



## Learn about your food and what happens when you eat

### Food Groups

- Starchy Foods: Provides us with energy
- Fruit and vegetables: Minerals and vitamins to stay healthy
- Milk and dairy: Calcium for healthy bones.
- Fat and sugar: Provides energy.
- Protein: Helps us to grow.



### Food Groups

- Starchy foods
- Fruit and vegetables
- Milk and dairy
- Proteins
- Fat and sugar



### Milk and dairy



### Proteins



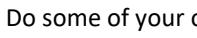
### Fat and sugar



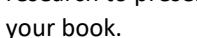
### Starch foods



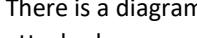
### Fruit and vegetables



### Mouth



### Esophagus



### Stomach



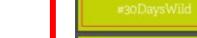
### Small intestine



### Large intestine



### Rectum



### Anal sphincter



### Anal sphincter



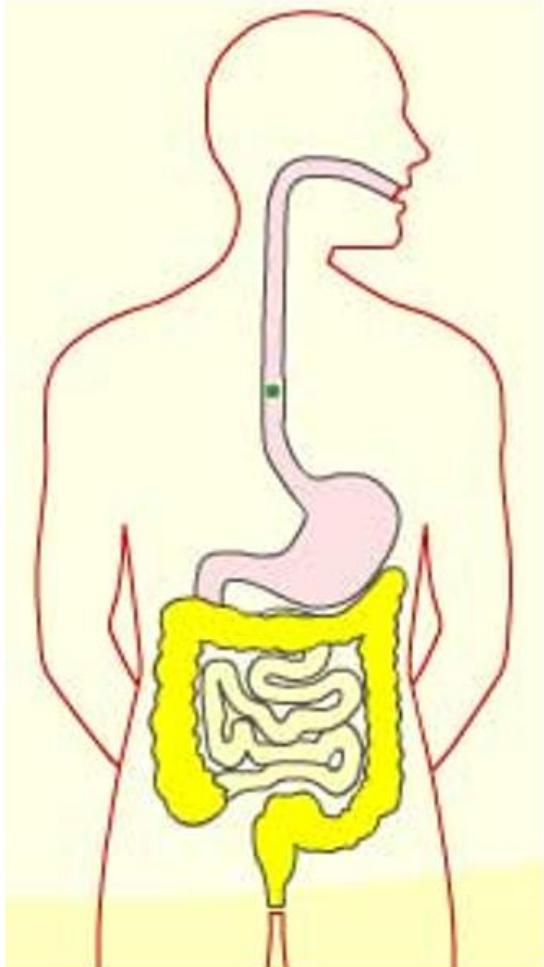
### Anal sphincter



### Anal sphincter



## The Digestive System



**Stomach   Mouth   Gullet**

**Small intestine   Anus   Large intestine**

## Digestive System

Fill in the words from the word band in the sentences below.

**Word Box** large Intestine oesophagus anus liver digestive system  
mouth saliva small intestine

1. The \_\_\_\_\_ breaks down the food we eat.
2. Digestion begins in the \_\_\_\_\_ when you chew and swallow.
3. A watery liquid called \_\_\_\_\_ makes the food wet and soft, and it has a chemical that helps digest the food.
4. The \_\_\_\_\_ connects the bottom of your throat to your stomach.
5. The \_\_\_\_\_ is a long narrow tube that has spongy walls that soak up nutrients from food.
6. The \_\_\_\_\_ is on the right side of the body near the lowest rib. Its job is to clean the blood.
7. From the small intestine, leftover food gets pushed into the \_\_\_\_\_.
8. From the large intestine, food that cannot be digested leaves the body through the \_\_\_\_\_.

# The Digestive System-Amazing Facts



The human digestive system is a **complex series of organs and glands that processes food**. In order to use the food we eat as **energy**, our body has to break the food down into smaller molecules that it can process; it also has to excrete (or get rid of) **waste**.

Most of the digestive organs (like the **stomach** and **intestines**) are tube-like and contain the food as it makes its way through the body. The digestive system is essentially a long, twisting tube that runs from the mouth to the anus, plus a few other organs (like the **liver** and **pancreas**) that produce or store digestive chemicals. Without the digestive system, our bodies would not be able to get nutrients from the food we eat or get rid of the waste products that food makes and we would soon become ill!

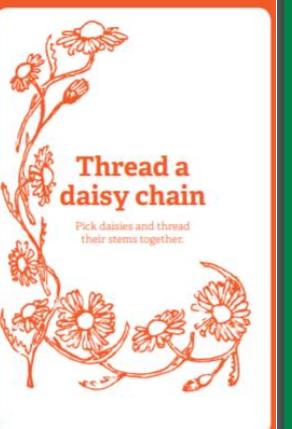
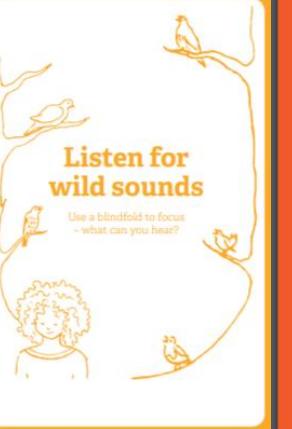
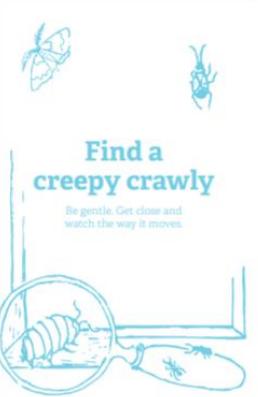
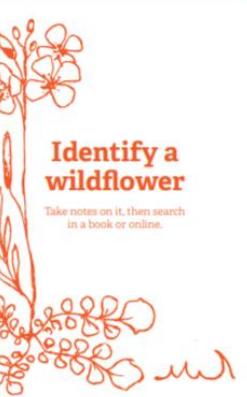
1. The **small intestine** is about 7 metres long, and about 2.5 centimetres in diameter. The surface area is around 250 square metres, or about the size of a tennis court!

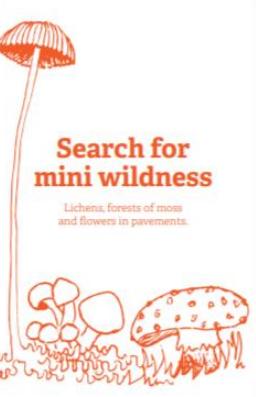
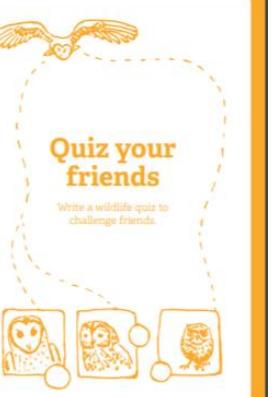
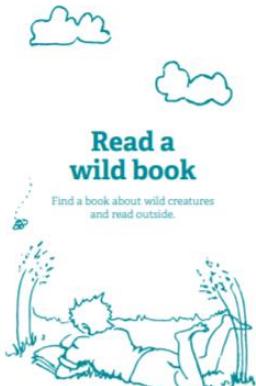
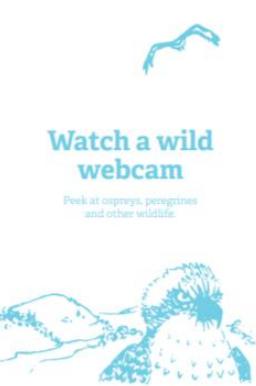
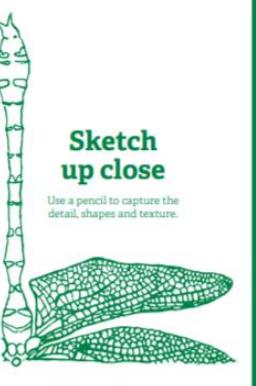
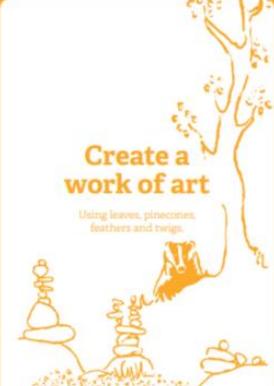
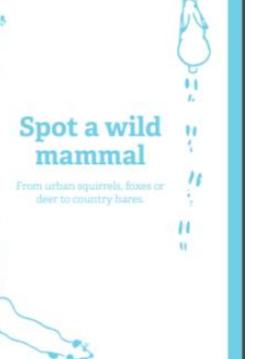
2. Some animals have **stomachs with multiple compartments**. (They're often mistakenly said to have multiple stomachs.) Cows, giraffes, deer and cattle have four-chambered stomachs, which help them digest their plant-based food.
3. Some animals – including seahorses, lungfishes and platypuses – have **no stomach**. Their food goes from the oesophagus straight to the intestines.
4. We make 1 to 3 pints of **saliva** a day.
5. It takes your mouth, oesophagus, stomach, small intestine, large intestine, gallbladder, pancreas and liver just to digest a glass of milk.
6. An adult's stomach can hold approximately **1.5 litres of material**.
7. **Food** stays in your stomach for 3 to 4 hours.
8. Cells along the inner wall of the stomach secrete roughly 2 litres of **hydrochloric acid** (the powerful chemical commonly found in some cleaning supplies, including toilet-bowl cleaners!) each day, which helps kill bacteria and aids in digestion. To protect itself from the corrosive acid, the stomach lining has a thick coating of **mucus**. But this mucus can't buffer the digestive juices indefinitely, so the stomach produces a new coat of mucus every two weeks.
9. When your **tummy rumbles**, it's the normal movements in the stomach and small intestines as food, fluid and gases pass through your gastrointestinal tract. When the tract is empty, however, the noises are louder because there's nothing in there to muffle the sound.
10. Within the **colon**, a typical person harbours more than 400 distinct species of bacteria.

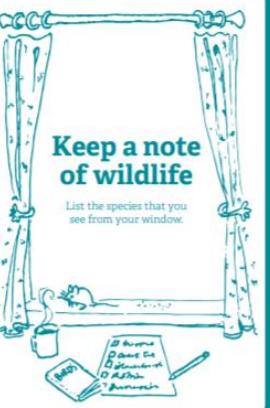
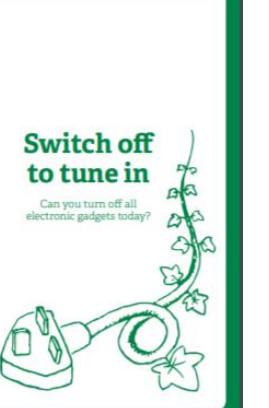
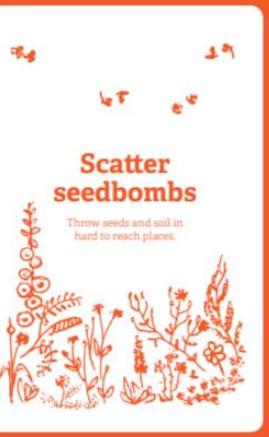
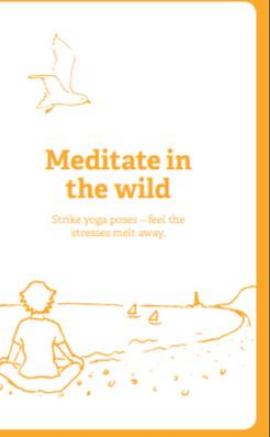
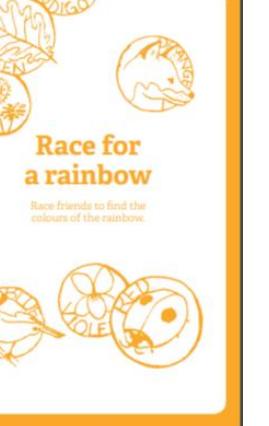
- When you eat something, the food doesn't simply fall through your oesophagus and into your stomach. The **muscles** in your oesophagus constrict and relax in a wavelike manner (called **peristalsis**). This motion pushes the food down through the small canal and into the stomach. Because of peristalsis, even if you were to eat while hanging upside down, the food would still be able to get to your stomach!
- The detergents used to wash clothes often contain several different classes of **enzymes**, which are also found in the human digestive system. The digestive system uses **proteases** to break down proteins like meat, **amylases** break

down carbohydrates like bread and **lipases** break down fats like cheese. For example, your saliva contains both amylases and lipases, and your stomach and small intestine use proteases.

- Most people think that the stomach is the centre of digestion, and it does play a large role in digestion by churning food, mixing it with gastric juices, physically breaking up food bits and turning them into a thick paste called chyme. However, the stomach is actually involved in very little chemical digestion, the process that reduces food to the size of molecules, which is necessary for nutrients to be taken up into the bloodstream. Instead, the **small intestine**, which makes up about two-thirds of the length of the digestive tract, is **where most of the digestion and absorption of nutrients takes place**. After further breaking down the **chyme** with powerful enzymes, the small intestine absorbs the nutrients and passes them into the bloodstream.

 <h3>Random Act of Wildness</h3> <p><b>01</b></p> <p>#30DaysWild</p>	 <p><b>Look up at the clouds</b> What shapes can you see?</p>	 <h3>Random Act of Wildness</h3> <p><b>04</b></p> <p>#30DaysWild</p>	 <p><b>Showcase on a nature table</b> Display wild treasures like feathers, fossils and bones.</p>	 <h3>Random Act of Wildness</h3> <p><b>07</b></p> <p>#30DaysWild</p>	 <p><b>Snap a blue photo</b> Butterflies, damselflies or even a clear blue sky.</p>
 <p><b>Feel the wild between your toes</b> Squelch your toes in the grass, sand or mud.</p>	 <h3>Random Act of Wildness</h3> <p><b>03</b></p> <p>#30DaysWild</p>	 <p><b>Thread a daisy chain</b> Pick daisies and thread their stems together.</p>	 <h3>Random Act of Wildness</h3> <p><b>06</b></p> <p>#30DaysWild</p>	 <p><b>Listen for wild sounds</b> Use a blindfold to focus – what can you hear?</p>	 <h3>Random Act of Wildness</h3> <p><b>09</b></p> <p>#30DaysWild</p>
 <h3>Random Act of Wildness</h3> <p><b>02</b></p> <p>#30DaysWild</p>	 <p><b>Find a creepy crawly</b> Be gentle. Get close and watch the way it moves.</p>	 <h3>Random Act of Wildness</h3> <p><b>05</b></p> <p>#30DaysWild</p>	 <p><b>Lunch in the wild</b> Share with friends on a blanket, bench or under a tree.</p>	 <h3>Random Act of Wildness</h3> <p><b>08</b></p> <p>#30DaysWild</p>	 <p><b>Identify a wildflower</b> Take notes on it, then search in a book or online.</p>

 <h3>Random Act of Wildness</h3> <p><b>10</b></p> <p>#30DaysWild</p>	 <h3>Picnic with the birds</h3> <p>Prepare a bird feast with fruit, cheese and seeds.</p>	 <h3>Random Act of Wildness</h3> <p><b>13</b></p> <p>#30DaysWild</p>	 <h3>Search for mini wildness</h3> <p>Lichens, forests of moss and flowers in pavements.</p>	 <h3>Random Act of Wildness</h3> <p><b>16</b></p> <p>#30DaysWild</p>	 <h3>Quiz your friends</h3> <p>Write a wildlife quiz to challenge friends.</p>
 <h3>Read a wild book</h3> <p>Find a book about wild creatures and read outside.</p>	 <h3>Random Act of Wildness</h3> <p><b>12</b></p> <p>#30DaysWild</p>	 <h3>Watch a wild webcam</h3> <p>Peek at capreys, peregrines and other wildlife.</p>	 <h3>Random Act of Wildness</h3> <p><b>15</b></p> <p>#30DaysWild</p>	 <h3>Sketch up close</h3> <p>Use a pencil to capture the detail, shapes and texture.</p>	 <h3>Random Act of Wildness</h3> <p><b>18</b></p> <p>#30DaysWild</p>
 <h3>Random Act of Wildness</h3> <p><b>11</b></p> <p>#30DaysWild</p>	 <h3>Create a work of art</h3> <p>Using leaves, pinecones, feathers and twigs.</p>	 <h3>Random Act of Wildness</h3> <p><b>14</b></p> <p>#30DaysWild</p>	 <h3>Whistle with grass</h3> <p>Use a thick blade of grass between your thumbs.</p>	 <h3>Random Act of Wildness</h3> <p><b>17</b></p> <p>#30DaysWild</p>	 <h3>Spot a wild mammal</h3> <p>From urban squirrels, foxes or deer to country hares.</p>

<p> <b>Random Act of Wildness</b> <b>19</b> #30DaysWild</p>	<p> <b>Keep a note of wildlife</b> List the species that you see from your window.</p>	<p> <b>Random Act of Wildness</b> <b>22</b> #30DaysWild</p>	<p> <b>Decorate with a wild mobile</b> Use twigs, string and leaves or paper birds.</p>	<p> <b>Random Act of Wildness</b> <b>25</b> #30DaysWild</p>	<p> <b>Switch off to tune in</b> Can you turn off all electronic gadgets today?</p>
<p> <b>Scatter seedbombs</b> Throw seeds and soil in hard to reach places.</p>	<p> <b>Random Act of Wildness</b> <b>21</b> #30DaysWild</p>	<p> <b>Meditate in the wild</b> Strike yoga poses – feel the stresses melt away.</p>	<p> <b>Random Act of Wildness</b> <b>24</b> #30DaysWild</p>	<p> <b>Draw a wild landscape</b> Can you use your imagination?</p>	<p> <b>Random Act of Wildness</b> <b>27</b> #30DaysWild</p>
<p> <b>Random Act of Wildness</b> <b>20</b> #30DaysWild</p>	<p> <b>Google wild facts</b> Discover secrets about your favourite animal.</p>	<p> <b>Random Act of Wildness</b> <b>23</b> #30DaysWild</p>	<p> <b>Design a wild home</b> From bug hotels to a hedgehog hideout.</p>	<p> <b>Random Act of Wildness</b> <b>26</b> #30DaysWild</p>	<p> <b>Race for a rainbow</b> Race friends to find the colours of the rainbow.</p>



## Random Act of Wildness

28

#30DaysWild

### Pick up litter

Sweep the area for rubbish  
and pop it in the bin.



### Map your local wildlife

Draw a map and mark  
where you see wildlife.



## Random Act of Wildness

30

#30DaysWild



## Random Act of Wildness

29

#30DaysWild



### Write a wild poem

Use a haiku or sonnet to  
recreate a wild experience.



# 30 DAYS WILD!



Note down or draw your daily Random Acts of Wildness and how they made you feel.

Share your daily Random Acts of Wildness photos and wild places using —  
**#30DaysWild**

We hope you've loved your wild month.  
Can you stay wild?

Find your wild life with your Wildlife Trust  
[wildlifetrusts.org](http://wildlifetrusts.org)

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# Nature Table



Use this page to collect things from your adventures in the wild...  
From mud to moss or berries to branches make as much mess as you can!

Rocks, stones, fossils  
and bones

Pinecones  
and seeds

Feathers  
and fur

Moss  
and mud

Leaves  
and twigs

Petals and  
grasses  
(remember, don't  
pick wildflowers)

#30DaysWild