Maintaining aerobic fitness could delay biological aging by up to 12 years

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Maintaining aerobic fitness through middle age and beyond can delay biological ageing by up to 12 years and prolong independence during old age, concludes an analysis published ahead of print in the *British Journal of Sports Medicine*.

Aerobic exercise, such as jogging, improves the body's oxygen consumption and its use in generating energy (metabolism).

But maximal aerobic power starts to fall steadily from middle age, decreasing by around 5 ml/[kg.min] every decade.

When it falls below aound18 ml in men and 15 ml in women, it becomes difficult to do very much at all without severe fatigue.

In a typical sedentary man, the maximal aerobic power will have fallen to around 25 mil/[kg.min] by the age of 60, almost half of what it was at the age of 20.

But the evidence shows that regular aerobic exercise can slow or reverse the inexorable decline, even in later life.

Research shows that relatively high intensity aerobic exercise over a relatively long period boosted maximal aerobic power by 25%, equivalent to a gain of 6 ml/ [kg.min], or 10 to 12 biological years.

"There seems good evidence that the conservation of maximal oxygen

intake increases the likelihood that the healthy elderly person will retain functional independence," says the author.

The other positive spin-offs of aerobic exercise are reduced risks of serious disease, faster recovery after injury or illness, and reduced risks of falls because of the maintenance of muscle power, balance, and coordination.

Source: British Medical Journal