














DSM Vitamin Supplementation Guidelines

Für Haustiere

Poultry ¹⁾		A	D ₃ ²⁾	E ³⁾	K ₃ (Menadione)	B ₁	B ₂	B ₆	B ₁₂ ⁷⁾	Niacin	D-Panto- thenic acid	Folic acid	Biotin	C ⁸⁾	Choline	Hy•D ⁹⁾ (25-OH-D ₃)
		IU	IU	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
Broilers starter, 1-21 days		8000-12500	3000-5000	150-240 ⁴⁾	2-4	2.0-3.0	7-9	3.0-6.0	0.015-0.040	50-80	10-18	1.0-2.0	0.15-0.30	100-200	300-600	0.069
Chicks, grower/ replacement		7000-10000	1500-2500	20-30	1-3	1.0-2.5	4-7	2.5-5.0	0.015-0.025	25-40	9-11	0.8-1.2	0.10-0.15	100-150	200-400	0.069
Hens/ducks, laying		8000-12000	2500-3500	15-30 ⁵⁾	2-3	1.5-3.0	4-7	3.0-5.0	0.015-0.025	20-50	8-10	0.5-1.0	0.10-0.15	100-200	300-500	0.069
Broilers, 22 days-market		8000-12000	2000-4000	30-50 ⁶⁾	2-4	2.0-3.0	5-8	4.0-6.0	0.020-0.030	40-80	10-15	1.0-2.0	0.15-0.30	100-200	300-500	0.069
Hens, breeding		10000-14000	2500-3000	50-100	2-4	2.0-3.0	8-12	4.0-6.0	0.020-0.040	30-60	12-15	1.5-2.5	0.20-0.40	150-200	300-500	0.069
Ducks/geese		12000-15000	3000-5000	40-80	3-5	2.0-3.0	7-9	5.0-7.0	0.020-0.040	50-70	10-15	1.0-2.0	0.10-0.15	100-200	300-500	0.069
Ostrich/emu		12000-16000	3000-4000	40-60	2-4	3.0-5.0	10-20	6.0-8.0	0.050-0.100	80-100	12-20	2.0-4.0	0.20-0.35	200-250	600-800	0.069

1) Added per kg air-dry feed
2) Do not exceed 3000 IU/kg D₃ when using Hy•D
3) Dietary fat higher than 3%: additional 5 mg/kg feed for each 1% dietary fat
4) For optimum immune function
5) Under heat stress conditions: total 200 mg/kg feed
6) For optimum meat quality: additional 150 mg/kg feed for last 3 weeks before market
7) Use upper level in animal protein-free diets
8) Recommended in stress conditions and to enhance reproductive performance in breeders
9) Local legal limits of total dietary vitamin D activity need to be observed

Turkeys ¹⁾		A	D ₃ ²⁾	E ³⁾	K ₃ (Menadione)	B ₁	B ₂	B ₆	B ₁₂ ⁶⁾	Niacin	D-Panto- thenic acid	Folic acid	Biotin	C ⁷⁾	Choline	Hy•D ⁸⁾ (25-OH-D ₃)
		IU	IU	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg
Prestarter, 0-3 weeks		11000-13500	4000-5000	100-250 ⁴⁾	2-4	3.0-5.0	10-20	5-7	0.030-0.040	100-150	20-25	2.0-4.0	0.250-0.300	100-200	1000-1200	0.092
Starter, 3-6 weeks		10000-13000	3000-5000	50-60	2-4	3.0-5.0	10-15	5-7	0.030-0.040	60-100	15-20	2.0-3.0	0.200-0.250	100-200	500-1000	0.092
Grower, 7-12 weeks		8000-11000	2500-4000	30-50	2-4	2.0-3.0	5-7	3-6	0.015-0.030	60-80	10-15	1.0-2.0	0.125-0.200	100-200	400-600	0.092
Finisher I, 13-16 weeks		7000-10000	2500-3500	30-40	2-4	2.0-3.0	4-7	3-6	0.015-0.030	50-70	10-15	1.0-2.0	0.125-0.200	100-200	400-600	0.092
Finisher II, 17 weeks-market		6000-9000	2000-3000	20-30 ⁵⁾	2-4	1.5-2.0	4-7	2-4	0.015-0.025	50-60	9-13	1.0-1.5	0.100-0.150	100-200	400-600	0.092
Breeders		11000-14000	3000-5000	40-60	2-4	3.0-5.0	10-20	6-7	0.030-0.040	70-100	18-22	2.0-3.0	0.400-0.600	100-200	400-800	0.092

1) Added per kg air-dry feed
2) Do not exceed 3000 IU/kg D₃ when using Hy•D
3) Dietary fat higher than 3%: additional 5 mg/kg feed for each 1% dietary fat
4) For optimum immune function
5) For optimum meat quality: additional 200 mg/kg feed for last 4-7 weeks before market
6) Use upper level in animal protein-free diets
7) Recommended in stress conditions and to enhance reproductive performance in breeders
8) Local legal limits of total dietary vitamin D activity need to be observed

Diese Guidelines stellen eine Empfehlung für die Versorgung des Geflügels mit Vitaminen dar. Der tatsächliche Vitaminbedarf hängt aber von vielen Faktoren wie Stress, Krankheitsdruck, Futterqualität, Wasserversorgung, Luftqualität etc. ab.

In Stressphasen bzw. bei hohem Krankheitsdruck ist es jedenfalls sinnvoll, die Versorgung mit diesen wichtigen Vitalstoffen zu erhöhen.