Stateline Northern Territory

Transcript

Oly Science:

Broadcast: 09/05/2008

Reporter: Danielle Parry

MARGIE SMITHURST - PRESENTER: Adrienne Francis reporting there. And just a foot note to that story, Stateline was unable to get any comment from the Territory or federal governments about protection for the fledgling bush plum industry. They were always meant to be a contest of strength and endurance between nations on an even playing field. But are the Olympics being hijacked by modern science? Stateline spent time with members of the Australian hockey team who've been in Darwin fine tuning their game in preparation for Beijing. As Danielle Parry discovered, they're using a space age temperature pill and global positioning technology to give them an edge on their rivals.

DANIELLE PARRY - REPORTER: It's the pinnacle of elite sport in Australia, representing your country at the Olympics and winning gold. After choking in three previous Olympic finals, the Kookaburras finally took home the gold in Athens in 2004. And they're preparing to do it again in Beijing with the help of sports science.

PETER PEELING - SPORTS SCIENTIST: We don't only track our players with GPS units , we put little tablets inside them and measure their temperature, we poke them and prod them, we take blood and we look at as many things as we can in their system to see how they're responding to exercise.

DANIELLE PARRY: Part of that work has been happening here in Darwin. Peter Peeling is part of a team of sports scientists working to give our Olympic hockey players the edge.

PETER PEELING: Performance gains of even half a per cent could be the difference between a gold medal and coming last, so if we can do even a one per cent change through science then our athletes want to take it as quickly as possible.

DANIELLE PARRY: He's using satellite technology to track how far and how fast players run in an average game.

PETER PEELING: We drop the gps onto the harness on their back and they just run around and it stores all their data for us.

RUSSEL FORD - PLAYER: Once it's on you forget about it. It's good, we get the feedback of how far we've run and whether we've been slacking off or not.

PLAYER: You're out there for 20/25 minutes as a forward, you just work out what your maximum efforts

are and you just get an idea of how hard to push yourself and pace yourself.

MATTHEW WELLS: You know there's teams, they can push guys too hard and to breaking point and they'll never recover during a game whereas we know how far our guys can go, we can bring them off in the right amount of time when they're really struggling, refuel them and get them back out there and they'll be fine.

DANIELLE PARRY: For the record, hockey players run about 10 kilometres in an average 70 minute game. That's almost as far as an AFL player travels in a two hour match.

COMMENTATOR: It paints the hockey players as a bit of strange beast if you like. Not only are they very good aerobically, so they're very good at in a fitness sense, they're also very fast and powerful athletes as well.

DANIELLE PARRY: The Kookaburras may be fit but heat could be their greatest Olympic hurdle. It's Darwin's big attraction but Beijing's biggest challenge.

MATT BREARLY - NT INSTITUTE OF SPORT: We know that it's going to be hot. We know that athelets are going to have to deal with the heat, so we're going to have to address that issue and the Kookaburras coming here at this time fo year is perfect for their preparation.

DANIELLE PARRY: Matt Brearley is a Territory scientist who specialises in helping athletes beat the heat. He's using these space age pills to literally get inside the players' bodies and see who's heating up.

MATT BREARLY: It gets ingested, goes through the stomach of an anthlete, into the intestines. From the intestines it will transmit a frequency based upon its temperatures so we can read temperature with this monitor here.

DANIELLE PARRY: The thermometer pills are covered in silicone and send a harmless signal to the hand-held receiver during and after play.

MATT BREARLY: Originally developed by NASA. Basically from 2001 we've utilised it to look at core tempeerature in the field, whereas before it hasn't been able to be done in the field. You've had to mimic these conditions in the lab which obviously isn't ideal.

DANIELLE PARRY: The wireless devices have been used in a range of professions from firefighting to the defence forces and sports like grid iron, hockey and triathlon are now making the most of the technology. It's cutting edge stuff. So much so that the results for each player are being kept secret until after the games.

MATT BREARLY: We're trying to keep that under wraps, trying to keep that competitive advantage. We'll look to modify what those guys do pre-game to try and accomodate differences in heat storage.

BARRY DANCER - AUSTRALIAN COACH: I think if we have got an edge then we'd be foolish to broadcast that. I think we are doing some things but it's important if we have that they're not the world's ideas, they're just ours for the moment.

DANIELLE PARRY: The hi-tech approach is the envy of many of Australia's rivals, including India.

JOAQUIM CARVALHO - INDIAN COACH: We also do it but not at the same level that the Australian

team does, and of course the money factor plays a very important role. And I think Australia is a far more advanced country than India.

DANIELLE PARRY: There's no denying that access to technology like this is creating an uneven playing field. But experts are divided about whether it's gone too far.

ASSISTANT PROFESSOR NICK O'DWYER - UNIVERSITY OF SYDNEY: Developed countries are essentially professionals and less developed countries are presumably far more at the amateur end of the scale. But whether it's an unfair advantage is difficulty to say. I don't know whether we can blame that on sport because it's really about the disparity in wealth between nations.

DR RICHARD LUCAS - SPORT ETHICIST, ANU: We think if everybody doesn't have a fair and equitable access to all of the technology, then it's an unfair advantage and if you specifically deny people access to that technology, which is what happens, then it is cheating. You're taking an unfair advantage over people.

BARRY DANCER - AUSTRALIAN COACH: Well its about us exploring the one per centers that might make a difference and give our athletes the best chance and I'm confident we're doign it as well as anybody in world hockey at the moment.

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