

Amounts To Be Administered and Administration Route

Pharmacological dose is 20 mcg/kg for cattle, horse, sheep and goat and 40 mcg/kg for cat and dogs.
Administration routes are intramuscular and subcutaneous in bovine and ovine.

According to this practical doses are administered as below:

Cattle-horse	3-7 ml
Calf-foal	1-3 ml
Sheep-goat	0.5-1 ml
Lamb-kid	0.25-0.5 ml
Cat-dog	0.25-0.5 ml

Dodeks

Solution for Injection









Dodeks

Solution for Injection







Dodeks

Solution for Injection

BILEŞIMI

Each ml contains
hydroxocobalamin
chloride equivalent to
2 mg hydroxocobalamin
(Vitamin B12) and
10 mg benzyl alcohol
for antimicrobial
preservative
purposes.





Ruminants are **more sensitive** to Vitamin B₁₂ deficiency than nonruminants, in large part because they are **highly dependent** on gluconeogenesis to meet their tissue glucose needs.

In young ruminants (preruminant lambs and calves) up to the ages of six to eight weeks, the rumen is not fully developed and not functional for the synthesis of Vitamin B₁₂.

In contrast, in adult domestic ruminants, even the ciliated protozoa present in the rumen need vitamin B₁₂, which they obtain from ruminal bacteria that synthesize Vitamin B₁₂. The production of vitamin B₁₂ by ruminal microflora, is generally considered **suffcient to avoid deficiency symptoms** in ruminants, although, it has been shown that the ruminal microflora extensively destroys dietary folic acid and vitamin B₁₂.

Therefore, they requiere source of Vitamin B₁₂.

Animals with vitamin B₁₂ deficiency show nonspecific clinical symptoms, such as reduced food intake, retarded growth, muscle wasting, rough coat and thickening of the skin. Reproductive disorders and decreased milk yield are often observed ⁽¹⁾

Hydroxocobalamin is a medication used in the management, protection and treatment of vitamin B_{12} . It is the active forms of **Vitamin B12**. $^{(2)}$



INDICATIONS FOR USE

- Vitamin B12 deficiency
 - Anemias
- Rapid growth and development
 - Nervous system disorders
 - Indigestions

What does the B₁₂ vitamin do?

- Plays an active role in different metabolic functions including carbohydrate and lipid metabolism and protein synthesis.
- It is involved in the formation and development of blood in all domestic animals.
- It is an essential vitamin for the growth, reproduction of cells, hematopoiesis, nucleoprotein, and myelin synthesis.
- It supports the main treatment in anemia caused by internal parasites and blood parasites, especially hyperchromic and monocytic anemia.
- It accelerates growth and development in young animals by taking part in cell division and the development of tissues.
- It eliminates the discomforts of growth retardation, loss of appetite, diarrhea, etc. that occur in vitamin B₁₂ deficiency.
- It increases the success of the treatment applied in indigestion and gastroenteritis, shortens the recovery period, and provides high efficiency in a short time.
- Protects the nervous and immune system function.