

Did dinosaurs hold their heads up?

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Some dinosaurs may have held their heads up, like a giraffe, rather than in a more horizontal position, University of Portsmouth scientists report today.

The team studied the posture of living animals and concluded that the sauropods, which include [dinosaurs](#) such as Diplodocus, held their heads upright for most of the time.

Sauropods typically had huge bodies, long necks and stout legs and weighed about as much as 10 [elephants](#). They were plant-eating dinosaurs and lived in the Jurassic and Cretaceous periods.

This new research, however, isn't enough of a reason to change the posture of the dinosaurs on display at the Natural History Museum, according to Museum dinosaur expert Dr Paul Barrett.

'It is not unreasonable to suggest that their necks may have been held in a vertical position for some of the time,' says Dr Barrett. 'But [sauropod](#) lifestyles would have required necks with a wide range of movement, not least to reach down to drink water from ground level, as well as being able to move the [neck](#) from side to side.'

'There is no scientific justification for changing the sauropod mounts in our galleries: these positions definitely reflect at least some of the poses that sauropods would have been able to adopt in life.'

The University of Portsmouth team studied X-rays of members of 10

different vertebrate groups and found that while the neck is only gently inclined in [salamanders](#), turtles, [lizards](#) and crocodylians, it is vertical in mammals and birds - the only modern groups that share the upright leg posture of dinosaurs.

The idea that sauropods held their heads upright, is not a new, however. This was how sauropods used to be reconstructed in the late 19th century and for most of the 20th century. This was before new lines of evidence in the 1980s and 1990s suggested that their necks may have been held horizontally.

'This was for a number of reasons,' says Dr Barrett. 'One theory was that their necks and tails would have acted as counterbalances for each other and that the horizontally held neck would have put less strain on their hearts as they pumped blood the long distance from the body to the head.'

The next step for the team will be to carry out engineering studies to see which of the neck positions is most energy efficient.

Source: American Museum of Natural History ([news](#) : [web](#))

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