Well done, you’ve passed the womb entrance exam

by HAYDEN SMITH

SOME complain that children are made to sit too many tests... and now it has emerged we all had to pass one before we were even born.

Education secretary Michael Gove will no doubt approve when he learns embryos applying for a place in the womb must take an ‘entrance exam’ to show they’ll make good foetuses.

The chemical selection process helps ensure low-quality candidates are rejected, new research reveals. But just as a marking mix-up can see able pupils given low grades, breakdowns in the quality control system can lead to healthy embryos being rejected. ‘Speaking in terms of an entrance exam, a poorly prepared womb will make the test too rigorous or too lax – decreasing the chances of a successful pregnancy,’ said Prof Jan Brosens.

Rather than testing embryos’ grasp of basic Latin and Greek – as Mr Gove might deem appropriate – the womb lining judges them on whether or not they secrete the chemical trypsin.

Embryos with a high proportion of abnormal cells fail to produce the substance, triggering an alarm mechanism, Prof Brosens and Warwick University colleague Prof Siobhan Quenby showed.

However, when the womb lining is unprepared for pregnancy, the system goes wrong and poor-quality embryos can be selected instead of good ones.

The discovery could be a major breakthrough in the development of fertility treatments because rejection of healthy embryos by the womb is a major cause of their failure. It could also help researchers devise ways of preventing miscarriages and late-pregnancy complications – which are often the result of low-quality embryos being accepted.

‘This work adds to a growing body of evidence that assessment and optimisation of the lining of the womb may be the only effective way in preventing infertility and pregnancy complications,’ Prof Quenby said.