's first black athlete to win an Olympic medal.

"The way I ran, this is not normal because, at one stage, I was last. You know, when the bell went, I was last... See now, I get goose bumps, eh."

But one drug test changed his life. With one positive test result in 2005, he went from being a hero to being strongly criticized. The runner says the laboratory made a mistake. Officials disagreed and banned him from competition for two years. The ban ended his athletic career.

Today, the 39-year-old athlete works with the South African athletics federation, and operates an organization that helps needy children. His message to the children is clear:

"Cheating, it's not good in sports. And our kids, especially you know in countries like in South Africa, most of the countries in Africa, we still need to teach our kids about, about doping."

Hezekial Sepeng was just one of many athletes who watched closely as the World Anti-Doping Agency strengthened its antidoping rules.

Doping scandals have hit many sports in recent years. Top athletes like American cyclist Lance Armstrong and baseball player Barry Bonds have been accused of using illegal performance-enhancing substances.

Can Doping Ever Be "Accidental"?

Supporters of disabled and poor athletes say there is little education on doping in many countries and the new code does not deal with that problem. They say this lack of education may lead to athletes taking drugs or eating foods that cause them to test positive for banned substances. They call this "accidental doping."

Yet the former head of the WADA, Dick Pound, says he does not believe there is such a thing as accidental doping. The agency's director-general, David Howman, explained Mr. Pound's comments.

"The issue that was raised by Mr. Pound has come from his experience in anti-doping and the fact that he chaired a committee that we held to look at the effectiveness of, of testing. And he has a very strong belief that far more athletes than concede, intentionally dope. And therefore the category of what he refers to as 'accidental dopers' is a small one. I think what we need to look at very clearly as we go forward, and this is mirrored in the code review, is the way to deal with the sophisticated doper, the intentional doper."

Mark Cooper heads the International Committee of Sports for the Deaf. He says it may be true that "accidental doping" does not happen. But he says "inadvertent doping" does. He spoke about Terence Parkin, a well-known South African swimmer. Mr. Parkin cannot hear and is unable to read words in their correct order because of a condition called dyslexia.

"Terence won a silver medal in swimming at the Athens Olympic Games and continues to compete. Terence is deaf and Terence is also dyslexic. So, would somebody please explain to me how I am expected to read to Terence the list of banned substances? It's just not possible. And there are still parts of the world there where are high illiteracy rates. How can we expect somebody

who is illiterate to read the, the ingredient list on the side of a, you know, a can of protein powder?"

Hezekiel Sepeng says lack of education and understanding leads many young athletes to use banned substances. The former Olympian says he knows of many athletes who have "accidentally" taken such substances in their food or drink.

He says there is one solution: education.

"We need to teach our athletes. I understand we are from different cultures, but there is rules, we need to make sure, especially what we drink, what we eat."

This Science in the News was written by Christopher Cruise, and produced by June Simms.

I'm Mario Ritter.

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Join us next week at this time for more news about science on the Voice of America.

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