

# The Telegraph

## Human growth hormone 'makes worst athlete the best'

Human growth hormone is powerful enough to make the worst athlete in an Olympic race finish first, a study has shown.

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By Peter Hutchison

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The trial, published today, is the first to show that HGH positively affects physical performance.

Scientists discovered that injections of the drug enhanced the sprint capacity of athletes considerably.

Tests found that HGH could lead to a 0.4 second improvement over 10 seconds in a 100 metre sprint.

The results would correlate for professional athletes, reserachers claimed.

Dr Ken Ho, who led the study, said: "This improvement could turn the last place finisher in the Olympic finals into a gold medal winner."

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During the eight-week study 96 amateur athletes aged 18 to 40 were given HGH injections or an inactive placebo.

Half of the 63 male participants also received an additional injection of placebo or testosterone.

The effect on a sprinter's speed was nearly doubled in men who also received testosterone injections.

Results showed that HGH injections increased the athlete's ability to sprint but had no affect on their ability to lift weights or jump.

Researchers also found that HGH significantly reduced fat mass among athletes but did not increase muscle mass.

Sprint capacity returned to normal six weeks after participants stopped receiving injections, the study found.

Athletes who received human growth hormone also complained of swelling and pains in joints, according to the study published in *Annals of Internal Medicine* - the journal of the American College of Physicians.

Olympic officials are increasingly concerned about the possible use of HGH amongst high-profile athletes.

In November last year the Wigan rugby league player Terry Newton became the first professional sportsman to test positive for HGH and received an automatic two-year ban.

Dr Ho, head of the department of endocrinology at St Vincent's Hospital in Sydney, said: "In our study, we used doses of growth hormone on the low end of what is believed to be abuse in sports.

"We think that the real effects of growth hormone could be far greater than what's reported in our study. Equally the side effects could be much more serious as well."

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