



## Balloon Kebab

### You need:

- 1 x balloon (plus inflator)
- 1 x kebab stick.

### Risks.

Breathing problems if inflating the balloon by mouth.  
Stab injuries from the sharp kebab stick.  
Hearing issues if the balloon bursts.

### Method.

1. Inflate the balloon, but do not over inflate.
2. Tie off the end of the balloon either with cotton or by knotting the neck.
3. Locate the centre of the balloon at the opposite end to the neck where the rubber has not been stretched.
4. Carefully push the sharp end of the kebab stick into the centre of this unstretched part of the balloon.



5. Carefully push the kebab stick into the balloon until the sharp end reaches the unstretched section of the neck.
6. Carefully push the sharp end of the kebab stick through the unstretched section of the neck.



### **How it works.**

Where the rubber of the balloon is stretched, energy is stored in the rubber and there are balanced but strong elastic forces pulling on each part of the rubber surface. If a small tear develops in the rubber as a result of a puncture, then the forces will no longer be balanced and the tear will rapidly grow leading to the balloon bursting. If a puncture occurs in an unstretched part of the rubber, then there is little or no elastic energy stored and very weak forces. These forces are insufficient to make the puncture grow and so the balloon does not burst.