Microvit® AD₃ Supra
Essential Vitamins for Dairy Cow Production
Vitamins A & AD₃ - Essential for Dairy Cow Production

**Vitamin A is an essential vitamin**
- Vision
- Epithelial Cells
- Reproduction
- Immunity & Health
- Milk Production and Quality

**Vitamin D₃ is an essential vitamin**
- Ca and P Homeostasis
- Stimulus of Immune Function
- Prevention of Rickets
- Prevention of Osteomalacia

A & AD₃ recommendations are quite variable in the market - Why?

Traditionally vitamins have been formulated to be stable in basemixes and feed, but they do not necessarily ‘fool’ the rumen.

Commercial vitamin A products are based on two forms of retinol:
- All-trans retinyl acetate
- or -
- All-trans retinyl palmitate

*Acetate or palmitate of Vitamin A in a pure form are not stable.*

Commercial vitamin products are stabilised by different technologies. The technology applied has a strong influence on the physical aspect and the bio-availability of the product.

Lactating dairy cows:
- A – 80,000 to 120,000 IU/cow/day
- D₃ – 20,000 to 40,000 IU/cow/day

Dry cows:
- A – 75,000 to 125,000 IU/cow/day
- D₃ – 20,000 to 25,000 IU/cow/day
Microvit® A and AD₃ Supra Ruminant
Unique vitamin technology designed for ruminants

- Double emulsion cross-linked matrix coating technology.
- Free-flowing powder of perfectly spherical beadlets.
- Vitamin A or A plus D₃ droplets in the beadlet
- Minimum Concentration:
  • AD₃ = 1,000,000 IU/g (A)
  • 200,000 IU/g (D₃)

Microvit® AD₃ Supra provides exceptional protection of D₃ in the rumen

![Bar graph showing protection rates](chart.png)
Microvit® AD₃ Supra provides superior concentration of D₃ in blood plasma

**Plasma 25-OH D₃ linearity increases in relation to amount of D₃ absorbed**

**Average plasma vitamin D₃ (25-OH form)**

- Concentration (nmol/l)
- Time post-suppl (h)
- Supra AD₃
- Competitor AD₃

Microvit® A & AD₃ Supra - the most cost effective source of supplementing A & D in the ration

**Quality**
- Best vitamin A and AD₃ combo on the market.
- AD₃ Supra delivers 100% of vitamin A & D₃ on the label.
- Improve “quality” of premixes and rations.

**Animal Performance**

- A
  - Respiratory
  - Digestive
  - Reproductive
  - Immunity
- D₃
  - Immunity
  - Ca Homeostasis
  - Rickets
  - Osteomalacia

**Economic**
- Use less A & D₃ Supra while promoting greater bioavailability.
- Increase of milk level of retinol.
- Feed 20-30% less, per effective IU while supplying cow’s needs.

**Less Overage**
- Better stability in premixes and pelleted feeds.