

Scientists unlock secrets of ageing

A SIMPLE test at birth could provide clues about someone's health in old age after scientists found a chemical 'fingerprint' in the blood.

Researchers have found 22 molecules linked to metabolism, called metabolites, that may be valuable indicators of the risk of disease in later life. It raises the prospect that a blood test could provide clues about how a

by **HAYDEN SMITH**

person will age and pave the way for preventative treatments.

Study leader Prof Tim Spector, at King's College London, said the discovery – based on blood samples donated by 6,000 twins – was 'very significant and exciting'. The test would be 'better than anything else

out there' in giving an estimate for how long someone would live and could also be used in forensics.

Scientists said the higher concentrations of the metabolites are found in older people.

'You potentially have a test, not only for how old someone is, but also the rate at which they are ageing,' Prof Spector explained. One

molecule – C-glyTrp – appears to be linked to a number of traits including lung function, bone density, blood pressure bone density and cholesterol levels.

It is also linked to birthweight, which is already seen as significant in determining future health.

'So far, the molecular mechanisms that link low birthweight to health or

disease in old age had remained elusive, but this discovery has revealed one of the molecular pathways involved,' Prof Spector said.

Understanding these 'could ultimately pave the way for future therapies to treat age-related conditions', co-author Dr Ana Valdes added.

The research is published in the *International Journal of Epidemiology*.