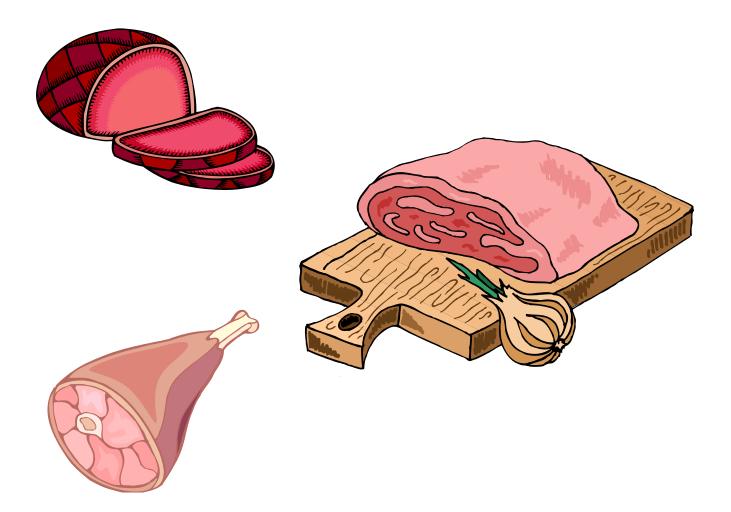
# ALL MANNER OF RED MEAT



### The 4-H Motto

"Learn to do by Doing"

### The 4-H Pledge

"I pledge My HEAD to clearer thinking, My HEART to greater loyalty, My HANDS to larger service, My HEALTH to better living, For my club, my community, and my country."

### The 4-H Grace

(Tune of Auld Lang Syne) We thank thee Lord, for blessings great on this our own fair land. Teach us to serve thee joyfully, with head, heart, health and hand.

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## **Club Volunteers' Guide**

**Welcome** and discover the role RED MEAT plays in a healthy lifestyle. This project gives members an opportunity to cook with red meats like beef, lamb and pork while investigating the safe handling of meat products and the cost of including this food group in the diet. The goal of this project is to increase awareness of how to prepare and include a variety of red meats in a healthy diet.

Members will gain skills in a "learn by doing" atmosphere through the activities and assignments that demonstrate certain concepts. In each meeting there are suggested activities and topics to cover - the timing will depend on the size of the group and the age of the members.

A "Red Meat, Overview of Meetings" has been provided for you to organize the club. Make sure to look at the overview first and then organize your meeting around the included material; based on time and financial restrictions. If the recipes that are included in each meeting will not work for your group, there is a recipe book in the last section of this manual that has alternative recipes.

Cut charts are also provided at the back of the manual. Looking for copies to provide to members? Try contacting the agencies directly or visit their websites. You will find the websites and contact information for most red meat organizations at the back of the manual.

Take time each meeting to prepare a recipe (if financially viable) and encourage members to continue to prepare meals that incorporate the skills covered in the meetings. This project allows the club to prepare and try meats they would not normally see on their kitchen table, so have fun and explore with the recipes.

# Members are to cook at least two (2) meals for their family and report back to the club on the meals they prepared. Members should also try to figure out cost per serving of these meals (following meeting 2).

The topics covered in this project are:

- Red Meat (Beef, Pork, Lamb and other specialty meats) and the role it plays in a healthy lifestyle
- Fat and its role in the diet
- Fighting bacteria in the kitchen & safe handling of meat
- Cost per serving
- Cooking Methods
- Meat Grading systems and Judging
- Farm to table
- Recipes including the different red meats

This manual format includes the volunteer leader and members materials together in each meeting section. The meeting is written with the volunteer leader in mind. Each topic / activity is on individual sheets so that you may choose to provide the members with only the material that they require. For example in Meeting 2 members might only need the sheets on "Now it's Your Turn – Your Kitchen", Cost Per Serving and the sheet to record Achievement Day ideas and recipe reports.

### As a club volunteer your responsibilities are to:

- ✓ have a membership list made with fees collected (if applicable) by the end of the second meeting
- ✓ review project material in both members' and volunteers' guide, familiarize yourself with material and adjust the information to the age group
- ✓ arrange your own schedule using 'meeting overview' and participate in each club meeting, achievement program and activities
- ✓ attend a volunteer training session

### **Materials Needed for Club**

#### Meeting 1

- round ball of yarn
- copies of Parliamentary Puzzler
- recipe ingredients

#### **Meeting 2**

- materials for Activity One: cooking oil and cinnamon
- materials for Activity Two: 2 sponges, paintbrush, red poster paint or food colouring, cutting board, serrated knife, light coloured plate / group doing the activity.
- materials for Activity Three: Assortment of Grocery Fliers
- recipe ingredients

#### Meeting 3

- copies of "Chaos in the Kitchen" pens / pencils & paper
- recipe ingredients

#### **Meeting 4**

- materials for Activity One: pork chops for judging, judging score cards
- materials for Activity Two: grocery store fliers, pens / pencils & paper
- recipe ingredients

#### **Meeting 5**

- materials for Activity One: copies of Quiz, pens / pencils
- materials for Activity Two: strips of paper, pens / pencils/ markers, tape
- recipe ingredients

#### Meeting 6

- party planning chart
- menu planner
- recipe ingredients

**Cost of Meetings:** Please note that this project includes a cooking component and will have costs associated with. You may want to ask members to pay a materials fee or perhaps find a sponsor for your club that can contribute either monetarily or in kind.

### Red Meat Project, Overview of Meetings

#### Meeting One:

- ✓ Call meeting to order and say the 4-H pledge.
- ✓ Give the group an outline of the project.
- ✓ Elect Officers for the group and decide on a Club Name
- $\checkmark$  Do a meeting mixer.
- ✓ Take the Meat IQ test and go over answers.
- ✓ Meat Nutrition Values
- ✓ Talk about a Matter of Fat in their bodies, and how they could reduce the amount of harmful fats in their diets. Where are the hidden fats??
- ✓ Cook a quick Beef dish
- ✓ Discuss Achievement day- Serve your families a meal and sell tickets to this event as a fundraiser, serve a meal to sponsors, cook a meal for a seniors group, cook a cultural meal?
- ✓ For next week...Bring a Grocery store flyer
- Bring in a recipe for a favorite RED MEAT dish your family uses to share with the other members. Leaders will make up a booklet of recipes for everyone to take home to try out on their own families.

#### Meeting Two:

- ✓ Call to order, pledge, and read the minutes of the last meeting.
- ✓ Share family favorite recipes.
- ✓ Continue planning Achievement
- ✓ Hand washing exercise from Fight-Bac
- ✓ Contamination experiment
- ✓ Buying meat- cost per serving activity.
- ✓ Cook BEEF if you have a larger group, ½ can do cooking this week while others work on cost per serving based on prices from their flyers.
- ✓ They could then either switch about, or eat, and the other group will do their costs next week while the 2<sup>nd</sup> group cooks. This will depend on the size of your group and the size of the kitchen you have to work in.

### **Meeting Three:**

- ✓ Call to order, pledge, and read the minutes of the last meeting.
- ✓ Pork Preserving methods
- ✓ Safe meat handling and storage.
- ✓ Cooking methods and temperatures for safe meat meals.
- ✓ More Fight- Bac activity- Chaos in the Kitchen.
- ✓ Continue to plan and discuss achievement program.
- Cook- Pork recipes- again some can cook, while others finish up their cost per serving exercise.
- ✓ For next week write a short radio commercial, to be presented to the group to try to sell us on your meat product!!

#### **Meeting Four:**

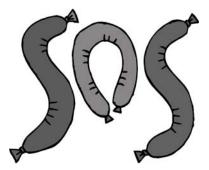
- ✓ Call to order, pledge, and read the minutes of the last meeting.
- ✓ Radio commercials- if the group is large you many need to hear some this week and some next week.
- ✓ Pork Nutrition-Pork on your Fork facts.
- ✓ Grading Meat- the Canadian system for our protection.
- ✓ Fight-Bac activity- Grocery Store Detective.
- ✓ Continue to plan achievement.
- ✓ Cooking- Pork

#### **Meeting Five:**

- ✓ Call to order, pledge, and read the minutes of the last meeting.
- ✓ Finish up with radio commercials if they are not completed
- ✓ Lamb Rules!! Nutrition
- ✓ Best cooking and storage practices.
- ✓ Fight-Bac activity- Chain of command!!
- ✓ Finalize plans for achievement program.
- ✓ Cooking Lamb

#### Meeting Six:

- ✓ Call to order, pledge, and read the minutes of the last meeting.
- ✓ Continue planning achievement or wrap-up.
- ✓ Veal, boar, bison, variety meats.
- Meat in the microwave- the new fast cook items why and how do they compare nutritionally!!
- ✓ Meat additives and why they are used.
- ✓ Fight-Bac activity-
- ✓ Cooking fast cook or variety meats



### Information on Parliamentary Procedure

- set of rules used to conduct a well organized meeting
- may be used in meetings to make decisions or simply to run the meeting
- saves time and eliminates confusion if done correctly

#### Motions

- procedure to have a topic discussed and recorded
- any member may make a motion for their idea or plan
- the member raises their hand then addresses the chairperson/president/person in charge
- the member is then called upon to speak, whereupon they state "Mr. /Ms President, I move that..."
- another member must now state "I second the motion"
- the president will now state the motion, debate or discussion will take place, the motion is put to vote and the results are announced

#### Nominations

- members help choose the officers for their club by formally presenting the name of a candidate to the club for a position to be filled
- candidate is referred to as the nominee
- chairperson must call for nominations by saying "Nominations are now open for the position of..."
- before closing nominations the chairperson must call for any additional nominations three times

Two types of nominations that could be used:

1. From the floor: chairperson asks for nominations, after the member has been addressed they will state the name and position to be filled, the name is written down

2. By Written Ballot: each member writes down the name of a member they would like to nominate and the results are read by the chairperson

- chairperson must ask if the nominee is willing to have their name stand for the position

- chairperson must call for any additional nominations, if there are none then they will declare that the nominations are closed

#### Elections

- nominations are closed and now the club can vote on the names by ballot or by show of hands (if this is done have nominees leave the room)
- vote for each position separately
- if there is only one person nominated for a position then the chairperson asks for a show of hands in agreement that the candidate be declared a unanimous decision

### Executive Duties

### President

- oversees all actions from organizing and running meetings to payment of bills
- acts as the chairperson of the meetings
- needs to remain impartial to all discussions held

### Vice-President

- learns duties of the president so they may act as chairperson
- helps with preparation of each meeting agenda and assists other members
- ✤ attends to special guests
- conducts meetings in absence of president

### Secretary

- assists the chairperson in preparing meeting agendas
- prepares minutes for each meeting
- deals with all correspondence and records
- notifies members of special meetings
- calls meeting to order
- keeps list of members
- has all papers and information available to everyone in the club
   prepares reports for the club



### **Press Reporter**

- publicizes any upcoming events in the local newspaper or in the 4-H Association Newsletter
- takes notes at general meetings and sends these highlights on to 4-H Ontario
- organizes committees to help publicize any 4-H events
- keeps a scrapbook of photo clippings of the club and its members

### Treasurer

- collects dues for any special events
- keeps a record of any financial matters of the club including receipts, bank statements and invoices
- deposits funds in the bank
- acts as one of the signing officers on all cheques







### THE 4-H PLEDGE

"I pledge My HEAD to clearer thinking, My HEART to greater loyalty, My HANDS to greater service, My HEALTH to better living, For my club, my community and my country."

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MEETING THREE:	Red Meat Handling and cooking methods
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MEETING FIVE:	Lamb Rules!!
MEETING SIX:	The Other Red Meats: Veal, Chevon, Boar,
	Bison, Deer

### INTRODUCTION:

The following project is a RED MEAT project. This will include Beef, Pork, and Lamb. The final chapter will include other types of Red Meat that may not be consumed as readily as these three. Red Meat is an important part of a healthy lifestyle.

### **OBJECTIVES:**

In this project you will:

- 1. Discover the role RED MEAT plays in a healthy lifestyle.
- 2. Become familiar with different cuts of meat, how to store and prepare them.
- 3. Cook at least 2 meals for your family and have them report on the meal you prepared. Attempt to figure out cost per serving of these meals.
- 4. Learn how to calculate food in terms of cost per serving.
- 5. Become familiar with some elements of the FightBAC program.
- 6. Become familiar with the contribution the RED MEAT industry plays in the economy of Canada.
- 7. Improve your interpersonal skills by working and co-operating with others.

### MEMBERS' GENERAL REQUIREMENTS:

Be a current paid member of 4-H Ontario.

Attend 2/3 of the club meeting time for this project.

Attend and participate in the Achievement Program for this project. Complete any assignments that are required of you as part of this project.

"Learn to do by Doing" learn new skills, meet new people, and most of all have fun!



### All Manner of Meat



### Personal Log for Recipes Made at Home

Recipe	Comments from Family & Friends	My Comments



### **MEETING ONE:**

#### RED MEAT NUTRITION AND THE MATTER OF FAT!!

### CALL TO ORDER AND THE 4-H PLEDGE **ROLL CALL QUESTION;**

Name your family's favourite meat dish.

Answer\_\_\_\_\_

Hold the Election of officers for this project, and Group Name

**Mixer:** Have the members stand in a circle. Give a round ball of wool to the new President and have them say 1 cut of **red meat**. (We know Red Meat is Beef, Pork and Lamb- Do our members?? Good way to find out what they consider Red Meat) When they have done this the ball must be tossed to another member in the circle, and they will say a cut of red meat and so on.... until everyone has had a turn. Hopefully they come up with a number of different cuts to talk about through the meetings to come. This exercise will also help you as a leader to find out what the youth know.

#### TEST YOUR MEAT IQ: True or False

- 1. The quality of protein in meat is higher than the quality of protein in plants.
- 2. Your body absorbs more iron from 120gms of beef or pork than from a whole bag of spinach.
- \_\_\_\_ 3. If you want to develop large muscles or improve your athletic Performance you should eat more red meat protein per day.
- \_\_\_\_\_4. A T-Bone steak is more nutritious than a blade steak.
- \_\_\_\_ 5. If you are on a diet to lose weight you should not eat meat.
- \_\_\_6. Pork is the leading dietary source of thiamine.

### ANSWERS:

**TRUE!** The quality of protein refers to the protein that provides the body with all the essential amino acids it needs to function. Amino acids are the building blocks your body needs to keep working. Animal protein is the highest quality of protein. Animal proteins come from not just red meat but also milk, cheese, eggs, fish, and poultry. Animal protein is easier than plant proteins for our bodies to digest and use.

**TRUE!!** Meat contains "hemme" or "ferrous iron, which is more easily absorbed into the body than plant based iron. The amino acids in meat also help your body digest iron from other sources in your diet like fruits and veggies.

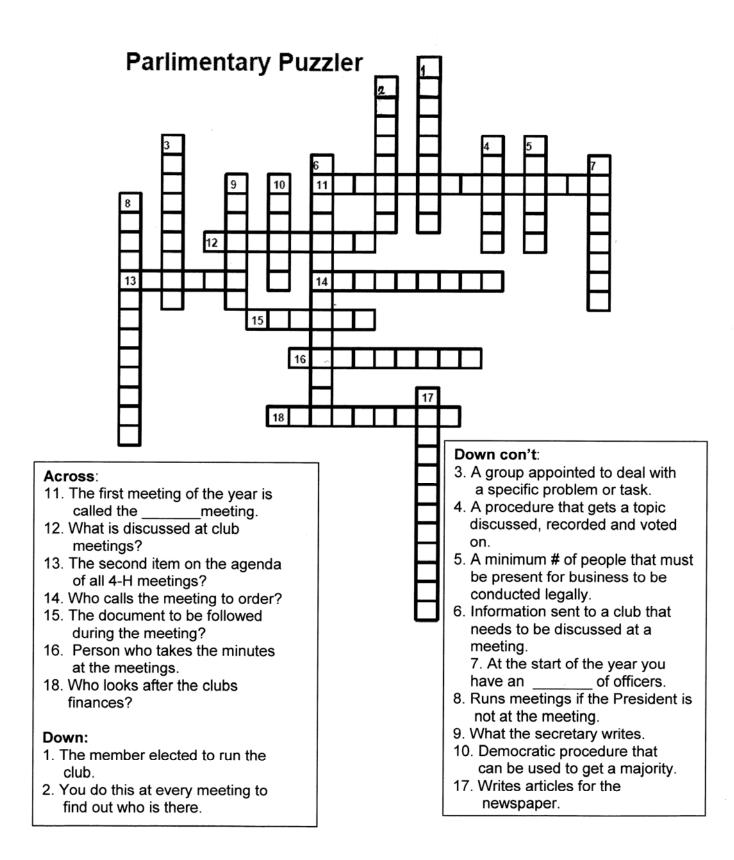
**FALSE!** While meat provides protein which is essential to our bodies because it helps to build and repair body tissues and keep us healthy it will NOT give you improved athletic ability. The key to improved athletic ability is regular exercise and practice!

**FALSE!** A 90gram serving of any cut of beef will give you the same nutrient content, regardless of the price. The items may vary in their fat content depending on carcass location, but your basic nutrient value stays the same,

**FALSE!** On a low calorie diet it is important to eat foods that are nutrient rich-like meat. For a moderate number of meat calories you get a high amount of essential nutrition.

**TRUE!** A 90gram serving of pork provides an adult male with 55% of his recommended intake of daily thiamine and a female with 74%. Thiamine is necessary for our bodies to convert carbohydrates into energy for the bodies use, and it helps our nervous system function normally.





### ANSWERS TO PARLIAMENTARY PUZZLER

ACROSS:

11. ORGANIZATIONAL
 12. BUSINESS
 13. PLEDGE
 14. PRESIDENT
 15. AGENDA
 16. SECRETARY
 18. TREASURER

DOWN:

- 1. EXECUTIVE
- 2. ROLL CALL
- 3. COMMITTEE
- 4. MOTION
- 5. QUORUM
- 6. CORRESPONDENCE
- 7. ELECTION
- 8. VICE PRESIDENT
- 9. MINUTES
- 10. VOTING
- **17. NEWS REPORTER**



### **BEEF**:

What's the word for today's healthy eating? "Lean Beef" This is the new focus of the Beef Producers.

Today's BEEF if leaner than ever, and has 12 essential nutrients, including minerals such as Iron and Zinc. Beef is a high source of Protein and contains a variety of B vitamins. What do these nutrients mean to us?? And why do we need these nutrients??

**IRON:** Iron carries oxygen throughout your body, releasing energy from the food you eat. Iron is found in every call in your body. Energy is needed to grow, move, breath, and make your heart beat. The iron in beef is easier for your body to digest than the iron in vegetables.

**ZINC**: Zinc helps your body process the food you eat, as well as build your immune system and aids in growth and reproduction. It helps develop your taste buds and night vision too. It also helps the body to produce insulin and certain bodily enzymes.

**PROTEIN:** Protein is important for healthy skin, hair, bones, and muscles. Protein also helps to build antibodies, the part of the blood that helps you fight infection.

**B VITAMINS**: Beef contains thiamine, niacin, riboflavin, B6, B12, and pantothenate, all of which are needed for normal growth and development, healthy blood and a healthy nervous system. B12 is ONLY found in foods of animal origin.



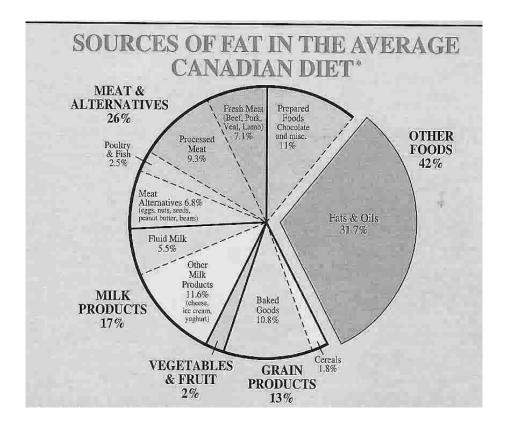
### WHERE'S THE FAT???

There are fats we can see- like fat in meats or poultry, or on foods like potato chips and French fries.

We can trim the fat off the meat if we don't want it there, we can avoid eating those potato chips or fries—but where's the other fat???

It is hiding in almost every product we buy from the shelf in the grocery store that is processed.

The chart below shows you where most of the ingested fat comes from. We can clearly see it is NOT from eating Red Meat.



We all need a certain amount of fat in our diet for good health. Fat is a major source of energy for our bodies.

Certain vitamins need fat for our body to absorb them- vitamins A, D, E and K. Because of these fat-soluble vitamins fat is particularly important to normal growth and development of children. Fat makes our food taste better.

#### BUT

High fat diets have been linked to heart disease, obesity, and some types of cancer.

**Females** age 19-49 need a recommended daily fat intake of 65 grams or 16 teaspoons.

**Males** age 19-49 need a recommended daily fat intake of 90 grams of fat or 22 teaspoons.

**Older adults 50+** need 60 grams of fat daily to maintain a healthy body.

What can we do to reduce the amount of fat in our diets??

### Go around the room and have each participant come up with one way to reduce the fat THEY consume in their daily diet.

### Examples are:

Substitute low fat versions of foods whenever possible.

Avoid the use of oils and margarines.

Eat smaller portions of the higher fat foods.

Don't eat the fatty foods so often.

When preparing meats, trim the excess fat off. If there is fat coming out while cooking (eg. Ground beef) drain it well before finishing the recipe.

Cook baked goods from scratch at home so you can control the kind of fat and amount used in the end product.

Avoid pre-packaged foods as much as possible, head toward the fresh product aisles more often.

Discussion about what the group would like to do for their **Achievement Day.** Some suggestions might be:

- Prepare a dinner as a fundraiser for family and friends.
- Hold a dinner or luncheon for a sponsor.
- Prepare a cultural cooking meal (different countries popular dishes, for ourselves and/or others).
- Any other ideas????

For next meeting:

- Bring a grocery store flyer.
- Bring a copy of you family's favorite meat recipe. We can copy them and share them with the group.

### QUICK TACO SALAD

450gm	ground beef
1	package taco seasoning
250mls	low fat Thousand Island
	salad dressing
200gm	bag Taco Chips
3-4	tomatoes
1	onion
1	head of lettuce

Yield: 6-8 servings

**Prep. time**: 20 minutes, including cooking time.

Equipment: Frying pan Chopping knives Cutting boards Wooden spoons for mixing Large serving bowl Serving spoons

Eating bowls and utensils

- 1. Wash Hands.
- 2. Assemble all ingredients and equipment.
- 3. Cook the ground beef in the frying pan, drain well and let cool.
- 4. Cut up tomatoes, onion and the head of lettuce. Put these together into a large serving bowl.
- 5. When ground beef is cool, add to the vegetable mixture.
- 6. Crush taco chips and add to the beef and vegetable mix.
- 7. Add the salad dressing right before serving.

Eat and enjoy

### **TERRIFIC TACOS**

Chopped tomato

Bacon bits

250g	lean ground beef	Yield: 6-8 tacos
2 1	<b>3</b> ,	Prep Time: 10 minutes
2 5 ml	tomatoes, chopped chili powder	Cooking time: 30 minutes
5ml 25ml 1 pkg.	hot pepper sauce tomato paste Taco shells	<b>Equipment:</b> Small measurering cups and spoons
Sugges	ted toppings	Frying pan Knives Grater
Grated cheese Shredded lettuce Chopped onion Chopped tomato		Cutting board Wooden spoon Cookie sheet Can opener

- 1. Assemble all ingredients and equipment.
- 2. In the frying pan brown the meat and garlic cloves over medium heat. Drain off all the excess fat.

Spoons

- 3. Add chopped onion and cook for 5 minutes.
- 4. Stir in tomato, chili powder, hot pepper sauce and tomato paste. Mix well. Reduce heat and let simmer for 20 minutes.
- 5. Arrange taco shells on cookie sheet. Warm in 160C oven for 5 minutes.
- 6. Remove tacos from oven. Fill each with taco mixture. Top with your choice of toppings and enjoy!!



#### **MEETING TWO;**

GET THOSE BACS!! FIGHTING BACTERIA IN YOUR KITCHEN!! WHAT DOES IT COST TO FEED OUR FAMILY??

#### CALL TO ORDER PLEDGE READ the MINUTES of the LAST MEETING. ROLL CALL QUESTION:



Can you name some steps you can take to avoid food born illnesses, on the farm or in the kitchen?

#### ANSWERS TO ROLL CALL QUESTION ARE:

There are 4 places that food can become contaminated before you the consumer even get the food.

**On the Farm:** Animals must have clean drinking water at all times, nutritious food and a healthy environment. Farm chemicals need to be applied in a safe manner. The government approves and monitors the use of farm chemicals and livestock medications to ensure the animal stays healthy and fit for the food chain. Can you think of a recent disease farm born that has been in the news lately?

**Imports:** Other countries do not necessarily have the same standards as Canada. Our government does have import regulations in place to protect us from poor quality food or food treated with chemicals that are not approved by our government. The food found to be unfit is usually destroyed or sent back. Can you think of an incident where this was not caught?

**Processing plants**: Staff at these plants are trained in health and safety issues. The plants should be clean and sanitized. Government inspectors go into plants to ensure quality of food and safety. Can you think of an incident where this system failed somewhere along the chain?

**Retail Stores:** Grocery stores and restaurants purchase the best quality foods they can. Food should be properly stored. Food preparation and sales areas should be kept clean and sanitary at all times. Temperatures of different stored materials should be monitored daily. Government agencies do periodic inspections. What could happen if foodstuffs were not stored properly?

### NOW IT'S YOUR TURN--YOUR KITCHEN

**CLEAN**: hands, utensils, cutting surfaces. Wash all produce when you bring it home from the store.

**SEPARATE:** keep all raw meats away from other foods during storage and preparation. Keep separate cutting boards for meat and vegetables Always keep food covered.

**COOK:** Cook food thoroughly. Be aware of proper cooking times and temperatures for different meats. Prepare foods immediately so foods don't remain at room temperature to let bacteria grow.

**CHILL:** Refrigerate or freeze perishables, prepared foods and leftovers within two hours. The danger zone for bacteria growth on food is between 4C (40F) and 60C (140F). Make sure the refrigerator is set at a temperature of 4C (40F) and keep the freezer at -18C (0 F).



**FOOD FACT:** Not all bacteria is bad! You probably have good bacteria in your kitchen too. Wonder how?? Good bacteria can be found in food items like cheese and yogurt.

### BACTERIA EXPERIMENT-- HANDS THE SOAPY SOLUTIONS:

### MATERIALS NEEDED:



Cooking oil Cinnamon Access to sink to wash hands Measuring spoons (teaspoons and tablespoons)

Ask 3 youth to be the volunteers for this experiment.

Procedure:

- 1. Rub 1 tablespoon of cooking oil all over your hands until completely coated. Sprinkle 1 teaspoon of cinnamon on hands and rub it around until it's evenly distributed. The cinnamon will be like bacteria. It's all over!!
- 2. Wash hands as follows, **rubbing them briskly for 20** seconds...

Volunteer #1 wash hands in **cold water** and **no soap** Volunteer #2 wash hands in **warm water** and **no soap** Volunteer #3 wash hands in **warm water** and **soap** 

For the rest of the group: Observe the three hand washing methods. Record our results.

The most effective method of removing the bacteria was\_\_\_\_\_

The least effective in removing the bacteria was

My Conclusions are...

I can remove bacteria from my hands by:

Using \_\_\_\_\_\_water, \_\_\_\_\_ and

by\_\_\_\_\_

### ACTIVITY:

### MEAT IN THE KITCHEN:

The purpose of this activity is to demonstrate the importance of keeping the kitchen clean. Cross contamination of food can lead to food poisoning. To reduce the risks, wash all cooking utensils and counters before and after preparing a meal. Use a mild bleach solution to clean cutting boards.

### **MATERIALS NEEDED:**

2 sponges, cut into the shape of a steak, water, paintbrush, red or bright colored poster paint (you could also try food coloring instead), cucumber, cutting board, serrated-edged knife, light colored plate.

### DIRECTIONS:

- 1. Wet both sponges so they become damp. Set one sponge aside to represent the cooked piece of meat.
- 2. Paint both sides of the other sponge with the red poster paint. The paint represents the juice found in meat that carries bacteria.
- 3. Place the painted sponge on the cutting board and cut it in half with a knife. Place the pieces on a plate.
- 4. Cut a slice of cucumber on the unwashed cutting board. What does the cucumber look like? What has happened?
- 5. Place the "cooked" sponge onto the plate beside the "raw" sponge. What happened?
- 6. Discuss your observations.

### CONSIDER...

Why should you wash the cutting board after cutting the raw meat? How many cutting boards do you have in your house? How many do you need?

What should you wash the board with to get rid of all of the bacteria? Should you use wood or plastic cutting boards?

### ACTIVITY:

#### COST PER SERVING:

NOTE-If you have a larger group, half of them can start the cooking while the other half start this activity. Or you can split the group in half so half cooks this week and half does the activity and then switch about next week.

#### When buying meat it is often the cost per serving that counts...

Many people compare the cost of meat based on the price per kilogram, or total price of the piece of meat. You will get the best meat buy if you start thinking in terms of "cost per serving". This is because the number of servings you can get from a piece of meat depends on the cut of that meat. The price can also depend on bone, fat and gristle in the cut. Shrinkage due to losses of moisture and juices while cooking can also decrease the number of servings possible.

Determining Cost per Serving:

Price per kg	 = cost per serving
number of cooked servings per kg.	

### Servings of Cooked Meat per Kilogram (Serving size = 90gms)

Type of Meat	Servings per kg.
Roasts (beef, pork, lamb) boneless bone-in Steaks and chops Stewing meats boneless bone-in Pork Ribs Bacon Ground Meat Sausages	7-8 5-6 5-6 7-8 4 4 6-8 7-8 5-6
Bacon	6-8
Sausages Liver	5-6 7-8

### Which is the best buy?

Using the formula and the information from the table, calculate the cost per serving of the following cuts of meat found in your fliers.

Cut of Meat	Price \ Kg.	Number of Cooked Servings per Kg.	Cost per Serving
Beef blade roast bo	ne in		
Beef blade roast bo	neless		
Pork shoulder chop	s		
Black Forest Ham			
Pork Spareribs			
Lamb Chops	. <u></u>		
Based on your cal Which was the mos Which cut of meat w	t economical meat	advertised this week?	

Were the cuts that had the lowest price per kilogram also those with the lowest cost per serving? \_\_\_\_\_\_

If not why? Suggest possible reasons. \_\_\_\_\_

#### FYI

Cooking meat at high temperatures for long periods of time will increase the moisture loss and shrinkage of the meat- making it less cost effective. Lower your temperature and time of cooking to reduce the amount of shrinkage and get the juiciest, tender, most flavorful meats, use oven temperatures of 140C - 160C.

Collect up favorite recipes that youth brought in. We will compile them (leaders) to use as a wee cookbook of different recipes when finished the meat project. This will give them new recipes to try at home with their families.

Over the past week did you think about what you would like to do for your Achievement Night? Talk about this and take a vote on the ideas presented. This will help plan for the event.

Write in any ideas or suggestions voted on and passed....

Did anyone cook a meal for their family last week?? Did you bring in a report??

 $\bigcirc$  $\bigcirc$ 

### **Oriental Vegetable Beef Stir Fry**

250g	beef sirloin steak
50ml	vegetable oil
1	head of broccoli
	broken into flowerettes
3-4	medium carrots, sliced
1	onion, sliced
1	can (398ml) baby corn
250ml	mushrooms, sliced
25ml	soy sauce
2ml	garlic powder
1	garlic clove crushed
2ml	ginger powder
50ml	beef broth
15ml	cornstarch

Yield: 4 Servings Prep Time: 10 minutes Cooking time: 10 minutes

**Equipment:** 

Liquid measures Dry measures Small measures Small and medium bowls Wok or electric frying pan Knives Cutting boards Slotted spoon Vegetable peeler

1. Assemble all ingredients and equipment.

2. Cut beef across the grain into 1x4cm strips

3. In the wok or frying pan, heat 25ml oil over medium high heat.

4. Add garlic. Heat until yellow. Remove from pan.

5. Add beef; stir fry 2-3 minutes. Remove from pan and keep warm.

6. Heat the remaining oil. Add broccoli and carrots, and stir fry for 2-3 minutes.

7. Add onions and mushrooms, and baby corn, and stir fry for 1 minute more.

8. In a bowl, combine soy sauce, ginger, beef broth and cornstarch.

9. Stir into vegetable mixture.

10. Reduce heat to medium low. Cover and cook for 3 minutes.

11. Return meat to the wok and heat through.

This dish can be served with noodles or rice.

Time saver tip: take advantage of pre-cut vegetables.

**Per Serving:** Calories 308, protein 29g, fat 16g, carbohydrates 14g **% of Daily intake:** 27%iron, 70%zinc, 63%sodium.

There are readymade stir fry sauces available that would make this dish even quicker. What might be some of the drawbacks to using these products?? What is an advantage??

Stir-frying is a quick, easy and nutritious way to cook meat and veggies. By frying in a small amount of oil over high heat and stirring vigorously, food is seared and maintains its nutrient value.

### **BEEF KABOBS**

- 500g sirloin tip or round steak, cut into 2.5cm cubes
- 398ml can of pineapple chunks
- 15ml soy sauce
- 50ml vinegar
- 50ml brown sugar
- 1 green or red pepper, zucchini chunks mushrooms cherry tomatoes olives onion wedges etc.

Yield- 4 kabobs Prep. Time: 20 minutes Cooking time: 12-15 minutes Equipment: Liquid measure Dry measure Small measure Broiler pan or electric fry pan Knives Cutting boards Slotted spoon Whisk Shallow dish and plastic wrap, or plastic bag with a tie Skewers

- 1. Assemble all ingredients and equipment.
- 2. Combine pineapple juice, soy sauce, vinegar and brown sugar in a bowl.
- 3. Pour over beef cubes in a shallow dish or bag. Cover (or tie) and refrigerate for 6-8 hours. (This prep. would need to be done by leader before the meeting).
- 4. Drain marinade from beef. Alternately thread beef, vegetables and pineapple onto a skewer to suite your preference.
- 5. Broil for 6 minutes on each side or until cooked to your liking (rare, medium, or well done). You can brush the kabobs with reserved marinade and turn frequently during cooking.

### MARINADES:

Marinades are used to tenderize tougher cuts of meat. Marinades can also enhance the flavor of the meat. Marinades can only tenderize the meat it touches. Pierce the meat with a fork if it is a roast, and baste regularly. For cubes just make sure they are all covered. Always refrigerate meats that are being marinated

Marinades take time to work. Cubes or strips take 3-6 hours, while roasts may require 12-24 hours.

**Tropical Marinade**: 125ml soy sauce and rice vinegar, 50ml honey, 15ml chili sauce, 10ml or both sesame oil and finely ground ginger.

**Tandoori Marinade**: 250ml plain yogurt, 2 cloves of minced garlic, I small onion minced, 15mls each of minced ginger, fresh lemon juice and hot curry powder, 5ml each of chili powder and salt.

**Cumin Sauce/Dressing**: 175mls each of mayonnaise and ranch dressing, 7ml ground cumin

**REMEMBER:** always reserve some of your marinade for basting. You do not want to use the marinade that had the RAW meat stored in it.

#### **MEETING THREE:**

### PORK SOLUTIONS: SAFE MEAT HANDLING AND COOKING METHODS:

PLEDGE MINUTES OF THE LAST MEETING ROLL CALL QUESTION: Name a cut of Pork that you would eat for...

Breakfast Lunch



Supper

#### Let's Talk it Over:

Pork is a tasty and versatile meat. While pork provides us with tender, mild, fresh cuts, such as roasts, loin, chops and spareribs, about 70% of Ontario pork is cured or smoked and processed into products such as ham, bacon, sausages and wieners.

What is smoked meat? Smoking is a method of preserving pork that predates ancient Egyptian times. By simply hanging it over a fire, it was found that smoking meat not only gave the meat a pleasant flavor, it also helped to preserve it. Today more sophisticated methods for smoking cured pork have been developed, preserving the traditional smoked flavor. Modern refrigeration makes this method of preserving less necessary, but the special flavor of ham has remained popular.

**What is curing?** Curing is the addition of salt, sodium nitrate, nitrates and sometimes sugars, seasonings, and other additives to pork for preservation, color development and flavor enhancement.

Nitrates contribute to the characteristic cured flavor and reddish-pink color of cured pork. Nitrates and salt inhibit the growth of certain bacteria that grow on foods. There are two methods of curing.

**Dry curing** is the process used to make country hams and prosciutto, fresh meat is rubbed with a dry-cure mixture of salt and other ingredients. Dry curing produces a salty product. In 1992 the pork industry received clearance to reduce the amount of salt used in these products. Since salt draws out moisture, this reduces the hams weight by 18% therefore you have a more concentrated ham flavor. Dry cured hams may be aged from a few weeks to more than a year. These hams are safe to store at room temperature because they contain so little water, bacteria can't multiply in them.

**Wet curing** or brine curing is the most popular way to cure a ham. This process means they inject the ham with a curing solution before cooking. The solution will contain salt, sugar, phosphate, potassium chloride, water and flavorings. Smoked flavoring may also be added to this brine solution.

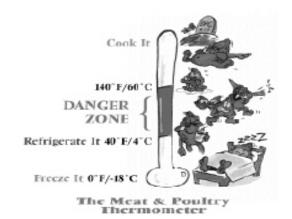
#### CHILL!!

Safe meat handling and storage is the key happy and safe meat eating.

- Use the 2 Hour Rule in your home and while shopping. Refrigerate or freeze all meats within 2 hours of purchase or preparation. If the weather is hot, >26C, reduce that time to 1 hour and use a cooler if necessary
- When shopping pick up meats and frozen foods last. Get these foods home and into the refrigerator or freezer immediately. Choose meats that are cold and tightly wrapped, without holes or tears. Check the packages best before dates.
- Now your meat is home, be sure your refrigerator temperature is less than 4C. Avoid packing your fridge too full, as cold air must be able to circulate.
- Marinate your meats in the fridge.
- NEVER defrost meat at room temperature. Defrost in the fridge slowly, or in the microwave. If meat is defrosted in the microwave it must be cooked immediately.
- □ Always cook thawed meats before re-freezing.
- When in doubt throw it out!!

Below you will find a table that will give you some guidelines for proper meat storage:

Meat Storage Chart		
Meat type	Refrigerator	Freezer
Ground meats-pork, beef, lamb	1 day	2-3months
Stewing meats/short ribs/kabobs Stir fry strips	2days	3-6months
Steaks, roasts, chops- Beef, pork or lamb	2-4 days	8-10months
Sausage- beef, pork or lamb	2-3 days	2-3 months
Cooked meats	3-4 days	2-3months
Ham- processed/cold cuts	3-4 days	not recommended
Bacon	1 week	1 month



#### COOK IT RIGHT!!

Proper cooking of food is important to prevent food borne illnesses. What is a food borne illness? (ask if members can give you an answer).

Food borne illness is the term used when people get sick from eating contaminated food. Food can become contaminated with viruses, bacteria, and parasites. People often refer to these illnesses as "food poisoning". Some people may think they have the flu, as the symptoms are the same. Some of the symptoms are stomach cramps, nausea, vomiting, diarrhea and fever.

When cooking meat you should get into the habit of using a **food thermometer** to see if the meat is fully cooked. **Why?** You need to cook your meat to temperatures that are high enough to destroy all the food borne contaminants. A food thermometer lets you check the internal temperature of a food to tell if it is cooked properly.

Proper use of a food thermometer is most important. Put the thermometer in the thickest part of the meat, away from any fat, bone or gristle. (Demonstrate proper use.)

- > When you think the meat is almost cooked, take it away from the heat source.
- Place the thermometer sideways into the center of the thickest part of the meat. If it is an instant read thermometer note the temperature and compare it with the chart below to see if you have proper doneness. If it is an older style thermometer that is not instant read, leave it in the meat for about 30 seconds, or until the needle stops climbing, again note the temperature to be sure of doneness.
- Always wash the thermometer in hot soapy water before inserting it again into meat.

FOOD	TEMPERATURE
Beef and lamb steaks and roasts	60C-rare, 70C-medium, 77C- well done
Ground beef, pork and lamb	71C
Pork chops, ribs and roasts/fresh cured	71C
Lamb chops and ribs	60C-medium (do not overcook)
Ham- ready to eat or fully cooked	cold or 60C
Pork cottage roll or smoked picnic shoulder	70C

Is it safe to eat rare burgers? Answer-

NO. All ground meats must always be cooked completely. Test with a thermometer to make sure all the meat is cooked. Bacteria live on the surface of the meat, and in the case of ground meat the surface is all ground inside the product.

Is it safe to eat rare roast beef or steak? Answer-

YES- Bacteria that may be on the raw meat only exists on the surface and is killed by the high temperatures reached during cooking.

### **COOKING MEAT METHODS:**

Before cooking any cut of meat, you must know three things:

- 1. Tenderness of the cut of meat you are using.
- 2. General method of cooking the cut of meat (dry vs. moist heat)
- **3**. Specific cooking method and desired temperature for the recipe or the cut of meat you are using.

The tenderness of any cut of meat depends on a number of factors:

**1. Age of the animal is one**. Meat is made up of muscle fibers and connective tissue. The older the animal- the more the connective tissues there are, therefore the tougher the meat will be. The more tender meats come from calves, weaner pigs and lambs.

**2. Location of cut on the carcass**. Think of your own body and the parts that get more exercise than others. It is the same for the animal. The neck, shoulders, and legs receive more exercise than other parts of the body so build up more of this muscle and connective tissue and are less tender. Look at the 3 cut charts in your manual and tell me where on each carcass you think the tenderer cut of meat comes from on them. Answer\_\_\_\_\_\_.

**3. Length of aging time**. After slaughter most meat is hung in the packing plants for a period of time. During this cooling off period enzymes in the meat disperse into the carcass, and this helps to tenderize the connective tissue that makes some meat tough.

**4. Amount of marbling**. Marbling is the streaks of fat throughout the lean part of the meat. The more marbling the meat has the more tender it is said to be. In today's low fat environment we are tending to raise much leaner animals, and the marbling is a lot less today than it was in the past. Our cooking methods are different today also-this goes hand in hand with industry changes for meat. (Bring 2 pieces of meat with different marbling patterns- heavy and little for comparison visual)

The methods of meat cookery fall into two general categories. The category you choose depends upon the tenderness of your meat cut.

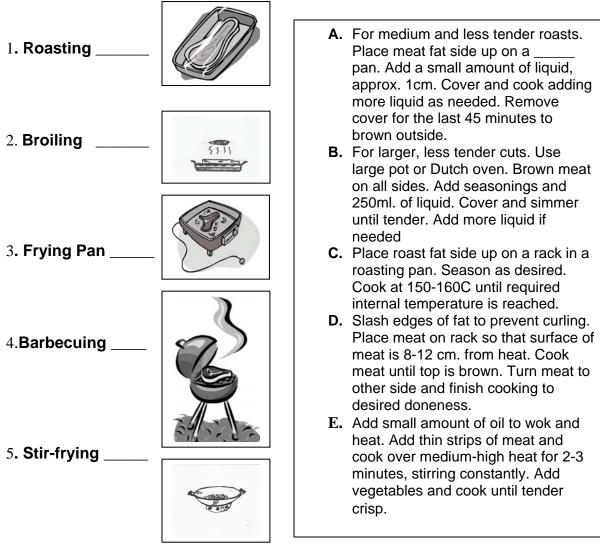
- 1. Dry Heat Cookery
  - Used on cuts of meat that are tender
    No liquid is
  - used
  - No cover is used

### 2. Moist Heat Cookery

- Used on medium and less tender cuts of meat
- Liquid is used
- Cover is used

Match the dry and moist heat methods of cooking to their correct descriptions.

### DRY HEAT METHODS



### MOIST HEAT METHODS:

6. Pot Roasting \_\_\_\_



7. Oven Braising \_\_\_\_



8. Top of Stove Braising



9. Stewing \_\_\_\_



10. Slow Cooking \_



F. For small cubes of meat of less tender cuts. Dip in seasoned flour and brown evenly in oil. Add seasoning and liquid to cover meat. Cover pot and simmer until meat is tender. Add vegetables in the last 30-60 minutes. Liquid may be thickened if necessary.

G. Use for thin tender cut, such as steaks, chops and ground meats. Snip the edge of fat at 3cm. intervals to prevent curling. Heat the pan and rub well with a small amount of oil. Cook over medium heat, turning occasionally until done.

H. Snip edges of fat at 3cm intervals. Rub a fry pan with oil. Brown meat on both sides. Drain fat . Add 250ml of liquid. Cover and simmer until meat is tender and done to temperature.

I. Use for less tender cuts of meat. Place meat in cooker either frozen or thawed. Add a small amount of liquid. Start on high for 1 hour, reduce to medium and add vegetables. Leave all day if necessary.

J. Heat grill or coals until desired cooking temperature for cooking meat is reached. Place meat on the grill. Turn meat with tongs. Test for doneness at minimum suggested cooking time.

FOR NEXT WEEK: Refer to your grocery fliers and come up with a radio announcement to sell the group on YOUR chosen meat product. You will have 2 minutes to verbally SELL us your favorite product.

If the group is large, and you are splitting the cooking duties, you could also assign this as an activity where by the non cooking group takes 5-10 minutes to come up with an ad and present them at this time. Therefore the process would be reversed the next week.

# ACTIVITY: TITLE: CHAOS in the KITCHEN

#### **Quality Equation Connection...**

**Quality Projects-** As consumers, we have a responsibility to handle and cook our food in a way that maintains its quality and keeps it safe to eat.

**SUPPLIES NEEDED**: "Chaos in the Kitchen" story (see next page), pens or pencils, paper.

TARGET AUDIENCE: All ages

Read the "Chaos in the Kitchen story to the group. Tell the group to try and pick out the unsafe practices.

Divide the group into smaller groups to work together to identify the unsafe practices

Read the "Chaos in the Kitchen story again. This time Encourage participants to interrupt and identify the unsafe Practice. Discuss each practice as it is identified. There are 15 unsafe practices in the story? Look for the number in the story to identify them. They are:

- 1) Perishable groceries should be refrigerated within 2 hours.
- 2) Not cold enough.
- 3) Should be refrigerated.
- 4) Danger zone is over 4C.
- 5) Thaws too quickly- not dense enough.
- 6) Pasteurize first.
- 7) Passing microorganisms from one to another.
- 8) Should set in a sink of cold water to speed cooling.
- 9) Modern refrigerators are able to cool a hot dish.
- 10) Refrigerate until ready to cook.
- 11) Do not partially cook meats.
- 12) Would take a long time to cool- should spread out.
- Do not turn bread bags inside out- lead from ink can be passed to the food.
- 14) Cross contamination of meat juices to cloth to table. Get a clean cloth.
- 15) Air-drying is more hygienic.

Activity created by: Manitoba 4-H Program.

#### LINKS TO LEARNING

Chaos- "great confusion, complete disorder" Gage Canadian Dictionary

**Contamination**- Making impure by contact; pollution"

Gage Canadian Dictionary

Micro-organism- " Any of a great number of one celled organisms too small to be seen with the naked eye." Gage Canadian Dictionary

### CHAOS IN THE KITCHEN

#### ACTIVITY: Find the 15 errors Chris made in handling food:

Chris works at an implement dealership in the neighboring town. Grocery shopping is done between job-related errands. On Tuesday, Chris's only opportunity to shop was at (1) 10:30 am.

The yogurt, cheese, ice-cream and pork chops were double wrapped and put in the (2) car trunk. The canned goods, vegetables, eggs (3) and coffee were put in the back seat.

Outside temperatures ranged from (4) 1C to 5C that day.

That morning Chris had put a (5) frozen tuna casserole in the oven, with the timer set to come on about 5:00pm. It was ready when the family wanted to eat at 6:00pm.

A neighbor had dropped off a jug of (6) raw milk and be cause supper was ready and they needed milk, it was served. Chris planned to pasteurize it later.

After supper, the table was cleared and all the leftover milk (7) poured in one glass and refrigerated.

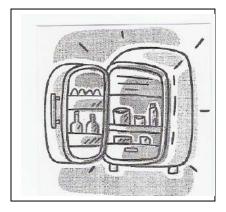
The casserole was (8) left on the counter to cool, so it (9) wouldn't heat up the refrigerator.

Chris unpacked the groceries and (10) set the pork chops on the counter. They would be precooked for tomorrow's supper.

Homework, bath time and stories took up the next hour. Once the children were in bed Chris headed back to the kitchen. The pork chops were (11) browned on each side and then (12) stacked in a pile on a small plate. Chris slipped the plate into a (13) used bread bag and put in the refrigerator.

The (14) kitchen counter and table were wiped clean.

Chris then washed and (15) dried all the dishes.



# HARVEST SOUP

050		
250ml 15 ml	uncooked pasta (macaroni or small shells)	Yield: 8-10 servings
2 1.5L 2 2 1 1 796ml 625ml 540ml 540ml 540ml 5ml 2ml 2ml 2ml 1ml	onions, chopped beef or vegetable stock carrots, peeled and chopped cloves garlic, minced green or red pepper, chopped small zucchini, chopped canned diced tomatoes cooked ham, cut into 1cm cubes can red kidney beans (drained) can chickpeas (drained) dried thyme dried basil salt pepper	Prep time: 25 minutes-including cooking time. Equipment needed: Large saucepan Dry measures Colander Large pot or Dutch oven Small measures Utility knife Cutting boards Wooden spoons Liquid measures Vegetable peeler Garlic press Can opener

Sieve

1. Read the recipe and assemble all the ingredients.

2. Cook the pasta in boiling water in the large saucepan until el Dante. (tender but

firm.

- 3. Pour into colander to drain and rinse under cold running water.
- 4. Meanwhile heat oil in Dutch oven over medium heat. Sauté onions until softened, 3-5 minutes. Add beef or vegetable stock.
- 5. Add carrots, garlic, peppers, and zucchini. Simmer for 3-5 minutes or until vegetables are tender.
- 6. Stir in the cooked pasta, tomatoes, ham, beans, chickpeas, thyme, basil, salt and pepper.
- 7. Simmer for 5 minutes.

8. Serve.



### SWEET AND SOUR PORK

Yield: 4-6 servings

**Prep time**: 25 minutes including cooking time.

#### Equipment needed:

Wok or skillet Dry measures Liquid measures Measuring spoons Utility knives Cutting boards Wooden spoons Can opener Wooden spoons Strainer Mixing bowls

- 1. In the wok or skillet, heat oil over medium heat. Add pork, sprinkle with paprika. Brown pork on all sides. Reduce heat.
- 2. Add water; cover and simmer until meat is tender (about 20 minutes)
- 3. Meanwhile, in medium bowl, combine brown sugar, cornstarch and salt. Gradually add reserved pineapple juice, vinegar, soy sauce and Worcestershire sauce; blend until smooth.
- 4. Increase heat under the wok and stir cornstarch mixture into the pork.
- 5. Cook stirring constantly until juice is thickened and bubbly. Once thickened, cook and stir for 2 minutes more.
- 6. Add pineapple, green pepper, onion and water chestnuts. Cover and simmer for 5 minutes more, until vegetables are tender crisp.
- 7. Serve immediately over hot cooked rice

Broccoli and cauliflower can be substituted for green peppers. Beef could also be substituted for pork.



#### PORK NUTRITION, MEAT GRADING SYSTEMS IN CANADA

#### PLEDGE ROLL CALL QUESTION:

Trivia time: The Chick and the Pig- two contestants are lined up to run the race of the century: a chicken and a pig. Although the 100 yard dash will indeed be a close one, and you know that pigs are lazy, fat and eat nothing but slop, right?? Who do you think will be the winner of this race?

Answer: The pig! The domestic pig has been timed at 17.7 kilometers per hour, compared to the chickens 14.5 kilometers per hour.

We need to hear to start hearing your radio commercials- sell me on your meat product! Depending on group size this exercise may have to be split over the next two meetings in order to accommodate the other information and activities on this week's list.

#### PORK NUTRITION:

Years ago pork was served only well done. This was to ensure that the meat was safe to eat and to melt away the excess fats.

Today an average 100gm cooked serving of pork provides a generous amount of many essential nutrients that your body needs. Pork is a good source of Thiamin (B1), Niacin (B2), Vitamin B6, Vitamin B12, Iron, Zinc and Protein.

The Pork Board has teamed up with the Heart and Stroke foundation in establishing meats that "meat" a Health Check Criteria. For example, fresh meats have to meet the following criteria to be accepted into this program:

CRITERIA	EXAMPLES			
LEAN 10% less fat	all trimmed fresh pork cuts (excluding ribs) such as pork chops, roasts, schnitzels, kabobs, cutlets, cubes and strips.			
EXTRA LEAN 7.5% fat or less***	pork tenderloin and cuts from pork leg inside round			
LEAN GROUND 17% fat or less***	lean ground pork			
An average 100gm raw, trimmed serving of pork provides the following nutrition:Energy139 calories (580KJ)Protein22gmFat5.0gmCarbohydrates0gm				

### **MEAT MAKING THE GRADE!**

The Canadian Meat Inspection Act has been in place since 1907. This Agency has earned the recognition as one of the leading meat inspection and enforcement systems in the world. Federal meat inspection has over 700 Canadian meat plants. There is also in place the Provincial Meat Inspection System. The difference in the two levels is the Federally inspected meat may be shipped between provinces and to other countries, while Provincially inspected meat must stay in Ontario. Their grading, handling and inspection systems are the same. Veterinarians and inspectors monitor the safety and wholesomeness of the meat we consume right from the slaughter phase and right through to the sale of the product to the consumer. All meat sold to consumers is inspected.

Beef Grading:

Canadian beef is graded on two basic criteria for today's market:

Quality: Carcasses are assessed for youthfulness (age), sex, muscling, fat colour and texture, color and marbling in the lean meat. The Canadian Prime, AAA, AA, and A grades all come from young animals, with firm white or amber fat and firm, bright red muscle. Canadian Prime has slightly abundant marbling, while Canada AAA has small marbling, Canada AA slight marbling and Canada A traces.

Yield: Carcasses that qualify for the Canada Prime or Canada A, AA and AAA grades are assessed for lean yield as determined by fat cover and the rib-eye area. Canada 1 represents the highest yield (leanest), with Canada 3 being the lowest yield (fattest).

Grades of beef not making the highest standard makes it's way into the food chain as processed products such as ground beef, processed meats, such as salami, sausage, wieners, etc. with the lowest most grade going into pet food.





Meat Inspector Grading Beef Carcasses before further processing.

PORK AND LAMB GRADING:

Both the Canadian Pork and Lamb industry use similar methods of meat grading. In 1986 Canada became on of the first countries to implement a National Hog Carcass Classification System. This system employs the use of electronic grading probe to value carcasses on the basis of objective measurements of both fat and muscle content. The core weight of hogs shipped to market has changed with the consumer demand for leaner meat. The ideal core weight for hog shipping today is between 75kg and 90kg with the focus on lower back fat measurements. This index system is designed to reduce the variability of pork quality and provide a consistent, quantitative signal regarding meat characteristics preferred in today's marketplace.

Wt Class	1	2	3	4	5	6	7	8	9
Dressed	40-	65-	70-	75-	80-	85-	90-	95-	100+
Wt./Kg	64.9	69.9	74.9	79.9	84.9	89.9	94.9	99.9	
Live Wt.	50-	81.1-	87.2-	93.5-	99.9-	106.2-	112.6-	118.5-	124.8+
Kgs.	81	87.1	93.4	99.8	106.1	112.5	118.4	124.7	
Yield Class									
1=>64.3% <19mm	10	50	100	110	114	114	114	104	70
2=61.8- 64.3% 20-24mm	10	50	96	107	112	113	112	101	70
3=59.6- 61.8% 25-29mm	10	50	92	106	111	112	111	97	70
4=57.7- 59.6% 30-34mm	10	50	88	103	108	110	108	93	70
5=56.1- 57.7% 35-39mm	10	50	85	99	104	104	101	87	70
6=54.7- 56.1% 40-44mm	10	50	83	90	100	100	97	85	70
7=<54.7% >45mm	10	50	82	88	94	94	94	82	70

Farmers' price per hog sold is based on these % of fat and muscle calculations. The table below is similar for the sheep industry. This grading table is used by the Ontario Sheep Marketing agency to calculate the price per head of lamb shipped through their forward contract system.

(New Grading Grid, effective October 6, 2003)		Muscle Score (subjective measurement taken visually)					
		5,5,5 5,5,4 A	5,4,4 4,4,4 B	4,4,3 4,3,3 C	3,3,3 3,3,2 D	3,2,2 2,2,2 E	2,2,1 Or Less
	1-3 mm	95	95	90	90	75	70
Fat	4-6 mm	105	100	95	85	85	75
Depth Score (Objective Measurement taken using a	7- 16 mm	115	110	105	100	95	80
calibrated knife)	17- 19 mm	105	100	95	90	80	75
	20+ mm	90	90	90	80	70	70

Table 1: Index Score Percentages based o	on muscle and fat depth scores.
--	---------------------------------

Example of how these 2 systems might work is: If you shipped a lamb the contract that weighed 49kg. They will measure the muscle depth =3, loin =3, shoulder=3, overall muscle score=D, and fat depth in mm=15. This would give your lamb an overall index of 100 and therefore you would achieve your maximum dollar value for that animal, with no penalties for excess fat.

#### ACTIVITY:



#### JUDGING PORK CHOPS

If loin chop, is the color of the lean light gravish pink? -If leg or shoulder chop, is the color of the lean darker pink? - Is the color or the fat white? - Is the color of the bones light pink? - Are there small streaks of fat throughout the lean meat? - Is it evenly distributed? - Is the surface of the cut smooth and velvety? - Is there a minimum amount of connective tissue and larger muscle fibers and bundles? - Is the lean meat firm to the touch? - Is the fat firm to the touch? - Is there a high proportion of lean to bone and fat? Total = ... 100 HOW TO GIVE REASONS EXAMPLE: I place this class of pork chops #1, #4, #2, #3. I place #1 on the top because... I place #1 over #4 because... (compare color, marbling, texture, firmness and Meat yield of pork chop #1 with that of #4) I place #4 over #2 because.... ( compare qualities of #4 and #2)

I place #2 over #3 because.... (compare qualities of #2 and #3)

Placing #3 last, it has.....(include additional qualities that put #3 at the bottom of the Class)

For this reason, I placed this class of pork chops #1, #4, #2, #3

CLASS JUDGED:	
I place this class of,,,,	
I place on the top because	
l place over because	
l place over because	
l place over because	
Placing last, it has	
For these reasons, I placed this class of	

Now to prepare pork chops for cooking!!

# ACTIVITY:

# **GROCERY STORE DETECTIVES:**

The Agri-food industry is a consumer-driven market and supermarkets compete for customer business, often through low price specials. In this activity, members will compare and investigate meat and produce prices advertised in grocery store flyers.

**You will need**: grocery store flyers (or have members bring their own), scissors, pens, paper, and map of North America (optional).

- 1. Circle or cut out 2-3 advertisements for different types of products in grocery store flyers.
- 2. Where do these products come from?
- 3. Who is involved in getting them to the customer?
- 4. Brainstorm everyone involved in the production of one of your circled items.
- 5. If possible, locate the product on a map.
- 6. What extra costs do you think might be involved with non-local products?
- 7. Pick one of the specials you have cut out. Write down the price per kg. Compare the unit prices with other members.
- 8. If possible, find out how much a local producer gets paid for the circled product.

### DEBRIEF:

There is usually a large discrepancy between the price the consumer pays for a product and the amount a producer is paid for the same product. We all want to save money at the store, but it is important to remember the producer at the other end of the agri-food chain. Who sets the price and what factors contribute to that price??

This activity could be done with a trip to a local grocery store also. The members could compare items and the cost first hand at the grocery store. The same debriefing process would be needed. Maybe by speaking with the store manager about pricing, purchasing practices etc. the members would get a first hand understanding of the pricing policies.



# **ORANGE CHILI PORK CHOPS**

- 4 Pork Loin Chops
- 30ml liquid honey
- 10ml chili powder
- 5ml each of cumin and salt
- 2ml each of garlic powder, thyme & rosemary
- 2ml grated orange rind

Yield- 4 servings

**Prep time**: including cooking 15 minutes.

#### Equipment needed:

Mixing bowls Dry measures Liquid measures Mixing spoons Measuring spoons

- 1. In a bowl, combine honey, seasonings and orange rind.
- 2. Spread over one side of pork chop. If honey is slightly stiff, heat it to soften in the microwave so mixture is liquid and easy to brush over the meat.
- 3. If grilling on BBQ place the honey side down (if under broiler in oven, place the honey side up) and grill for 4-6 minutes per side, brushing remaining honey mixture over the other side of the meat until done.



### Ham-Potatoes Au Gratin

500ml 60ml	cooked ham chopped green onion
60ml	chopped green pepper
30ml	margarine
15ml	flour
dash	pepper
250ml	milk
250ml	grated cheddar cheese
50ml	mayonnaise
3med.	Potatoes, cooked and
	diced

Yield- 4 to 5 servings

**Prep. time**- including cooking 45 minutes

### Equipment Needed:

Wok or Pot Corning ware casserole for oven Utility knives Cutting boards Wooden spoons Cheese grater Liquid measures Dry measures Measuring spoons

- 1. Cook onion and green pepper, on the stove, in butter until tender.
- 2. Stir in flour and pepper.
- 3. Add milk all at once; bring to a boil, stirring constantly.
- 4. Reduce heat and add cheese and mayonnaise. Stir until cheese melts.
- 5. Combine ham and potatoes with the sauce. Put into an oven safe casserole dish and bake at 180C/350F for 30-35 minutes.

MEETING FIVE:

LAMB RULES!!

# PLEDGE ROLL CALL QUESTION:

How long ago was the first flock of lambs domesticated?

Answer: Over **8,000 years ago**. Man not only needed meat to survive in their harsh environment, but found the wool to protect their bodies of great importance also. The wool was a renewable resource that soon became a trading tool throughout Europe. Sheep continue to be the most versatile of all domesticated animals as it provides wool for clothing, hides, meat and milk.

If your family is like most Canadian families, you do not eat much lamb. Lamb sales are one of the fastest growing meat industries in Canada at this time. Ontario Lamb producers provided over 270,000 sheep and lambs for market each year, and is steadily growing.

Lamb nutrition rates right up there with other red meats as an excellent source of high quality protein, niacin, and Vitamin B12, as well as a good source or iron, phosphorus and zinc. Lamb is easier to digest than other red meats.

**Did you know that you can buy "spring lamb" all year round?** The term "spring lamb" does not refer to the season of spring but to the age of the lamb that is sent to market. These "spring lambs" are between the ages of 3-5 months. Lamb received a less than stellar reputation many years ago during World War II, when mutton was served instead of lamb. Mutton is from a much older animal and therefore develops a stronger taste, smell upon cooking and has denser meat. Imported lamb comes from older animals that are pasture fed, and wool sheep, not meat breeds.

Today's Canadian lamb products are raised for the Canadian consumer. The meat is mild, easy to cook, leaner than ever, and has no strong odor. The cuts of lamb are similar to those you would get from beef or pork and can be cooked in the same manner.

**New Zealand or Ontario**- We're talking about LAMB of course. Which country do you prefer to supply your tasty meal of lamb chops or leg of lamb? Well, from those in the know the difference is in the taste!! Here are a few reasons why:

- New Zealand lambs walk much larger distances to graze than most Ontario lamb. There is an estimated 60 million sheep in that country. Traditionally they are pastured on huge acreage. Some say the miles of walking the lamb does naturally toughen the meat.
- 2. Most sheep farmers in Canada finish their lambs on some grain, therefore adding a milder flavour to the meat. In New Zealand the lambs' diet consists of grass (pasture).
- 3. New Zealand lambs are grown traditionally larger- after all when you have to ship your meat all this way you need more meat to ship. The animals therefore are usually a little older than the traditional lamb grown for the Canadian consumer.
- 4. New Zealand lamb is sometimes vacuumed packed and freeze dried, because of the distance the meat travels. This process makes the meat taste quite different than the Canadian fresh or frozen lamb products.
- 5. New Zealand lambs were known for centuries for their wool-sometimes with an older lamb people will describe the taste or odor on cooking as "woolly". There are wool breeds of sheep in Canada also, and their lambs do get sent to market. BUT- because of the age of the animal and different way of finishing them Canadian lamb is milder tasting and does not have an offensive odor when cooking.

Lamb consumption has increased quite dramatically over the last few years. The increase in our ethnic population in Canada, has been a strong influencing factor. Canada is making great strides in increasing the number of sheep and lambs available for market, so the consumer can eat a healthy home grown meat.

# ACTIVITY: TEST YOUR FLAIR FOR FOREIGN MEAT TERMS

Write the letter indicating the correct description beside the appropriate foreign meat term:

1. Beef Bourguignon (French)	A. Thinly sliced ham
2. Chateaubriand (French)	B. A thin fried cake made of cornmeal and filled with meat
3. Medallion (French)	C. Breaded Veal Cutlets
4. Pot-au-feu (French)	D. Spaghetti with meat sauce
5. Mousakka (Greek)	E. A small round cut of meat
6. Sauerbraten (German)	F. Thin flatbread to fill with meat and vegetables
7. Schnitzel (German)	G. Casserole of broad noodles, meat, cheese and tomato sauce.
8. Weinerschnitzel (German)	H. Thick broiled steak from the tenderloin of beef.
9. Bolognese (Italian)	I. Lamb and eggplant casserole
10. Lasagna alla geno (Italian)	J. Cooked in tomato and cheese sauce.
11. Prosciutto (Italian)	K. Cubes of lamb and veggies cooked on a skewer.
12. Spaghetti con carne (Italian)	L. Braised beef cooked in red wine with onions and mushrooms.
13. Souvlaki (Greek)	M. Marinated braised beef.
14. Tamale (Spanish)	N. Thin slices of meat, usually veal
15. Tortilla (Spanish)	O. Boiled beef dinner with vegetables

# ACTIVITY: LINKS IN THE CHAIN...

#### SUPPLIES: Paper

Tape Pens, markers or pencils Scissors

Pre-cut the paper into strips about 2cmx5cm. Cut lots as the youth may come up with lots of answers!!

This is a **farm to fork** activity. Divide the club into smaller groups- depending on the size of your group. Every member is to have some input into the adding of the rings to the chain. They will write their selection on the piece of paper, then add it to the first ring, and tape it together. They must take turns coming up with an answer. They will end up with a great huge ring garland by the time they are done, if they put their thinking caps on.

# How many people are involved in getting a lamb chop from birth to your dinner table??

The list will include of course the farmer, wife, kids, hired man, may involve more than 1 trucker, butcher and on and on it goes..

Provide a time frame for this activity- usually about 15 minutes to come up with as many rings as they can think of.

Take a few minutes to review the list and discover who had the most correct (sometimes they add rings that don't belong!!) rings.

# HOME ACTIVITY:

- 1. Conduct a survey of the availability of Ontario lamb in your community.
- 2. Where can you buy it? \_
- 3. Is there a sheep producer in your area that sells fresh lamb at the "farm gate"? If so who is it? \_\_\_\_\_
- 4. Did you find lamb products from other countries available for sale? Which countries? \_\_\_\_\_

### **CHILI LAMB BURGERS**

1	egg	
50ml	bread crumbs	Yield: 4-6 servings
50ml 30ml 2ml	green onion, finely chopped vegetable stock chili powder	<b>Prep. time</b> , including cooking 20- 25min.
2ml	salt	Equipment:
1ml	pepper	Large bowl
1ml	paprika	Whisk or fork
1ml	cumin	Wooden spoon
2ml	Tabasco sauce	Dry measure
500an	n lean ground lamb	Utility knife Cutting board
4-6	hamburger buns or pitas	Small measures
-	<u><u></u></u>	Spatula
		Skillet
		Flipper

Read the recipe and assemble all ingredients and equipment. Beat the egg in a large bowl; stir in bread crumbs, onion, stock, chili powder, salt, pepper, paprika, cumin and Tabasco sauce. Mix in the ground lamb. Stir well. Shape mixture into medium patties. Cook on medium high heat in the skillet for about 10 minutes, or until evenly browned, turning the patties once. To test for doneness, make a slit in the burger center- there should be minimal to no pinkness.

**NOTE:** Lamb is at its best not to be overcooked. A small amount of pinkness in the cooked product is a good and acceptable practice. No red juices should be running- just slight pinkness in the burgers core.

# APPLE CITRUS LAMB CHOPS

- 2 red skinned apples, cored and sliced
- 1 orange, juice and grated rind of
- 8 lamb loin chops
- 50ml good quality marmalade

salt and pepper to taste

Yield: 4 servings

**Prep. time**, including cooking 30 minutes

#### Equipment:

Oven dish or roaster pan Spoons Pastry Brush Utility knife Grater Measuring spoons Bowl Juicer

- 1. Pre-heat oven to 200C.
- 2. Arrange apple slices in shallow oven proof dish.
- 3. Spoon over orange rind and juice.
- 4. Place the chops on top and season well.
  - 6. Spoon marmalade on each chop. Cook for 30 minutes.

Remove the chops and serve on the apple slices. Heat the juices and reduce to thicken them if necessary, to make a "gravy". Serve with new potatoes or rice.

### **MEETING SIX:**

### THE GREAT MEAT ROUND-UP!!

# PLEDGE ROLL CALL QUESTION:

Name some other types of red meat that are for sale on today's market?

This week we are going to talk about some other delicious red meats that are available on today's grocery shelves.( If you have a Youth Leader in this club they could present one of these other red meats)

We are also going to finalize our Achievement Night Dinner/Party.

### VEAL:

Veal is produced from male (bull) dairy calves. Years ago some of these bull calves would have been kept around on the farm as breeding stock. With the increase in the use of artificial insemination (AI) for breeding the farmer does not need to keep a bull on the farm. As dairy producers have become highly specialized , veal producers began to buy bull calves from the dairy farmers to raise for veal- this becoming specialists themselves. Ontario and Quebec are the largest producers of veal in Canada.

There are two types of veal produced in Ontario: milk fed and grain fed veal. Milk fed veal results in a light pink meat that possesses a mild taste and soft texture. Milk fed calves will reach market weight of 205kg-227kg. Grain fed veal is pink in colour and has a similar taste to beef, but not as strong. Market weight of grain fed veal is 269kg-318kg.

Canadian Beef and Veal exports for 2004 were 454,662 tonnes.

# CHEVON:

Goat meat is called Chevon. Chevon is in great demand, especially in ethnic and gourmet markets. Many ethnic groups from Europe, Asia and the West Indies enjoy chevon as their main source of meat.

Goat meat is a delicacy. Chevon is a very lean, high protein meat with a delicious mild taste. Kid meat has no fat and is always best if marinated in oil and herbs. Larger animals are cut similarly to lamb, with chops, ribs and roasts being the favorite cuts.

#### VENISON:

The term venison applies to all antlered animals- this would include fallow deer, red deer, elk, white tailed deer, moose, reindeer, and so on.

Venison is not always easy to get. The farm raised venison is often sold to the best hotels and restaurants, while deer shot in the wild may not be sold.

From 1990 to 1999, venison consumption in North America tripled. This was not just for the variety of taste, but also the emphasis on healthy and natural food. Venison is high in protein, contains iron, zinc and many B vitamins like other red meat sources. Venison is very lean. There is no such thing a "marbling" in venison. A deer has 5% body fat whereas other domesticated animals have up to 25% body fat.

Cooking of venison requires the addition of fat, such as brushing olive oil over the meat- cook it fast on high heat to prevent the meat from drying out.

Venison is a very dense meat- there is lots of goodness packed into a smaller portion.

Estimated number of deer and elk raised in Canada in 2001 census was 72,282 head.

#### **BISON:**

Bison is the preferred term for Buffalo. Yes, Bison is farmed in Canada. Bison is very lean red meat. As with other red meat it is an excellent source of protein, B vitamins and selenium. There is less than 2.4gms of fat per 100 gm serving. Bison is considered a gourmet or specialty meat that is usually sold to high end hotels and restaurants. When Bison is compared to Beef it provides a greater amount of boneless meat with a lower amount of fat. The Bison is cut in the same manner as Beef.

Because of the low fat content Bison tends to be over cooked if not careful. The recommended method of cooking is to consider the cut in compared to beef, and lower your temperature.

In Canada, in 2001 there was an estimated 1,887 Bison farms with approximately 145,094 head of animals.

#### WILD BOAR:

Our trip through red meat would not be complete without the mention of the Wild Boar!! Yes this is just another variety of swine. Some would say it has a class all to itself!! Wild Boars became a non-traditional livestock trend. Boars raised for meat numbered nearly 37,000 in 1996. These swine originated in Europe. They tend to be leaner than their more domestic cousins- however the meat is darker in colour and tends to be of stronger taste.

#### LET'S PLAN A PARTY!!

#### PARTY FEATURING MEAT:

Use the following charts to help plan your achievement party:

Date of the Party_		
· -		

Time of the Party
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Guests: eg. Club, family, friends, seniors...\_\_\_\_\_

#### **Co-ordinators for:**

Food
Invitations
Decorations
Utensils and plates
Table set up
Clean-up
Games
Information sharing
Photographer
Media Reporter

### **MENU PLANNER:**

APPETIZER & SNACKS	NUMBER OF SERVINGS	PERSON PREPARING
MAIN COURSE (S)		
SALAD (S)		
DESSERT(S)		
BREAD/ROLLS		
RELISHES		
BEVERAGE(S)		

# VEAL SCHNITZEL

250gm veal cutlet, thinly sliced
125ml fine dry bread crumbs
50ml flour
2ml celery salt
1ml pepper
1 egg

25ml oil

Yield: 4 servings

Prep. Time: 15 minutes

#### Equipment:

- Dry measures Small measures Small bowl 20cm pie plate 23cm round or electric fry pan Chef knife Cutting board Tongs Meat mallet Waxed paper Plate
- 1. Assemble all ingredients and equipment.
- 2. Place meat between 2 sheets of waxed paper and pound with meat mallet to 1cm thickness. Cut into serving sizes.
- 3. Combine bread crumbs, flour, pepper, and celery salt in a shallow dish. Break egg into another small bowl. Beat the egg.
- 4. Dip the veal into the egg and then into the bread crumb mixture. Let dry for 15 minutes to allow crumb mixture to adhere to the veal.
- 5. Heat oil in a large fry pan at medium high heat (180C). When oil is hot, add veal to the fry pan. Cook for 2-3 minutes per side.
- 6. Remove from fry pan and place on plate.

Pounding the veal in this recipe helps to tenderize the veal and to extend the number of servings. Pork may be substituted for the veal.

# **CHEVON MEATLOAF**

1kg ground Chevon
2 eggs beaten
125ml dry bread crumbs
5ml salt
1 small tin crushed tomatoes
3 small chopped onions
sage to taste
pepper to taste

Yield: serves 4-6

**Prep time**: 15 minutes, cooking time 1 hour

#### Equipment:

Dry measures Small measures Large bowl Utility knife Cutting board Can opener Loaf pan Oven

- 1. Mix all ingredients except for the tomatoes.
- 2. Shape into a loaf.
- 3. Place into a greased loaf pan.
- 4. Pour tomatoes over the top of the loaf.
- 5. Bake at 180C for 1 hour.



# **RESOURCE INFORMATION:**

Fight Bac for Food Safety Canadian Partnership for Consumer Food Safety Education Contact- 1-800-892-8333 www.canfightbac.org

Beef Information Centre 1-888-248-BEEF www.beefinfo.org

Put Ontario Pork on Your Fork 1-877-668-7675 www.porkpeople.com

Ontario Sheep Marketing Agency 1-519-836-0043 e-mail- <u>general@ontariosheep.org</u> <u>www.lambrecipes.ca</u>

Farm Facts www.farmissues.com

Ontario Veal Association 1-519-824-2942 www.ontarioveal.on.ca

Ontario Deer and Elk Farmers Association www.ontariodeerelkfarmers.com

Canadian Meat Goat Journal www.goatlinks.com

#### From Our Backyard

In the Kingston Region Partners in Agriculture 2000-2001

#### 4-H Resources:

Goats for all Reasons 4-H 1200 99 ME Quality Equation 4-H Club Pack pg 49 Much Ado About Meat 1750-88 Explore 4-H 4-H 585 91 ME

All of the above commodities are happy to send you as many brochures as you need to run your Red Meat project. Feel free to contact them.

Canadian Bison Association phone- (306) 522-4766 www.bisoncentral.com

# RECIPE BOOKLET FOR ALL MANNER OF RED MEAT

# **BEEF RECIPES:**

POTATO SKINS MEATLOAF IN A MUG SAVOURY BEEF STEW TIMESAVER BEEF AND TOMATO CASSEROLE

# **PORK RECIPES:**

HONEY GARLIC SPARERIBS GINGER PLUM PORK CUTLETS CAESAR SALAD WITH BACON

# LAMB RECIPES:

BAAA KEBAAABS MAPLE ORANGE LAMB CHOPS IRISH LAMB STEW

# CHEVON:

CHEVON CHILI CHEVON SWEET AND SOUR MEATBALLS

# **VENISON:**

**VENISON STEAK** 

### WILD BOAR:

ROAST BOAR WITH APRICOT NUT STUFFING

# **BISON:**

PRAIRIE SATAY

# POTATO SKINS

### Skins

4 large potatoes 25ml melted butter salt and pepper

# Filling:

	250g	ean ground be	ef
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- 2 cloves garlic, crushed
- 1 medium onion, chopped
- 2 tomatoes, chopped
- 5ml chili powder
- 5ml hot pepper sauce

25ml tomato paste

175 ml grated cheddar cheese

Yield: 16 potato skins

**Prep. Time**: 10 minutes, cooking time 1hr, 20 min.

### Equipment:

- Small measures 23cm round or electric fry pan Cookie sheet Utility knife Can opener Cutting board Fork Grater Spoon Wooden spoon
- 1. Assemble all ingredients and equipment.
- 2. Preheat the oven to 220C.
- 3. Wash and dry potatoes. Prick skin with a fork.
- 4. Bake potatoes at 220C for 40-50 minutes. (You can speed this process up by cooking potatoes in the microwave for this part).
- 5. Remove potatoes from oven and cool slightly.
- 6. Cut each potato into 4 wedge shaped pieces. Remove all but 0.5cm of potato pulp from each wedge and reserve this for another use.
- 7. Place wedges, pulp side up, on a baking sheet and brush with melted butter.
- 8. Sprinkle with salt and pepper. Return to the oven and bake at 220C for 10 minutes until crispy.

Filling:

- 1. While potatoes are baking, brown meat and garlic over medium heat in a fry pan. Drain off the excess fat.
- 2. Add onion and cook for 5 minutes.
- 3. Stir in tomatoes, chili powder, hot pepper sauce and tomato paste. Mix well. Reduce heat and simmer for 20 minutes.
- 4. When potatoes are crispy, remove from oven. Add toppings and sprinkle with grated cheese to serve.

### **MEATLOAF IN A MUG**

125ml	ground beef
1	slice bread, torn into small pieces
25ml	milk
1	green onion, thinly sliced
2ml	Worcestershire sauce
salt	pinch
pepper	pinch

Yield: 1 serving

**Prep. Time**: 5 minutes, cooking time 4 minutes

Equipment: Small Bowl Dry Measure Small Measure Sharp Knife Cutting board Fork Medium straight sided mug Wax paper



- 1. Assemble all ingredients and equipment.
- 2. Read recipe.
- 3. Mix all ingredients thoroughly in a small bowl.
- 4. Press into a medium size mug.
- 5. Cover with wax paper.
- 6. Microwave at 70% power for 4 minutes or until the meat is firm, rotating the mug a half turn after 2 minutes.
- 7. Let stand for 1 minute.

Eat and enjoy.

# SAVORY BEEF STEW

- 625g boneless stewing beef
- 25ml all purpose flour
- 25ml oil
- 500ml tomato juice
- 2 onions, quartered
- 5ml thyme
- 2ml marjoram
- 5ml Worcestershire sauce
- 2ml salt
- 1ml pepper
- 4 medium carrots, sliced thin
- 3 medium potatoes, cut into cubes
- 250ml frozen peas

Yield: 4 servings

Prep time: 15 minutes Cook time: 2 hours,15 min.

Equipment: Liquid measure Dry measure Small measure Chef knife Cutting board Wooden spoon Small plastic bag Vegetable peeler 6L saucepan

- 1. Assemble all ingredients and equipment.
- 2. Trim visible fat from the meat. Cut meat into 2.5cm cubes and coat with flour.
- 3. Heat oil over medium heat in a large pot. Add meat and cook until all sides are brown.
- 4. Add juice, onions, thyme, marjoram, Worcestershire sauce, salt and pepper.
- 5. Cover, reduce heat and simmer for 1-1/2 hours.
- 6. Add carrots and potatoes to the pan. Cover and simmer for 40 minutes or until vegetables are tender.
- 7. Add frozen peas, cook until peas are heated through.

Note: If there is a microwave available you may be able to cut down on your cooking times by cooking the vegetables while the meat is cooking, and then just add them to the pot.

Stews are an ideal way to stretch your meat buying dollars. Not only does stewing beef have a low cost per serving, but the addition of vegetables means you can extend a smaller quantity of meat. When making stews, make it a day in advance and refrigerate. Any fat will harden on the surface and then can be easily removed.

# TIMESAVER BEEF AND TOMATO CASSEROLE

500ml 500gm 250ml 1 1 can 50ml 5ml 5ml ½	uncooked rotini pasta ground beef sliced mushrooms medium chopped onion each of tomato and mushroom soups water dried oregano garlic powder green pepper, sliced red pepper, sliced
· -	
· -	• • •
250ml	shredded mozzarella cheese

Yield: 6-8 servings

Prep time: 15 minutes Cook time: ½ hour

Equipment: Large cooking pot Large fry Pan Utility knife Cutting board Can opener Liquid measure Dry measure Small measure Grater Wooden spoon Spatula Oven Casserole dish

- 1. Cook pasta according to package directions. Drain when cooked and set aside.
- 2. In fry pan brown ground beef. Drain off fat. Add onion, green and red pepper and mushrooms to the skillet.
- 3. Stir in soups, water and spices into the mixture.
- 4. Heat mixture to a boil, stirring often, until vegetables are tender.
- 5. Add pasta to the mixture, reduce the heat to low and cook for 5 minutes.
- 6. Transfer mixture to a casserole dish and sprinkle with the cheese. Place casserole into the oven at 180C until the cheese is melted and the casserole is bubbly.

# HONEY-GARLIC SPARERIBS

- 1kg pork spareribs
- 125ml honey
- 50ml water
- 50ml soy sauce
- 125ml ketchup
- 2 cloves garlic, minced

Yield: 4 servings

Prep time: 15 minutes Cooking time: 2 hours

#### Equipment:

Liquid measures Broiler pan 2L saucepan Chef knife Cutting board Rubber spatula Tongs Wooden spoon Aluminum foil

- 1. Assemble all ingredients and equipment.
- 2. Preheat oven to 160C.
- 3. Cut spareribs into serving size pieces. Place a single layer in a broiler pan.
- 4. Place in oven and bake for 30 minutes. Drain the fat from the pan.
- 5. Meanwhile, combine remaining ingredients in small saucepan. Bring to a boil, reduce heat and simmer for 5 minutes. Stir occasionally.
- 6. Pour sauce over spareribs that have been drained of fat.
- 7. Cover ribs with aluminum foil and return to oven for 1-1/2 hours or until tender. Turn ribs every 20 minutes to coat with sauce.

# GINGER PLUM PORK CUTLETS

- 4 pork cutlets or fast fry pork chops
- 5ml vegetable oil
- 250ml plum jam
- 5ml ground ginger
- 25ml soy sauce
- 1 small onion, diced

Yield: 4 servings

Prep time: 15 minutes

Equipment: Large fry pan Tongs Small bowl Wooden spoon Utility knife Cutting board Liquid measure Small measure

- 1. Heat oil in a large fry pan over medium-high heat. Lightly brown pork chops on both sides.
- 2. Mix remaining ingredients into a small bowl.
- 3. Pour this mixture over the chops in the fry pan. Lower the heat and simmer for 4-5 minutes.



# CAESAR SALAD WITH BACON

8	slices, side bacon	
1	head, Romaine lettuce	
405.001	ve setekle ell	

- 125ml vegetable oil 25ml lemon juice
- 25ml lemon juice 2 cloves garlic, crushed
- 2ml Worcestershire sauce
- 1ml dry mustard
- 1ml sugar
- 1ml salt
- 1ml pepper

50ml grated Parmesan cheese

125ml croutons

**Yield:** 8-10 side servings

Prep time: 20 minutes Cooking time: 10 minutes

#### Equipment:

Liquid measures Dry measures Small measures Small bowl Large bowl Utility knife Cutting board Colander Paper towel Tongs Whisk 23cm round or electric fry pan

- 1. Assemble all ingredients and equipment.
- 2. Place bacon slices in fry pan and separate so they will lay flat.
- 3. Cook slowly over medium heat until well browned (6-8 min). Turn often during cooking.
- 4. Remove bacon from pan onto cutting board. Pat with paper towel to remove excess fat. Tear or cut bacon into 1cm square pieces.
- 5. While bacon is cooking, wash lettuce and dry. Tear lettuce into bite size pieces.
- 6. Measure oil, lemon juice, garlic clover, Worcestershire sauce, dry mustard, sugar, salt, pepper and Parmesan cheese into a bowl. Whisk together until all ingredients are well blended.
- 7. In large bowl, toss lettuce with dressing. Sprinkle with croutons and bacon and serve.

### **BAA- KEBAAABS**

1	leg of lamb (4 pounds)	Yield: 6 servings
125ml	soy sauce	C C
125ml	red wine vinegar	Prep time: overnight
250ml	vegetable oil	Cooking time: 15 minutes
6	cloves garlic, minced	
7ml	sugar	Equipment:
2ml	pepper	Utility knife
2		Cutting board
2	large green or red peppers	Liquid measures
10	(cut into 2.5cm pieces)	Small measures
18	cherry tomatoes	Colander
18	small onions	Storage container for
18	small whole mushrooms	marinade and meat.
		Brush for marinade Grill or broiler
		Kebab skewers

- 1. Assemble all ingredients and equipment.
- 2. Remove fell (tissue-like covering) from the leg of lamb: cut the meat into 2.5cm cubes and set aside.
- 3. Combine soy sauce, vinegar, oil, garlic, sugar, and pepper into a storage container. Add the lamb pieces, cover and marinate overnight in the refrigerator. (Reserve some of the marinade to brush onto the kabobs while they are cooking)
- 4. Next day remove meat from the marinade. Wash vegetables and cut peppers into pieces.
- 5. Alternate meat and vegetables on the skewers.
- 6. Grill 15-20 minutes over medium heat or until desired degree of doneness, brushing often with marinade. These kabobs can be cooked on a barbeque or broiled in the oven.

# MAPLE-ORANGE ONTARIO LAMB CHOPS

- 8 Lamb loin chops
- 15ml orange juice concentrate
- 15ml maple syrup
- 5ml thyme
- 15ml Dijon mustard

salt and pepper to taste

Yield: 4 servings

**Prep. time**: 1 hour **Cooking time**: 10 minutes

Equipment: Small measures Small bowl Container to hold marinade & Chops. Brush for marinade. Grill or broiler in oven

- 1. Assemble all ingredients and equipment.
- 2. In a small bowl, combine orange juice concentrate, maple syrup, thyme and mustard. Mix well
- Rub marinade into both sides of the chops, place in a covered container and let stand in the refrigerator, for about 1 hour.
- 4. Remove chops from the refrigerator and bring to room temperature before grilling at medium heat.
- 5. Grill about 4 minutes per side, until desired doneness. Do not overcook.

NOTE: Depending on what is served with this meat dish- you could stretch your chops to feed 6-8 persons.

### **IRISH LAMB STEW**

750gm 25ml 375ml 1 clove 175ml 10ml 2ml 875ml	boneless stewing lamb vegetable oil sliced onion garlic, crushed flour salt thyme water	
10ml	Worcestershire sauce	
6	carrots medium cut in 2cm pieces	
6	new potatoes, medium quartered	
dash of pepper		

Yield: 6 servings

Prep time: 20 minutes Cooking time: 1 & ½ hours

#### Equipment: Utility knife Cutting boards Large Fry Pan Slotted spoon Liquid measures Small measures Dry measures Mixing bowl Spatula Wooden spoon

- 1. Assemble all ingredients and equipment.
- 2. Trim excess fat from meat and cut into 4cm pieces.
- 3. In a large fry pan, brown the lamb in oil; remove with a slotted spoon and set aside.
- 4. Sauté onions and garlic in fry pan until onions are transparent.
- 5. Return the lamb to the pan, sprinkle with the flour and lightly brown again.
- 6. Add salt, thyme, Worcestershire sauce and water, bring to a boil, reduce heat, cover and simmer for 45-60 minutes or until meat is tender.
- 7. Add carrots and potatoes and cook for another 30 minutes for until vegetables are tender.

# **CHEVON CHILI**

30ml	goat butter (or regular butter)
1	green pepper, diced
1	can kidney beans, drained
500ml	cooked rice
500ml	ground Chevon
3	onions, thinly sliced
750ml	canned tomatoes
5ml	chili powder
250ml	water or broth
salt and	pepper to taste

Yield: 4-6 servings

Prep time: 15 minutes Cooking time: 1 hour

#### Equipment:

Fry pan Utility knife Cutting board Wooden spoon Can opener Small measures Liquid measures Slow cooker Ladle

- 1. Brown chevon in fry pan and drain off the fat.
- 2. Sauté onion and green pepper in butter.
- 3. Mix all ingredients together in a slow cooker.
- 4. Simmer until desired thickness.
- 5. Serve with hot butter rolls and veggie sticks.

NOTE: This type of recipe is great to come home to. If you put all the ingredients into a slow cooker on low, the chili could cook away all day and be ready to eat when you get home.

# CHEVON SWEET AND SOUR MEATBALLS

1kg	chevon hamburger
1	small onion, chopped
1	egg
125ml	ketchup
30ml	flour
60ml	brown sugar
185ml	water or broth
80ml	white vinegar
5ml	soy sauce
	-

Yield: 4-6 servings

Prep.time: 30 minutes Cooking time: 1 hour

#### Equipment: Small measures Dry measures Wet measures Wooden spoon Slotted spoon Spatula Sauce pan Fry pan Oven casserole dish

- 1. Assemble all ingredients and equipment.
- 2. Mix the chevon hamburger, onion and egg together and form into small balls.
- 3. Cook the meatballs in a fry pan until browned.
- 4. In a saucepan combine the ketchup, flour, brown sugar, water, white vinegar and soy sauce and cook until thickened slightly.
- 5. Place the meatballs and sauce in a covered casserole dish and cook in the oven at 180C for 1 hour.

Serve over noodles or rice.

# **VENISON STEAKS**

- 1kg venison steak
  15ml vinegar
  30ml red wine vinegar
  2ml salt
  1ml pepper
  .5ml ginger
- .5ml cinnamon

Yield: 4 servings

**Prep. time**: 15 minutes **Cooking time**: 15 minutes

Equipment: Small mixing bowl Tongs Broiler pan or fry pan Small measures Liquid measures

- 1. Assemble all ingredients and equipment.
- 2. Grill the steak either in a grill pan (one with ridges) or a slightly greased frying pan, or under the broiler in the oven.
- 3. Grill as long as necessary, according to the size and thickness of the meat, remove from heat to a serving platter when the meat is browned.
- 4. Mix together the vinegar, red wine vinegar, salt, pepper, ginger and cinnamon.
- 5. Spoon this mixture over the steak.

Serve at once. If the steak is of the thick flank type, cut it on the bias before adding the sauce.

# **ROAST BOAR WITH APRICOT NUT STUFFING**

5ml	loin rack or double loin of boar apple, large, peeled sugar lemon juice chopped dried apricots chopped pine nuts apple cider dried sage dried thyme chicken stock red wine vinegar corn starch	
15ml	corn starch	
salt and pepper		

Yield: 4-6 servings.

**Prep. time**: ½ hour **Cooking time**: 1 hour

Equipment: Mixing bowl Roasting pan Saucepan Wooden spoon Small measures Liquid measures Dry measures Peeler Utility knife Cutting board

- 1. Assemble all ingredients and equipment.
- 2. Make a pocket in the center of the roast or between two loins for the stuffing.
- 3. In a bowl mix apple, sugar, lemon juice, apricots, and pine nuts with 60ml of apple cider, sage and thyme together for your stuffing.
- 4. Sprinkle the pocket with salt and pepper. Add the stuffing.
- 5. Place the loin on a rack in a shallow roasting pan. Sprinkle with salt and pepper.
- 6. Roast uncovered in a 165C oven for 20 minutes per kg.
- 7. Remove from pan and cover with foil for 10 minutes before serving.
- 8. To make the sauce, discard any fat. Stir in the remaining cider and vinegar. Bring this mixture to a boil. Stir in the cornstarch that has been dissolved in a little water. Cook until thickened. Use this mixture as your gravy.

# PRAIRIE SATAY

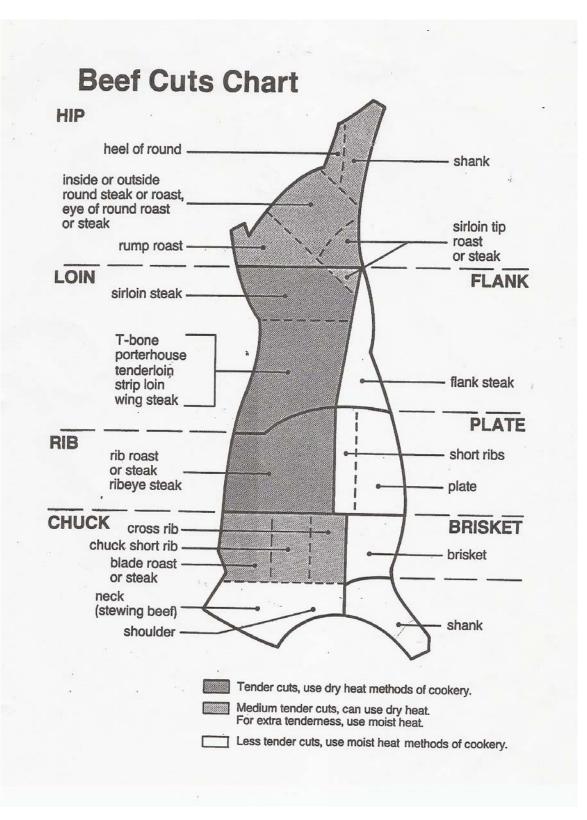
700gm	bison inside round or sirloin tip , cut with the grain of the meat into 2.5cm cubes	
60ml	butter	
1	clove garlic, minced	
45ml	onion, grated	
5ml	ground coriander	
1ml	ground ginger	
1	lemon, juice and rind	
2ml	Tabasco sauce	
45ml	brown sugar	
2ml	ground cumin	
125ml	Teriyaki sauce	
salt and pepper		
cherry tomatoes		
green and red pepper chunks		
zucchini pieces		
onion pieces		
8" wooden skewers		

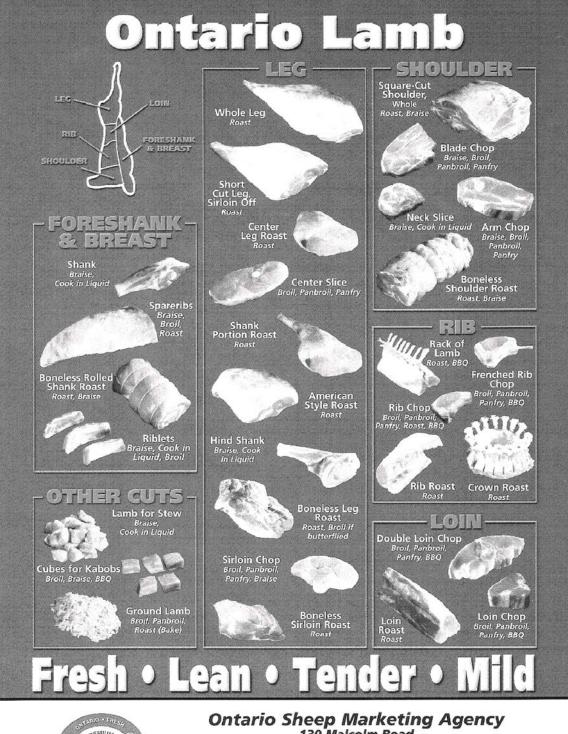
Yield: 6 servings

Prep. time: 1 hour Cooking time: 5 minutes

Equipment: Saucepan Wooden spoon Small measures Liquid measures Dry measures Container with cover Utility knife Cutting board Wooden skewers Barbecue or oven broiler

- 1. Assemble all ingredients and equipment.
- 2. Melt the butter in a saucepan and add garlic, onion, coriander, ginger, lemon juice, Tabasco sauce, brown sugar, cumin and Teriyaki sauce.
- 3. Bring these ingredients to a boil and simmer for 5 minutes.
- 4. Pour marinade over meat pieces and leave overnight in the refrigerator, turning periodically.
- 5. Remove meat from the marinade and put 5 or 6 pieces of meat on each skewer, alternating with cherry tomatoes, pepper chunks, zucchini and onion.
- 6. Grill on the barbecue or broiler of the oven for 5 minutes, turning once. Do not overcook.







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