

## How about a fridge that does not use electricity?



Mohammed Bah Abba ( 1964-2010) won the Rolex award for enterprise in 2000. A Nigerian teacher, motivated by his concern for the rural poor in his country, designed this extremely simple pot-in-pot refrigeration method.

A fridge uses around a third of the electricity in the average kitchen. Although it doesn't use much at a time it's always on. Most things don't actually need refrigerating, but milk and its substitutes do, and purchased vegetables last much longer when chilled.

This simple design for a power-free fridge is much used in Africa. It works on the principle that wherever water evaporates there's a local drop in temperature.

Take two big terracotta plant pots, one with around 8cm wider diameter than the other. Place the smaller inside the larger and fill the space in between them with sand, so that the tops of the pots are level. Wet the sand and keep it wet. A lid is needed. Until we can find a suitable one with a handle we use an old dinner plate. A tray below to catch surplus water is useful, and an old saucer placed upside down in the bottom makes sure that the things in the bottom of the storage space don't accidentally get wet.

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