When it comes to exercise, our brain's sense of effort can be as good a measure of effectiveness as a heart monitor, according to research undertaken by University of South Australia Professor Roger Eston.

Professor Eston, Head of the School of Health Sciences at UniSA, will be explaining the value of the rating of perceived exertion (RPE), in the next Knowledge Works public lecture this month.

"Invasive methods requiring sophisticated equipment can provide ways to assess the capacity for, and effects of exercise, including measuring heart rate, breathing rate and oxygen use," Professor Eston says.

"However, there is also a personalised, permanently online, user-friendly
and remarkably accurate way to monitor effectiveness – the brain, which determines the subjective sense of effort."

Professor Eston's research has involved asking different groups of people to exercise at specific ratings of perceived exertion (RPE), using a simple 15 point scale ranging from no exertion to maximal exertion.

The outcome of this research indicates that it is possible to control exercise intensity in such a way as to enable fitness to be measured without maximal effort and also to gain improvements in physical health over a period of time.

"There is a fantastic relation between the rating of perceived exertion (RPE) and more objective measures of intensity," Professor Eston says.

"The RPE is now a recognised measure for predicting exercise capacity and interpreting fluctuations in performance over an exercise session."

At the lecture Professor Eston will explain how individuals can optimise their exercise intensity and also predict their exercise capacity by paying attention to their perceptions.

Professor Eston will present findings from a range of age groups and challenge people to think about the effort they make when they exercise.

"This is a simple concept, but it is valid. It can empower people to feel more confident about their sense of effort and how reliable that is as an indicator of their exercise intensity."

Provided by University of South Australia