Nutrients and their functions 1. Carbohydrates:		Feed ration		Macrominerals		Microminerals
1. Protein:		M	onogastric vs Ruminant			
2. F at:						
3. Vitamins:						
4. Minerals:		Metabolic processes				
5. W ater:						
When is extra protein Essential vs non-required in the diet? essential amino aci		ds	<u>Deficiency diseases</u> Swayback		Methods minerals	of supplementing
			Pine disease			
			Milk fever			
			Grass tetany			

Metabolisable energy Definition: Measured in: energy energy

Pregnant animals need:

Bulky feeds vs Concentrates

Dairy ration

Source of Carbohydrates:

Source of Protein

Source of fibre

Source of sugars

Beef ration

Source of Carbohydrates:

Source of Protein

Source of fibre

Source of sugars

Acidosis*

Sheep ration

Source of Carbohydrates:

Source of Protein

Source of fibre

Source of sugars

energy energy energy energy 1.Maintenance 2.Production

Production diet

Maintenance diet

	DAIRY RATION	BEEF RATION	SHEEP Ration	Pig ration
% Protein				