Have humans hit an evolutionary wall? Top scientists offer their views

Our Stone Age ancestors who were faster runners avoided being trampled by mammoths and were more likely to have children. That is ‘natural selection’.

Overtime, the human population became faster at running. That’s evolution.

That makes sense for Stone Age humans, but what about nowadays? We don’t need to outrun mammoths, we have medicines for when we’re sick and we can go to the shops to get food.

Natural selection needs a ‘selection pressure’ (e.g. dangerous trampling mammoths), so if we don’t have these anymore, does this mean we stop evolving?

Even with no selection pressures, experts say evolution still occurs by other mechanisms.

Professor Stanley Ambrose, an anthropologist from the University of Illinois, explains that “any change in the proportions of genes or gene variants over time is also considered evolution. The variants may be functionally equivalent, so evolution does not automatically equate with ‘improvement’”.

Whilst some genes can be affected by natural selection (e.g. genes that help us run faster), other changes in our DNA might have no obvious effect on us. ‘Neutral’ variations can also spread through a population by a different mechanism called ‘genetic drift’.

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So, evolution can happen by different mechanisms like natural selection and genetic drift. As our environment is always changing, natural selection is always happening. And even if our environment was ‘just right’ for us, we would evolve anyway!

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