



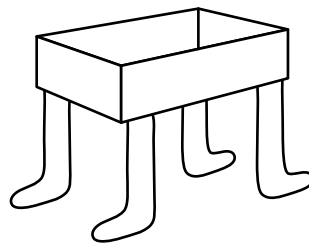
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Based on pages 16 and 17 of *Food, teeth and eating*

# When vitamin D is missing


## Try this...

1. Vitamin D helps bones grow strong. You can test the effect of vitamin D on leg bones by making the following models and testing them.
2. Make four cylinders of Plasticine. Each one should be half a centimetre thick and five centimetres long.
3. Bend each cylinder so that it makes a foot two centimetres long and a leg three centimetres long.
4. Arrange the legs as the diagram shows so that they can support a matchbox tray.



5. Put the matchbox tray on the legs. Place a coin in the tray and check the shape of the legs after each coin is added.
6. Repeat step 5 until there are ten coins in the matchbox tray.
7. Make four cylinders of Plasticine. This time each one should be three millimetres thick and five centimetres long.
8. Bend the cylinders to make feet and legs as in step 3.
9. Repeat steps 4 and 5.
10. Keep adding coins one at a time and check the shape of the legs after each coin is added.

## Looking at the results.

11. Which set of legs are stronger?  .....

12. How can you tell they are the stronger legs?

 .....

13. What happens to weak legs when they have to support a heavy weight?

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