

# Total Mixed Rations (TMRs)

Total mixed rations are blends of forages, concentrates, and supplements, formulated to specific nutrient requirements or concentrations, and fed ad libitum. In a true TMR, no additional feedstuffs are offered.

Potential advantages of TMRs include:

- Ensures that cows consume the desired proportion of forages when two or more forages are offered.
- Ensures that cows consume the desired amount of forage relative to the amount of grain offered.
- Reduces risk of digestive upsets.
- Improves feed efficiency.
- Allows for greater use of unpalatable feeds and nonprotein nitrogen sources such as urea or ammonia.
- Adapts well to mechanization.
- Offers the potential to reduce labor required for feeding.
- Eliminates the need to free-choice minerals.
- Allows for greater accuracy in formulating and feeding.

The potential disadvantages include:

- Long hay is difficult to incorporate into rations.
- Requires additional equipment investment for mixing and weighing equipment.
- Grouping of cows into two or more groups may be advisable.
- Cows with low nutrient requirements may over-eat.
- Rations must be carefully formulated and continually checked.
- Pasture can not be easily incorporated efficiently.

for more information:

[Constant Ration Density: the TMR Concept](#), *Advances in Dairy Technology*

[Monitor Silage Dry Matter Content](#), *Alberta Dairy Management*