

Explore How does blood flow through blood vessels of different diameters?

Materials

2 pieces of flexible rubber or plastic tubing (different diameters, each 60 cm long)

2 identical plastic jars

water

stack of books

large plastic container

turkey baster

clock or watch with second hand

What to Do

- 1 Fill each of the plastic jars with water to exactly the same level. Place one of the plastic jars on top of a stack of books.
- 2 Place one end of the narrower of the two tubes in the plastic jar and hold the other end over the plastic container. Make sure there is no air in the tube. Use a turkey baster to remove the air if necessary. Then let the water flow into the plastic container. Time how long it takes for the plastic jar to empty.
- 3 Repeat the procedure using the other jar and the other piece of plastic tubing.

Explain Your Results

Would blood flow more easily through blood vessels that have a large diameter or a small diameter?