



When we think about dinosaurs, we think about enormous creatures who lived eons ago. What we know about them comes from fossilized remains which paleontologists study to learn more about these extinct animals.

In many ways, it seems logical to think that dinosaurs had large brains which fit inside their large skull cavities. But ... that's not necessarily the right conclusion we should draw. It all depends on the dinosaur under discussion.

On further study, of a *Triceratops* (for example), we learn something quite different from analyzing its brain cavity.

Although the brain itself may not be fossilized, it is still possible to determine its size. Scientists create an "endocast" - or replica of the brain- to learn more:

An endocast is easily made by filling the cleaned-out braincase (space occupied by the brain during life) with liquid rubber to make a mold of its internal contours. When hardened, the rubber will closely match the shape of the brain and its nerves.

We can see, for example, an endocast of a *T. rex* brain (thanks to National Geographic's Channel at YouTube):

When it comes to the brain size of a *Triceratops*, however, be prepared for a surprise. Despite the enormous size of this 5-ton creature - which was the prey of other dinosaurs, like *T. rex* - its brain was small.

When compared with its overall size, its brain was very small!



The image at the top of the page depicts the location of a *Triceratops* brain cavity *in situ* (meaning...while the fossilized *Triceratops* was still at the site where it became fossilized).

Click on the top image for a better view.

Credits:

Image online, courtesy Wikimedia Commons.

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In-text photo: Alina Zienowicz took this picture of an imagined Triceratops, on display at JuraPark Baltow (in Poland). Online via Wikimedia Commons; license: [CC BY-SA 3.0](https://creativecommons.org/licenses/by-sa/3.0/)

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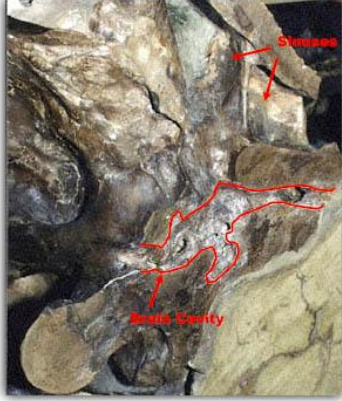
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