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Golfers used as guinea pigs

By IAN HUTCHINSON, TORONTO SUN

For those of the opinion that golfers aren't really athletes, the exercise physiologist for the national men's and women's amateur teams has some inside information to pass along.

"We do consider them to be athletes and they are competitive with other sports in terms of their fitness and conditioning and athletic abilities," said Greg Wells about players on the national team.

It would be natural to assume Wells is biased because of his ties to the Royal Canadian Golf Association, but he's worked with other athletes such as swimmers, kayakers and paddlers and is putting his words into action in his other life as a scientist at Toronto General Hospital and the Hospital for Sick Children.

After working with lupus and leukemia patients in the past, his current focus is joining with the respiratory medicine team and the exercise lab at Sick Kids to test the effects of exercise on children with cystic fibrosis, a debilitating disease that affects the lungs and digestive system.

In order to advance that knowledge, a number of elite athletes have been recruited to undergo tests that include getting inside an MRI machine that has been rigged with a non-magnetic bike, so it doesn't affect the operation of the MRI, and duplicating the cycling motion.

According to Wells, the MRI has been set up to measure chemicals inside muscles.

"What happens to people when they're sick is almost replicated by what happens when you exercise," he said.

"For example, you can put the heart under stress, so if there are problems with the heart, it shows up during exercise when it wouldn't show up during rest.

"If kids with cystic fibrosis have lung limitations, you don't detect it at rest, but you make them exercise and you can start to see where some of these problems begin to become apparent.

"The same training techniques or the same understanding and test methods that you would use to find out what the limits of an athlete are, you use the exact same tests to find out what the limits of a child with a disease is," added Wells.

"Obviously, the limits are very different, but the learning and the test techniques are exactly the same," said Wells, adding that golfers could play an important role in his work at Sick Kids.

"We're very interested in vertical jump and how quickly muscles can contract and that happens to be what the children with cystic fibrosis have the most problems with is the explosive, fast, intense-type movement and intense-type contactions," said Wells.

"There will definitely be a link between the stuff that I'm doing with the strength and power athletes, of which golfers are one, and those children with CF."

The work of Wells and his colleagues won't produce a cure for cystic fibrosis, but exercise can be used as a complement to existing treatments for the disease. Wells says developments over the past 15 years have raised the life expectancy of those with cystic fibrosis and continuing that through exercise is the goal.

"Children with CF have a specific challenge with their muscles and we're going to now begin to apply some of the training techniques and nutrition interventions that we've used with some of the athletes to see if we can impact on these kids," said Wells.

"The kids with cystic fibrosis that exercise the most tend to have the best health outcome so it's very, very important for them, but we really didn't know what the link was exactly and it turns out that there is definitely something going on within the muscles that we were able to discover with the MRI.

"The exercise programs are huge. It can be used to treat pretty much every single disease. It doesn't cost anything and has none of the side effects of drugs. The biggest challenge is figuring out what the right type of exercise is for each type of illness that the child may have and, obviously, to get doctors interested."

Wells adds that children with such diseases have something else in common with elite athletes, whose minds are focused on winning and championships.

Such children also have to battle every day with their lives and health as their focus. To say the least, the stakes are much higher than trophies.

It's a fact that makes mindless arguments about who is and who isn't an athlete seem trivial.