

## Transcript

### What sporting future? Risks and rewards

#### **MICHAEL JOHNSON:**

Andy, you've been involved in sport for a very long time. Is this time, over the last 50 years or so, are we seeing right now the most advancement in sport performance and what athletes are actually capable of?

#### **DR ANDY WALSH:**

Yeah, that's a great question. I think in the last five, 10 years so, last five years really, the technology revolution has just come like in every aspect of life. And I think right now, this is a point where we can understand things in ways we've never been able to before. So in terms of where we're heading, the future is wide open. I think we're going to see advancements in the next 10, 20 years that make the last 100 look sort of insignificant.

What that translates to in terms of actual faster running and lifting more, things like that, is still to be determined. But I think as I look at it, if a scale of 1 to 10, we're probably a 1 out of 10 in terms of our understanding of really what it takes to perform at the top. One's good, it helps, but I think there's so much more we're going to learn in the next few years. And that's really the beauty of this time. We're going to start to get answers to things and discover things and even learn new things that I think that are going to shed light on how we can help people really get to the top of their game.

[MUSIC PLAYING]

#### **SIR DAVE BRAILSFORD:**

I think we're going to get faster. I honestly believe that. I think we have done for all of the time to this point. I can't see why it's going to stop now. And so I think we will definitely get higher, faster, stronger. It's diminishing returns. We're going to work have to work harder. The rate of progression, the potential will get slower. But I think there's some super work being done about what are the limits. And I'm particularly interested or we're interested at the minute and certainly in nutrition. And I think there are still gains to be made in truly understanding some of the nutritional interventions.

And for us, which fueling systems and substrates have been used when and how, and can we optimize that? Can we manipulate it a little bit? Can we change it? And there's a lot of work still to be done in that area. So I think personally, I think there's a knowledge and an education and research insights that's all feeding into that. So I can't see why it's going to slow down.

[MUSIC PLAYING]

#### **DAVID EPSTEIN:**

As competitive as sports are, I think there's still large populations in the world that really don't have any access to the sports or to the kind of training that they would need to be successful. And so I think we're going to continue to discover groups of people that have the potential for great performances. I

mean, I think a lot of what we're learning about genetics is some of what we learned in sports genetics is what we learned in medical genetics, which is people are set up in different ways to respond better to certain types of training. Muscular training, aerobic training. And then what you see on day one isn't always the talent you're really looking at. And I think as we realize more that trainability is part of the most important talent, it'll change the way people are recruited and tested and measured.

**DR ANDY WALSH:**

But ultimately, I think of performance in the bigger conversation. The cognition, the body, the spirituality, the creativity, the physicality. That is, I think, really untapped. And that whole combination, we may, because we've been training the 100 since a couple of thousand years, we may be sort of limiting out, and that sort of curve is slowing. But in other areas of overall total function and human function, I think we're still on this trajectory up.

And then we get into this idea that things will start to be augmented. Bodies will start to be assisted by machines and so we're starting to get this whole conversation of really how the human evolves and develops in contrast to what the technology could be. In the last Olympics, Oscar and his prosthetics really was a window into where the worlds could diverge.

And ultimately, if a individual has a bionic set of limbs that outperform the human limb, in athletics, yes, there's probably a rule that says he shouldn't or she shouldn't be in the event. But outside of that, there are other communities interested in performance which don't have those rules. So then I think you're going to start to see interesting integrations of augmented components of humanity.

**MICHAEL JOHNSON:**

I'm both excited and somewhat concerned about what science will do to sport. I see what it's doing to society and it's a double-edged sword. There are great things that we're able to benefit from technology as a society. At the same time, it creates a new set of problems that we have to then address and deal with and create solutions for.

And I think the same thing will have to happen in sport. I think that governing bodies will have to start to prepare for what is to come with technology and science, and how it affects performance and how it affects sport. Because at the end of the day, personally, I want to see sport always remain fair and balanced for everyone, and not turn into something that that's unfamiliar to a sports fan.

[MUSIC PLAYING]