

# Sheep

## Main Uses

Meat (lamb) and wool

## Additional Uses

### Bones, horns & hooves

- Dice
- Piano keys
- Shampoo

### Fats and fatty acids

- Antifreeze
- Pet food
- Floor wax

### Hide

- Clothing
- Insulation
- Tennis balls

### Intestine

- Sausage casings
- Instrument strings
- Surgical sutures

### Wool

- Clothing
- Carpet
- Baseballs
- Lanolin (extracted from sheep's wool and used in cosmetics and lubricants)

Wool unsuitable for fabric is used as mulch for plants, to clean-up oil spills and grease around machinery, for insulation in homes and buildings, and as an inter-liner in winter clothes.

# Poultry

## Main Use

Meat and eggs

## Additional Uses

### Feathers

- Bedding & pillows
- Clothing
- Fertilizer
- Livestock feed (Poultry feathers can be processed as a source of protein for livestock feeds)

# AGRICULTURE

## It's your food, fuel, clothing, and shelter!

**A**griculture provides us with these essentials, as well as a staggering number of secondary products that are a vital part of our daily lives.

A wide range of technologies are used to produce the agricultural products necessary for our survival. These technologies include plant and animal genetic research and development, soil analysis and nutrient evaluation, crop and livestock production management, and processing and marketing activities.

There are thousands of ways to use Minnesota plants and animals every day. Here are a few examples of agricultural products developed from Minnesota plants and animals.

# Corn

## Main Uses

Livestock feed and human food products

## Additional Uses

### Corn oil

- Cooking oil
- Potato chips
- Salad dressings
- Insecticides
- Soap

### Corn starch

- Baby foods
- Chewing gum
- Batteries
- Cleaners
- Paper products

### Corn sweeteners

- Ice cream and desserts
- Fruit jams and juices
- Peanut butter
- Soft drinks

### Corn flour

- Snack foods
- Gravies and sauces
- Pharmaceuticals

**Ethanol** (a fuel produced from corn)

- Distillers grain (a livestock feed created as a result of ethanol production)

# Trees

## Main Uses

Lumber and fiber

## Additional Uses

### Cellulose (wood)

- Paper
- Rayon

### Bark

- Cork
- Dyes
- Medicines
- Mulch

### Sap

- Paint thinner
- Rubber
- Sugar

# Pigs

## Main Use

Meat (pork)

## Additional Uses

### Blood

- Adhesives
- Fabric dyes
- Plastics

### Bones and hooves

- Bone china

### Fats and oils

- Candles
- Chewing gum
- Lubricants
- Paints

### Hair

- Air filters
- Brushes
- Upholstery

### Heart

- Heart valves for humans

### Hide

- Drum heads
- Fertilizers
- Gloves

Hog by-products are a source for nearly forty drugs and pharmaceuticals.

# Soybeans

## Main Uses

Protein and oil food products, and livestock feed

## Additional Uses

### Soybean oil

- Cooking oil
- Mayonnaise
- Salad dressing
- Cosmetics
- Crayons
- Ink
- Paint
- Plastics

### Soybean protein

- Baby foods
- Soy milk
- Animal feeds
- Pesticides

### Soybean flour

- Breads and baking products
- Cereal and breakfast foods
- Noodles

### Soybean hulls

- Fiber bran breads, cereals, and snacks

### Whole soybeans

- Edamame
- Soy sprouts
- Soybean meal
- Tofu

**Soy lecithin** (an emulsifier used in foods. Example: Lecithin keeps the chocolate and cocoa butter from separating in a candy bar)

**Biodiesel** (a fuel produced from soybeans)

# Cattle

## Main Uses

Meat (beef) and dairy products

## Additional Uses

### Blood

- Bandages
- Fabric dyes
- Medicine

### Bones and hooves

- Bone meal fertilizers
- Pet food
- Glue

### Connective tissue

- Gelatin used in candy, marshmallows, ice cream and yogurt

### Fats and oils

- Antifreeze
- Cosmetics
- Crayons
- Deodorants
- Plastics
- Rubber tires

### Hair

- Air filters
- Paint brushes

### Hide

- Clothing
- Boots and shoes
- Sports equipment

### Manure

- Methane gas
- Fertilizer

# Sugarbeets

## Main Use

Sugar

## Additional Uses

- Livestock feed (beet pulp)
- Molasses
- Vinegar
- Yeast