Feed Options for Winter Finishing

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Outline

1. Feed Options

   Grass, grass silage, maize / whole crop cereals, fodder beet, ad lib meals

2. On-farm storage of grains

Feed Options for Finishing

Grazed Grass

Feed Budget: Milk, Grass, Grass Silage, Meals

Relative Cost (UFL)

Grass	1.00
Grass silage	2.70
Meals	3.50

BULL BEEF	Target Gain
Housed as weanlings	0.6-0.8
Grazing (100 days)	1.2-1.3
Ad lib meals	1.7-1.8

Questions:

1. Target gain 1st winter?

2. Do you feed meals over summer?

Grass Silage

Target: 70-75 DMD

Cost = Yield vs Digestibility

Integral part of grassland management

Steers - 80 kg carcass gain		
Silage DMD	70	65
Feed cost €	€261	€291

BULLS	% of Concentrates				
	25	40	55	68	75
Daily carcass gain kg	0.60	0.83	0.91	0.98	0.99

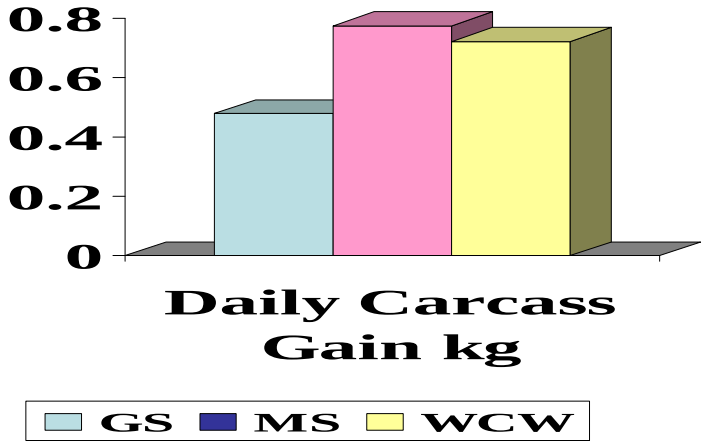
Forage Maize / Fermented Whole Crop

Target Feed Value:

Maize	30% DM, 25-30% starch
Whole crop	40% DM, 25-30% starch

Animal Production Potential

- High intake potential
- Concentrate saving – 2kg/day?
- Forage maize vs whole crop
  - Poorer efficiency with whole crop



O'Kiely et al., 2004

Fodder Beet

Production Potential	t DM /ha	UFL/ha
Fodder Beet	13	14,560
Winter wheat	8	9,280

Feeding rates 20-30 kg

Labour cost

When ration is €230 / t, fodder beet is worth €40

DM effect

Ad Lib Meals System

Predictable performance, shorter finishing period, higher kill out etc

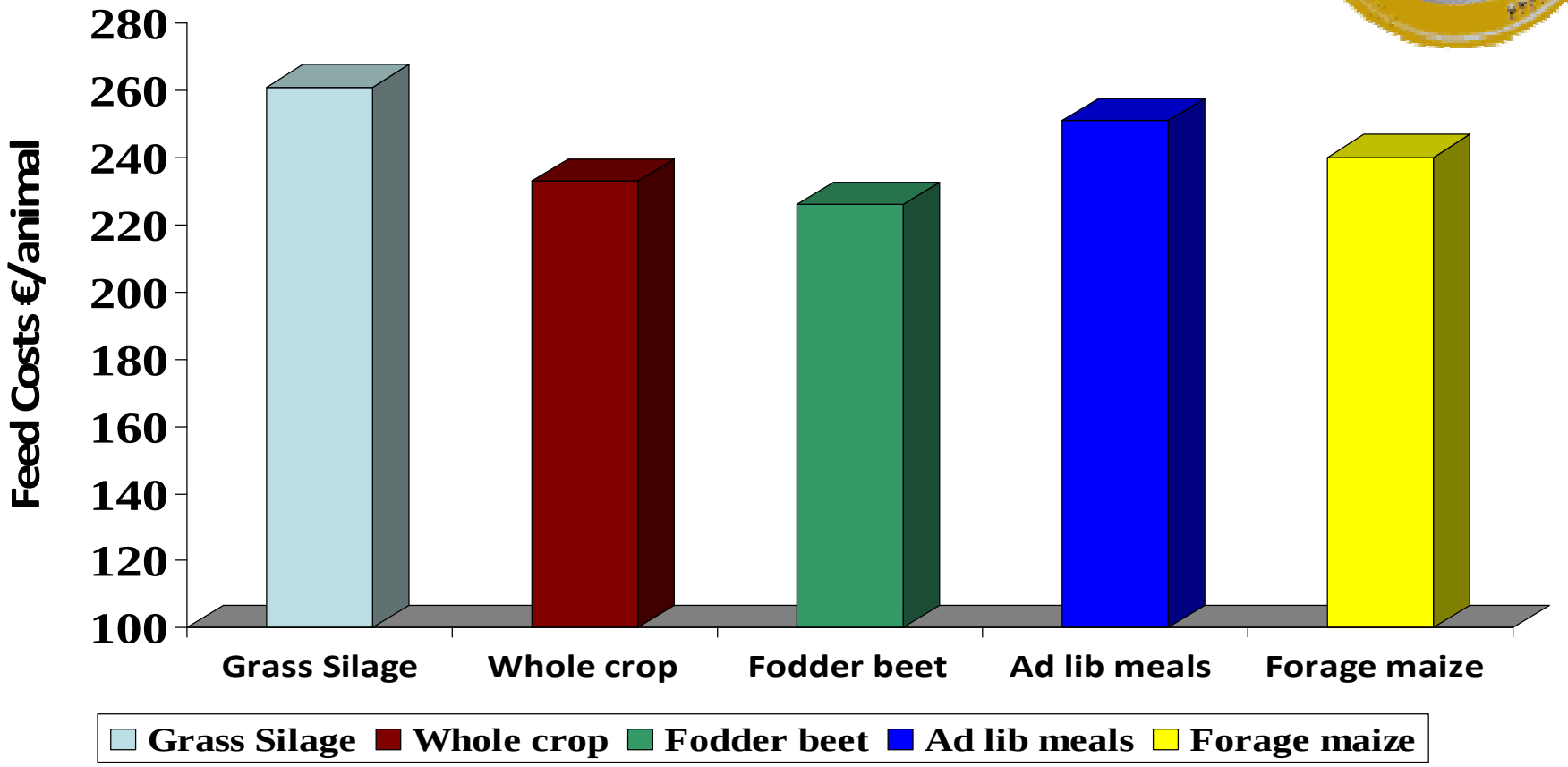
Selecting the right animal for the system

Steers & heifers - Maximum 90 days
Bulls on ad lib - Up to 180 days – shorter the bette
Growing vs finishing diets

Concentrate Price

Finishing Steers (120 kg LW)

Feed Costs € per kg carcass gain



On-Farm Storage of Grains

What are the Options?

Type	Additive	Process	Storage	Comment
Crimp	Innoculant	Roll	Ensile	
Acid	Propionic acid	Roll	Loose	Store rolled
Urea	Urea + Enzyme	Roll	Cover	Incr. protein Store rolled
Alkali	Sodium hydroxide	-	Loose	

Costs

Treatment, processing, storage, losses, working capital

How does this compare to purchased grain?

Assuming a green grain price of €160 / t @ 20% MC

Purchased dried rolled grain

€210 / t fresh or €247 / t DM @ 15% MC

	% MC	€ / t fresh	€ / t DM
Crimping	35	29	245
Acid treatment	20	32	250
Urea treatment	20	45	271*
Alkali treatment	20	32	251

*Higher protein %

In Conclusion…

Target high levels of gain from grass

- 65-80% of gain from grass

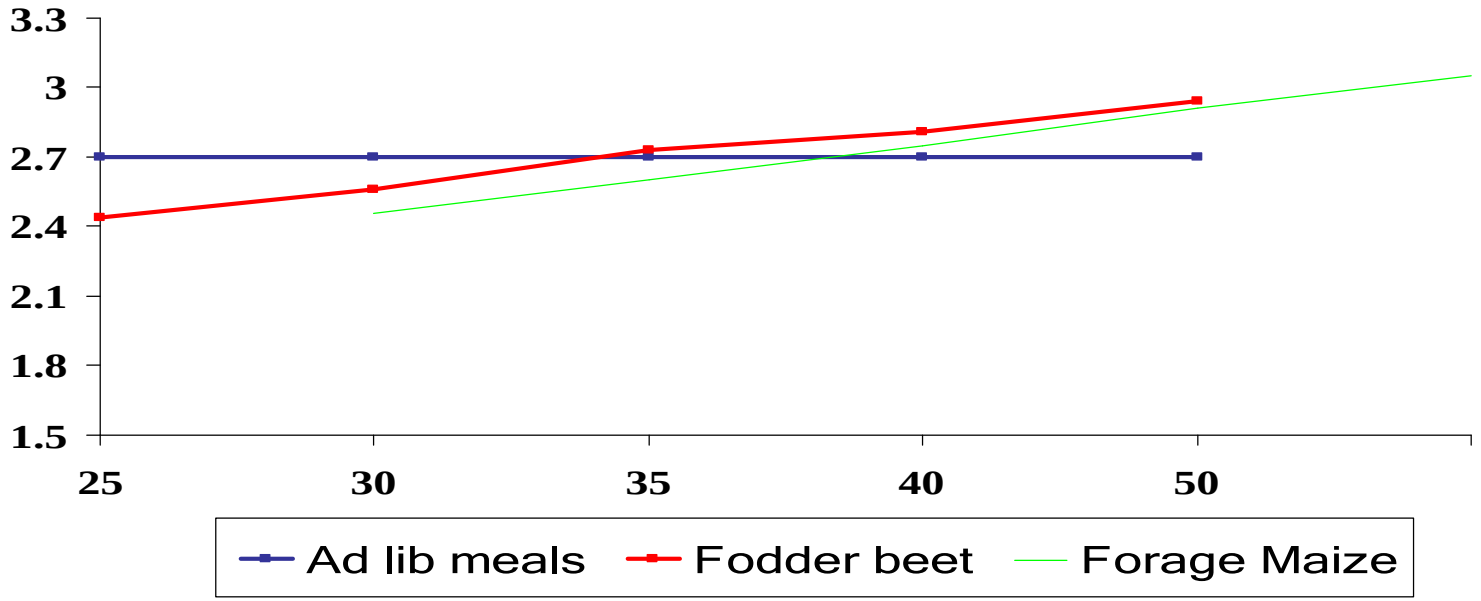
On 50 finished cattle, €1,900 of difference between feeding systems

- Relatively small differences between most systems, differences could be a lot less with yield variation, investments in machinery etc

Relatively small differences between grain treatment options

Value of Fodder Beet / Forage Maize

@ a concentrate price of €200 / t

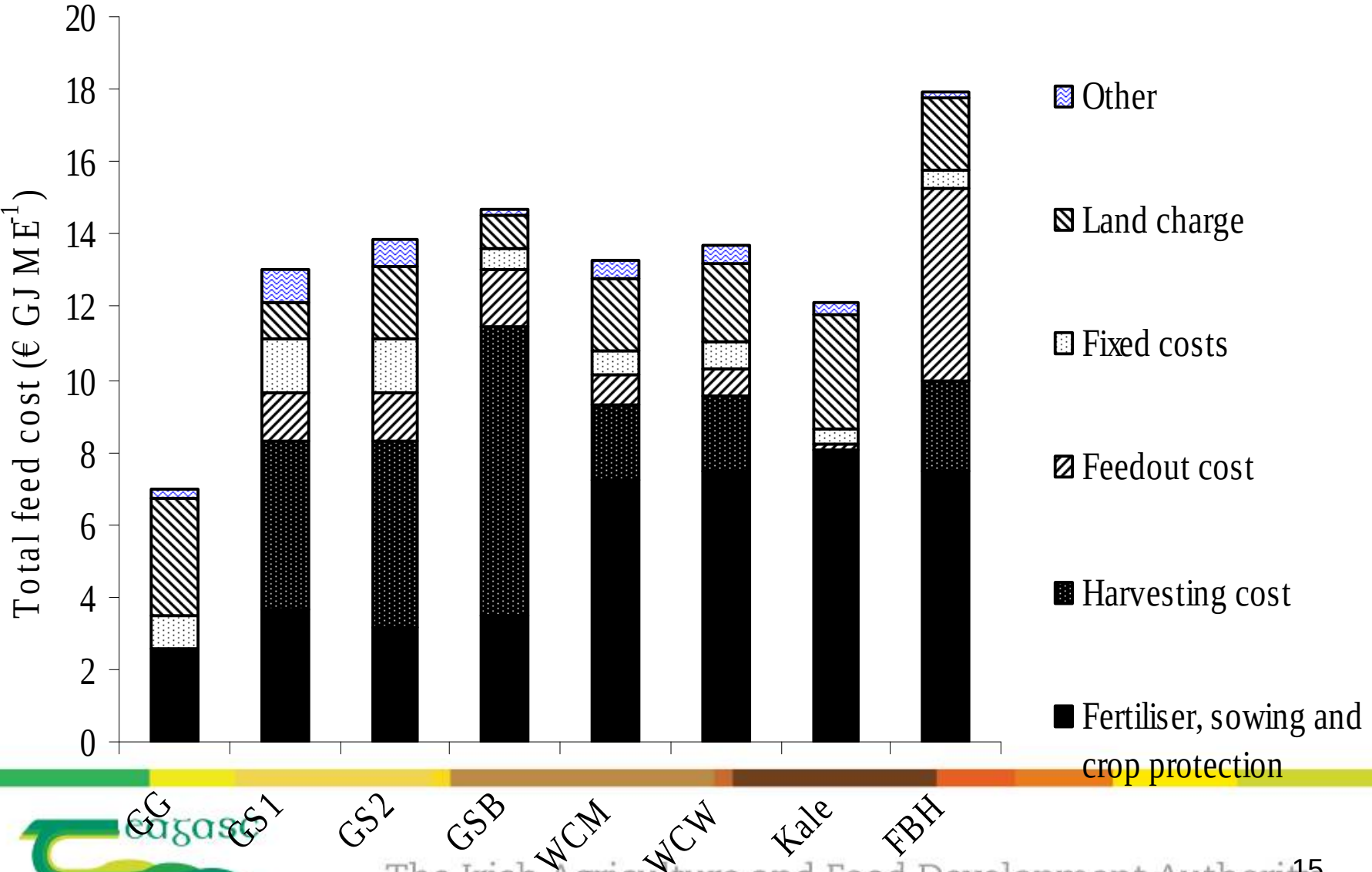


Fodder beet is worth maximum €33 / t

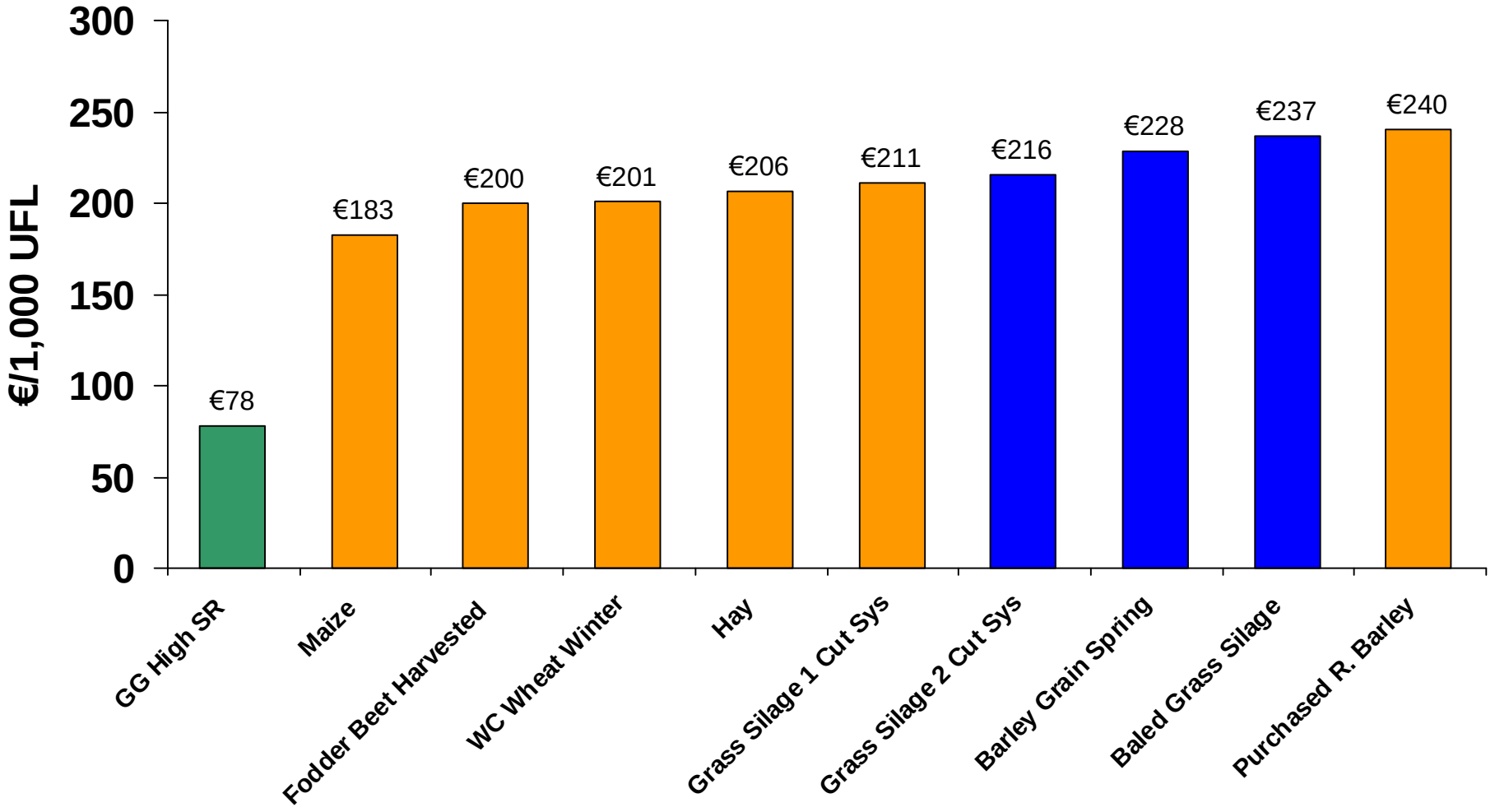
Forage maize is worth maximum €38 / t

Increase / decrease by €4-5 / t, for every €20 change in concentrate price

Composition of Total Feed Cost



Total Feed Cost



Source: GFCM 2012

Total Feed Cost

Source: GFCM 2012

Suckling Calf to Beef

	Males	Females
Slaughter Wt. (kg)	710	570
Lifetime Gain kg.	665	528
From Grass	460	453*
% From Grass	69	80

* Heifers Slaughtered off Grass and Concs.

\- Modified from Grange System