

Table 5.2: The main functions of the 10 body systems

Name of system	Main functions
Cardiovascular system	<ul style="list-style-type: none"> <li>• Major transport of materials to and from cells</li> <li>• Distributes heat around the body and assists in temperature regulation</li> <li>• Defence of the body</li> <li>• Water regulation</li> </ul>
Respiratory system	<ul style="list-style-type: none"> <li>• Maintains oxygen supply to cells</li> <li>• Removes carbon dioxide and water from the body</li> </ul>
Digestive system	<ul style="list-style-type: none"> <li>• Reduces complex food molecules to simple substances capable of being absorbed and delivered to cells</li> <li>• Removes undigested waste at intervals</li> <li>• The liver is the main producer of important chemicals</li> </ul>
Renal system	<ul style="list-style-type: none"> <li>• Removes excess water and salts</li> <li>• Eliminates nitrogen-containing waste in the form of urea</li> <li>• Assists in the production of new red blood cells</li> <li>• Involved in the maintenance of blood pressure</li> </ul>
Nervous system	<ul style="list-style-type: none"> <li>• Receives and interprets information from the environment</li> <li>• Controls and co-ordinates the internal organs</li> <li>• Associated with the endocrine system</li> <li>• Reflex actions protect the body from injury</li> </ul>
Endocrine system	<ul style="list-style-type: none"> <li>• Controls and co-ordinates organs</li> <li>• Maintains blood glucose, water and salt levels</li> <li>• Assists in reproduction and growth</li> </ul>
Reproductive system	<ul style="list-style-type: none"> <li>• Produces gametes that can create new life when united with a gamete from the opposite sex</li> <li>• Assists in growth</li> <li>• Responsible for secondary sexual characteristics</li> </ul>
Lymphatic system	<ul style="list-style-type: none"> <li>• Removes excess tissue fluid and proteins from spaces between cells</li> <li>• Defence of the body</li> <li>• Transports fatty acids from the digestive system</li> </ul>
Musculo-skeletal system	<ul style="list-style-type: none"> <li>• Effects movement (with the nervous system)</li> <li>• Stores calcium</li> <li>• Protects vital organs</li> <li>• Supports organs</li> <li>• Manufactures many blood cells</li> </ul>
Immune system	<ul style="list-style-type: none"> <li>• Defends against invasion by micro-organisms</li> <li>• Has an anti-cancer role</li> <li>• Rejects material perceived as 'foreign'</li> </ul>

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