

Brain's glial cells may hold key to treating obesity

Some of the latest discoveries suggest that [glial cells] play complex roles in regulating appetite and metabolism, making them a possible target for treating obesity.

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Two recent studies add new evidence that glia play a key role in metabolism. In one study, [researchers]...reported that insulin acts on astrocytes to regulate sugar intake in the brain.

The researchers used genetic engineering to remove insulin receptors from astrocytes in adult mice...As a result, the mice were unable to adjust the amount they ate to balance the sugar level in their bodies.

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“[The researchers] show that these manipulations have a clear physiological effect on glucose metabolism,” says [Pierre] Magistretti...

Around the same time, another group of researchers...was investigating a different type of glial cell—NG2-glia...[T]hey blocked the proliferation of NG2-glia in mice and found that[,] without them[,] neurons...became unresponsive to leptin. This caused the animals to overeat, leading some to double in weight in just a month.

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Researchers investigating glia hope that focusing on these long-overlooked cells will provide some much-needed advances.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [New Players in the Obesity Puzzle: The Brain's Glial Cells](#)