**Swedes**
(Brassica = Crop)

**Tops/ Leaves**
DM Percentage = 15%
Energy per kg DM = 14 MJME

**Bulbs**
DM Percentage = 10%
Energy per kg DM = 14 MJME
Cost = 9 cents /kgDM*

*does not include the cost of fertilisers, pesticides or the cost of cultivation and reseeding the paddock after this crop.

**Feed notes**
A nutritious good quality feed, traditionally used in winter. Time is needed to get cows used to the feed again if they have not consumed it for a long time. If milking cows eat too many the taste of milk will be impacted. This is usually only a concern for farms that supply milk during winter for the domestic market.

Swedes can grow in cool climates and are important feed sources in Southland, Otago and the central North Island. Swedes do not like water logging so soil type and site selection are important. They cannot be planted in the same field repeatedly. Swedes respond well to fertilisers so apply a round of fertiliser to increase the available dry matter (DM) to 8kg.

It is break feed (feed in sections). Once consumed by cows little is left that can re-grow. Therefore paddocks need to be ploughed and replanted (which costs money).

There are also holes left where the swedes used to be. It is estimated that nitrogen leaching can be twice as high as pasture that has effluent spread on it and three times higher than normal pasture.

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**Fresh Grass**
(Ryegrass, Clover Mix = Pasture)

DM Percentage = 18%
Energy per kg DM = 12 MJME
Cost = 15 cents / kgDM

**Feed notes**
A nutritious good quality feed choice that is also cheap. Grass paddocks can be grazed multiple times throughout the year and does not need to be replanted.

The soil has permanent grass cover so it is protected from erosion. Access to water and nitrogen within the soil can be limited because root systems are not that deep (30cm below ground level).

Clover takes nitrogen from the air and fixes it into the soil which helps other plants grow. However, it is a large source of nitrogen in the cow’s diet and the nitrogen that the cow does not use is extracted in urine and dung.

The nitrogen levels in urine can be 100 times the concentration of fertiliser. The plants it lands on can only absorb a small amount that is supplied.

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**Hay**
(Pasture)

DM Percentage = 85%
Energy (per kg DM) = 8 MJME
Cost = 20 cents /kgDM*

*does not include the cost of fertilisers, pesticides or the cost of cultivation and reseeding the paddock after this crop.

**Feed notes**
Grown and harvested in summer to be used in winter. Feed from this card is saved to use in winter.

When feeding stock only 2kg DM is allowed at a time. It is not nutritious feed and because it is hard to break down the cow’s stomachs become too full to eat more nutritious feed.

Used in cold conditions as it warms cows up. If they eat too much, too often, they will lose weight.

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**Silage**
(Pasture)

DM Percentage = 30%
Energy per kg DM = 8.5-11 MJME
Cost = 30 cents /kgDM*

*does not include the cost of fertilisers, pesticides or the cost of cultivation and reseeding the paddock after this crop.

**Feed notes**
Grown and harvested in summer to be used in Winter. Feed from this card should be saved to use in winter but can also be used in summer when feed is tight.

Silage is wrapped up into a bale (or placed in a silage pit) when the grass is still green. The wrapping ensures there is limited air, so instead of rotting the grass ferments and can be stored over winter.

A nutritious good quality feed choice. Be careful when buying silage in as the quality can vary.