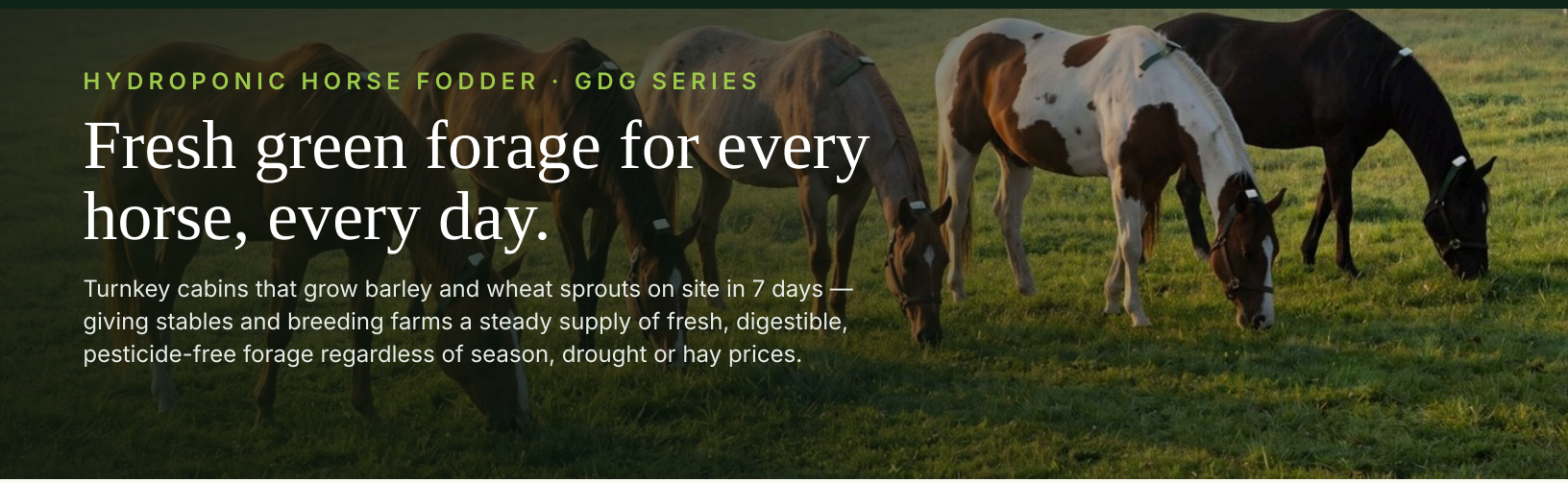


HYDROPONIC HORSE FODDER · GDG SERIES

Fresh green forage for every horse, every day.

Turnkey cabins that grow barley and wheat sprouts on site in 7 days — giving stables and breeding farms a steady supply of fresh, digestible, pesticide-free forage regardless of season, drought or hay prices.

EXECUTIVE SUMMARY

Horses are grazers. Fodder brings the pasture indoors.

A horse's digestive system is built for small amounts of fresh grass eaten through the day. Most stabled horses instead live on dry hay and concentrates, and owners pay rising prices for both.

Greenfield Hydroponics (GHI) GDG Series cabins grow fresh barley or wheat fodder inside a climate-controlled unit that needs only a level pad, power and water. Each day one tray is harvested and one is seeded, producing 60 to 220 kg of fresh forage — enough for 8 to 26 horses — with about an hour of labor.

For larger operations, GHI builds semi- and fully automated plants from 1 to 100 metric tons per day.

AT A GLANCE

15–17%
crude protein, dry-matter basis

75–80%
total digestible nutrients

7 days
seed to harvest, 365 days a year

~0.5 L
water per kg of fresh fodder

8 – 270
horses fed per day, cabin to 2-ton plant

NUTRITION

What the lab shows

Dry-matter basis	Barley 3 d	Barley 6 d	Wheat 3 d	Wheat 6 d
Crude protein (%)	**14.9**	**17.1**	**16.5**	**15.9**
Total digestible nutrients (%)	**79.9**	**75.6**	**80.3**	**77.5**
Non-fibrous carbs (%)	64.9	55.3	69.2	64.1
Acid detergent fiber (%)	5.9	11.0	4.2	6.4
Crude fat (%)	3.7	2.9	2.3	2.0
Calcium (%)	0.12	0.13	0.14	0.11
Phosphorus (%)	0.40	0.39	0.43	0.38
Zinc (ppm)	90	89	46	42
Copper (ppm)	29	17	7	1
Dry matter as fed (%)	40	18	44	29

Source: Dairyland Laboratories wet-chemistry analysis, January 19, 2017.

What it means for horses

- **Quality protein** — 15–17% supports muscle, hoof and coat, comparable to good alfalfa hay.
- **Highly digestible** — low fiber and lignin let horses absorb more of each kilogram.
- **Fresh and moist** — 60–82% water adds hydration, valuable in hot, dry climates.
- **Trace minerals** — sprouted barley carries roughly three times the zinc of the seed.
- **Reported by owners** — better coat and condition, calmer temperament and faster recovery after work.

Feeding guidance: fodder is a fresh supplement to hay, not a replacement — typically about 7.5 kg (16.5 lb) as fed per horse per day. Its non-fibrous carbohydrate is high, so introduce it gradually and involve your veterinarian for horses with insulin resistance, metabolic syndrome or a history of laminitis.

GDG SERIES & PROFESSIONAL PLANTS

Sized to the stable, from 8 horses to 270

All figures are for barley on a 7-day cycle. Cabins arrive turnkey and ready to use; plants are engineered to the site.

Model	CABIN GDG 60	CABIN GDG 100	CABIN GDG 200	PLANT 1 Metric Ton	PLANT 2 Metric Ton
FRESH FODDER / DAY	60 kg 132 lb	100–120 kg 220 lb	200–220 kg 440 lb	1,000 kg 2,200 lb	2,000 kg 4,400 lb
HORSES FED	8	12–14	24–26	130–135	260–270
ELECTRICITY / DAY	10 kWh	30 kWh	60 kWh	Engineered per site	
WATER / DAY	30 L	50 L	100 L	Engineered per site	
WORKING HOURS / DAY	1	1	2	4	6
LABORERS	1	1	1	1	1
CLIMATE & CONTROL	9,000 BTU air conditioning · PLC automation with AI · local or remote control			Semi- or fully automated	



Turnkey smart cabin

No assembly and no building required — only a level platform, electrical and water connections. Climate, light and irrigation run automatically for mold- and mildew-free fodder.



Professional plants

Custom semi- and fully automated plants from 1 to 100 metric tons per day for breeding farms, racing stables, cooperatives and feed suppliers.



Measured, not guessed

Pair fodder with the GHI Horse Smart Monitoring System: Equine Core collars and scale-equipped feeders show how much each horse actually eats and how it responds.

~0.5 L	7 days	365	0
water per kg of fresh fodder in a GDG cabin	from seed to feed, harvested daily	days of production, any climate	pesticides, herbicides or agrochemicals

EFFICIENCY

More forage from less water, land and labor

High production density is what makes the system efficient. Stacked trays in a cabin the size of a shipping container replace acres of hay ground, and recirculated irrigation uses a fraction of the water field crops need.

Feed is grown on site, so there is no hay to buy, haul or store, less waste from spoiled bales, and no exposure to drought-driven price spikes.

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Nutrition values are laboratory results on a dry-matter basis and vary with grain, water and harvest day. Horses-fed figures assume about 7.5 kg of fresh fodder per horse per day alongside hay. Owner-reported benefits are not veterinary claims; consult your veterinarian before changing a horse's diet. Cabin renderings are illustrative.