Excretory System

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What happens to your body’s waste?

There is no space for a landfill in your body to contain wastes. You must be able to expel wastes from your body. This is the role of the excretory system.

Excretion

So what happens to your body’s wastes? Obviously, you must get rid of them. This is the job of the excretory system. You remove waste as a gas (carbon dioxide), as a liquid (urine and sweat), and as a solid. **Excretion** is the process of removing wastes and excess water from the body.

Recall that carbon dioxide travels through the blood and is transferred to the lungs where it is exhaled. In the large intestine, the remains of food are turned into solid waste for excretion. How is waste other than carbon dioxide removed from the blood? That is the role of the kidneys.

**Urine** is a liquid waste formed by the kidneys as they filter the blood. If you are getting plenty of fluids, your urine should be almost clear. But you might have noticed that sometimes your urine is darker than usual. Do you know why this happens? Sometimes your body is low on water and trying to reduce the amount of water lost in urine. Therefore, your urine gets darker than usual. Your body is striving to maintain **homeostasis** through the process of excretion.

Urine helps remove excess water, salts, and nitrogen from your body. Your body also needs to remove the wastes that build up from cell activity and from digestion. If these wastes are not removed, your cells can stop working, and you can get very sick. The organs of your **excretory system** help to release wastes from the body.
The organs of the excretory system are also parts of other organ systems. For example, your lungs are part of the respiratory system. Your lungs remove carbon dioxide from your body, so they are also part of the excretory system. More organs of the excretory system are listed below (Table 1.1).

**Table 1.1: Organs of the Excretory System**

<table>
<thead>
<tr>
<th>Organ(s)</th>
<th>Function</th>
<th>Component of Other Organ System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lungs</td>
<td>Remove carbon dioxide.</td>
<td>Respiratory system</td>
</tr>
<tr>
<td>Skin</td>
<td>Sweat glands remove water, salts, and other wastes.</td>
<td>Integumentary system</td>
</tr>
<tr>
<td>Large intestine</td>
<td>Removes solid waste and some water in the form of feces.</td>
<td>Digestive system</td>
</tr>
<tr>
<td>Kidneys</td>
<td>Remove urea, salts, and excess water from the blood.</td>
<td>Urinary system</td>
</tr>
</tbody>
</table>

**Further Reading**

Excretory System Diseases

**Summary**

- Excretion is the process of removing wastes from the body.
- Organs of the excretory system include the kidneys, large intestine, skin, and lungs.

**Explore More**

Use the resource below to answer the questions that follow.

- **Excretion** at [http://www.youtube.com/watch?v=DNJosKX_PmA](http://www.youtube.com/watch?v=DNJosKX_PmA) (8:47)

1. What is filtered and excreted in the nephron?
2. What two mechanisms govern filtration in the glomerulus?
3. What is the name of the first section of the nephron?
4. What ions are removed from the blood?

**Review**

1. What is excretion?
2. List four organs involved in excretion.
3. How is the large intestine involved in excretion?
4. What does urine remove from your body?

References

1. Jodi So. CK-12 Foundation . CC BY-NC