

Grass fed beef & The Controlled Fodder flow Grazing management strategy, a model for the production of super healthy red meat for the Arid and Semi-Arid regions of Southern Africa.

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Namibian Rangeland Forum,

Windhoek 2009



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THE CON-
TROLLED
FODDER FLOW
GRAZING
MANAGEMENT
STRATEGY

The Development of the Controlled fodder flow grazing management strategy(1)

- ❑ Developed by Dames 1996.
- ❑ Interim results Adelaide long term grazing experiment, false thorn veld of Eastern Cape.
 - Effects of:
 - (1) animal number
 - (2) type
 - (3) distribution and
 - (4) rotational yearlong resting vs continuous grazing on rangeland condition and animal production per animal & per ha.

The Development of the Controlled fodder flow grazing management strategy(2)

□ Results Adelaide experiment:

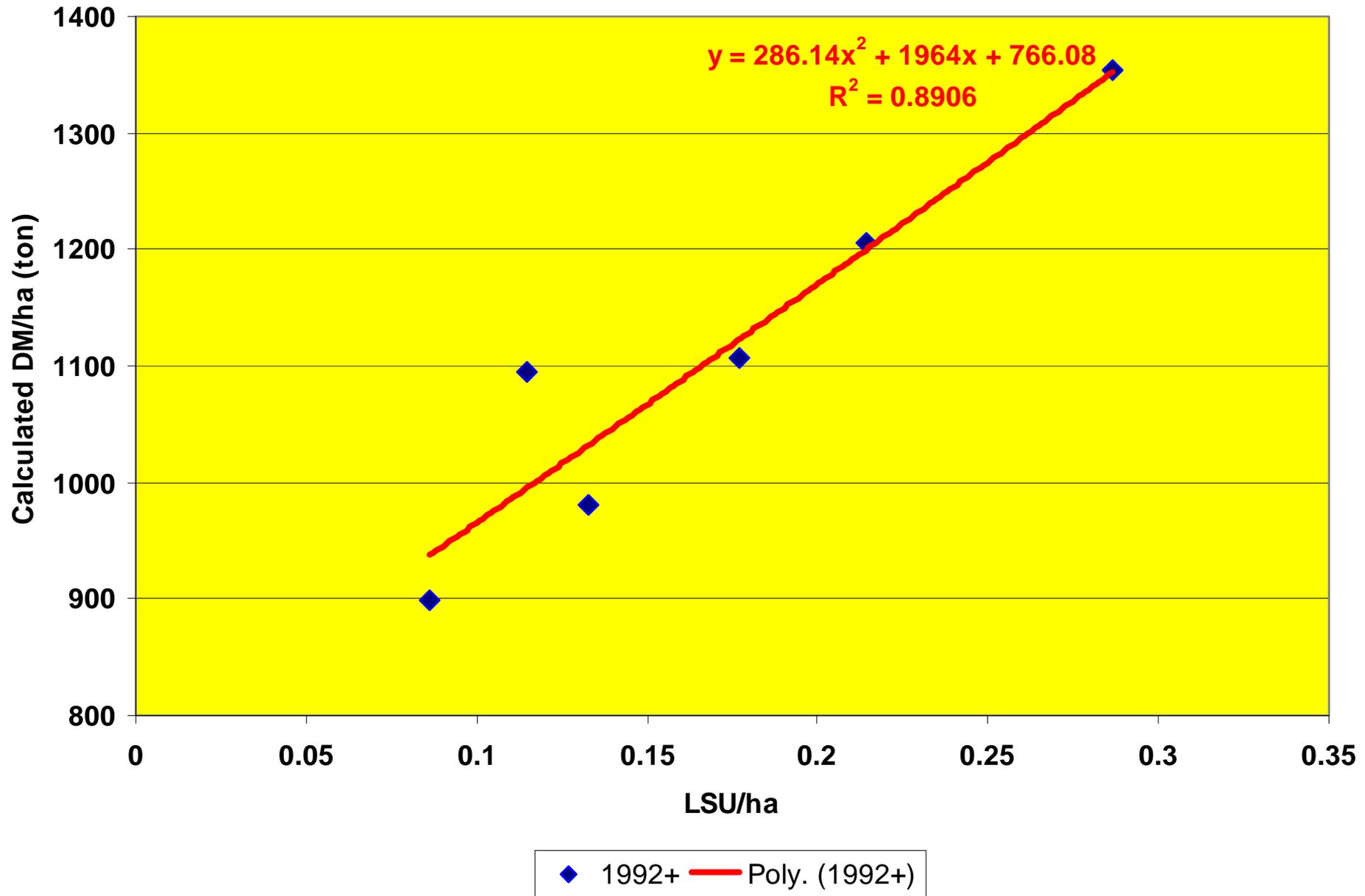
- Continuous grazing 30% better animal performance than rotational grazing (sustainability of veld condition?).
- Continuous grazing combined with yearlong resting better chances for sustainability!

The Development of the Controlled fodder flow grazing management strategy(3)

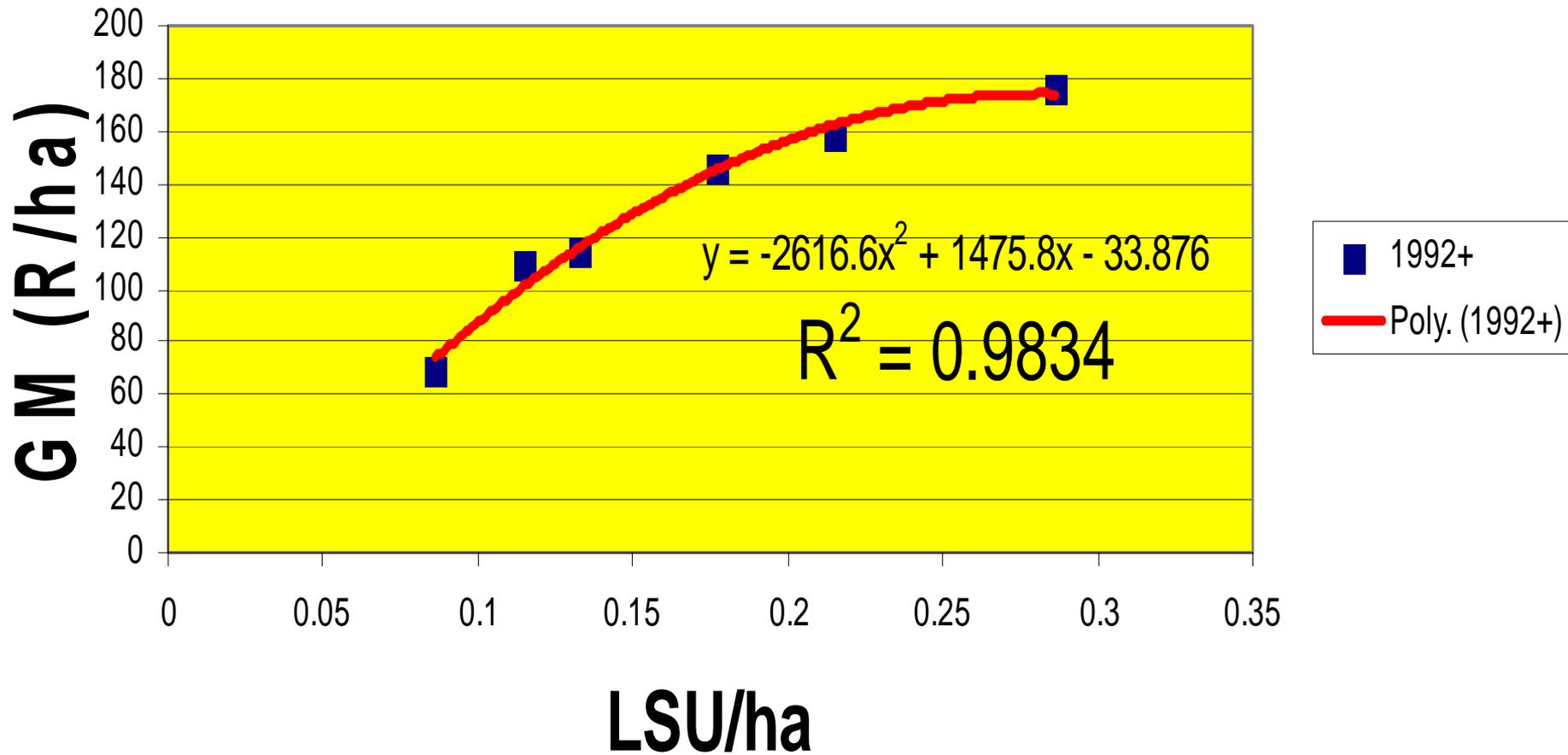
□ Interim results Armoedsvlakte long term stocking rate trials initiated by J Fourie(1976):

- Stocking rates higher than Departmental recommendations, higher grass and animal production per ha.
- Optimum profitability at stocking rate 50% above departmental recommendations.

Influence of SR (utilisation %) on grass DM prod/ha(Dames 2003)



Influence of SR on GM/ha(1992-2002)(Dames 2003)



Objectives of the Controlled fodder flow grazing management strategy(1)

Developed for:

- increased carrying capacity
- better animal performance
- higher animal production and profit/ha
- low management risk
- low infrastructure requirements

Main principles of the controlled fodder flow grazing management strategy

- ❑ Controlled biannual yearlong resting, in other words 50% of land rested biannually from August to Jul the following year.
- ❑ Other 50% of land is grazed in a flexible manner, mainly determined by herd management requirements and for maximum utilization efficiency and maximum conversion efficiency of veld to meat.

BIANNUAL RESTING AND GRAZING AS PRACTISED WITHIN THE CONTROLLED FODDERFLOW GRAZING MANAGEMENT STRATEGY(DAMES 1996)

YEAR/ EASON	CAMP/G ROUP/1/ 2	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R C	A P R	M A Y	J U N	J U L
1 1	A B	R W	R W	R W	R W	R W							
2 2	A B	W R	W R	W R	W R	W R							
3 3	A B	R W	R W	R W	R W	R W							



Implementation of the Controlled fodder flow grazing management strategy

- Divide grazing area into two groups/blocks.
- Phase in by priority grazing of the area that will be rested the following year.
- Adjust animal numbers to increased carrying capacity to avoid the production of moribund and poor quality of grass during resting season (Aug to Jul).

Main Advantages of the CFFGMS

- Flexibility, a strategy and not a system/recipe
- Accommodate animal numbers higher than Departmental norms in a controlled manner.
- Optimal animal performance and improved utilization efficiency of rangeland.
- Low infrastructure requirements

RESULTS FROM
THE CONTROLLED
FODDERFLOW
GRAZING
MANAGEMENT
STRATEGY

Results from the Controlled fodder flow grazing management strategy

- Successful in communal and commercial operations.

OP DIE AARDE BONSMARA STUD REIVILO

- ARC BEST PERFORMING STUD BREEDER SOUTH AFRICA 2007.
- VOERMOL BEST BEEF FARMER IN SOUTH AFRICA 2008.
- ANIMAL NUMBERS INCREASED BY 35% WITHIN 3 YRS AFTER IMPLEMENTATION.
- PROFIT DOUBLED WITHIN THREE YEARS

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Together we can forward ever backward never

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PIET VAN DER LINDE - GRASSFED BEEF

❑ CHANGED FROM SHORT DURATION GRAZING THREE YRS AGO.

- ❑ YR 1 - 190 - 208 KG
- ❑ YR 2 - 228 KG
- ❑ YR3 - 242 KG (AFRIKANER)

❑ 2008 SLUAGHTERED 150 OXEN ON TWO CONSEQUITIVE DAYS, 98% A2's at 18 months of age, 200 kg carcass weight.

❑ ANIMAL NUMBERS 50% HIGHER THAN DEPARTMENTAL NORMS.

PIET VAN DER LINDE – GRASSFED BEEF



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FOURIE VENNOOTSKAP – 350 MM

- 1000 HA CAMPS.
- 6 HERDS OF 200 COWS/HEIFERS
- IMPLEMENTED DURING 1995
- AVG WEANING % ABOVE 90%
- STOCKING RATE 8 HA/LSU (50% HIGHER THAN NORM).

FOURIE VENNOOTSKAP – 350 MM

FOURIE VENNOOTSKAP – 350 MM



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THE LINK BETWEEN FOOD AND HEALTH

The Link between food and health(1)

- ❑ You are what you eat!
- ❑ What happened to our diets during the last 100 years?
- ❑ What happened to our general health during the same time?
- ❑ What happened in the USA?
- ❑ The culprit- FAT, FAT, FAT, FAT!!!!!!!
- ❑ Response: Fat free diets, rich in grains, carbohydrates and sugars!

The Link between food and health(2)

- ❑ Result : Fatter, more heart attacks, increase in cancer and diabetes.
- ❑ Why? Grains became the staple diet of the world!
- ❑ Research from USA: Fat structure of Grains wrong ratio of Omega 3: Omega 6 fatty acids.
- ❑ Green plants ideal ratio of Omega 3: 6 fatty acids.
- ❑ Initially all fat was equal, later saturated fat regarded as bad fat, unsaturated regarded as good fat.

The Link between food and health(3)

- ❑ Latest results: all fats are not equal. Fat is good for u!
- ❑ Higher intake of Omega 3 fatty acids reduce bad cholesterol and decrease risk of heart disease, diseases of the nervous system and diabetes and reduces the chances of cancer significantly.

WHAT IS
GRASS FED
BEEF?

What is grass fed beef?



- Beef produced from natural rangelands (veld) or green planted pasture.
- No grains
- Growing world demand(niche market).

GRASS FED BEEF
IS EXTREMELY
HEALTHY AND
NUTRITIOUS AS
COMPARED TO
GRAIN FED BEEF

Grass fed beef is 4x higher in Vit E as compared to grain fed beef!

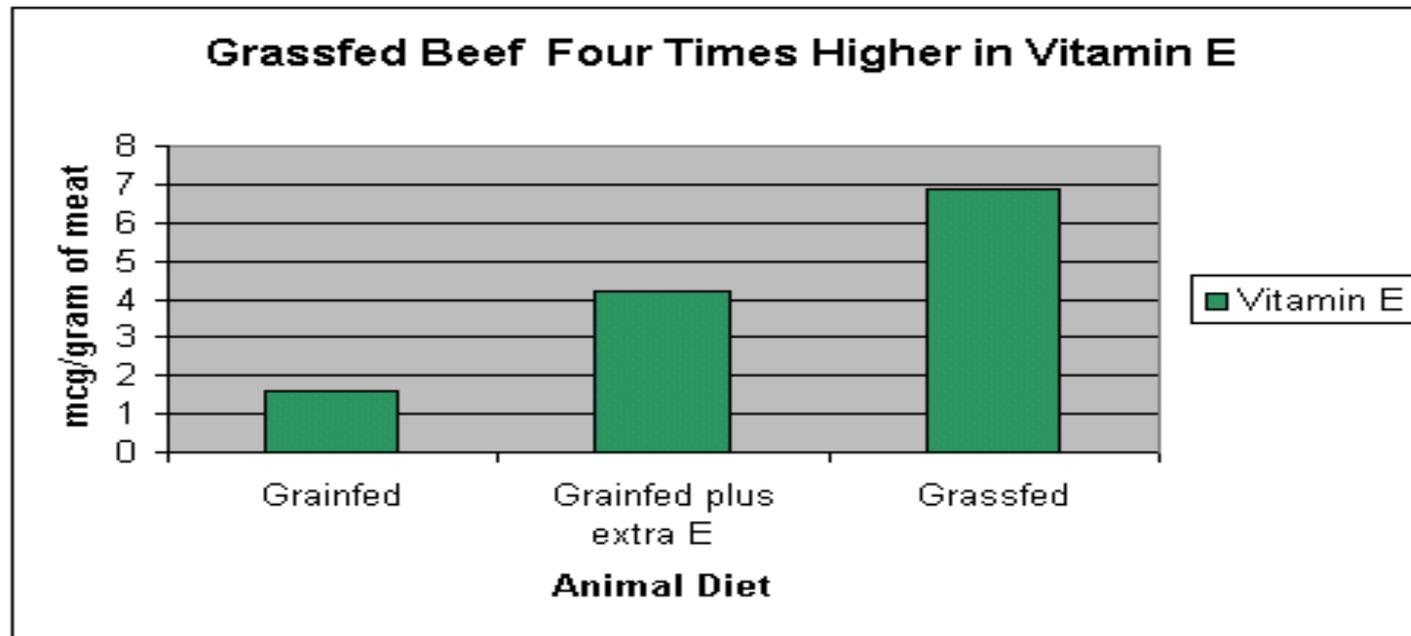
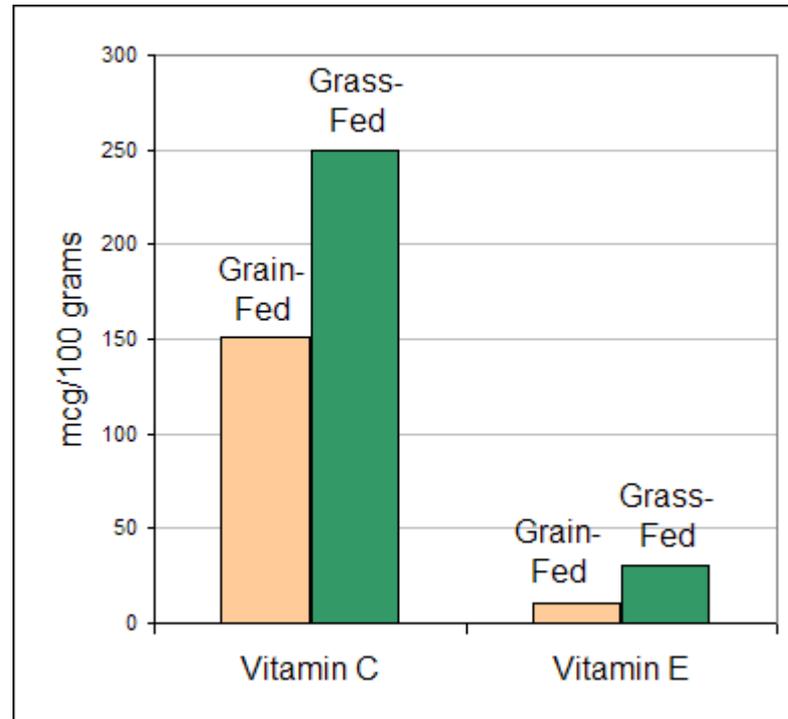


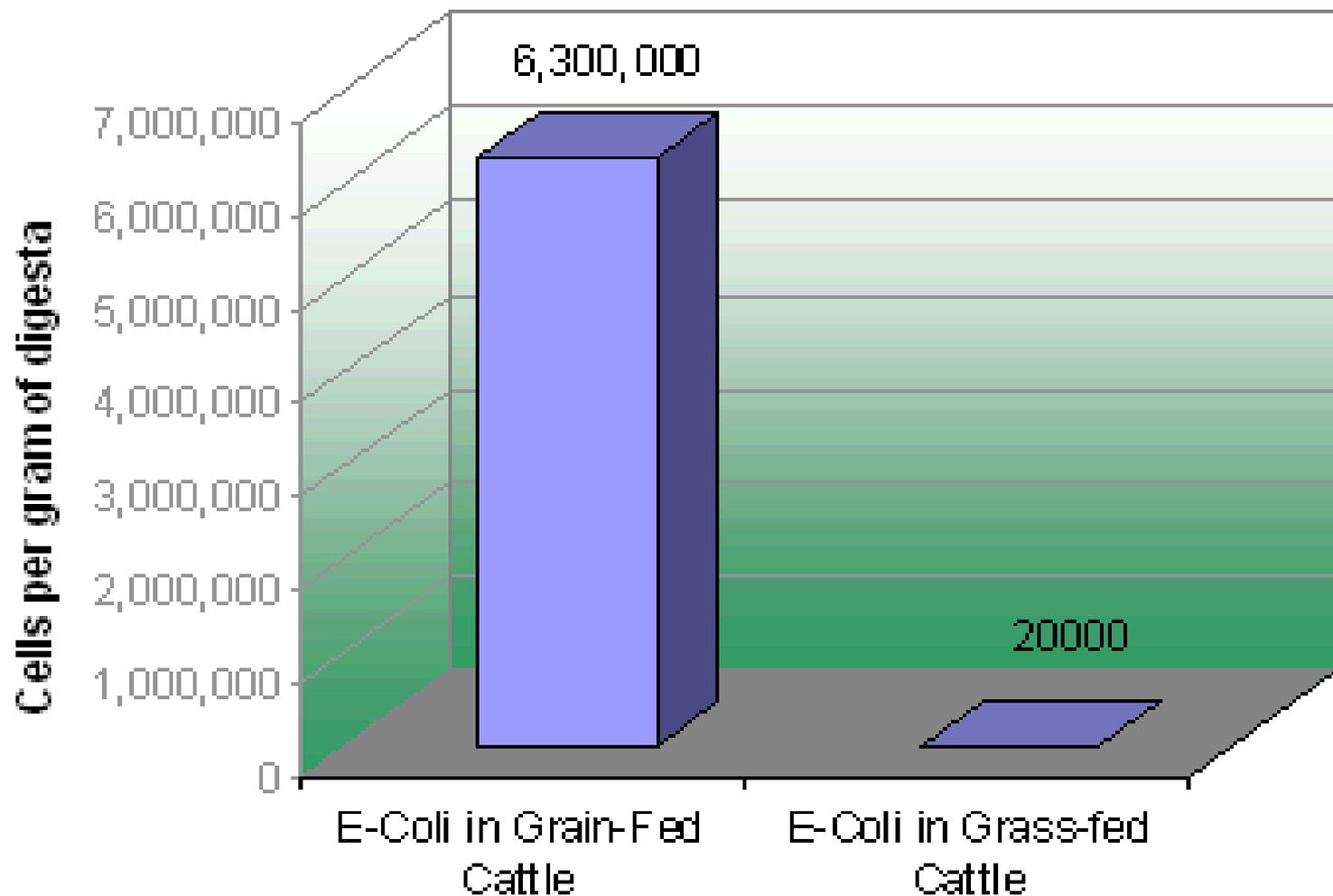
Figure 1: Data from: Smith, G.C. "Dietary supplementation of vitamin E to cattle to improve shelf life and case life of beef for domestic and international markets." Colorado State University. Fort Collins, Colorado 80523-1171



Grass fed beef is higher in Vit C as compared to grain fed beef!



Far fewer E. coli in grass-fed cattle



E-coli that survive our digestive tracts: 10 x lower in grass fed beef.

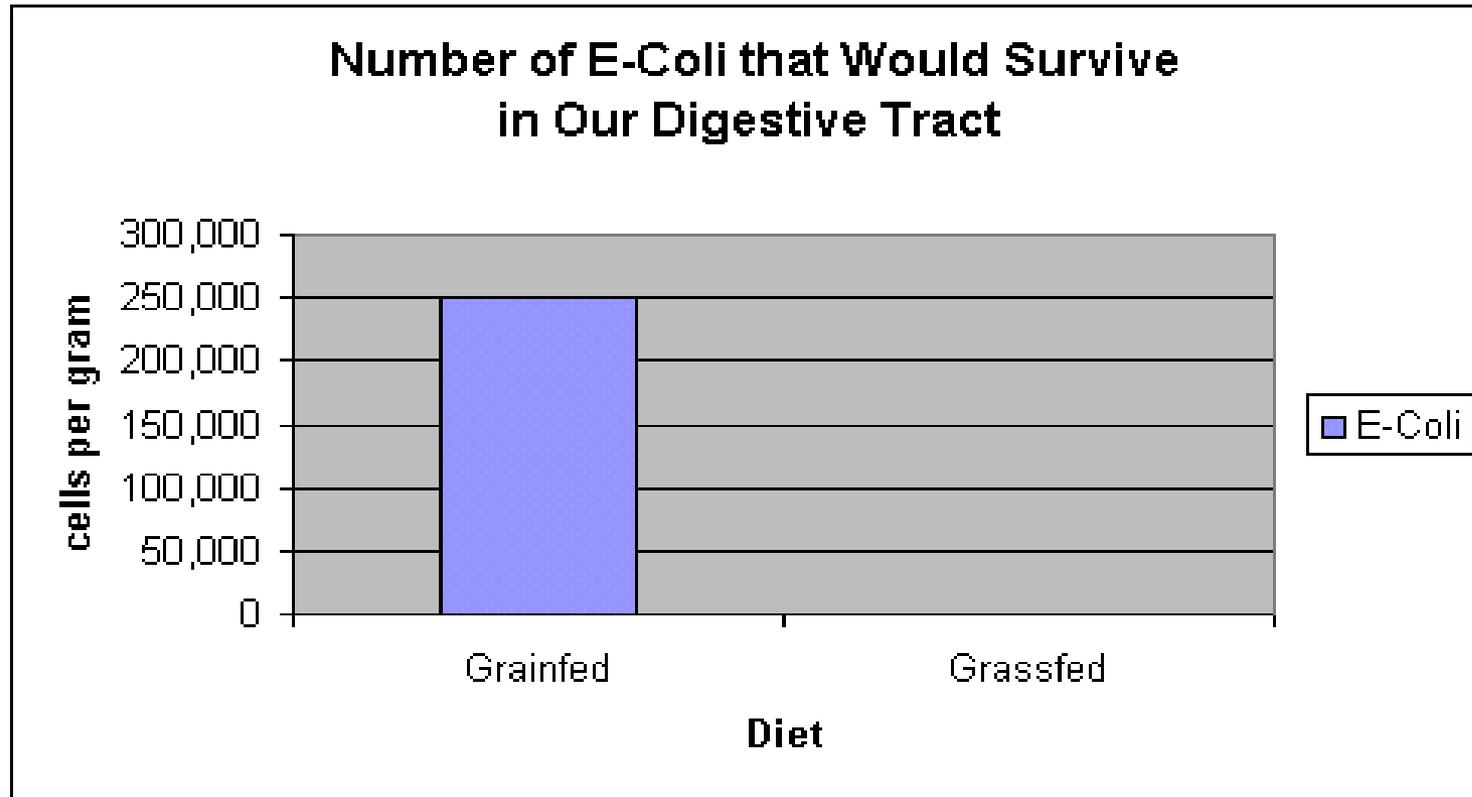


Fig3: Diez-Gonzalez, F., *et al.* (1998). "Grain-feeding and the dissemination of acid-resistant Escherichia coli from Cattle." *Science* 281, 1666-8.)



Grass fed beef reduces the risk of cancer.

- Highest source of CLA (conjugated linoleic acid) known, a cancer fighting agent.
- US studies: women with high intake of CLA, up to 75 % lower chances for breast cancer.

Grass fed chickens, pigs, eggs,
milk: all the benefits of grass fed
beef!



REQUIRE-
MENTS FOR
GRASS FED
BEEF PRO-
DUCTION

Requirements for grass fed beef production

- ❑ Right type of animals- small framed(why?)
 - ❑ Ability to finish on natural rangelands
 - ❑ Ability to store fat on natural rangelands.
- ❑ Sweet veld and semi-sweet veld
- ❑ Zietsman, sourveld. (tropical sourveld).
- ❑ Effective grazing management (constant quality)
- ❑ Traceability

Conclusion

- The Controlled Fodderflow grazing management strategy incorporated into grass fed beef production forms a proven basis of an environment friendly strategy for the production of super healthy red meat in the arid and semi-arid rangelands of Southern Africa.

Thank You!



R1,500
DELIVERED??

