



The Canadian Junior Hereford Association

Presents:

Beef Cattle Nutrition



feed to succeed

Why is Nutrition Important?

Animals need feed to grow, reproduce, and to produce meat and milk. Providing good nutrition to your cattle is part caring for them properly. Cattle will be the most productive and profitable when they are fed to meet all of their nutritional requirements.

What Should I Feed My Cattle?

Most cattle are fed a mixture of roughages and grains. Roughages include grass, hay, silage, and straw. They are low in energy, high in fibre, and are necessary for the proper functioning of the rumen. Grains include barley, wheat, oats, and corn. They are high in energy, but low in fibre. To make an animal grow and put on fat faster, use a higher proportion of grain in the diet. Be careful not to feed grain without roughage, because that will cause rumen function to shut down and make your animal very sick. It is important to feed cattle at the same time(s) every day.



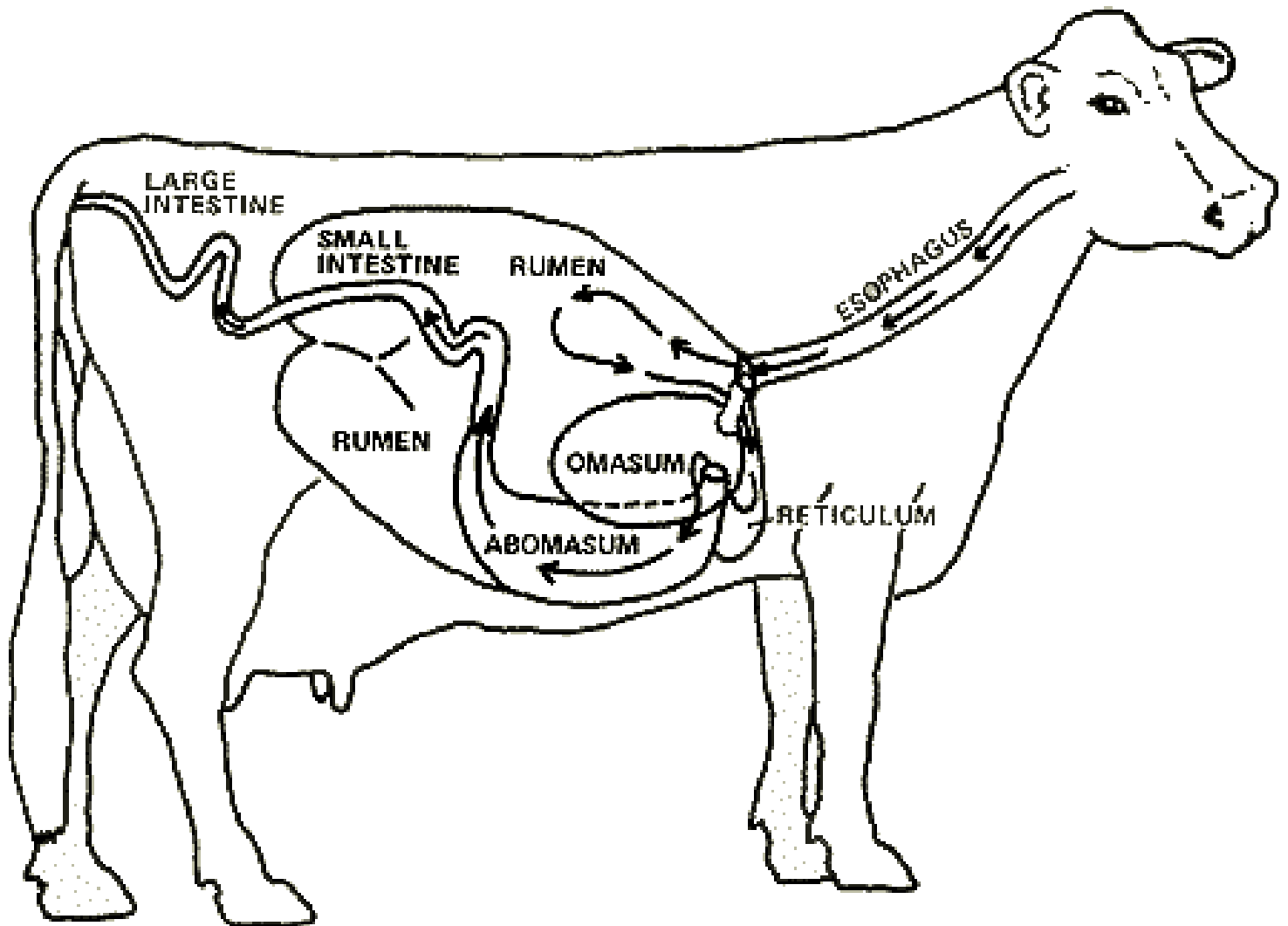
What Are Nutrients?

Nutrients are the basic ingredients required for life. The amount of nutrients an animal needs will vary based on age, sex, weight, and stage of growth or production. Water, protein, fats, carbohydrates, minerals and vitamins are all required to maintain the health of cattle. Protein, fats, and carbohydrates all provide energy, which the animal requires to fuel all of the processes that occur within the body. Vitamins and minerals are essential to proper organ and cell functions. Make sure that your cattle have access to a salt block and mineral. Many times purchased rations will be fortified with certain vitamins or minerals, so make sure to read the label - too much of certain vitamins/minerals can be harmful. There are software programs available to help you formulate the proper ration to meet your goals for your animals.

Always make sure that your cattle have free access to fresh, clean water.

How Does the Digestive System Work?

Cattle have a ruminant digestive system. They differ from humans because their stomach has 4 chambers, while ours only has 1. The four chambers are called the **RUMEN**, **RETICULUM**, **OMASUM** and **ABOMASUM**.



Feed enters the rumen first, where it is broken down by microbes. These microbes are able to digest cellulose and hemicellulose, which are the main components of roughages. This is why cattle can digest grass while humans can't! The reticulum acts as a holding area for feed particles that are too big to pass through to the omasum. The omasum uses muscle contractions to grind those particles even smaller, and absorbs water. Finally, the feed passes into the "true stomach," the abomasum, where digestive enzymes finish the job. The nutrients from the breakdown of feed are absorbed in the small intestine, and can now be used by the animal for energy.

Mission Statement

"Our mission is to be an open, enthusiastic and honest group dedicated to the improvement of ourselves, our group, and our industry. We exist to encourage, organize and unite all young Hereford supporters. While working towards this goal, we will work together, enjoy ourselves and one another, and put the interests of the group above our own."

*The rumen holds up to 190L of fluid.
That's 10 five gallon pails!*

*A 1200 lb
heifer needs
12 gallons
of water per
day!*

*Other ruminants include
sheep, goats, & deer*

Did You Know?

*Cud refers to a bolus of
partially chewed food
that is regurgitated to
be rechewed when the
animal is at rest*

*Highest protein
grains:
Wheat, Barley,
Oats, Corn*

*Highest energy
grains:
Corn, Wheat,
Barley, Oats*

Canadian Junior Hereford Association

5160 Skyline Way NE
Calgary, Alberta
T2E 6V1

Toll-free: 1-888-8-FOR-CHA
Toll-free fax: 1-888-8-CHA-FAX
e-mail: herefords@hereford.ca
website: www.hereford.ca

