

Sync your sport to your body clock for a personal best

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Natural early risers, or larks, hit peak performance around noon, according to a study that tested elite hockey players at different times of the day. The night owls among them did best at around 7 pm – irrespective of what time they got up that day.

It is now accepted that people can be divided into [different "chronotypes"](#), depending on what times they are naturally inclined to rise and go to bed. About a quarter of us are larks, another quarter are owls, with the rest in the middle.

Previous research has suggested that, on average, people generally do best at running and some other sports in the afternoon or evening. But [Roland Brandstaetter](#) of the University of Birmingham in the UK wondered if this could be affected by chronotype.

Retrain or rethink?

Brandstaetter and a colleague gave 20 hockey players numerous aerobic fitness tests over several weeks, randomised to six different times of the day. The players weren't told the purpose of the study.

The players' performance changed considerably over the day, in a pattern that depended on whether they were larks, owls or intermediates, as gauged by questionnaires.

The owls showed the most variation, performing 26 per cent worse at 7 am than at 7 pm. Larks

and intermediates had less variation, with individual differences of 7.5 and 10 per cent.

Even a small performance advantage could mean the difference between winning and losing at professional level, points out Brandstaetter. He suggests that if athletes have to compete at a time that doesn't suit them, they should try to retrain their body clock into a different pattern. "They could benefit from adjusting their sleep-wake cycle," he says. "Every body clock can be adjusted."

For those of us with more choice, Brandstaetter suggests the opposite measure, changing your activity time to suit your body. "Let's say you're an extreme owl and your swimming club only has the pool early in the morning – then you would have a problem."

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