

Marks
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- Indicate a biological function for each of the following elements.

| Element | Biological Function |
|----------------|---|
| cobalt | Cobalt is found in the active site of the vitamin B₁₂. Lack of this metalloenzyme can cause pernicious anæmia. |
| sodium | The sodium cation is the main extracellular (outside cells) cation in animals and is important for nerve function in animals. |
| iodine | Iodine is found as I⁻ in the thyroid hormones. Lack of iodine can cause goitre. |
| magnesium | Magnesium is found in the centre of chlorophylls which are responsible for the green colour of plants. Magnesium is also required for the proper working of some enzymes. Magnesium is essential to the nuclei acids. |
| zinc | Zinc is the key component of many enzymes and is found in the protein hormone insulin. It plays a role in reproduction and sexual maturation. Zinc deficiency results in stunted growth and in male sexual immaturity. |