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Sticky method to beat germs

As bacteria become resistant to existing antibiotics, scientists around the world are searching for new approaches. The latest comes from an international group of chemists from the UK, US and Canada. They propose to use branched sugar-like molecules, called glycodendrimers, to grasp germs in a sticky embrace. Attached to the glycodendrimer is an enzyme that will destroy bacterial proteins.

In laboratory tests the group, led by Ben Davis of Oxford University, showed that the approach worked against a germ called *Actinomyces naeslundii*. By changing the shape of the glycodendrimer, the chemists hope to make it bind to different bacteria. Their study is published in the Journal of the American Chemical Society.

"We are trying to block infection before it even gets going," says Mr Davis. "The glycodendrimer inhibits the binding but then the enzyme that is attached to the glycodendrimer swings around, chews up the protein on the surface and renders it unable to grab hold of the host it wants to infect."

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