Friendly bacteria

Your intestines hold an entire ecosystem of tiny life that helps keep you healthy. *Eschericia coli*, or *E. coli*, is a common species of bacteria that contributes to your healthy gut flora and helps make vitamin K. These rod-shaped bacteria can divide every 20 minutes.

E. coli has been studied by scientists for more than 60 years, helping us understand more about life. They sometimes have tiny hairs called 'pili'. Most strains are harmless or useful but occasionally a strain can make you unwell and cause food poisoning.

Add colours and shading to this group of bacteria to make them beautiful. Bacteria at the bottom right show a view inside, with a cell wall around the edge and DNA as paler areas. The bar represents one micrometre (one thousandth of a millimetre). Around 40 bacteria lined up lengthwise would fit across the width of a human hair.

