

4. Strange Liquid

Make a liquid that flows easily if you push it gently, but turns solid if you try to push it hard.

Apparatus

Cornflour or custard powder
A bowl
Water



Experiment

Put 2 heaped spoonfuls of custard or cornflour into the bowl. Add water slowly and mix. At first the mixture will be very stiff but keep going.

When the proportions of water and powder are right, the liquid will have some strange properties:

1. If you move the spoon through it slowly, it will flow very easily.
2. If you try to move the spoon fast, the liquid will solidify.
3. As soon as you release the pressure, it will liquefy again.

If your liquid is never runny, add more water. If it's always runny, add more powder. When you have the right consistency, play with it! See what happens when you stab the liquid with the spoon, or try dragging the spoon firmly across the surface.

What happens when you pour the liquid into another bowl?

What does it feel like if you hold it in your hands?