TOOLBOX

Stabilizing head mold leads to sharper brain images

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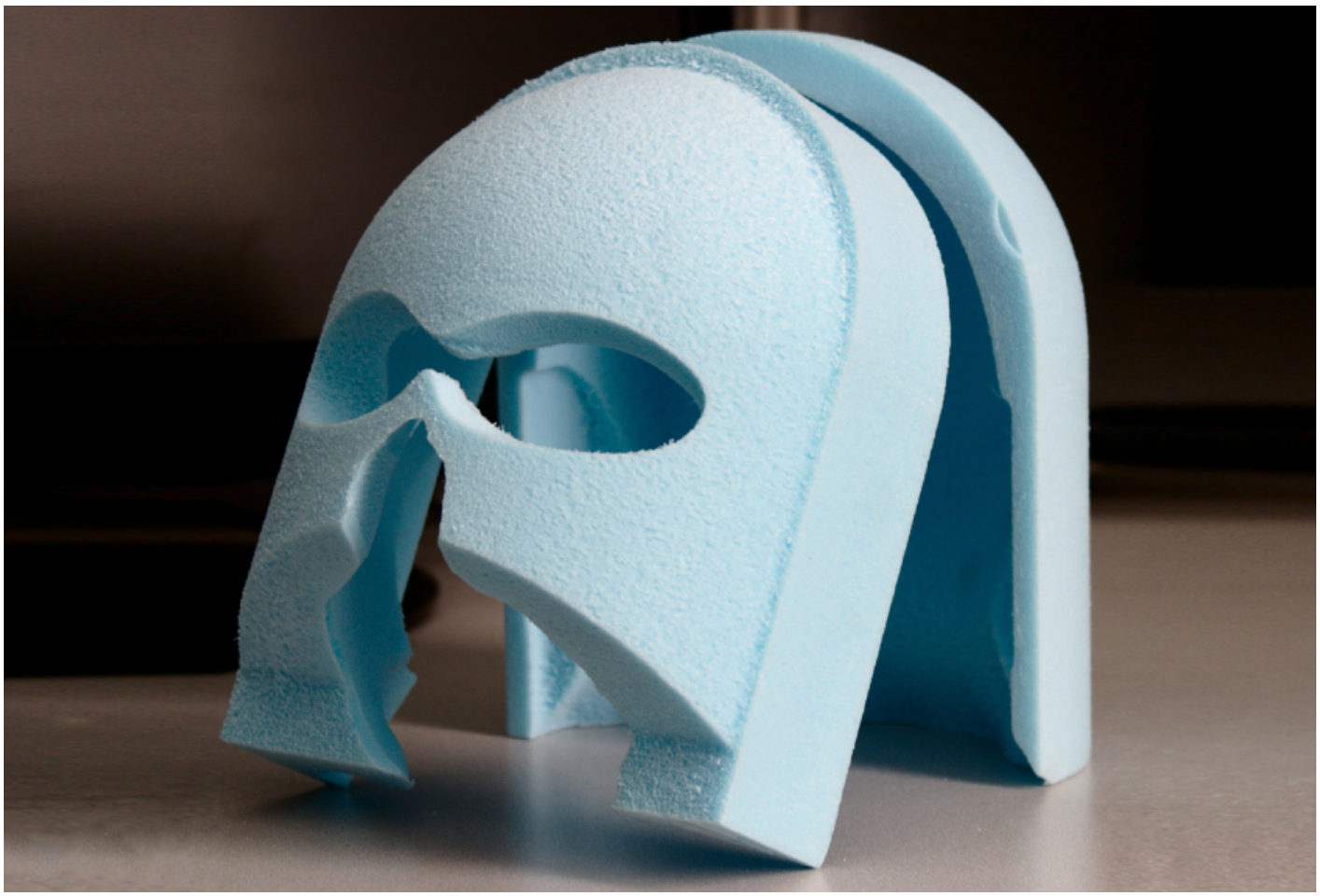

A customizable Styrofoam head mold minimizes movements during brain scans, enabling researchers to produce clearer images[1].

During a typical functional magnetic resonance imaging (fMRI) scan, researchers take multiple pictures of a person's brain and combine them. If the person's head moves during the scan, the images may blur and **taint the results**. The problem is particularly **prevalent in autism research**, as children with the condition are often anxious or sensitive to noise, making them liable to fidget.

Researchers often try to minimize autistic children's movements by having the children practice in a mock scanner. They may also use foam pads to cushion the bars that surround the head area. But these strategies don't prevent all movement.

REFERENCES:

1. Power J.D. *et al. NeuroImage* **189**, 141-149 (2019) **PubMed**