Baby's microbiome may come from mom's mouth via placenta

Babies in the womb are not as sheltered from the outside world as you might think. The placenta harbours a unique ecosystem of bacteria which may have a surprising origin – the mother's mouth.

Disturbances of the placenta's bacterial community may explain why some women give birth prematurely, and could also be one of the ways that a woman's diet affects her offspring's gut bacteria, and as a result the child's disease risk. "Different nutrients [in the mother's diet] are a huge determinant of which microbes take up residence in the placenta," says Kjersti Aagaard of Texas Children's Hospital in Houston, who led the study.

In the past decade there has been growing awareness of the important role of the human microbiome – all the bacteria, viruses and fungi that live on and in our bodies. Disturbances to the gut microbiome have been linked with conditions ranging from obesity to autism.

Read the full, original story: Baby's first gut bacteria may come from mum's mouth