
Food Studies 10, 30

Curriculum Guidelines

A Practical and Applied Art

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Table of Contents

Acknowledgements	i
Introduction	1
Philosophy and Rationale	1
Aim, Goals, and Foundational Objectives	1
Course Components and Considerations	3
Assessment and Evaluation.....	3
Module Overview.....	5
Suggested Course Configurations	6
Core and Optional Modules	7
Module 1: Kitchen Basics (Core).....	7
Module 2: Kitchen and Food Safety (Core)	11
Module 3: Baking Basics (Core).....	13
Module 4: Food and Health (Core)	16
Module 5: Grains (Core).....	20
Module 6: Vegetables and Fruits (Core)	23
Module 7: Milk and Dairy Products (Core).....	25
Module 8: Eggs (Core)	28
Module 9: Snacks (Core).....	30
Module 10: Canada’s Food Guide and Beyond (Core)	32
Module 11: Food Through the Life Cycle (Optional)	37
Module 12: Cakes and Pastries (Optional)	40
Module 13: Baking with Yeast (Optional).....	44
Module 14: Keep It Cold (Core)	47
Module 15: Protein Foods: Meats, Poultry, Fish, Vegetarianism (Core)	52
Module 16: Make Mine Quick and Healthy (Optional).....	62
Module 17: The Science of Nutrition (Core).....	65
Module 18: The Canadian Food Mosaic (Core).....	72
Module 19: International Cuisine (Optional)	78
Module 20: The World of Soups (Optional)	81
Module 21: Sauces (Optional)	85
Module 22: Creative Baking (Optional)	88
Module 23: Entertaining with Food (Optional)	90
Module 24: Foods for Special Occasions (Optional).....	92
Module 25: Food Preservation (Optional)	94
Module 26: Food Additives (Core)	99

Module 27: Current Food Issues (Core)	102
Module 28: Exploring Careers (Optional)	106
Module 29: Work Study Preparation and Follow-up Activities (Optional).....	108
Module 30: Work Study (Optional).....	111
References	112
Appendix A: Recordkeeping Chart.....	113

Introduction

Within Core Curriculum, the Practical and Applied Arts (PAA) is a major area of study that incorporates five traditional areas of Home Economics Education, Business Education, Work Experience Education/Career Education, Computer Education, and Industrial Arts Education. Saskatchewan Education, its educational partners, and other stakeholders have collaborated to complete the PAA curriculum renewal. Some PAA curriculum guidelines have been updated; some components have been integrated, adapted, or deleted; some Locally Developed Courses have been elevated to provincial status; and some new guidelines have been developed.

A companion *Practical and Applied Arts Handbook* provides background on Core Curriculum philosophy, perspectives, and initiatives. The Handbook provides a renewed set of goals for PAA. It presents additional information about the PAA area of study, including guidelines about work study and related transition-to-work dimensions. In addition, a PAA Information Bulletin provides direction for administrators and others regarding the implementation of PAA courses. Lists of recommended resources for all guidelines will be compiled into a PAA Bibliography with periodic updates.

Philosophy and Rationale

Food Studies is a curriculum designed to teach about foods and nutrition. The mission is both educational and preventive. The skills and knowledge taught in this curriculum will increase resourcefulness of students and help them to develop self-reliance and independence. The curriculum is also designed to provide opportunity for achievement and success at projects and activities that in turn builds self-image and increases self-confidence. The curriculum ideas and learning objectives develop skills necessary for life.

The Foods Studies curriculum combines academic and practical foods experiences and is an option for all students. The study of foods is important because every person must eat to live. As well, the preparation of food whether at school or at home can be a creative, interesting, enjoyable, and rewarding experience.

Many students are responsible for meal preparation at home. With the increasing number of single parent families and working parents, meal preparation is often the responsibility of younger family members. Knowledge and understanding of basic food preparation and nutrition is important in order to make healthy food choices for individual and family well-being.

Knowledge about nutrition is an important component of a healthy lifestyle. Food-related health problems and eating disorders are major health concerns in Canada. The impact of eating highly refined, processed foods is affecting our short and long term health. Damage caused by poor nutrition is cumulative and often begins with poor food habits in childhood. A study of food can expose students to accurate information as well as provide opportunities for students to gain competence in making informed, reasoned choices.

Traditional food preparation skills are being lost in today's fast paced lifestyles. Much of the food consumed is fast foods, partly prepared foods, or food eaten away from home. Time constraints and the effects of advertising have dramatically changed the types of foods prepared and eaten. Contrary to advertising claims, the preparation of nutritious foods does not have to be time consuming or difficult. Less preparation at home means less transfer and reinforcement of food preparation skills. Students need the opportunity to learn and practise preparation techniques in the classroom or in the workplace.

Aim, Goals, and Foundational Objectives

Aim

The Food Studies curriculum focuses on essential knowledge and understanding of food and nutrition. It stresses the importance of making healthy food choices in order to promote the well-being of individuals and

families. It also aims to develop self-reliance, independence, and positive social skills as well as to teach basic life skills and knowledge that all students need.

Goals

Consumer Knowledge: To develop knowledge that will enable students to make wise buying choices when shopping for food.

Personal Skills: To allow students to cultivate practical skills that can be used daily in the preparation of foods.

Technological Advances: To gain knowledge of the changes in the production of food and the many conveniences that can be attributed to technological advances.

Careers and Employment: To create an awareness of the career opportunities in the fields of Food and Nutrition.

Foundational Objectives

Foundational objectives are the major, general statements that guide what each student is expected to achieve for the modules of the PAA curriculum guidelines. Foundational objectives indicate the most important knowledge, skills, attitudes/values, and abilities for a student to learn in a subject. Both the Foundational Objectives for Food Studies 10, 30 and the Common Essential Learnings (CELs) Foundational Objectives to be emphasized are stated in this document. Some of these statements may be repeated or enhanced in different modules for emphasis. The Foundational Objectives of the Core Modules of the Food Studies 10, 30 curriculum include:

- To appreciate the importance of Canada's Food Guide for the development of an individual's health and wellness.
- To understand the importance of the science of nutrition.
- To understand and practise safety in the preparation and storage of food.
- To apply independent learning skills in the preparation of nutritious foods.
- To be creative when applying knowledge about nutrition to food preparation.
- To understand better the social and cultural aspects of food for all people.
- To be aware of and practise environmental protection through conservation and recycling.
- To develop the desire and ability to access knowledge about issues and obtain factual information before forming opinions about food-related issues.
- To identify and evaluate personal qualities related to career choices.
- To be aware of career and employment opportunities related to diet, food and food preparation.

All of the subject and CELs Foundational Objectives are stated explicitly at the beginning of each module.

Common Essential Learnings

The incorporation of the Common Essential Learnings (CELs) into the instruction and assessment of the Practical and Applied Arts (PAA) curriculum offers many opportunities to develop students knowledge, skills, and abilities. The purpose of the CELs is to assist students with learning concepts, skills, and attitudes necessary to make transitions to career, work, and adult life.

The CELs establish a link between the Transition-to-Work dimensions and Practical and Applied Arts curriculum content. The Transition-to-Work dimensions included in the PAA curricula are: apprenticeship, career exploration/development, community project(s), employability skills, entrepreneurial skills, occupational skilling, personal accountability, processing of information, teamwork, and work study/experience. Throughout the PAA curricula, the CELs objectives are stated explicitly at the beginning of each module and are coded in this document, as follows:

COM	=	Communication
NUM	=	Numeracy
CCT	=	Critical and Creative Thinking
TL	=	Technological Literacy
PSVS	=	Personal and Social Values and Skills
IL	=	Independent Learning

It is anticipated that teachers will find additional ways to incorporate the CELs into their classroom instruction.

Course Components and Considerations

The primary focus of Food Studies is to prepare students for everyday life in a global society. The Food Studies curriculum provides a balance between academic and practical food preparation experiences. Students are actively engaged in the learning process. The Food Studies courses are designed to be comprehensive and as relevant as possible.

The Learning Objectives listed in each module are designed to help students build the competencies identified in the Foundational Objectives and the Common Essential Learnings Objectives. The teacher Notes suggest teaching approaches and define some of the criteria necessary for assessment. Suggested food preparation experiences apply learning objectives, teach specific skills, and develop expertise in food preparation. Practical lab experiences are an integral part of each module. Teachers should plan each module to determine how the cooking experiences can best be incorporated into classroom activities.

There are many teacher/student activities included in the curriculum. Teachers are not expected to complete them all but may **choose** from or **adapt** the suggestions. Teachers should choose or design learning activities that meet the curriculum objectives and the needs of their students.

Consumer education and buymanship concepts are incorporated into many of the food modules. A separate module was not developed. These concepts need to be emphasized in as many modules as possible.

Each of the two Food Studies courses requires one hundred hours of instruction. The Introductory Level modules (Food Studies 10) help students build daily living skills and form the basis for further learning. Introductory Level modules are developed for students who have no previous experience in food studies. Certain modules will be recommended for use at the Middle Level.

The Advanced Level modules (Food Studies 30) help students build on competencies developed at the Introductory Level and focus on further development. These modules demand a higher level of expertise and student responsibility and can help prepare students for entry into the workplace.

There is a range of hours given for each of the modules to allow for flexibility and differences in Saskatchewan programs.

The course is written using CELs as an integral part of the framework. Transition-to-work skills are also an important part of the course content and suggested activities. Employability skills (academic, personal management, and teamwork skills) are an integral part of the Food Studies curricula. There are many career opportunities in the area of foods and some ideas have been included. School and community situations will help determine the employment and work study opportunities for students.

Assessment and Evaluation

Student evaluation is an important part of teaching as it allows the teacher to report the progress and successes of the student. Evaluation also provides valuable feedback about how a student learns best. It is important that teachers use a variety of evaluation strategies to evaluate student progress. Additional information on evaluation of student achievement can be found in "Evaluation in Education, Report of the Minister's Advisory Committee on Evaluation and Monitoring" January 1989.

It is important that the teacher discuss with students the evaluation strategies to be used in the course, when the evaluation will occur, and the weighting of each evaluation. The weighting of the evaluation should be determined in relation to the amount of time spent and emphasis placed on each area of the course as suggested in the curriculum guidelines. The student evaluation for the course studied should reflect the variety of teaching/learning strategies used throughout the course. An example of types of evaluation and their weighting is included below.

Food Studies 30

Written Exams	30%
Student Demonstrations	10%
Practical Experiences (lab or work study)	25%
Student Projects	20%
Written Assignments	15%

Module Overview

Module Code	Module	Suggested Time (hours)
FOOD01	Module 1: Kitchen Basics (Core)	8-10
FOOD02	Module 2: Kitchen and Food Safety (Core)	8-10
FOOD03	Module 3: Baking Basics (Core)	10-15
FOOD04	Module 4: Food and Health (Core)	10-15
FOOD05	Module 5: Grains (Core)	5-10
FOOD06	Module 6: Vegetables and Fruits (Core)	5-10
FOOD07	Module 7: Milk and Dairy Products (Core)	5-10
FOOD08	Module 8: Eggs (Core)	5-10
FOOD09	Module 9: Snacks (Core)	5-10
FOOD10	Module 10: Canada's Food Guide and Beyond (Core)	6-8
FOOD11	Module 11: Food Through the Life Cycle (Optional)	5-6
FOOD12	Module 12: Cakes and Pastries (Optional)	5-8
FOOD13	Module 13: Baking with Yeast (Optional)	5-8
FOOD14	Module 14: Keep it Cold (Core)	5-10
FOOD15	Module 15: Protein Foods (Core)	10-15
FOOD16	Module 16: Make Mine Quick and Healthy (Optional)	6-8
FOOD17	Module 17: The Science of Nutrition (Core)	12-15
FOOD18	Module 18: The Canadian Food Mosaic (Core)	5-10
FOOD19	Module 19: International Cuisine (Optional)	5-10
FOOD20	Module 20: The World of Soups (Optional)	5-6
FOOD21	Module 21: Sauces (Optional)	5-6
FOOD22	Module 22: Creative Baking (Optional)	5-8
FOOD23	Module 23: Entertaining with Food (Optional)	5-8
FOOD24	Module 24: Foods for Special Occasions (Optional)	5-8
FOOD25	Module 25: Food Preservation (Optional)	5-8
FOOD26	Module 26: Food Additives (Core)	4-5
FOOD27	Module 27: Current Food Issues (Core)	5-8
FOOD28	Module 28: Exploring Careers (Optional)	5-6
FOOD29	Module 29: Work Study Preparation and Follow-up Activities (Optional)	5-10
FOOD30	Module 30: Work Study (Optional)	25-50

Suggested Course Configurations

Module Code	Module	Suggested Time (hours)
	Food Studies 10	
FOOD01	Module 1: Kitchen Basics (Core)	8-10
FOOD02	Module 2: Kitchen and Food Safety (Core)	8-10
FOOD03	Module 3: Baking Basics (Core)	10-15
FOOD04	Module 4: Food and Health (Core)	10-15
FOOD05	Module 5: Grains (Core)	5-10
FOOD06	Module 6: Vegetables and Fruits (Core)	5-10
FOOD07	Module 7: Milk and Dairy Products (Core)	5-10
FOOD08	Module 8: Eggs (Core)	5-10
FOOD09	Module 9: Snacks (Core)	5-10
FOOD12	Module 12: Cakes and Pastries (Optional)	5-8
FOOD13	Module 13: Baking with Yeast (Optional)	5-8
THER05*	Module 5: Food Safety and Sanitation (Optional)	6-8
	Minimum	100 hours
	Food Studies 30	
FOOD10	Module 10: Canada's Food Guide and Beyond (Core)	6-8
FOOD11	Module 11: Food Through the Life Cycle (Optional)	5-6
FOOD14	Module 14: Keep it Cold (Core)	5-10
FOOD15	Module 15: Protein Foods (Core)	10-15
FOOD16	Module 16: Make Mine Quick and Healthy (Optional)	6-8
FOOD17	Module 17: The Science of Nutrition (Core)	12-15
FOOD18	Module 18: The Canadian Food Mosaic (Core)	5-10
FOOD19	Module 19: International Cuisine (Optional)	5-10
FOOD20	Module 20: The World of Soups (Optional)	5-6
FOOD21	Module 21: Sauces (Optional)	5-6
FOOD22	Module 22: Creative Baking (Optional)	5-8
FOOD23	Module 23: Entertaining with Food (Optional)	5-8
FOOD24	Module 24: Foods for Special Occasions (Optional)	5-8
FOOD25	Module 25: Food Preservation (Optional)	5-8
FOOD26	Module 26: Food Additives (Core)	4-5
FOOD27	Module 27: Current Food Issues (Core)	5-8
FOOD28	Module 28: Exploring Careers (Core)	5-6
FOOD29**	Module 29: Work Study Preparation and Follow-up Activities (Optional)	5-10
FOOD30**	Module 30: Work Study (Optional)	25-50
	Minimum	100 hours

*See the *Tourism, Hospitality, and Entrepreneurship A30, B30 Curriculum Guidelines* online at www.sasked.gov.sk.ca.

**Work Study Guidelines are found in the *PAA Handbook*.

Core and Optional Modules

Module 1: Kitchen Basics (Core)

Suggested time: 8-10 hours

Foundational Objectives

- To apply independent learning skills in the preparation of nutritious foods.
- To be aware of and practise environmental protection through conservation and recycling.

Common Essential Learnings Foundational Objective

- To practise cooperation and teamwork when working in groups. (PSVS)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	<p>Ideas for practical application:</p> <p>One suggestion for the lab to theory ratio is 2-3 hours of cooking to 3 hours of class theory. How time is used may depend on timetabling, budgets, class size, equipment, etc.</p> <p>Lab suggestions for the two introductory units (Modules 1 and 2) include making: puffed wheat cake, bannock, pancakes/waffles, muffins, apple/rhubarb crisp, cinnamon rolls, biscuits, cookies.</p> <p>Assessment and evaluation criteria include some or all of the following: interpreting and following recipes, correct use of equipment and tools, accurate measurement, cooperation, sharing tasks, responsible behaviour, proper cleanup. Teacher, group, and self-evaluation may be used for evaluating cooking labs and other class activities. Evaluate the nutritional values of the foods prepared, including the food group(s).</p> <p>One suggestion for varying cooking groups is to use pictures made into jigsaw puzzles. Using one picture per group, cut each into as many pieces as there will be students in that group. Distribute puzzle pieces. Students will create their groups as they complete their pictures.</p> <p>It may be necessary to review Learning Objectives 1.1 and 1.2 at the beginning of each class or module.</p> <p>Throughout the semester, collect and use news clippings on current food issues (e.g., nutrition, biotechnology, agriculture, etc.). Students may assist with this.</p>

Learning Objectives

Notes

- 1.1 To examine the steps involved in food preparation and to establish guidelines for working together in class. (COM, PSVS)
- Prepare a list of steps that are part of preparing to cook. Include washing hands, reading and understanding recipes, adjusting oven racks, preheating ovens, preparing pans, assembling and measuring ingredients, combining ingredients, cooking, cleaning up, and evaluating.
- As a class, identify the guidelines for working together as a team. Include sharing of tasks as well as considerate and cooperative behaviour. Design a schedule for working together.
- Bulletin board idea: "Good Cooks Don't Skip Steps!"
- 1.2 To develop guidelines for serving and eating food in the classroom.
- Brainstorm a list of appropriate guidelines or behaviours for serving and eating food.
- Discuss the importance of table manners and which are appropriate for the following: a family setting, a business setting, a meal with friends, and a meal in the foods lab.
- Outline a set of guidelines for table setting.
- Draw diagrams and/or practise different table settings.
- Design some cartoons of Do's and Don'ts of table manners.
- 1.3 To understand and evaluate the information provided in a recipe. (CCT)
- Examine the information given in a recipe. Look at the list of ingredients, instructions, cooking information, yield, equipment needed, skills necessary. Determine if the recipe suits your needs.
- Bring a family recipe from home. Analyze to determine if all recipe information is included.

Learning Objectives

Notes

- 1.4 To become familiar with the tools of measurement and how to measure accurately. (NUM)
- Identify dry, liquid, and small measures and the sizes of each. Demonstrate the proper techniques for measuring ingredients. Discuss metric vs. imperial measures.
- Examine the measurement units comparing weight, mass, volume, temperature, and distance in the metric and imperial systems.
- Determine why it is important to develop an understanding of both the metric and the imperial systems of measurement.
- Discuss the importance of accurate measurement in baking. Find recipes where accuracy of measuring is important and where it is not as important. Explain reasons for the choices.
- Measure flour before and after sifting. Note any differences. Measure solid fat using different methods. Measure liquid or dry ingredients using both wet and dry measures for each.
- Practise reducing and increasing the size of recipes.
- 1.5 To examine, identify and use correctly a variety of kitchen tools and equipment.
- Make a list of common kitchen tools and equipment. Discuss factors that determine whether tools are essential or nonessential.
- Give examples of how to use kitchen equipment correctly. Role play the correct use.
- Equip a new kitchen with a limit of 30 pieces. Explain the choices.
- Have students list the tools and equipment that are absolutely essential, if they were living independently of their parents/guardians.
- 1.6 To recognize quality features in cookware and food preparation tools. (COM)
- This particular learning objective might be omitted if there is a shortage of time and/or it is discussed in another class.
- List and evaluate factors that should be considered when buying equipment: brand, energy use (energy guides), uses, materials used, construction, durability, care, storage, price, special features, cost, and consumer testing.
- Discuss consumer warranties and guarantees and UL and CSA symbols.
- Discuss the importance of operating and caring for equipment properly.
- Choose a piece of equipment to be purchased. Have students apply their knowledge in making their decisions.

Learning Objectives

Notes

- 1.7 To create an awareness of the issues involved in conserving and recycling. (PSVS)
- Discuss the issues involved in conserving and why it is important. Discuss the amount of the world's resources used by Canadians today. Talk about garbage and waste disposal.
- Recognize and draw the recycling symbol.
- Identify the three Rs (reduce, reuse, recycle). Have students list some ways in which these can be done. Why is "reduce" first priority? What are other "Rs" for conservation?
- 1.8 To recognize that it is everyone's responsibility to adopt conservation as part of his/her lifestyle.
- List ways in which each individual can conserve energy and water in the foods lab and at home.
- Learn how to cut down on food waste.
- Investigate the recycling programs that are part of your community.
- Encourage recycling at home. Suggest ways to reduce the use of disposable items and to reuse household items.
- Create a 30 second radio commercial promoting any of the 3 main Rs (reduce, reuse, recycle).
- 1.9 To apply knowledge. (IL)
- Home cooking assignment: choose one of the foods made in the lab or one similar to it and prepare it at home.
- Make puffed wheat cake, muffins, or cinnamon rolls and sell them to students in the school.
- 1.10 To evaluate for understanding of knowledge/concepts in "Kitchen Basics."
- Continuous assessments make use of assignments, lab work, and the home cooking lab suggested in this module.
- Design and administer an exam.
- Students may assess their cooking group confidentially before or during the final exam.
- The sum of these assessments yields the student's value/worth for the module.

Module 2: Kitchen and Food Safety (Core)

Suggested time: 8-10 hours

Foundational Objectives

- To understand and practise safety in the preparation and storage of food.

Common Essential Learnings Foundational Objectives

- To follow safe procedures when working with equipment and food in the kitchen. (CCT, PSVS)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
2.1 To understand food safety.	<p>Explain what is meant by the terms food safety, food borne illness, food poisoning, food infection, food intoxication, and pathogens.</p> <p>Describe the symptoms of food poisoning. (COM)</p> <p>Discuss food contamination, how it occurs, and how to tell if food is spoiled.</p>
2.2 To identify food-borne illnesses.	<p>List and explain some of the common bacteria that contaminate food: <i>Clostridium botulinum</i> (botulism), <i>Staphylococcus aureus</i> (staph), <i>Salmonella</i>, <i>Clostridium perfringens</i>, <i>E coli 015:H7</i>, <i>Camplobacter</i>, <i>Listeria</i>.</p>
2.3 To examine the conditions necessary for food-borne illnesses to occur.	<p>Factors include: temperature, time, acidity (pH), moisture, a food source, poor personal hygiene, and poor sanitation.</p> <p>Define what is known as the Danger Zone.</p> <p>Explain the importance of proper food storage to prevent food poisoning. Outline food storage principles and the different ways that food can be stored (e.g., dried, frozen, refrigerated, closed containers, etc.).</p>
2.4 To learn how to prevent food poisoning.	<p>Discuss the importance of the following factors in any food preparation area: sanitation, storage, proper cooking, thawing foods, contamination (spreading germs and cross-contamination), and personal hygiene. Assign a research project on one aspect of food sanitation. (CCT)</p> <p>Rule: "When in doubt, throw it out!"</p> <p>Discuss the role of health inspectors. Make a list of items to look for if you were a local health inspector.</p> <p>Make a poster on "Prevention of Food Poisoning" showing some of the ways to promote sanitation in the kitchen. Make a fridge poster for food safety.</p>

Learning Objectives**Notes**

2.5 To identify and practise safe work habits that may prevent accidents in the kitchen. (PSVS)

Identify safe work practices in the kitchen. Discuss ways to work safely to prevent accidents. Topics to include are preventing cuts, falls, burns, fires and poisoning, and using electricity wisely.

Develop a checklist for identifying kitchen hazards at school and at home.

Examine the WHIMIS symbols on household products.

Write a public service announcement focusing on a specific safety topic.

2.6 To develop first aid principles for kitchen safety. (IL)

Identify the poison control centre in your community.

Learn some basic first-aid principles including how to deal with burns and scalds, bleeding, poisoning, eye injuries, and choking.

Role play what to do for cuts, burns, choking, falls, etc.

Module 3: Baking Basics (Core)

Suggested time: 10-15 hours

Foundational Objectives

- To apply independent learning skills in the preparation of nutritious foods.

Common Essential Learnings Foundational Objectives

- To understand and use the vocabulary related to diet, food, and food preparation. (COM)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	<p>Ideas for practical application:</p> <p>Choices for food labs will depend on what was done in Modules 1 and 2. Suggestions include making: muffins, biscuits, cheese biscuits, cookies, carrot cake, quick bread loaves, upside down cake, fruit flan.</p> <p>During the lab work, students and teacher will continue to evaluate work based on the list of ideas outlined in Learning Objective 1.2.</p> <p>Use jigsaw groups to teach any of the learning objectives in this module. Students become experts on one topic and then return home to their groups and teach the concept. Evaluate what students know about their topics by using a jeopardy game format.</p>
3.1 To identify the ingredients used in flour mixtures and to analyze their role in baked products. (COM)	List the ingredients common in flour mixtures. Explain the function of flour, fats, sugars, eggs, liquids, leavening agents, and flavouring agents in baked products. It is important to understand the role of ingredients for successful baking.
3.2 To analyze the different types of flour available today.	<p>Discuss the different types of flour (all purpose, whole wheat, bread, cake and pastry, self-rising, stone-ground, etc.) available in the supermarket. Evaluate each kind of flour in terms of nutrition, price, and uses in food products.</p> <p>Explore the factors involved in the selection of flour for baked products.</p>
3.3 To understand the role of leavening agents in baked products. (CCT)	<p>Define leavening and leavening agents. List the types of leavening agents (baking powder, baking soda, egg, yeast) and the gases that they produce (air, steam, carbon dioxide). Explain the chemical reaction that occurs causing products to rise. Give examples of uses in baking.</p> <p>Design an experiment to show the action of leavening agents. This can be done using test tubes and balloons with different leavening agents in each.</p>

Learning Objectives	Notes
3.4 To explore the function of gluten in baking. (COM)	<p>Define gluten and discuss its importance in flour mixtures.</p> <p>List the factors that affect the development of gluten (types of flours, other ingredients). Determine when it is desirable to develop gluten and when it is not.</p> <p>Do a gluten ball experiment to show the effect of using different types of flours.</p> <p>Explain why hard spring wheat grown in Saskatchewan is an excellent source of gluten desired by pasta manufacturers. Name places in Saskatchewan where pasta is made. What is a gluten allergy?</p>
3.5 To examine the different types of flour mixtures.	<p>Make a chart that names the four types of flour mixtures (pour batter, drop batter, soft dough, stiff dough), their proportion of flour to liquid, examples of each, and mixing techniques that are common to each.</p>
3.6 To differentiate between quick breads and yeast breads.	<p>Discuss the difference between quick breads and yeast breads in terms of mixing, leavening, and preparation time.</p> <p>Name three nutrients that may be found in quick breads.</p>
3.7 To recognize the terms used in baking. (COM)	<p>Identify mixing, cutting, and cooking terminology. List and explain terms such as stir, cream, bake, beat, combine, whip, knead, cut-in etc. Start with these basic terms and then add to the list as more cooking is done.</p> <p>Explain that it is important to understand; practise specific techniques for successful baking.</p> <p>Select and demonstrate different methods of combining ingredients or preparation techniques. Follow various recipes to demonstrate.</p>
3.8 To identify the basic methods of combining ingredients in preparing flour mixtures.	<p>Explain the three basic methods of mixing quick breads: blending, cutting, creaming. Give examples of where each is used (e.g., making muffins, biscuits, fruit loaves).</p>
3.9 To discuss and apply techniques that will result in successful baking.	<p>Stress the importance of accurate measurement, testing for doneness, and using correct mixing techniques, tools, pans, oven temperature, and position in the oven.</p> <p>Develop a scorecard for evaluating baked goods.</p>

Learning Objectives

Notes

- 3.10 To identify the role of flour mixtures in the Canadian diet.
- Discuss the role of flour mixtures in the diet in terms of Canada's Food Guide. Explain the importance of making healthy choices.
- List different kinds of ethnic breads/baking prepared in Canada by different cultural groups.
- 3.11 To evaluate concepts/ knowledge in "Baking Basics."
- Use continuous assessment.
- Give a home cooking assignment of a baked product or an acceptable substitute related to the work in this module.
- Plan a field trip to a local grocery store and have students list and price basic ingredients used in baking (e.g., types of flours, leavening agents).
- Design and administer an exam.
- 3.12 To demonstrate understanding of concepts and knowledge of "Baking Basics." (COM, CCT, NUM)
- Sell cookies at breaks to students in the school.
- Become involved in organizing and preparing baked items/beverages at a school events such as a school dance, fashion show, athletic event, etc.
- Find a recipe for each of the different methods of mixing and prepare the items in the lab.
- Using a chart, summarize the information on flour mixtures. Include the four types of flour mixture, leavening agents used, the three methods of mixing, types of flour, and uses.

Module 4: Food and Health (Core)

Suggested time: 10-15 hours

Foundational Objectives

- To understand the importance of the science of nutrition.
- To be creative when applying knowledge about nutrition to food preparation.
- To better understand the social and cultural aspects of food for all people.

Common Essential Learnings Foundational Objectives

- To gain the knowledge and develop the skills required to make appropriate food choices and to become discriminating consumers. (CCT)
- To explore the relationships between culture and the social and geographic influences on food customs. (PSVS)
- To interpret data and tables for nutritional values of foods. (NUM)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	Ideas for practical application . Lab suggestions for this module include: <ul style="list-style-type: none">• breakfast foods• pizza buns• tuna burgers• soups• chicken fajitas• pizza, tacos, burritos that include ingredients from the four food groups
4.1 To identify the factors that influence food habits and the reasons for eating. (CCT, COM)	Survey students to determine their favourite foods and discuss reasons for their choices. (PSVS) Examine the factors that influence our food choices such as religion, culture, history, region or geography, lifestyle, social needs, physical needs, emotional needs, advertising, special occasions, nutrition, trends, and technology. Explain the reasons for differences in food customs among various cultures of the world. Interview a parent, relative, or friend to learn about her or his cultural heritage and the role of traditional foods in regular meals and on special occasions.
4.2 To be aware of the influences that determine students' food habits.	Have students give personal examples for each of the factors listed above and discuss how these factors influence the students' food choices. Keep track of foods eaten for several days. Discuss types of foods chosen, when they were eaten, and why they were chosen.

Learning Objectives

Notes

4.3 To understand and analyze Canada's Food Guide. (CCT)

Discuss the purpose of Canada's Food Guide. Identify the four food groups, the number of servings required daily, what constitutes a serving, age specification for milk, and the "extra" category. Explain why there is a range of servings for the food groups.

Stress variety and moderation and how all food customs can fit into the four food groups.

Look at why the food guide is designed in a rainbow and why whole grain cereals, lower fat choices, and dark coloured foods are recommended.

Compare the American Food Guide Pyramid to Canada's Food Guide.

Make posters promoting Canada's Food Guide, nutritious food choices, or healthy lifestyles.

4.4 To understand the relationship between nutrients and good health.

Look at each food group and identify the nutrients that are key in each.

List the 6 nutrient groups and identify major functions of each.

Discuss how all food groups are necessary for a healthy diet.

Define what is meant by nutrient density and give examples of high nutrient density and low nutrient density foods.

Have a prepared student handout, classroom chart, poster, and/or bulletin board display to illustrate nutrients found in the various food groups. (NUM)

Learning Objectives

Notes

4.5 To analyze what is meant by healthy eating. (COM, CCT)

Identify guidelines to use when evaluating personal eating habits. Discuss the importance of Canada's Food Guide requirements for each food group and the recommended daily allowances (RDA) of nutrients. RDA is American (recommended dietary allowance) and appears on many of our food products. RDI is Canadian and stands for the recommended daily intake. Examine the role of RDI and RDA. Explain why moderate consumption of fat, sodium, sugar, and carbohydrates is important.

Look at the choices of foods made at home and away from home and evaluate in terms of nutrition. Identify four ways to make healthy food choices when eating out and eating at home.

Explore guidelines for evaluating nutritional information and list sources of reliable information.

Analyze and evaluate some of the foods available in the school cafeteria, school lunches, fast food outlets, etc. Evaluate the amount of fat, sugar and salt in each. Suggest some alternative nutritional foods that could be offered that would be acceptable.

Food Diary: have students keep track of what they eat for three days. Categorize into Canada's Food Guide groups. Evaluate the diets and list ways students' diet may be improved. Evaluate each other's diet, family member's diets, teacher's diet, etc.

If a computer program is available, introduce this as a tool for evaluating diets for nutritional value. (TL)

4.6 To examine the relationship between wellness and food.

Explain how food affects physical health. Discuss why it is important to eat right and make healthy lifestyle choices.

Make a small change in your diet for a few days (e.g., drinking more water, decreasing junk food). Have students analyze how they feel.

Brainstorm and explain a list of factors that contribute to a healthy lifestyle. Factors include nutrition, physical fitness, stress management, avoiding harmful substances, proper rest, etc.

4.7 To understand the importance of breakfast.

Do a breakfast survey in your school. Include reasons why breakfast was/was not eaten. Evaluate and publish results.

List foods that could be part of a nutritious start to the day.

Discuss the importance of breakfast.

Plan some healthy breakfast meals and prepare some of the foods.

Learning Objectives

Notes

4.8 To incorporate knowledge of nutrition to make healthy food choices. (COM, CCT)

Have students work in pairs to plan a day's meals for a teenager with their lifestyle.

Examine differences in diets for any or all of the following: a young woman active in gymnastics, a young man active in football, a young woman who wishes to lose 15 pounds, etc.

Choose one way to improve one's diet. Put it into practice for one week. Evaluate the diet and the results at the end of the week.

Plan nutritious bag lunches for a younger brother or sister for three days. For example, plan for a 12 year old brother who dislikes vegetables and a six year old sister who is a picky eater but likes finger foods.

4.9 To demonstrate understanding of concepts/knowledge in this module.

Use continuous assessment.

Collect 8-10 ads for a TV/Magazine Food Ad assignment.

Prepare a cookbook of cultural and favourite foods for the class.

Write an essay on why you need nutrients. How can a knowledge of nutrition help you?

Identify and discuss careers that involve nutrition and health.

Questions to answer may include:

- what is the ad telling you?
- what food groups are being represented?
- is the food nutritious?
- would you buy it? why or why not?

Module 5: Grains (Core)

Suggested time: 5-10 hours

Foundational Objectives

- To appreciate the importance of Canada's Food Guide for the development of an individual's health and wellness.
- To be creative when applying knowledge about nutrition to food preparation.

Common Essential Learnings Foundational Objectives

- To understand and use the vocabulary related to diet, food, and food preparation. (COM)
- To gain the knowledge and develop the skills required to make appropriate food choices and to become discriminating consumers. (CCT, IL)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	Ideas for practical application . Three to four labs are suggested for preparing cereal grains and their products. Ideas include stir fried rice, rice or pasta Primavera, pasta parmesan, or a traditional or ethnic food. Prepare different types of pasta with the same sauce. Assess using specified criteria.
5.1 To explore various kinds of grains used for food. (COM)	Define the term grain and list different kinds of grains used for food. Explain their importance as a major source of carbohydrates. Display various grains. Identify cereal crops and other grains grown in Saskatchewan. Consult with the Biology 20 teacher.
5.2 To examine the importance of grains in diets throughout the world today and in the past.	Cereal grains or grasses are a major food. They can be processed into many food products that play a major role in our diets. Cereal grasses were harvested and eaten in prehistoric times. Which ones? Explain why bread is called the "staff of life." Examine how nearly all cultures use cereals as a major part of their diet. List examples. Have students interview a person from another culture about the grain products they use. Provide for class reporting. List different kinds of ethnic breads and cereals. Collect articles from magazines or newspapers discussing local, national, and international cereal grains and products.

Learning Objectives

Notes

- 5.3 To recognize and examine the foods that belong to the Bread and Cereal group. (COM, CCT)
- Students will list foods that are made from various grains. List factors that determine their nutritional value. Identify the foods eaten yesterday that are part of the Bread and Cereal group.
- Discuss the requirements of Canada's Food Guide for Bread and Cereal and how a variety of cereal grains can become a part of the diet.
- Visit a store and ask students to list the varieties of grain products that they find (e.g., different kinds or forms of pasta, rice, breakfast cereals, flour, etc.).
- Discuss the role of fiber and complex carbohydrates in the diet.
- 5.4 To analyze the three different parts of a cereal grain.
- Identify the bran, germ, endosperm of a grain and discuss the nutrient value of each. Draw a diagram of a cereal grain or seed.
- Explain why the germ is removed and sold separately (except for stone-ground).
- Examine a cereal grain under a microscope or hands lens and identify the parts.
- 5.5 To understand the terminology associated with grains. (COM)
- Define and give examples for the following cereal grain terms: refined, whole grain, enriched, fortified, baby cereals, ready-to-eat, converted, instant.
- Discuss why flour and flour products are enriched and why that practice is compulsory in Canada. (CCT)
- 5.6 To develop guidelines for the selection and storage of cereal grain products.
- Factors to consider when buying grain products are: quantity, labels, nutrition, price, list of ingredients, enriched or fortified, refined or whole grain, form (cooked or ready-to-eat).
- Make a list of rules for storing cereal grains.
- 5.7 To examine information available on cereal packages. (COM, CCT)
- Look at different kinds of breakfast cereals available and evaluate the information on the labels. Calculate the cost per serving. Explain how to tell if a cereal is whole grain or refined.
- Examine what marketing tools are used to influence children's choices of cereals.

Learning Objectives**Notes**

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| 5.8 | To identify guidelines for preparing grain products. | List general guidelines for cooking grain products including rice and pasta. Compare different types of rice and pasta products before and after cooking. |
| 5.9 | To visualize new ideas for using grains in the diet and plan for the preparation of a new grain recipe in class. (CCT, IL) | Plan five school lunch menus that incorporate different types of grain products. Include foods from each food group.

List ways to use a variety of grain products in daily meals.

Suggest creative ways to prepare cereal products. |

Module 6: Vegetables and Fruits (Core)

Suggested time: 5-10 hours

Foundational Objectives

- To appreciate the importance of Canada's Food Guide for the development of an individual's health and wellness.
- To understand the importance of the science of nutrition.
- To be creative when applying knowledge about nutrition to food preparation.

Common Essential Learnings Foundational Objectives

- To practise cooperation and teamwork when working in groups. (PSVS)
- To interpret data and tables for nutritional values of foods. (NUM)
- To understand how specific foods contribute to a healthy diet. (COM)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	Ideas for practical application . Lab ideas for preparing fruits and vegetables include a vegetable or fruit buffet, vegetable stir fry, potato skins, perogies, fruits and/or vegetables with various dips, fruit or vegetable salads, fruit or vegetarian pizza.
6.1 To identify the foods that are part of the Fruit and Vegetable group. (COM)	Have the students identify the fruits and vegetables that they eat. List common fruits and vegetables grown in Saskatchewan. List examples of ethnic varieties available in the community and in Saskatchewan.
6.2 To recognize the number and sizes of daily servings required in the diet.	Review Canada's Food Guide requirements for this group. Discuss the required daily servings of fruits and vegetables and the size or amount that makes up one serving. Explain why there is a range of servings recommended and why certain colours and citrus fruits are singled out as being important. (NUM)
6.3 To understand the importance of the Vegetable and Fruit group.	Fruits and vegetables are flavourful, colourful, nutritious, easy to prepare, and often low in cost. Discuss new terminology such as functional foods, antioxidants, nutraceuticals, and how the terms relate to vegetables and fruits. Explain why fruits and vegetables are called "convenience foods." Identify the key nutrients found in this food group and the major functions of the nutrients. Note that most of the foods from this group are fat-free. Examine the reasons for likes and dislikes of some vegetables. List ways to make vegetables more appealing. List ways a person can increase vegetables and fruits in his/her diets.

Learning Objectives	Notes
6.4 To understand the classifications used for vegetables and fruits. (COM)	<p>Make a list of fruit and vegetable classifications, examples for each, and their nutrient contributions. Include wild fruits found in Saskatchewan in these categories. Classifications of fruits include: berries, citrus, tree, vine, and tropical. Classifications of vegetables include: root, bulb, leaves, flower, seed, stem/stalk, and fruit.</p> <p>Bring examples of fruits and vegetables to class and ask the students to identify and classify them into groups. Students may prepare a fruit salad and vegetables with dip to sample.</p>
6.5 To consider criteria for selecting and buying quality fruits and vegetables. (CCT)	<p>Discuss the forms in which fruits and vegetables can be purchased, signs of quality to look for, grading, and packaging.</p>
6.6 To consider terms associated with storing fruits and vegetables.	<p>Discuss the following terms related to storage: cool, dry, unwashed, airtight, packaged, crispers, cool temperatures.</p>
6.7 To examine proper storage methods for the different forms and types of fruits and vegetables.	<p>List different varieties and forms of fruits and vegetables and describe how each should be stored.</p>
6.8 To compare different methods of preparing fruits and vegetables. (CCT)	<p>List guidelines for preparing, cooking, and serving fruits and vegetables. Examine whether to cook or not to cook and the effects that peeling and cutting fruits and vegetables have on nutritional value.</p> <p>Evaluate the effects of different methods of cooking on colour, texture, appearance, and nutrient retention of fruits and vegetables.</p> <p>Suggest specific ways to serve fruits and vegetables.</p>
6.9 To discover creative ways of using and preparing fruits and vegetables and to apply some of these ideas in class/home. (CCT, IL)	<p>Find a recipe for preparing a favourite fruit or vegetable. Students may prepare this at home. Collect all recipes from the class and make a cookbook.</p> <p>Develop an infomercial for nutritious ways to serve fruits and vegetables.</p>

Module 7: Milk and Dairy Products (Core)

Suggested time 5-10 hours

Foundational Objectives

- To understand the importance of the science of nutrition.
- To understand and practise safety in the preparation and storage of food.
- To apply independent learning skills in the preparation of nutritious foods.

Common Essential Learnings Foundational Objectives

- To make necessary calculations when selecting, purchasing, preparing, and storing food. (NUM, IL)
- To understand how specific foods contribute to a healthy diet. (COM)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	<p>Ideas for practical application.</p> <p>Lab ideas for applying knowledge and understanding of milk and milk products include: white or cheese sauce with a vegetable (could be combined with the fruit/vegetable lab), cream soup, puddings, dips using various dairy products, macaroni and cheese.</p> <p>Prepare dips made with sour cream (light and regular), fat-free sour cream, yogurt and blended cottage cheese. Have a taste panel compare and note differences.</p> <p>Include milk in combination with other foods such as Orange Julius, and other milk/fruit juice drinks, and French toast.</p> <p>Taste test various types of cheeses. Compare low-fat varieties with regular.</p>
7.1 To identify the foods from the Milk and Dairy food group. (COM)	Brainstorm a list of foods that fit into this group. Explain why sour cream, butter, margarine, and cream are not considered servings of milk even though they are dairy products.
7.2 To discuss the requirements for the Milk and Dairy food group.	Explain the numbers of servings required for different age categories and sizes of servings required for one serving for different dairy foods.
7.3 To understand the contributions of milk and milk products to the diet.	<p>Some people believe that adults do not require milk. This idea may be discussed/researched.</p> <p>Discuss the disease osteoporosis, its causes, and how individuals can help prevent it.</p> <p>Explain why milk is called the “almost perfect food.”</p> <p>Identify the key nutrients in milk and milk products especially calcium, Vitamins A, B, D, and complete protein.</p>

Learning Objectives	Notes
7.4 To investigate milk allergies and milk intolerance.	Explain the term lactose intolerance. Consider the milk substitutes available and other sources of calcium.
7.5 To understand terminology associated with milk and dairy foods.	Define these terms: pasteurized, homogenized, fortified, reconstituted, butterfat, frozen dairy products.
7.6 To recognize the various types of milk and dairy products and to understand their nutritional differences. (COM, CCT)	<p>Discuss the various types of milk products: 1%, 2%, skim, whole, buttermilk, evaporated, condensed, powder, UHT, fresh, sweet, sour.</p> <p>Examine the differences between milk and cheese.</p> <p>List and explain the different types of creams and cheeses.</p> <p>In chart form, list the forms of milk and milk products, descriptions of them, and their nutritional differences. Pay particular attention to fat content.</p> <p>Plan a field trip to a local grocery store. Add the price per unit to the chart in the activity above.</p>
7.7 To examine guidelines for heating milk.	<p>Define curdling, scald, casein, boil-over, scorching.</p> <p>List guidelines for cooking with milk.</p>
7.8 To examine ways to use milk products in food preparation.	<p>Suggest ways of using fresh milk, dried skim milk, yogurt, buttermilk, and fat-free sour cream in different recipes.</p> <p>Discuss how to reduce fat levels in recipes by substituting milk ingredients with a lower fat content.</p>
7.9 To use the information on milk product labels when selecting and buying foods. (IL)	<p>Explain how to use the information on a carton of milk and other milk products. Look at the date, butterfat content, addition of Vitamins A and D, etc.</p> <p>Observe the different types of containers used for fluid milk. Consider the advantages and disadvantages of each. Are waxed cartons the best containers for holding fresh milk?</p>

Learning Objectives**Notes**

- 7.10 To describe the proper storage for milk and various dairy products.
- Milk is a perishable food and must be properly stored. List ways to store milk.
- State the effect sunlight has on riboflavin and the effect that ultraviolet light has on Vitamin A.
- 7.11 Design a menu for a family for a week that includes a variety of milk and dairy foods. (COM, CCT)
- Calculate the cost of providing a variety of milk products for your family for a week. (NUM)

Module 8: Eggs (Core)

Suggested time: 5-10 hours

Foundational Objectives

- To appreciate the importance of Canada's Food Guide for the development of an individual's health and wellness.
- To understand and practise safety in the preparation and storage of food.
- To be creative when applying knowledge about nutrition to food preparation.

Common Essential Learnings Foundational Objectives

- To gain the knowledge and develop the skills required to make appropriate food choices and to become discriminating consumers. (CCT, IL)
- To understand how specific foods contribute to a healthy diet. (COM)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble	Ideas for practical application . Lab suggestions: omelets, deviled eggs, meringue type of cookie, French toast, breakfast tortillas (scrambled eggs wrapped in a tortilla), egg burgers, baked eggs, egg drop soup, egg noodles, and other egg dishes.
8.1 To discuss the importance and versatility of eggs in the diet and their role as a traditional breakfast food. (COM)	Give examples of different ways to prepare and serve eggs. Discuss personal preferences for various ways of egg preparation. Suggest ways eggs can be disguised for people who dislike them. Discuss the role eggs play in breakfast menus. List ways that eggs may be used in other simple meals.
8.2 To identify the role of eggs in the Canada Food Guide and the key nutrients in eggs.	Explain why eggs are considered to be a meat alternative. Identify the nutrients contained in eggs. Review the functions of these nutrients.
8.3 To examine the role of cholesterol in our diets and the implications for good health.	Discuss the controversy regarding cholesterol and the role eggs play in this debate. Consider the factors that determine cholesterol in our bodies. (CCT) Discuss cholesterol-free egg products.

Learning Objectives	Notes
8.4 To become familiar with the structure of an egg and identify each part.	<p>Draw and label the egg including the shell. Indicate nutrients in each part.</p> <p>Break an egg onto a plate and examine its parts.</p> <p>Immerse a whole egg in vinegar for several days. Record the observations. Discuss.</p>
8.5 To understand the grading of eggs.	<p>The inspection of eggs is monitored by Agriculture Canada. The term “CANADA” indicates that foods have been inspected to make sure they are safe and healthy for human consumption.</p> <p>Describe the standards for grading eggs and the process of candling.</p> <p>List the grades and sizes in which eggs can be purchased and look at the factors that determine grades and sizes.</p> <p>Analyze information that is on egg cartons. (CCT)</p>
8.6 To understand the factors involved in buying and storing eggs.	<p>Outline guidelines for purchasing and storing eggs.</p> <p>Discuss salmonella and why cracked eggs should not be bought or used. Explain why eggs should always be cooked before eating.</p> <p>Explain why pasteurized egg products must be used for making eggnog and other raw egg products.</p> <p>Consider why people might choose to buy certain egg sizes and grades.</p>
8.7 To examine the role of eggs in our foods. (COM)	<p>List the effects eggs have on foods and state examples of recipes/foods to illustrate each. Eggs are used for thickening, leavening, emulsifying, binding, coating, clarifying, and crystallizing foods.</p>
8.8 To identify guidelines for cooking eggs. (NUM, TL)	<p>Identify the guidelines for successful egg cookery. Consider temperature, overcooking, microwaving, and coagulation of eggs.</p> <p>List the various methods of egg preparation: poaching, frying, boiling, etc.</p>

Module 9: Snacks (Core)

Suggested time: 5-10 hours

Foundational Objectives

- To understand the importance of the science of nutrition.
- To apply independent learning skills in the preparation of nutritious foods.
- To develop the desire and ability to access knowledge about issues and obtain factual information before forming opinions about food-related issues.

Common Essential Learnings Foundational Objectives

- To understand how specific foods contribute to a healthy diet. (COM)
- To interpret data and tables for nutritional values of foods. (NUM)
- To gain the knowledge and develop the skills required to make appropriate food choices and to become discriminating consumers. (CCT, PSVS)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	<p>Ideas for practical application.</p> <p>Lab suggestions: nachos, pizza, quesadillas, snack mix, bean spread, stuffed pitas, some simple appetizers. Choose two.</p> <p>Choose a snack you can make, eat, and clean-up in class time.</p> <p>Rank and compare each group's snacks for nutritional value, Food Group(s) used, low fat/salt content. Present an award for first, second, and third placing etc. Compare homemade type appetizers with purchased convenience types.</p>
9.1 To understand what constitutes a snack. (COM)	<p>Brainstorm foods eaten as snacks. Categorize these into groups of Canada's Food Guide.</p> <p>As a class, decide on a definition for the word "snack." Consider reasons why we snack and the types of foods that can be called snack foods. Ask students to create a list of favourite snack foods.</p>
9.2 To investigate the availability of ready-to-eat snack foods.	<p>List a variety of places where snack foods can be obtained.</p> <p>List foods available in vending machines in school and evaluate them for nutritional value. Make some generalizations about the quality of these snack foods and the role they play in a diet.</p>
9.3 To analyze snacking habits for a select group. (CCT, NUM)	<p>Keep track of snacks eaten for a specific time (e.g., 3-5 days) and then evaluate the nutritional contribution of snack foods to the diet. Considering an individual's daily diet, calculate the percentage of snack foods. Determine which snacks are of benefit to the body and which are not. Decide how the process of choosing snacks may be improved.</p>

Learning Objectives	Notes
9.4 To examine the positive and negative effects of snacks on nutrition and wellness.	Examine how snacks fit into our daily eating plan. Outline the benefits and dangers of snacking.
9.5 To discuss how choosing snacks wisely may contribute to a healthy eating plan.	Brainstorm some snacking strategy guidelines such as making careful decisions when you buy, using information on food labels, analyzing fat, sodium and sugar levels, considering food groups involved, etc. List four nutritious snacks for each of the food groups.
9.6 To develop a plan for healthy snacking. (CCT, IL)	Have students work in pairs to list some foods that would fit the definition of a snack and analyze them nutritionally by reading labels and using nutrient tables or a computer program. Eat healthy snacks for a week. Apply knowledge to ensure that choices are appropriate. Evaluate the results. List four seasonings you could use in making a vegetable dip, a fruit dip, or on popcorn (other than salt or butter). Do some sample comparisons; e.g. Allan is considering a package of unsalted peanuts or a peanut chocolate candy bar. Analyze which is the most healthful choice and explain why. Look at the choices of foods available in the school canteen or in vending machines; choose several to compare and evaluate.
9.7 To evaluate the understanding of concepts/knowledge in the Learning About Foods modules. (COM, CCT)	Give quizzes at the end of each of Modules 5-9. Use continuous assessment of class work and activities. Teacher and student evaluations of all lab/cooking activities should be done.

Module 10: Canada's Food Guide and Beyond (Core)

Suggested time: 6-8 hours

Foundational Objectives

- To appreciate the importance of Canada's Food Guide for the development of an individual's health and wellness.
- To develop the desire and ability to access knowledge about issues and obtain factual information before forming opinions about food-related issues.

Common Essential Learnings Foundational Objectives

- To apply knowledge and skills when making independent decisions regarding food choices and preparation. (IL, CCT)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	Ideas for practical applications for Modules 10 and 11.
	Plan and prepare foods that are high or low in specific nutrients. Examples are: high in iron, low in salt; lower in fat, high in fiber; etc.
	Modify recipes, prepare the foods, and evaluate to achieve reduced fat and increased fibre.
	Plan and prepare some nutritious snack/appetizer-type foods.
	Plan healthy meals based on <i>Canada's Food Guide to Healthy Eating</i> (available through your local health district office). Plan, prepare, and evaluate examples of some of the foods.
	Research, select, plan, prepare, and evaluate foods for one of the special dietary needs groups or for one of the life cycle groups.
	Prepare some nutritious snacks for children or a simple nutritious meal for a child you are babysitting.
	Plan a party with activities and food for a 4 year old, a 6 year old, etc.
	Plan, prepare, compare, and analyze a variety of high quality nutritional foods. Evaluate foods prepared comparing them to established nutritional guidelines.

Learning Objectives	Notes
<p>10.1 To focus on how foods affect one's performance now and one's health in the future. (CCT)</p>	<p>Identify characteristics of healthy foods. List examples of healthy single foods and healthy food combinations.</p> <p>Discuss the relationship between diet and health. Discuss how good eating habits may be a benefit in the future.</p> <p>List examples of how food can aid in physical, emotional, and social well-being.</p> <p>Choose at least one food from each food group and one "extra" food. Using food labels, calculate the percentage of total calories from fat, carbohydrates, and protein.</p> <p>Analyze personal eating habits for one week using Canada's Food Guide. Recognize positive eating patterns and identify possible areas for improvement.</p> <p>Examine the importance of high fibre and low fat diets. List ways to lower fat intake and increase fibre in the diet.</p>
<p>10.2 To examine the long term effects of diet practices on health and wellness. (IL, PSVS)</p>	<p>Brainstorm various health problems related to diet. Discuss topics of current health concerns relating to diet: anemia, blood pressure (high and low), diabetes (hyperglycemia), low blood sugar (hypoglycemia), ketosis, cholesterol and cardiovascular disease, osteoporosis, cancer, food allergies and intolerances, compulsive eating, anorexia nervosa, and bulimia nervosa. Each student or small group may be assigned to research and report on one of these food-related health topics. Create a brochure giving information on the topic. Use the library, public health personnel, and the Internet for information.</p>
<p>10.3 To relate energy value of foods to the body's requirements. (NUM)</p>	<p>Compare energy amounts required for activities and energy amounts supplied by foods. Have students list routine activities for three days and calculate the energy required. Record food eaten and calculate the energy from the food. Compare results and draw conclusions.</p> <p>List some popular snack foods. Calculate the number of calories in each. List other flavourful snack foods that have fewer calories. Choose an activity and estimate the length of time necessary to burn these calories.</p> <p>List general guidelines for weight control. Explain how to maintain weight, lose weight, and gain weight while following Canada's Food Guide.</p> <p>Identify three ways to lose one pound per week by changes in eating habits or amount of exercise; do the same to gain one pound.</p>

Learning Objectives

Notes

10.4 To create an awareness of current weight management programs and to evaluate them. (CCT, IL, PSVS)

Collect information about various diets. Some examples are high carbohydrate, low carbohydrate, high protein, vegetarian, low calorie, liquid diet, meal replacements. Analyze and evaluate nutritional implications. Survey magazines, media advertisements, telephone yellow pages, and books for ideas.

Have students share their experiences with dieting, as well as the results and implications of their experiences.

Define see-saw (yo-yo) dieting and its consequences.

Identify and evaluate examples of weight management programs.

10.5 To determine sources of reliable nutrition information. (CCT)

Evaluate advertising of nutritional food products. Outline guidelines to determine if information is reliable. Guidelines could include questions such as:

- Who is doing the advertising?
- Are any misleading techniques being used?
- Is the whole story being told?
- Is it only implied that food is nutritious?

Brainstorm sources of nutrition information. Evaluate the accuracy of this information. Ask questions about the author, recognized degree, business/professional associations, qualified scientist/professional, the group sponsoring the speaker or author.

List sources of reliable nutrition information. Examples are Community Health Agencies, hospital dietitians, Dietetics Associations, etc. Invite a professional nutritionist to discuss how to evaluate nutrition information for validity.

Learning Objectives	Notes
<p>10.6 To develop an understanding of the process of digestion. (COM, CCT)</p> <p>Note: This learning objective is optional as some students may study it in Biology.</p>	<p>Discuss how the body processes food in the three distinct but continuous stages of digestion, absorption, and metabolism. Define these three terms.</p> <p>Explain basal metabolism and discuss how the basal metabolic rate (BMR) determines weight. Discuss the influence of dieting and exercise on the BMR.</p> <p>Locate or draw a diagram showing the process of digestion and absorption. Identify and label body parts involved in the digestive process.</p> <p>Distinguish between chemical and mechanical digestion.</p> <p>Discuss changes in the structure of carbohydrates, fats, and proteins.</p> <p>Give examples of and discuss the role of enzymes in digestion.</p> <p>Describe the storage of excess energy as fat in the body.</p> <p>Examine the role of water in the body. For two or three days try to consume the required 8 glasses of water. Keep a diary of how you felt.</p> <p>Examine the role of fibre in digestion and in helping to prevent diseases.</p> <p>Demonstrate the principle of osmosis by re crisping wilted celery.</p>
<p>10.7 To define meal management and to identify factors involved in planning meals. (COM)</p>	<p>Define the term “meal management.” List and discuss factors involved in planning meals:</p> <ul style="list-style-type: none"> • Canada’s Food Guide and nutrition • variety in the menu • variety in colour, flavour, texture, shape, and size • resources • customs and traditions • diet and health needs • budget • number of people being served.

Learning Objectives**Notes**

10.8 To demonstrate the importance of consumer skills in the planning and selection of foods for meal management. (IL)

Using weekly grocery flyers, have students plan menus for one week for their family. Make a shopping list, indicating the foods on sale and the price of groceries for the family for one week. Evaluate menus to determine if they are well-balanced and meet Canada's Food Guide requirements.

Evaluate coupons offered to promote buying certain foods and other grocery items.

List some shopping tips for becoming a knowledgeable and wise consumer.

Evaluate a variety of menus and discuss how to improve each.

Module 11: Food Through the Life Cycle (Optional)

Suggested time: 5-6 hours

Foundational Objectives

- To appreciate the importance of Canada's Food Guide for the development of an individual's health and wellness.
- To be aware of career and employment opportunities related to diet, food, and food preparation.

Common Essential Learnings Foundational Objective

- To develop the ability to deal with special circumstances and concerns related to diet, food, and food preparation. (CCT, IL)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	Ideas for practical application : See Module 10.
11.1 To identify food needs for different stages of the life cycle. (COM, CCT)	Define the term life cycle. Outline the different stages and consider special dietary needs. Stages may reflect a person's age: infant, toddler, child, teenager, adult, middle-age, senior. Stages may also reflect special circumstances: student sharing accommodation, pregnancy and nursing, person living alone, special dietary needs (permanent or temporary). Create a flow chart to demonstrate the special dietary needs during the different stages of the life cycle. Using the RDI/RDA (see Learning Objective 4.5), compare nutritional requirements for different ages and genders. Explain the reasons for the differences.
11.2 To identify and understand the nutritional requirements for special dietary needs.	Assign a project in which the student researches nutritional/dietary requirements for one stage of the life cycle and one of the special health problem groups. Plan a one-day menu for each including appropriate foods to achieve optimum nutrition.

Learning Objectives

Notes

- 11.3 To examine the role of food and nutrients in athletic performance. (IL, NUM)
- Interview several athletes in the school who are involved in various sports about their diet and training. Document similarities and differences.
- Analyze an athlete and a non-athlete's body size and composition, activity level, and energy requirements. Compare an athlete and a non-athlete's nutritional needs. Consider protein, water, calcium, potassium, iron, carbohydrates, and fats.
- Discuss nutritional needs during training, pre-event, and during the event.
- Relate *Canada's Food Guide to Healthy Eating* to achievement of optimal nutrition. Plan meals to meet the athlete's energy requirements and motivational needs with an appropriate balance of carbohydrates, fats, and proteins. Include a training diet for three days, a pre-competition meal eaten at home, and a pre-competition meal eaten "on the road."
- Evaluate nutrition information and misinformation directed at the athlete.
- 11.4 To apply knowledge of special dietary needs. (CCT, PSVS)
- Adapt a family meal to incorporate the preparation of baby food.
- Identify food or food-related activity that may help develop a toddler's intellectual or motor development.
- Enhance calcium and folic acid intake for a pregnant or nursing woman.
- Students may know people with special dietary requirements. Students may arrange to interview them and evaluate their dietary habits. Suggest improvements if necessary.
- Encourage a senior, or a person eating alone, to improve his/her eating habits.
- Investigate the advantages of breast-feeding a baby.
- Discuss the practice of using food to reward or punish a child.
- Outline ways to encourage healthy eating habits in young children.

Learning Objectives**Notes**

Outline ways to improve teenagers' diets while including foods they enjoy.

Plan and prepare nutritious snacks for a daycare menu.

Have students prepare a lesson plan on nutrition to give to a primary class on an area of their choice. If possible, have the students teach the lesson to the primary class. Plan an activity to reinforce what was taught.

Compare the nutrient requirements of a performing athlete, sedentary teenager, and an office worker who jogs; a pregnant woman, a female athlete, and a sedentary female.

Prepare a chart showing the processed foods to avoid if you are allergic to one of the following: eggs, peanuts, fish, gluten, milk, etc.

Research and report on the fast-growing area of the use of medicinal foods for "healing naturally."

11.5 To identify and evaluate community food/nutrition programs.

Find out what kinds of food assistance programs your community has for the elderly, children, or the hungry. Investigate how to become involved.

Investigate the use of food banks, Meals on Wheels, and community kitchens and the services they provide. Participate in a field trip. Volunteer to work a few hours.

11.6 To explore careers in community health. (IL)

Investigate careers in community health that relate to nutrition.

This is a good module for career discussion. Examples: a dietitian, a public health nutritionist.

Invite a dietitian from your health district as a guest speaker.

Module 12: Cakes and Pastries (Optional)

Suggested time: 5-8 hours

Foundational Objectives

- To apply independent learning skills in the preparation of nutritious foods.
- To be creative when applying knowledge about nutrition to food preparation.

Common Essential Learnings Foundational Objectives

- To understand and use the vocabulary related to diet, food, and food preparation. (COM)
- To make necessary calculations when selecting, purchasing, preparing, and storing food. (NUM)
- To practise cooperation and teamwork when working in groups. (PSVS)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	<p>Ideas for practical application.</p> <p>Students should have the opportunity to demonstrate skills and techniques involved in the preparation of selected cakes and pastries.</p> <p>Select and prepare a minimum of three of the following products: shortened cake with frosting, foam cake, short crust pastry product and filling, choux pastry with low calorie filling/topping, sweet or savoury item with varied ethnic origins (e.g., baklava). Examples of some recipes are fruit flan, wacky cake, chocolate chiffon cake, orange sponge cake, apple pie, lemon meringue pie, sour cream apple pie, chocolate pie, banana cream pie.</p> <p>Have students bring a baby/toddler picture of themselves with one of their birthday cakes. Display on a bulletin board.</p> <p>Have a competition for the most attractive pie or cake, most nutritious, most creative, etc.</p>

Learning Objectives	Notes
12.1 To discuss the role of cakes and pastries in Canadian cuisine, considering nutrition as well as cultural and social traditions. (COM, CCT)	<p>Examine the role of the Other Foods category in the daily diet. Focus on the fact that these foods are mostly fats and/or sugars but can be enjoyed as part of a healthful eating plan when eaten in moderation.</p> <p>Discuss ways to improve the nutrition of desserts with the addition or deletion of selected ingredients.</p> <p>List a variety of cakes and pastries that are student favourites. Examine the cultural, family, and social traditions of each.</p> <p>Discuss the use of cakes and pastries for social occasions, for traditional occasions such as birthdays, and/or for cultural events.</p> <p>List cakes and pastries that are from specific countries or cultures. Check specialty cookbooks for ideas.</p> <p>Select ethnic meals that use pastry as the base for the main course. Analyze the fat and calorie content of the dish. Identify foods that could accompany the dish to balance it nutritionally.</p> <p>Select a Canadian dessert that uses a form of sugar as the primary ingredient.</p> <p>Using a table of nutrient values or a computer program, compare the nutritional value of a variety of cakes and pastries with other foods such as fresh fruits and vegetables or other desserts. Observe in particular the calories (energy), fat, carbohydrates, vitamins, and minerals.</p>
12.2 To understand the function of ingredients in making cakes and pastries.	<p>Identify the type of flour mixture for cakes and pastries.</p> <p>List the ingredients used in cakes and pastries and note the function of each.</p> <p>Discuss the role gluten development plays in each.</p>
12.3 To identify different types of pastries and cakes.	<p>Distinguish between the three types of cakes: (1) butter or shortened, (2) foam or sponge, and (3) chiffon.</p> <p>Explain the different types of pastries: (1) short crust, (2) cream puffs or choux pastry, and (3) puff pastry.</p> <p>List various ways in which pastries and cakes may be used in daily meals. Identify recipes that use a pastry crust for foods that are eaten as a main dish or an appetizer.</p>

Learning Objectives	Notes
12.4 To compare methods of mixing cakes.	<p>Discuss the quick-mix and conventional methods of making shortened cakes.</p> <p>Explain the techniques involved in preparing foam and chiffon cakes. Include information on the handling of egg white foams.</p>
12.5 To examine methods used in the production of basic short crust pastry.	<p>Outline the procedure for making a basic pie crust. Include techniques of cutting-in, mixing liquid, rolling out, transferring to pie plate, decorating the edge and baking. Stress mixing lightly to avoid developing the gluten and to ensure flakiness and tenderness.</p> <p>Discuss types of fillings that may be used.</p>
12.6 To analyze the principles involved in successful preparation of cakes and pastries. (COM, NUM)	<p>Discuss and/or demonstrate important baking skills that are required for successful cakes and pastries: accuracy in measuring, correct mixing procedures, correct pan preparation, baking and determining doneness, altering and varying basic recipes, and compensating for failures.</p> <p>The principles are concerned with the influence of ingredients on gluten formation, methods of mixing or combining ingredients, and baking.</p> <p>Make a list of and define terminology involved in the preparation of cakes and pastries: creaming, folding, beating, leavening, meringue, quiche, cake flour, pie shell, soft peak, stiff peak, etc.</p>
12.7 To identify different types of frostings that may be used.	<p>Explain that frostings are concentrated sugar mixtures, either cooked or uncooked, and are used for decoration and to keep cakes moist. Discuss briefly how to frost cakes. Examine different recipes for frostings. Discuss their uses, ease of preparation, and their keeping quality.</p> <p>Evaluate purchased, ready-to-use frostings and homemade frostings for taste, convenience, preparation time, and cost.</p> <p>Discuss the art of cake decorating for special occasions.</p> <p>Discuss toppings that could be used on cakes that would be more nutritious and lower in calories than frostings.</p>

	Learning Objectives	Notes
12.8	To demonstrate safe, hygienic work habits and the correct use of tools and equipment. (TL, IL)	Assess individual effort, interpersonal interaction, managing resources, and responsible behaviour during lab activities.
12.9	To evaluate cake and pastry products according to identified quality standards. (CCT)	Outline standards for evaluating cake and pastry products and compare foods prepared in class to these standards.
12.10	To assess convenience forms of cakes and pastries.	Identify the various convenience cakes and pastries. Compare cost, convenience, time, taste, and nutrition. Draw some conclusions about the purchase and use of convenience products. Prepare some different convenience type products and compare to homemade.
12.11	To establish guidelines for storing cakes and pastries.	Categorize the various types of cakes and pastries and clarify guidelines for storage.
12.12	To demonstrate basic knowledge and understanding of cakes and pastries. (COM, IL, PSVS)	Activity suggestions: <ul style="list-style-type: none"> • Pretend you are a chef being interviewed for a television cooking show. Your topic is, "Tips for preparing and baking cakes or pastries." Write what you would say. • Prepare a question and answer article for a magazine or a script for a talk show. • Do a demonstration of one of the techniques learned in this module. • Have a pie sale in school at noon.

Module 13: Baking with Yeast (Optional)

Suggested time: 5-8 hours

Foundational Objectives

- To apply independent learning skills in the preparation of nutritious foods.
- To better understand the social and cultural aspects of food for all people.

Common Essential Learnings Foundational Objectives

- To understand and use the vocabulary related to diet, food, and food preparation. (COM)
- To make necessary calculations when selecting, purchasing, preparing, and storing food. (NUM)

Note: Other CELs may be emphasized.

	Learning Objectives	Notes
	Preamble.	Ideas for practical application . There is a great variety of yeast breads that may be prepared to develop and demonstrate skills and knowledge. Prepare basic sweet dough or holiday yeast breads.
13.1	To explore the role of yeast breads in our diet.	Explain why bread is referred to as the "staff of life." List ways that yeast breads are used in meals. List new breads that are currently popular (bagels, sourdough, pita, ethnic breads with special dips, foccacia, etc.). Calculate the cost of the wheat that is used as flour in one loaf of bread. What return does the farmer get per loaf of bread? Who gets the rest?
13.2	To define the term "yeast breads."	Yeast breads are a special kind of flour mixture. Review briefly how they differ from quick breads and the functions of the ingredients.
13.3	To understand the principles of yeast as a leavening agent and to experiment with the fermentation process. (COM, CCT)	Explain that yeast is a fungus and describe the conditions that are necessary for yeast to grow and produce carbon dioxide. List, explain, and examine the different types of yeast available. Experiment by mixing yeast and sugar with water at various temperatures. Record observations.

Learning Objectives	Notes
13.4 To explore gluten development and carbon dioxide formation in successful bread making.	Explain the importance of gluten and carbon dioxide formation. Gluten forms the framework of the dough and expands as carbon dioxide is produced by the yeast. To develop gluten and a proper framework for yeast bread requires thorough mixing and kneading.
13.5 To examine the different methods used in making yeast bread.	Describe the different methods of making yeast dough. These include: straight dough, batter, sponge, refrigerator, freezer. Consider the advantages and disadvantages of each.
13.6 To demonstrate the basic techniques in making yeast breads.	Demonstrate important techniques necessary in making yeast bread. Have a cinnamon roll sale at noon at school. Assign a home lab of any yeast bread product.
13.7 To understand terminology associated with making yeast breads. (COM)	Explain terms related to yeast breads (e.g., kneading, fermentation, proofing). Describe proper baking procedures and tests for doneness.
13.8 To evaluate the nutritional value of yeast breads.	Identify the nutrients in bread. Decide how nutritional values can be improved. Examine the different types of flours that can be used in making yeast bread. Evaluate the nutritional differences. Discuss compulsory enriching of bread in Canada.
13.9 To identify appropriate storage and handling of baked yeast products.	Discuss proper storage of yeast breads. Discuss factors that influence shelf life of various yeast breads. Clarify safe hygienic work habits at home, in the foods lab, and in industry. What does Saskatchewan Labour have to say about this? Visit the department's website.
13.10 To explore a variety of specialty and holiday breads that can be prepared. (IL, PSVS)	Share examples of student's family/cultural/holiday breads. List examples of specialty breads used at holiday time. Search for examples of traditional breads from other countries. List the country and variations of preparation methods. Share findings with the class.

Learning Objectives**Notes**

13.11 To compare homemade breads and ready-to-eat yeast breads.

List examples of different types of convenience yeast breads. Investigate the differences in nutrition, cost, and uses of each.

Examine the information on bread labels.

Compare homemade bread with a ready-to-eat yeast bread product. Consider the time involved, cost, taste, and nutritional value of each.

Participate in a field trip to a bakery or bagel shop.

13.12 To investigate the use of bread machines in the home. (TL, CCT)

Analyze information to support claims that the two current trends for yeast breads are: (1) faster methods for home-baked products and (2) more nutritious products.

Consider the convenience of owning a bread machine. Analyze special features available, sizes, and prices of bread machines.

Examine a bread machine, if available, and make a yeast bread product.

For Food Safety and Sanitation, see the *Tourism, Hospitality, and Entrepreneurship A30, B30 Curriculum Guidelines*, Module 5 and/or the ideas about safety in the *Commercial Cooking 10, 20, 30 Curriculum Guidelines* (Saskatchewan Education, 1999).

Module 14: Keep It Cold (Core)

Suggested time: 5-10 hours

Foundational Objectives

- To understand the importance of the science of nutrition.
- To understand and practise safety in the preparation and storage of food.
- To be creative when applying knowledge about nutrition to food preparation.

Common Essential Learnings Foundational Objectives

- To follow safe procedures when working with equipment and food in the kitchen. (CCT, TL)
- To practise cooperation and teamwork when working in groups. (PSVS, COM)

Note: Other CELs may be emphasized.

Salads and Salad Dressings

Learning Objectives	Notes
Preamble.	Ideas for practical application . Explain and/or show how a head of lettuce is cored, washed, and can be dried. Prepare a basic tossed salad and a homemade dressing. Make it creative, interesting, and unique by providing a variety of different ingredients. Have a competition for the most attractively arranged salad. Prepare a variety of different types of salads. Sample and evaluate each. Grow some alfalfa sprouts for salads and sandwiches. Demonstrate how to grow sprouts at home and discuss the advantages of doing so.
14.1 To develop and explain the meaning of the module entitled Keep It Cold. (COM)	Explain the importance of creativity and the application of nutrition knowledge in the preparation of salads, salad dressings, and sandwiches and the importance of keeping these foods chilled for food safety. List various ways to keep foods cold: using refrigeration, insulated containers, freezer packs, and frozen food items. Discuss safe and hygienic work habits for preparing these foods. List foods that must be kept cold.
14.2 To explore the history of salads.	Briefly explore the history of salads. The Romans are credited with inventing the salad. German doctors in the mid-1700s prescribed different salads for various ailments.

Learning Objectives	Notes
14.3 To understand the nutritional importance of salads in our diets. (COM, NUM)	<p>Name the major nutrients obtained from salads. Identify the food groups involved.</p> <p>Give examples of ways to add specific nutrients to salads (e.g., add protein to a tossed salad).</p> <p>List common ingredients used in salads and examine their nutrient contributions.</p>
14.4 To understand how salads may be used in a meal or menu.	<p>List and give examples of the various ways in which salads may be classified. Consider the ingredients used, ways they are used at a meal, and the way they are arranged.</p> <p>Compare the foods that are used in each of these categories and list examples.</p>
14.5 To identify the basic parts of a salad and various salad ingredients that can be used.	<p>Explain the three parts of a salad: the base, body, and dressing. List examples of ingredients that may be used for each part.</p> <p>List as many ingredients as possible that could be added to a tossed salad.</p> <p>Discuss the types of greens that may be used in salads. If possible, have examples of different greens as well as some of the new types of "leaves" being used in some restaurants and are available in some grocery stores. Identify the new types of salad ingredients.</p>
14.6 To discuss selecting, buying, and storing salad ingredients.	<p>List guidelines for selecting and buying salad ingredients.</p> <p>List the prices of different salad ingredients. Discuss the factors that influence prices, quality, and availability of salad ingredients.</p> <p>Discuss the relationship between colour and nutrition.</p> <p>Describe the proper storage of different salad ingredients.</p> <p>Demonstrate how to "crisp up" wilted produce.</p>

Learning Objectives	Notes
14.7 To analyze the principles involved in making salads. (CCT)	<p>Discuss guidelines for accomplishing and protecting: salad freshness, salad nutrients, and salad attractiveness.</p> <p>Describe the process in making a tossed green salad.</p> <p>List various types of garnishes that may be used. Have students practise and demonstrate the preparation of some.</p> <p>Have a tossed salad competition. Judge the salad's appearance, arrangement, garnishings and the variety of ingredients used. Provide an assortment of vegetables and other ingredients for the creations.</p>
14.8 To identify and explain the three basic types of salad dressings.	<p>Name and explain the differences between the three types of dressings (French, Mayonnaise, and Cooked Salad dressing).</p> <p>Discuss when salad dressings are added to various salads.</p> <p>Prepare one of the types of salad dressings and compare its texture, flavour, colour, convenience, ingredients, and price to a purchased dressing.</p> <p>List ingredients that may be added to basic salad dressings to change their flavour.</p> <p>Compare the nutritive value of various types of salad dressings considering, in particular, the fat and cholesterol content. Discuss the amount of dressing added, especially to pasta/potato and Caesar salads.</p> <p>Evaluate the advertising and labeling used for salad dressings. Do a blindfold taste test of regular vs. light mayonnaise.</p>
14.9 To compare and evaluate convenience types of salad ingredients available. (CCT)	<p>List examples of convenience types of salad ingredients, dressings and mixes available. If possible, have some samples on hand and analyze the list of ingredients, price, freshness, colour and flavour.</p> <p>Consider the advantages and disadvantages of using convenience salad foods.</p>

Creative Sandwiches

Learning Objectives

Notes

Preamble

Ideas for **practical application**.

Plan and prepare a variety of sandwiches using a variety of ingredients.

Students may select, plan, and prepare interesting and creative sandwiches. Include an assignment detailing cost, nutrition, time required to plan and prepare, serving ideas, and taste-test.

14.10 To explore ideas related to sandwiches. (COM)

List as many examples of food ideas as possible for the following: types of breads, fillings, and other additions.

Look through cookbooks and/or food textbooks for ideas.

14.11 To discuss the importance of safe food handling procedures.

Outline ways to handle sandwich fillings safely. Include discussions about cross-contamination, clean utensils and chopping boards, good sanitation, proper refrigeration, etc.

Do a bacterial count of egg salad sandwiches, using one stored at a cold temperature and one kept at room temperature.

14.12 To examine the nutritional values of sandwiches. (NUM)

Using the list of sandwich ideas above, evaluate major nutrient values and food groups involved. Discuss the size of servings for various situations.

14.13 To consider principles of resource management in sandwich production.

Do an assignment discussing how to accomplish the following related to resource management:

- using leftover breads and fillings
- maintaining freshness
- using time and resources efficiently
- creating eye appeal
- appetizing colour
- flavour and texture combinations.

Learning Objectives

Notes

- 14.14 To create an awareness of careers and job opportunities related to this module.
- List places of employment in your community where knowledge of food safety and the preparation of salads and sandwiches would be beneficial.
- Give examples of entrepreneurial opportunities possible in this field.
- Working with school cafeteria personnel, prepare sandwiches/salads for students.
- 14.15 To demonstrate basic knowledge and understanding of the module Keep It Cold. (CCT, PSVS, IL, NUM)
- Make a poster illustrating healthful salad choices, nutrition, various types of salads and preparation guidelines.
- Prepare several menus for a salad and sandwich luncheon. Consider the serving sizes and requirements of Canada's Food Guide. Analyze the nutritional contributions using a table of nutrient values or a computer program.
- Create a mini-salad bar for the home refrigerator. Identify foods to include, how to select, prepare and store them, and the advantages of having the salad bar.
- Write an article detailing information about the preparing of salads and sandwiches.
- Investigate various new produce, like herbs and floral blossoms, that may be used in food preparation.
- A school project could include a sandwich and/or salad bar to be served to parents, staff, or students for a reasonable price. Coordinate this activity with the school cafeteria or canteen.

Module 15: Protein Foods: Meats, Poultry, Fish, Vegetarianism (Core)

Suggested time: 10-15 hours

Foundational Objectives

- To develop the desire and ability to access knowledge about issues and obtain factual information before forming opinions about food-related issues.
- To better understand the social and cultural aspects of food for all people.
- To understand and practise safety in the preparation and storage of food.

Common Essential Learnings Foundational Objectives

- To understand how specific foods contribute to a healthy diet. (COM)
- To gain the knowledge and develop the skills required to make appropriate food choices and to become discriminating consumers. (CCT, IL)
- To explore the relationships between culture and the social and geographic influences on food customs. (PSVS)

Note: Other CELs may be emphasized.

Meats

Preamble.

Ideas for **practical applications**.

Guide students to discover creative ways to prepare protein dishes in the classroom and at home.

Prepare various cuts of meat as the budget allows, employing a cross-section of moist and dry heat cooking methods. Evaluate how tenderness is preserved or developed and how flavour and palatability is achieved.

Select and prepare recipes for lunch/dinner that are low in fat, relatively inexpensive, and can be prepared in class time.

Prepare ground beef in different, nutritious, and creative ways.

Find a poultry or fish recipe in which the product is oven baked and provides a complete one-dish meal (poultry or fish, grain, and vegetable).

Plan, prepare, and serve a chicken/turkey dinner. Include a report that details the menu, food cost, time and organizational plan, table setting, and evaluation of the meal. Students could become involved in preparing and serving a fowl supper in a Saskatchewan community.

Find a new way to prepare fish or chicken. Plan a lunch or dinner menu to include this recipe. Prepare the food. Evaluate.
Prepare a chicken stir-fry, chicken burritos, chicken fajitas, or other ethnic chicken dish.

List ways to use the microwave oven for cooking chicken and/or fish. Prepare one of the dishes. Evaluate for eye appeal, taste, and texture.

Learning Objectives	Notes
15.1 To recognize and examine the foods that belong to the Meats and Alternatives group. (COM)	List and discuss each of the foods that belong to this group. Examples include beef, veal, lamb, pork, chicken, turkey, goose, duck, eggs, fish, shellfish, nuts, legumes, peas, beans, tofu, etc.
15.2 To identify the role of meat in Canadian diets and compare to those of other nations. (CCT)	Compare Canadian meat eating habits to those in other areas of the world. Compare the use of meats in different cultural groups. Explore the religious significance and regulations regarding meat for various major religions such as Christianity, Buddhism, Judaism, Islam, Hinduism.
15.3 To determine how meats and alternatives fit into a healthful eating plan.	Develop an understanding that meats are an important and costly part of meals and it is important to select and prepare them wisely. Discuss the number and sizes of servings of various meats and alternatives. Prepare a chart to illustrate the nutritional value of the various protein foods including an analysis of the type of protein and varying levels of fat, cholesterol, iron, and Vitamin B12. Discuss the health concerns regarding consumption of red meat, myths about cholesterol, and the effect of the preparation method on nutritional value. Outline ways in which meats and alternatives can be part of a low-fat eating plan. Make a list of lower quality protein foods that may be used as meat extenders.
15.4 To develop an understanding of the factors that affect the tenderness of meat.	Explain the composition of meat: connective tissue, bone, fat, and muscle. Explain the difference between elastin and collagen. Outline factors that determine tenderness in meats, especially beef (age, exercise, area of cut, diet, amount of fat, etc.).

Learning Objectives	Notes
15.5 To identify the cuts of meat.	<p>Describe the wholesale cuts and retail cuts of the carcass. Identify the degree of tenderness of each cut. Explain the use of the following terms in regards to cuts of beef: tender, medium tender, and less tender.</p> <p>Explain the bone shapes that identify basic cuts and give examples. Compare charts of wholesale and retail cuts of lamb, pork, veal, and beef.</p> <p>Use a jigsaw puzzle of half a beef carcass to help clarify various cuts.</p> <p>Collect pictures of different kinds of meat. Prepare a bulletin board display to illustrate the type of meat, type of cut, and suggested ways to cook it.</p>
15.6 To examine the various methods for tenderizing meats.	<p>Analyze the various ways to tenderize meat: moist and dry cooking methods, chemicals (marinating in acid, enzymatic tenderizers), and mechanical methods (pounding, scoring, grinding). Give examples of each.</p>
15.7 To determine and evaluate factors involved in selecting and buying meats. (NUM, CCT)	<p>Name and briefly describe the grades of beef in Canada.</p> <p>Explain that meat inspection is important for safety reasons. Identify health inspection stamps and the use of the word CANADA.</p> <p>Provide labels of various meats and examine the information provided.</p> <p>List characteristics to look for when buying fresh meat.</p> <p>Brainstorm guidelines for making economical, nutritious choices when shopping for meats.</p> <p>Provide the servings per pound for various cuts and calculate the cost per serving.</p> <p>Discuss factors that determine the cost of meats.</p> <p>Compare the varying levels of fat in ground beef. Compare prices.</p>
15.8 To examine the convenience forms in which meat can be purchased. (TL)	<p>List various convenience products available and give advantages and disadvantages for using them.</p> <p>Calculate the nutritional value of deli meats using nutritional tables or a computer program.</p> <p>Discuss the salt and nitrate content in deli, processed or canned meats.</p>

Learning Objectives	Notes
15.9 To establish proper storage methods for different meats.	<p>Brainstorm a list of safe hygienic ways to handle, store, and prepare meats.</p> <p>List ways to thaw meats safely.</p> <p>Outline how to store raw and cooked meats safely in the refrigerator and freezer (include length of time).</p> <p>Discuss the bacteria eColi105:H7 as a health and safety concern.</p>
15.10 To discuss the principles of cooking meat.	<p>Consider the reasons for cooking meat, such as killing harmful bacteria that might cause food poisoning, making it more appetizing, bringing out the colour and flavour, etc.</p> <p>Name ways to tell when meat is done. Why is it important to cook some meats to the correct internal temperature? Give examples of the various temperatures used for the different types of "doneness."</p> <p>Examine why ground meats must be cooked to the well-done stage while steak may be eaten rare.</p>
15.11 To compare moist and dry cooking methods of preparing meat. (CCT)	<p>Categorize and discuss the various types of moist and dry heat cooking methods used with meat. Give examples of each.</p> <p>Select appropriate cooking methods for a variety of cuts of meat.</p> <p>In pairs, students could select different cuts of meat and recommend appetizing methods of preparation.</p> <p>Select a less tender cut of meat. Find as many different methods of cooking it as possible.</p>

Poultry

Learning Objectives

Notes

- | | | |
|-------|--|---|
| 15.12 | To understand the grading and inspection of poultry. (COM) | Compare standards of grading and inspection of poultry to red meats.

Name and briefly describe the grades of poultry.

Describe the factors used to determine the grades of poultry (conformation, fleshing, and dressing). |
| 15.13 | To examine factors involved in selecting and buying poultry. | List the meats represented by the term poultry.

Identify and evaluate convenience poultry items used in students' homes.

Outline guides to consider for buying poultry.

In pairs, have students research and report on the market classifications of chicken and turkey (include characteristics and recommended cooking methods), the different forms of poultry products, and qualities to check for when buying fresh or frozen poultry.

Collect poultry labels from a variety of products. Determine the number of servings per pound and calculate price per serving. Conclude which is most economical. |
| 15.14 | To discover how to handle poultry safely. | Prepare a poster to illustrate how to handle, prepare, cook, and store poultry safely.

List food safety guidelines for handling poultry.
Discuss the bacteria <i>Salmonella</i> .

Describe the proper storage of fresh, frozen, and left-over poultry.

Discuss how to handle poultry dressing/stuffing safely before and after roasting poultry.

Describe methods for testing poultry for doneness. |

Learning Objectives**Notes**

15.15 To identify principles and methods for preparing poultry. (COM, IL)

Brainstorm and define terms relating to cooking poultry.

Demonstrate how to cut up a chicken. Compare prices of chicken parts with whole broiler/fryer.

Demonstrate how to cut wings apart into drumettes and wing pieces.

Outline techniques involved in roasting whole poultry, preparing a stuffing, and carving.

Explore methods of preparing poultry pieces.

Discuss what influences the tenderness of poultry and the recommended cooking methods. Determine doneness in cooked poultry.

Discuss similarities and differences between the cooking of poultry and other meats.

List ways to prepare poultry for low-fat diets.

Fish

15.16 To consider important commercial varieties and basic market forms of fish and seafood.

List types of fish and fish products eaten by students and their families.

Identify the different kinds of fish and shellfish available in Canada. Classify as freshwater or ocean.

List available fish and shellfish convenience products and list their advantages and disadvantages. Evaluate their convenience, cost, ingredients, and nutritional value.

Name and describe the common forms of fresh and frozen fish available. Compare the number of servings from each.

Discuss fish farming in different parts of Canada and the world.

15.17 To develop guidelines for buying and handling fish and seafood.

List guidelines for buying fresh and frozen fish.

Compare prices of various fish products available. Discuss the reasons for the range of prices for different kinds of fish.

Outline safe handling and storage for different types of fish. Discuss proper storage in the home and food store.

Learning Objectives	Notes
<p>15.18 To identify methods of preparing fish and shellfish.</p>	<p>Discuss the perishable nature of fish and how to thaw and prepare it safely.</p> <p>Examine how the composition and structure of fish and seafood determines preparation and cooking methods. Note that one type of fish can be substituted for another type if it is of similar colour, flavour or fat content.</p> <p>Describe the 10-minute rule for cooking fish. List characteristics that indicate that the fish is thoroughly cooked.</p> <p>Working in groups, list different ways fish may be prepared. Collect recipes that utilize moist and dry heat cooking methods and that reflect traditional dishes from around the world.</p> <p>Describe filleting and portioning of fish.</p> <p>Discuss sushi and sushimi, especially the variety that uses "flash frozen" fish.</p>
<p>15.19 To demonstrate knowledge and understanding of meats, poultry, and fish. (CCT, IL, NUM)</p>	<p>Create a word search or crossword with the terminology and definitions in this module.</p> <p>Using a cookbook or other resources find three recipes that use: a red meat, fish, and poultry. Outline how to select, prepare, and present the foods.</p> <p>Compare and analyze prices of various meats, fish, and poultry products.</p> <p>Research how various meats are produced and marketed in Saskatchewan.</p> <p>On a large map of Canada place names of freshwater fish, saltwater fish, and shellfish on appropriate lakes, rivers, and oceans.</p> <p>Research information on the value of fish oil, in particular omega-3 and eicosopentanoic (EPA).</p> <p>Research the issue of declining fish stocks in Canadian waters. Discuss world international influences on Canadian fish supplies. Discuss declining fish stocks on a global scale.</p>

Learning Objectives	Notes
15.20 To discuss career choices in the meat industry. (IL, PSVS)	<p>Visit a local fish market, butcher shop, or meat department of a grocery store.</p> <p>Examine the scope and importance of Saskatchewan's meat industry. List careers available from beginning production to the preparation stage in the home or restaurant.</p>

Vegetarian Cuisine

Preamble.	<p>Ideas for practical application.</p> <p>Select, plan, prepare, and evaluate a variety of vegetarian foods including complementary protein food combinations.</p> <p>Develop a repertoire of vegetarian recipes that are student-friendly. Have students select and prepare some of these recipes.</p> <p>Prepare sample dishes that include tofu and pulses as well as dishes that have complementary protein combinations.</p> <p>Have students look through vegetarian cookbooks and choose some recipes to prepare.</p> <p>Have each student find and bring to class a vegetarian recipe. Prepare a sample of some of them.</p> <p>Try growing lentil sprouts.</p> <p>Analyze a recipe to determine which type of vegetarian eating pattern it represents and the cost of the ingredients.</p> <p>Take a trip to a grocery store to observe and evaluate examples of vegetarian food products. Consider both price and availability.</p>
15.21 To analyze factors that motivate individuals and groups to follow vegetarian eating patterns. (CCT)	<p>Discuss the reasons people give for being/becoming a vegetarian. Examples include ethical, moral, social considerations; body image; religion; distaste for meat; health concerns; food costs; traditional dietary patterns.</p>
15.22 To understand various types of vegetarian eating patterns.	<p>Explain the following types: vegan, ovo, lacto, ovo/lacto, and incorporating vegetarian foods into conventional eating patterns.</p>

Learning Objectives	Notes
15.23	<p>To examine the nutritional elements of wholesome vegetarian diets. (CCT)</p> <p>Develop an understanding that a healthy vegetarian diet requires knowledge and careful planning.</p> <p>Examine the provision of adequate proteins, Vitamin B12, iron, calcium, zinc, copper, fat, fibre, and calories through vegetarian eating.</p> <p>Discuss protein complementarity and give examples of combinations of foods that are necessary to provide complete protein.</p>
15.24	<p>To develop meal plans and evaluate foods suitable for vegetarian eating patterns. (IL, PSVS)</p> <p>Assess barriers to wholesome vegetarian eating patterns considering: reliability of nutrition information, palatability, conventional attitudes toward eating patterns, and time required for preparation of some vegetarian foods.</p> <p>Identify the essential foods in vegetarian diets. Evaluate nutritional value, taste, cost, cooking, acceptability. Include different kinds of legumes (pulses), grains, soybeans, and tofu. Have each student choose one of the vegetarian protein foods (protein sources other than meat) and prepare a small report to present to class. Include examples of dishes that use a protein food.</p> <p>Give examples of ethnic foods that apply protein complementarity combinations.</p> <p>Divide the class into five groups to represent each type of vegetarian and develop and analyze three days of vegetarian diets. Share with the class.</p> <p>Adapt personal meal plans to incorporate vegetarian proteins. Formulate strategies for increasing the acceptability of vegetarian foods.</p> <p>Describe briefly the preparation that must be given to legumes prior to cooking.</p> <p>Prepare a bulletin board display of various vegetarian foods.</p>
15.25	<p>To explore protein substitutes.</p> <p>Discuss tofu (textured vegetable protein) as a vegetarian food choice. Consider source, nutritional value, palatability, availability, cultural significance, and cost. Investigate traditional ethnic foods that use tofu. List other foods made from soy beans such as soy milk.</p> <p>Find recipes using legumes for main dishes, soups, and salads.</p> <p>Visit a supermarket and list the textured soy meat-like products available. Examine cost. If possible, sample some and evaluate palatability.</p>

Learning Objectives**Notes**

15.26 To apply knowledge of vegetarian foods. (IL, CCT)

Research the growing of pulses as part of diversified agriculture in Saskatchewan. Check out pulses on the Internet under Saskatchewan Pulse Growers.

Research the history and use of legumes throughout the world.

Outline how to select and store pulses. Do a cost comparison of various kinds of legumes available in the community. Suggest one method and/or recipe for preparing each one.

Write a news bulletin describing the benefits of eating legumes as part of a healthful diet or the different ways to incorporate tofu in recipes.

Your family has decided to incorporate some vegetarian foods into its diet. Outline factors you need to consider in order to eat healthy and provide foods that will fit into your lifestyle. Give some examples of foods/recipes.

Prepare a complementary protein dish as a home lab.

Module 16: Make Mine Quick and Healthy (Optional)

Suggested time: 6-8 hours

Foundational Objectives

- To be creative when applying knowledge about nutrition to food preparation.

Common Essential Learnings Foundational Objectives

- To gain the knowledge and develop the skills required to make appropriate food choices and to become discriminating consumers. (CCT)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	<p>Ideas for practical applications to enhance ease and speed of preparation: Make one-dish meals that incorporate the four food groups.</p> <p>Use foods incorporating prepared and/or convenience foods.</p> <p>Make foods using time-saving appliances or equipment.</p> <p>Prepare foods demonstrating meal management (time and money).</p> <p>Make 30 minute meals.</p> <p>Compare convenience vs. homemade foods - rate time, cost, quality, nutrition.</p> <p>Use an existing recipe and create ways to make it cheaper, more convenient, and less time consuming. Use a convenient food product and make it more nutritious. Have a class contest using these two ideas.</p>
16.1 To analyze the effect of lifestyle on the eating patterns and the nutritional status of Canadians. (CCT, PSVS)	<p>Discuss the factors that influence food choices of individuals and families.</p> <p>Survey the types and frequency of convenience foods used by the students/families in the class.</p> <p>Assess the impact of evolving eating trends on individuals, families, and the community.</p> <p>Analyze whether present eating patterns satisfy nutritional and psychological needs.</p> <p>Survey, compare, and evaluate the use of processed and/or convenience foods of the present day with that of a past generation. Do a cost analysis of foods prepared at home and those in various local restaurants.</p>

Learning Objectives	Notes
16.2 To practise problem solving. (CCT, PSVS)	<p>Describe as many ideas as possible for quick, healthy, simple meals that could be made at home. Emphasize that nutritious, satisfying meals do not need to be time consuming or expensive.</p> <p>Consider the following alternatives and give examples of how they can be incorporated into lifestyles: meal management (planning ahead, planned leftovers), equipment (e.g., microwave, slow cookers, convection ovens), prepared and convenience foods.</p> <p>Compare alternatives to eating out, discussing the various aspects of eating patterns and cost. Evaluate eating establishments available locally and their menus. Rate the choices available by using panel discussion, presentations, etc.</p> <p>Working in groups, have students write a case study outlining conditions such as limited budgets, little time, limited facilities (e.g., a kitchen undergoing renovations for one to two weeks). Present to another group for suggestions and menus. The activity may be adapted to writing a letter to a time management expert or nutritionist describing a situation and having another group make suggestions.</p>
16.3 To evaluate prepared and convenience foods.	<p>List the information that must be present on labels of food products.</p> <p>Discuss the advantages and disadvantages of using prepared and convenience foods.</p> <p>List suggestions for choosing healthy prepared and convenience foods.</p> <p>Compare a variety of prepared/convenience foods for availability, list of ingredients, nutritional value, resource use (time, money, skill, equipment), and palatability.</p> <p>Choose examples of one-dish meals and evaluate the nutritional value. Suggest ways to make them more nutritious.</p> <p>Explore ways to enhance the palatability and aesthetic appeal of foods through varied presentation techniques.</p> <p>Discuss ways to improve nutrition of convenience foods by combining with other nutritious foods.</p>
16.4 To examine technologies employed in the processing of prepared and convenience foods. (TL)	<p>Discuss and give examples of the technologies and processing necessary to make the wide selection of prepared and convenience foods possible. Discuss equipment necessary in the home to store and prepare these types of foods.</p>

Learning Objectives**Notes**

16.5 To demonstrate basic knowledge and understanding of preparing healthy, quick meals. (IL, PSVS)

In small groups, plan three healthful, creative supper menus that would be suitable for the student's living situation. Consider resources needed (including cost, time available), nutrition, and ease of preparation. Have the students prepare one of the meals at home.

Prepare a report on one-dish meals. Provide information about one of the following: casseroles, pizzas, stews, skillet dishes, or stir-fry meals.

Outline suggestions for preparing packed lunches that will be nutritious, safe, appealing, and inexpensive.

Plan three meals to demonstrate strategies for coping with different limitations including: limited budget, limited time, staggered family schedules, eating away from home, limited cooking facilities.

Plan a school campaign to improve the nutrition level of foods available as choices in the school canteen.

Plan a school campaign to encourage students and parents, if applicable, to prepare and eat more nutritious brown bag lunches.

Module 17: The Science of Nutrition (Core)

Suggested time: 12-15 hours

Foundational Objectives

- To understand the importance of the science of nutrition.
- To better understand the social and cultural aspects of food for all people.
- To develop the desire and ability to access knowledge about issues and obtain factual information before forming opinions about food-related issues.

Common Essential Learnings Foundational Objectives

- To understand and use the vocabulary related to diet, food, and food preparation. (COM)
- To interpret data and tables for nutritional values of foods. (NUM)
- To apply knowledge when making independent decisions regarding food choices and preparation. (CCT, IL)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	Ideas for practical application .
	Applying information from this module, plan and prepare foods from each of the six nutrient groups.
	Plan and prepare a variety of plant protein foods.
	Plan and prepare interesting, nutritious, low fat breakfast foods.
	Select three foods designed to improve the intake of different nutrients. Prepare one. (Coordinate with an activity in the mineral section.)
	Prepare a food that demonstrates an acceptable carbohydrate-fat-protein ratio.
	Have each cooking group prepare a different food that is high in a specific nutrient(s).
	Reduce the fat in several high fat cookie recipes. Calculate the reduced amounts and follow-up with a list of changes noted in the baked products.
	Do a nutritional analysis of various diets, personal or predetermined, using computer software.

Learning Objectives

Notes

- 17.1 To recognize the relationship between science, food, and health. (CCT)
- Determine a definition for *science, nutrition, and health*. Check in a biology, chemistry, or physics text and compare definitions. Analyze how nutrition fits into the definition of a science. Where does health fit?
- Consider that science plays an important role in discovering how nutrients work in the body. Research scientists continue to produce new information about nutrition.
- Define the term nutrients. Emphasize that nutrients are chemicals that must be present in the body for proper body functioning.
- 17.2 To appreciate how understanding nutrition can benefit your body.
- The human body needs nutrients to survive and to work properly. Review the six categories of nutrients and their simplified functions of providing energy, building and repairing body cells, and keeping vital body processes working.
- Using Canada's Food Guide, discuss how nutrition knowledge may be used to evaluate daily eating patterns and food choices.
- Recognize that nutrition research in the past dealt with the study of deficiency diseases that are almost unknown in this country today. List the more common ones and the nutrient involved. Today, researchers emphasize health and prevention of disease. Today's health, however, is influenced by eating too much rich, processed food. Give examples of these current health concerns.
- Evaluate magazine articles and/or food ads for validity and reliability of nutritional information presented.
- 17.3 To recognize that nutrients work in combinations in the body. (COM)
- Examples are Vitamin D, calcium and phosphorous; chlorine, potassium and sodium; iron and protein; zinc, carbohydrates, proteins, and fats. Research information on the functions of the different nutrients.
- Examine the relationship among carbohydrates, fats, and proteins used to provide energy for the body. Consider the body's health, the cost, and the environmental implications.

Learning Objectives

Notes

- 17.4 To determine the adequate requirements for nutrients. (NUM)
- Define RDA and RDI. RDA is an American term that outlines the recommended dietary allowances; RDI is a Canadian term that outlines the recommended daily intake. Look at charts of the two, compare, and note any differences. Review Learning Objective 4.5.
- Compare the units used for the different nutrients. For vitamins and minerals the amounts are expressed as a percentage of the RDI.
- Note how these charts are used for food analysis.
- Discuss the use of supplements, check labels of supplements, the amounts for each nutrient, and compare with RDI. Discuss what the body does with excess amounts of nutrients.
- Using RDI chart guidelines, analyze how and why nutrient requirements differ for different groups of people.
- 17.5 To examine the functions of the common nutrients and identify sources.
- Review the Introductory curriculum modules (optional). In a chart form, list the nutrients, several functions for each, several major food sources, and the daily recommended amount for your gender and age. A suggested list is: carbohydrates, fats, proteins, water, the fat-soluble vitamins A, D, E and K, the water-soluble B complex vitamins (thiamin, riboflavin, niacin, biotin, folic acid, B12) and Vitamin C, and the minerals, calcium, phosphorous, iron, copper, iodine, zinc, fluorine, potassium, magnesium, and sodium.
- 17.6 To understanding what carbohydrates are and to distinguish between the various types of carbohydrates. (COM)
- Define carbohydrates. Name the three types of carbohydrates: sugars, starches, and fibre (cellulose).
- Explain the differences between simple carbohydrates, complex carbohydrates, monosaccharides, disaccharides, polysaccharides, sugars, starches, fibre (cellulose), and processed carbohydrates. Give examples for each.
- List the different types of sugars: sucrose, fructose, dextrose, glucose, lactose, and maltose. Give examples for each.
- Draw the chemical structures of the various carbohydrate molecules. Recognize that carbohydrates are composed of carbon, hydrogen and oxygen.
- Consult and collaborate with the Biology 12 teacher, especially in a small school.

Learning Objectives

Notes

Discuss the importance of fibre in a diet for good health. Evaluate various sources of fibre as well as information and claims surrounding this nutrient. Stress the fact that fibre, although it is sometimes listed separately as a seventh nutrient group because of its importance, belongs to the carbohydrates nutrient group.

Check the labels of processed foods to identify the types of carbohydrates that they contain. Discuss why many packaged foods are calorie-rich and nutrient-poor.

Name sources of carbohydrates in the diet. Have students make a list their 10 favorite carbohydrate foods and indicate whether they are simple, complex, or processed.

Have the students list what they ate yesterday. Determine what percentage of the students' daily caloric intake is supplied by carbohydrates (the requirement is at least 50%). Note that each gram of carbohydrates gives the body 4 calories. Determine the number of calories from the grams of carbohydrates consumed.

How many kilojoules are found in one calorie?

17.7 To understand fats and their role in the diet. (COM)

Define the term fatty acids and discuss their importance for good health. List some foods that are high in fat.

Distinguish between saturated, monounsaturated, and polyunsaturated fats. Give characteristics and food sources for each.

Examine the current trend for low fat foods. Distinguish between low fat, lite, light, and no fat foods and evaluate advertising claims for each. A "light" product must provide a calorie reduction of 25%. "Lite" may refer to a reduction in calories as in "light", or to that product's colour, taste, texture, fat content, or just about anything.

Discuss the health risks of too much fat in the diet noting gender differences in the storage of body fat.

Use tables of nutrient values to explore the saturated and unsaturated fat content of selected foods.

Identify sources of visible and invisible or hidden fats in our foods. To find out if foods contain fat, rub small quantities of several foods on labeled squares of unglazed brown paper. Let dry, then hold them up to a light. Fatty foods leave an oily stain on paper.

Learning Objectives**Notes**

17.7 (Continued)

Record the fats you eat in one day. Create a chart using the headings saturated or unsaturated. Include the approximate measure and the calories (and/or kilojoules) for each. Note that each gram of fat gives the body 9 calories.

Using nutrient tables or a computer program, have the students do a diet analysis of the percentage of calories that come from fat.

Judge current popular breakfast choices for fat content, both saturated and unsaturated.

Evaluate recent information, if available, on fat substitutes and their hazards to health.

Have a display of fat jars that illustrate the grams of fat in common fast foods and processed foods.

17.8 To examine and evaluate the role of cholesterol in the body and its implications for good health.

Explain the term cholesterol and explore its role in the body's health. List sources.

Distinguish between and explain the terms LDL and HDL and discuss their roles in the risk of heart disease. (LDL is low-density lipoproteins and is often referred to as "bad cholesterol." HDL is high-density lipoproteins and is known as "good cholesterol.")

Research and report on articles about cholesterol and health. Consider the health risks of too much cholesterol. Discuss factors other than diet that affect cholesterol levels.

Explain the process of hydrogenation and evaluate saturated fats with the trans fatty acids produced by hydrogenation.

Define and give examples of tropical fats (palm and coconut oils) and explain their relationship to cholesterol. These plant sources are high in cholesterol and are used in many prepared foods.

Create a list of tips for lowering fat intake.

Learning Objectives	Notes
17.9 To examine the role of protein in the body. (COM)	<p>For information on protein, review Module 15. The depth of study will be determined by what was dealt with there.</p> <p>Explain the terms: amino acids, essential and non-essential amino acids, complete, and incomplete protein. List examples for each.</p> <p>Explain how different amino acids are combined in different ways to make different proteins.</p> <p>Discuss the use of amino acid supplements by athletes and body builders.</p> <p>List functions of protein in the body.</p> <p>Review complementary protein (from the intermediate level). Legumes + grains or seeds or nuts = complete protein.</p> <p>Research and discuss protein consumption in different parts of the world and the sources of the protein foods.</p> <p>List some popular ethnic foods that combine incomplete protein foods.</p>
17.10 To explain the role and identify sources of vitamins.	<p>List the vitamins, their functions, and food sources for each.</p> <p>Distinguish between fat-soluble and water-soluble vitamins. Explain the implications for daily intake and storage in the body, and for handling, preparing, and cooking vitamin rich foods.</p> <p>Define provitamin A.</p> <p>Explain the relationship between vitamin content and the colour of food.</p> <p>Explain the relationship between Vitamin D and the sun. Note the name "sunshine vitamin." Name places where inadequate sunshine might cause Vitamin D deficiencies.</p> <p>Discuss the current information regarding antioxidants and their relationship to health.</p> <p>Discuss the controversy surrounding megadoses of vitamins.</p> <p>Have students list some favorite food sources that are high in each of the vitamins.</p> <p>Read labels of foods and supplements to determine what vitamins are present and in what amount. Compare to RDI requirements.</p> <p>Review the terms enrichment and fortification. Give examples of each.</p>

Learning Objectives**Notes**

17.11 To explain the role and identify sources of minerals.

List the minerals needed by the body and their functions and food sources.

Define the terms macronutrients, micronutrients/trace elements. Explain the relationship between amount required and the amount stored in the body.

Have students list favorite foods that are high in each of the minerals.

Read labels of foods and supplements to determine what minerals are present and in what amount. Compare to RDI requirements.

Use a jigsaw activity to research the minerals needed for good health.

Discuss osteoporosis.

Plan daily meals that are high in specific minerals such as calcium or iron.

Create ads for the different minerals.

17.12 To understand the importance of water for good health. (COM, CCT)

Have students calculate the average amount of water they drink daily. Name the daily requirement. Have students evaluate their water intake and suggest ways to improve daily intake of water in their diets. Have students try to drink the required 6-8 glasses of plain water for several days. Evaluate the results.

Discuss the importance of adequate amounts of water. List health problems that may occur if there is insufficient water in the diet.

Discuss liquids that act as diuretics (e.g., coffee, coke), removing liquid from the body, and why it is important to limit quantities in the diet.

Discuss the issue of water quality in different parts of the world.

Have students try to increase the amount of water they drink daily. Suggest ways to include drinking water in their foods classes.

Module 18: The Canadian Food Mosaic (Core)

Suggested time: 5-10 hours

Foundational Objectives

- To be creative when applying knowledge about nutrition to food preparation.
- To understand better the social and cultural aspects of food for all people.

Common Essential Learnings Foundational Objectives

- To develop various technological skills related to selecting, preparing, and storing foods. (TL)
- To explore the relationships between culture and the social and geographic influences on food customs. (PSVS, CCT)

Note: Other CELs may be emphasized.

Learning Objectives

Notes

Preamble.

Ideas for **practical applications**.

Prepare some typical traditional foods such as bannock, sourdough, or a fruit crisp. Find recipes in Canadian cookbooks for regional and/or traditional foods.

Prepare foods unique to your region. Examples are various fruits, vegetables, venison, elk, moose, prairie chicken, wild goose, duck, etc. Discuss reasons why this food is common in your area.

Prepare traditional dishes for students in the class. Have each student do a report concerning typical cultural foods of his/her background. Examples are perogies, cabbage rolls, samosas, spring rolls, Jamaican pitas, phyllo savouries, bannock, and sweets.

Research Canadian food patterns and food customs representative of one of the following: Canada's past, a Canadian geographical region, or a defined cultural group in Canada. Have students do a report and prepare a food. For the report, students should consider some of the following: geography, climate, typical foods, recipes and their significance, social structure, equipment used, typical ingredients used, special preparation techniques, presentation, and style of service. This food preparation and report could be used as a tool to evaluate understanding of concepts in this module. Sources of information may include the library, the Internet, the classroom, old recipe books, community museums, local history books, novels about early Canada, exchange students, and various cultural groups. Evaluation of the food prepared should consider nutrition, cost, management of preparation time, adaptations to recipes because of equipment and ingredients, and acceptability of food products.

Learning Objectives	Notes
18.1 To develop an understanding of our Canadian food heritage. (COM)	<p>Food in Canada reflects this country's history, size, geography, and its many ethnic groups. Create an awareness and appreciation for our multicultural heritage.</p> <p>Experience new foods in personal lives by trying new foods in class.</p> <p>Students could visit Wanuskewin if they live in or near Saskatoon.</p>
18.2 To examine the food customs and patterns in Canada's past.	<p>Analyze the social, cultural, historic, geographic and climatic influences of Canadian foods. Discuss how weather and seasonal changes, types of vegetation, fish and game affected the lives and food choices of the different groups of First Nations people.</p> <p>Assign students to research food habits and traditions of Aboriginal (Inuit, Métis or First Nations) peoples across Canada. This may include peoples from Eastern Woodlands, the Plains, the West Coast, Northern Canada, or early Canadian settlers in various regions of Canada.</p> <p>Teachers of Social Studies 9 and 30 or Native Studies 10 may help to identify resources for this assignment.</p> <p>Identify traditional foods typical of the past. Examples include bannock, tourtiere, sourdough, pemmican, blubber, etc.</p> <p>Prepare a chart of early First Nations people to outline the part of Canada in which they lived, their principal foods, and significant features of their lifestyles.</p>
18.3 To identify cultural influences of food patterns within the community.	<p>Recognize the various cultures within specific communities, their foods and cultural traditions. Survey cultural tradition of students in the class, staff in the school, or people in the community.</p> <p>Examine foods in Saskatchewan served by various cultural groups at various holidays such as Easter and Christmas. Have guest speakers from the community talk about or prepare some ethnic foods.</p> <p>Prepare a list of festival and cultural traditions in which members of the class are involved.</p>
18.4 To recognize the cultures represented in Canada and identify some foods for each. (COM, CCT)	<p>Create a checklist of terminology of ethnic foods. Explain the meaning of food terms.</p> <p>Examine the role of food in retaining cultural heritage and in adapting to a new cultural environment.</p> <p>Explore what can be learned about a culture from its foods and food customs.</p>

Learning Objectives	Notes
<p>18.5 To identify typical foods of Saskatchewan people and to examine reasons for regionalization. (COM, CCT, IL)</p>	<p>List and describe foods typical of Saskatchewan. Include in this list traditional historical foods of Aboriginal peoples and the early settlers.</p> <p>Research the Aboriginal people in Saskatchewan and/or any of the different groups of early immigrants. Examine food patterns, traditions, lifestyles, typical foods eaten, etc.</p> <p>Work with the Social Studies teacher.</p> <p>Study the geography and climate of Saskatchewan and describe how this determines the various foods grown.</p> <p>Check a Saskatchewan Food Industry Directory to compare various foods grown and processed in Saskatchewan.</p> <p>If time permits and depending upon class interests, individual students could contact one of these food processors and prepare a report about the business.</p> <p>Design a menu of Saskatchewan foods to be served at a world exposition restaurant.</p> <p>Design a menu of Saskatchewan foods to be served at a national convention.</p> <p>Refer to Module 11 in <i>Tourism, Hospitality, and Entrepreneurship A30, B30 Curriculum Guidelines</i>, Saskatchewan Education 1998.</p>
<p>18.6 To identify the foods typical of the various regions in Canada and to understand reasons for regionalization.</p>	<p>Explore examples of how geography and climate of a region have created Canadian regional foods. Name typical foods from each region in Canada.</p> <p>Plan dishes in which typical regional foods (e.g., apples, potatoes) are the principal ingredient. Prepare one of the dishes.</p> <p>Plan a day's menu for a family of four in one Canadian region using that region's local foods.</p> <p>Role play discussions between people from various parts of Canada. Include and explain in the discussion the similarities and differences in the foods eaten and the reasons.</p> <p>Do a bulletin board display with a map of Canada and pictures of food typical of each region.</p>
<p>18.7 To analyze how nutritional needs are met through the food patterns of a culture. (TL, NUM)</p>	<p>Analyze a sampling of historical, ethnic, and regional foods identified in this module to determine where they belong in Canada's Food Guide and/or to determine nutrient values.</p>

Learning Objectives	Notes
<p>18.8 To demonstrate basic competencies in managing learning, using resources, teamwork, leadership, and developing personal responsibility. (IL, PSVS)</p>	<p>These learning objectives will be applied throughout this module through group activities, discussions, and food preparation.</p> <p>Write an essay about one's food culture analyzing reasons why these foods are eaten. Evaluate how geography, climate, region, food patterns, history, background, holiday foods, social circumstances, and resources influence food habits.</p> <p>Design a three generation questionnaire to compare and contrast food patterns for three generations.</p> <p>Compare and contrast one's lifestyle now with that of a teen living during early Canada. Discuss family patterns, food habits, recreation, and home responsibilities.</p>
<p>18.9 To demonstrate safe hygienic work habits and correct use of tools and equipment. (TL)</p>	<p>During food preparation, safe work habits and correct use of equipment should always be practised and observed.</p> <p>Discuss differences and similarities in food preparation techniques, equipment, and storage of food from the past to present.</p>
<p>18.10 To explore occupational and entrepreneurial opportunities related to ethnic and regional foods.</p>	<p>Develop a checklist of opportunities for careers in this area. Examples may include heritage sites, restaurants, tourism, import businesses, owning your own business, catering, etc.</p> <p>Refer to Module 8 and 10 in <i>Tourism, Hospitality, and Entrepreneurship A30, B30 Curriculum Guidelines</i>, Saskatchewan Education 1998.</p>

Module 19: International Cuisine (Optional)

Suggested time: 5-10 hours

Foundational Objectives

- To understand the importance of the science of nutrition.
- To understand better the social and cultural aspects of food for all people.

Common Essential Learnings Foundational Objective

- To explore the relationships between culture and the social and geographic influences on food customs. (PSVS, CCT)

Note: Other CELs may be emphasized.

Note: Work with the Social Studies teacher. Middle level curriculum focuses on the countries of the Pacific Rim, and Canada's regional differences.

Learning Objectives	Notes
Preamble.	<p>Ideas for practical application.</p> <p>Recognize and prepare some typical foods served in different parts of the world.</p> <p>Prepare some ethnic foods common in your community. Examples may include cabbage rolls, pyrohies (perogies), crepes, stirfries, scones, nachos, quesadillas, apple pancakes, schnitzel, donairs, etc. Do a smorgasbord of foods from a variety of countries.</p> <p>Prepare a list of spices and herbs used in preparing foods that are typical of different countries.</p> <p>Research and describe basic characteristics of cooking in a variety of countries.</p>
19.1 To experience food customs of other countries. (COM)	<p>List as many different countries as possible and foods eaten in those countries. Discuss foods eaten by individual students and the prevalence of these foods in the Canadian mosaic.</p> <p>Understand how these foods fit into Canada's Food Guide.</p> <p>Plan a trip for two months to other parts of the world. Include at least 6 countries. Make a list of the foods one might choose to eat in each country.</p> <p>Participate in a high tea or a Japanese tea ceremony.</p> <p>List restaurants in the community that serve foods from different cultures. Note the country represented most often.</p>

Learning Objectives

Notes

- 19.2 To create an appreciation for the international language of food.
- Have groups of students brainstorm a list of international food terms and define them. Have each group report its list and make a master list.
- List different foods, preparation techniques, and equipment used around the world. Have students identify the food terms and country involved.
- 19.3 To understand how food relates to the region where it is produced. (CCT)
- Foods commonly eaten in a region reflect what is grown or available locally. This, in turn, is affected by geography, climate, processing, and storage capabilities, availability of transportation as well as historical events and social structure. Use examples to illustrate these ideas.
- Discuss how preparation techniques and equipment relate to the concepts above.
- List some staple foods from various countries and explain reasons why they became traditional staple foods.
- 19.4 To compare and evaluate staple foods of the world. (PSVS)
- Grains play an important role in the diet of every country. Give examples of grains around the world to prove this. Give examples of staple foods made from the grains.
- Role play a discussion among students on the topic: "My country makes the best grain products."
- Explore the similarities of foods (e.g., cheese, rice, corn, wheat) from various countries.
- List the basic grains and find examples of different foods that are made from them around the world.
- Using Canada's Food Guide, choose 5 countries and find examples of foods that fit into each of the four groups.

Learning Objectives

Notes

- 19.5 To understand the role food plays in the social, cultural, and psychological well-being of people. (PSVS)
- Give examples of how food affects the psychological well-being of people.
- Investigate factors that determine the availability of ingredients for preparing ethnic foods in your community.
- Investigate ethnic foods eaten by members of the class or by their acquaintances. Analyze the role these cultural foods play in their lives. Examine changes that have been made in the preparation of these foods and the reasons for these changes.
- Analyze the concept that many things in the lives of new immigrants change but that food habits may be one of the last things to change. Discuss why.
- Interview someone from another country. Ask about foods that are typical of his/her culture and what modifications or adaptations have been made in the preparation of these foods.
- Choose a country, research its traditional celebrations, and plan a menu for an event.
- 19.6 To research the cuisine of one country of choice.
- Write a report on a country of choice researching food patterns and customs. Consider history, geography, and culture of the country. Identify indigenous foods. Select, plan, and prepare a food(s) typical of the country chosen. During food preparation, safe work habits and correct use of equipment should be practiced and observed. Evaluate food prepared considering nutrition, cost, management of preparation time, adaptations to recipes because of equipment and ingredients, and acceptability of food products.
- Compile a cookbook of recipes prepared in class. Include at least one food from each student's cultural or family background.

Module 20: The World of Soups (Optional)

Suggested time: 5- 6 hours

Foundational Objectives

- To apply independent learning skills in the preparation of nutritious foods.
- To be creative when applying knowledge about nutrition to food preparation.

Common Essential Learnings Foundational Objectives

- To understand and use the vocabulary related to diet, food, and food preparation. (COM)
- To apply knowledge when making independent decisions regarding food choices and preparation. (IL, CCT)

Note: Other CELs may be emphasized.

	Learning Objectives	Notes
	Preamble.	<p>Ideas for practical applications.</p> <p>Lab ideas: make a cream soup using a white sauce as a base or prepare a vegetable soup from an assortment of ingredients provided in the lab.</p> <p>Students may prepare various soups demonstrating correct preparation procedures. Have each group choose a different recipe. Analyze the nutritional value, use of ingredients, seasonings, and cost. In this module or any others, students may choose their own recipes, do a time plan, make a grocery order, and evaluate the food prepared.</p> <p>Making soup is a good place to include using a pressure cooker, slow cooker, and kitchen equipment such as stock pot, Dutch oven etc.</p> <p>Do a comparison of the homemade and convenience soups available in the marketplace.</p>
20.1	To define the term soup and evaluate its contribution to meals. (COM)	Have the students define the term soup. Discuss the importance of soups to meals.
20.2	To examine the different types of soup.	<p>Do a matching activity for definitions of the different soups. Include such terms as: cold, hot, broth, chowder, stock, stew, bouillon, cream, consommé.</p> <p>List as many soups as possible and identify ways in which they can be used in a meal.</p>

Learning Objectives	Notes
20.3 To list the many different ingredients in soups, including those used for thickening and flavouring.	<p>Check recipe books for the variety of foods that can be part of a soup (e.g., vegetables, fish, meat, poultry, fruit).</p> <p>Based on student's past experiences, make a list of different soups and the ingredients used.</p> <p>Discuss the thickening agents used for soups: flour, cornstarch, tapioca, potatoes, and grains such as barley. Analyze how they function as thickeners. Give examples of ways they can be used.</p> <p>Experiment with thickeners using various amounts of thickener and liquid. Evaluate the results.</p> <p>Discuss the importance of seasonings in soups.</p>
20.4 To discover how soups fit into meal planning and evaluate their nutritional value.	<p>Soups may be used as a snack, appetizer, dessert, main dish entrée, and soup 'n' salad or soup 'n' sandwich meal combinations.</p> <p>Evaluate the nutritional value of soups by analyzing the ingredients used.</p> <p>Describe the ways soup fit into a healthy eating plan. Refer to Canada's Food Guide.</p>
20.5 To define terminology associated with soups.	<p>Define terms such as: clarify, reduce, degrease, puree, curdle, gelatin, roux.</p>
20.6 To examine and evaluate commercially prepared soup. (COM, CCT)	<p>Discuss some of the different types of convenience soups available. Purchase some sample products. Ask the students what types of products they have used. Look at the list of ingredients and evaluate the nutritional value and price of each.</p> <p>Compare homemade and convenience soups. Calculate the cost, preparation time, nutritional value, flavour, ingredients, and additives used for each. Make some generalizations regarding lifestyles and choices made.</p>
20.7 To describe the safe storage of soups.	<p>Discuss the importance of food safety and proper storage of soups.</p>

Learning Objectives	Notes
20.8 To practise good management skills when making soups. (TL)	<p>As a class, discuss ways to be good managers using resources wisely. Some examples of a good management may include:</p> <ul style="list-style-type: none"> • using leftovers (cooked and uncooked) for making stock or as ingredients • making a large quantity of soup and freezing some for future use • using the oven, a slow cooker, a microwave for cooking or reheating soups • saving and freezing cooking water (stock) for later use in soups • selecting and buying ingredients for use in soups and stocks. <p>Discuss the economical advantages of soups.</p> <p>Review types of containers and special techniques to use in microwave cooking.</p>
20.9 To identify preparation and cooking techniques involved in making soups.	<p>Discuss what to do if curdling occurs, ways to thicken, seasoning and spices, ways to prevent lumping, floury flavour, skin on top, cooked egg particles, etc.</p>
20.10 To develop creativity in the preparation and presentation of soups. (CCT)	<p>Plan some menus using soup as one of the courses. Consider how soups can be used as different parts of the meal.</p> <p>Develop a recipe booklet containing simple soup recipes.</p> <p>Write some food tips suggesting ways to serve soups as quick, nutritious, and economical menu ideas. Include a suggestion of other foods that may be used with the soup to make the meal well-balanced.</p> <p>Make a list of garnishes that may be used on soups.</p> <p>Suggest ways to make canned or dried soups a healthier choice.</p> <p>Outline ways to adapt soup recipes to satisfy the health-conscious individual.</p> <p>Discuss the preparation of stock from leftover turkey or (roasting) chicken bones. Include information for making a healthy economical meal from this stock. If a chicken or turkey dinner is made in class, prepare a soup as an additional lab.</p>

Learning Objectives**Notes**

20.11 To analyze the use of soup in the food services industry. (COM, PSVS)

Discuss the use of soup in restaurants in your locale. List some examples of the soups used. Talk about the importance of these as basic menu items. Find out how the soups are prepared in restaurants and discuss the importance of soup on a menu.

20.12 To apply knowledge of soups and their preparation. (IL)

To evaluate this module, a practical exam may require students to prepare a soup.

Module 21: Sauces (Optional)

Suggested time: 5-6 hours

Foundational Objectives

- To apply independent learning skills in the preparation of nutritious foods.
- To be creative when applying knowledge about nutrition to food preparation.

Common Essential Learnings Foundational Objectives

- To understand and use the vocabulary related to diet, food, and food preparation. (COM)
- To gain the knowledge and develop the skills required to make appropriate food choices and to become discriminating consumers. (CCT, IL)

Note: Other CELs may be emphasized.

	Learning Objectives	Notes
	Preamble.	Ideas for practical applications . Lab ideas may include researching cookbooks for sauce recipes and ideas and preparing some of them singly or in combination with other foods. Students should prepare various sauces to demonstrate correct preparation procedures. Students may prepare a sauce they have not tried.
21.1	To define the term sauce and evaluate its contribution to meals. (COM)	Have students define sauce and discuss the importance of this food.
21.2	To list and compare different types of sauces.	Do a matching activity for definitions of the different sauces. Include such terms as: basic white, cheese, basic brown, hollandaise, béchamel, veloute, bernaise, mornay, and different kinds of dessert sauces (custard, hard, butterscotch, chocolate, lemon, orange, etc.). Explain the three types of white sauces and identify how they are used. Identify ways in which the different sauces may be used in meal preparation. Classify the sauces listed below as derivatives of basic sauces. Examples are: Béchamel-Mornay, Beloute-curry, Brown-mushroom, Tomato-Creole, White (Basic)-Cheese.

Learning Objectives	Notes
21.3 To list the different foods that may be used as ingredients in sauces, including those used for thickening and flavouring.	<p>Check recipe books for the variety of foods that may be part of sauces.</p> <p>Based on student's past experiences, list different sauces and the ingredients used.</p> <p>Discuss the thickening agents used for sauces. Analyze how they function as thickeners. Give examples of ways they can be used.</p> <p>Experiment with thickeners using various amounts of thickener and liquid and then cooking the sauce. Evaluate the results.</p> <p>Discuss the importance of seasoning in sauces.</p>
21.4 To discover how sauces fit into meal planning and to evaluate their nutritional value.	<p>Sauces give zest to bland foods, smoothness and coolness to spicy foods, sweetness to desserts, and are a savoury accompaniment to main dishes.</p> <p>Evaluate the nutritional value of sauces by analyzing the ingredients used.</p> <p>Describe the ways sauces can fit into a healthy eating plan. Refer to Canada's Food Guide.</p>
21.5 To examine and evaluate convenience sauces. (COM, CCT)	<p>Discuss some of the different types of convenience sauces available. Purchase some sample products. Ask the students what types of products they have used. Look at the list of ingredients and evaluate the nutritional value, flavour, time required to prepare, and price of each. Make some generalizations as to when the different types might be chosen and used.</p>
21.6 To describe the safe storage of sauces.	<p>Discuss the importance of food safety and proper storage of sauces. Discuss which sauces need to be made as close to serving time as possible and the reasons why.</p>
21.7 To identify preparation and cooking techniques involved in making sauces.	<p>Identify preparation techniques in making a white sauce or different sauces of choice.</p> <p>Discuss preparation techniques for emulsified sauces, namely Hollandaise and Bernaise.</p> <p>Discuss what to do if curdling occurs, ways to thicken, seasoning and spices, ways to prevent lumping, floury flavour, skin on top, cooked egg particles, etc.</p>

Learning Objectives	Notes
21.8 To develop creativity in the preparation and presentation of sauces. (CCT, IL)	<p>Plan some menus using sauces as part of various meals.</p> <p>List foods that use a white sauce as a base and different ways to use a white sauce.</p> <p>Examine the role of sauces from other food cultures or in “fine dining.” Example: European, especially French cuisine.</p> <p>Discuss how to make quick sauces using convenience products such as canned soups or yogurt as a base.</p> <p>Make a list of garnishes that may be used on sauces.</p> <p>Outline ways to adapt sauces to satisfy the health-conscious individual.</p>
21.9 To analyze the use of sauces in the food services industry.	<p>Discuss the use of sauces in restaurants in your locale. List some examples of sauces used. Talk about the importance of these as menu items. Find out how sauces are prepared in restaurants, to demonstrate, and discuss their importance in menus.</p>
21.10 To apply knowledge of sauces and their preparation. (CCT, IL)	<p>A practical evaluation may include having the students prepare a sauce. A written evaluation may include having students define terms.</p>

Module 22: Creative Baking (Optional)

Suggested time: 5-8 hours

Foundational Objectives

- To be creative when applying knowledge about nutrition to food preparation.
- To be aware of career and employment opportunities related to diet, food, and food preparation.

Common Essential Learnings Foundational Objectives

- To follow safe procedures when working with equipment and food in the kitchen. (CCT, PSVS)
- To develop an awareness of career and employment opportunities related to food and food preparation. (IL, TL)

Note: Other CELs may be emphasized.

	Learning Objectives	Notes
	Preamble.	Ideas for practical applications . Choosing from specialty cakes, pastries, desserts, or advanced yeast breads, have students prepare two or three foods. Make a gingerbread house and sell raffle tickets. Have students choose recipes for creative baking that they have never tried. Develop scorecards for different products and have taste tests.
22.1	To refine baking skills and knowledge. (COM, IL, TL)	Students will choose a topic (specialty cakes, pastries, desserts, advanced yeast breads), research information, and write a report to include some or all of the following: basics of preparation (handling, stages in production, shaping, preparation techniques, standards for evaluation), varieties, storage, uses in meal planning, and nutritional analysis. A time plan and a grocery list will be completed in preparation for the task chosen. As an appendix to the report, list some baker's tips as well as some ways to improve the nutritional value of the product. As an alternative students may write a magazine article with picture layouts or do a multimedia presentation.
22.2	To develop creativity in the presentation of the specialty baked product. (CCT)	Have students consider how the prepared food should be presented. Discuss how food is presented in a restaurant, deli, and magazine. Talk about garnishes, serving dishes, use of colour, etc. When the food item is prepared it should be attractively presented. Pictures could be taken for a portfolio.

Learning Objectives	Notes
22.3 To analyze the cost of the specialty baked food. (NUM)	Calculate the cost of supplies needed, tools, equipment, and labour to prepare the baked food product. Students may pay themselves the minimum wage for labour cost calculations. Compare with the cost of a prepared product. Summarize the conclusions in the report.
22.4 To demonstrate basic competencies of individual effort and interpersonal interaction.	For assessment and evaluation purposes, the teacher may consider criteria such as independent learning, innovation, use of resources, teamwork and leadership, responsibility, safety and sanitation, correct use of tools and equipment, and the completion of assignments.
22.5 To research careers that relate to creative baking. (COM, IL)	<p>Compile a portfolio of pictures of the finished baked products prepared by the students.</p> <p>List careers or employment opportunities that relate to this area of study. Using the newspaper or the employment centre, students may research job opportunities in this field. They should compile a list of requirements, academic and personal, that would be necessary for employment opportunities related to baking.</p> <p>Depending on the situation and community, a field trip or a job shadow in a bakery or dessert place may be arranged.</p> <p>There is potential here for a work study in a local bakery.</p>

Module 23: Entertaining with Food (Optional)

Suggested time: 5-8 hours

Foundational Objectives

- To be creative when applying knowledge about nutrition to food preparation.
- To understand better the social and cultural aspects of food for all people.

Common Essential Learnings Foundational Objectives

- To practise cooperation and teamwork when working in groups. (PSVS)
- To make necessary calculations when selecting, purchasing, preparing, and storing food. (NUM, IL)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	<p>Ideas for practical applications.</p> <p>Two to four hours may be spent in the preparation of foods.</p> <p>Students may choose what foods they wish to prepare.</p>
23.1 To examine how entertaining with food is related to one's lifestyle.	<p>Review the meaning of lifestyle.</p> <p>Sharing food with friends is a time-honoured event. For some people, it has religious or spiritual significance.</p> <p>Food and friends make an excellent combination for entertaining. Parties may be held for special occasions or they can be casual get-togethers. For more elaborate parties, planning and organizing are necessary.</p> <p>The students may select the type of entertainment events that they wish to plan and give reasons for their choices. They will plan the events to suit their lifestyles.</p>
23.2 To plan, organize, and evaluate an entertainment event. (IL, PSVS)	<p>Discuss what factors must be considered when planning and organizing an event. The students should consider the following in their plans: type of event, budget, menu, management plan, clean-up plan, and an evaluation. Students may also consider food safety concerns that may arise during handling, preparing, or presenting the food.</p> <p>Discuss etiquette that is necessary for the special event. Have students list ten good table manners. Have them demonstrate how to set an attractive table and how to serve food properly.</p> <p>Evaluate the importance of an R.S.V.P.</p>

Learning Objectives	Notes
23.3 To develop creativity in the presentation of the food. (CCT)	Consider how the prepared food should be presented. Discuss how food is presented in a restaurant, a food deli, and a magazine. Talk about garnishes, serving dishes, use of colour, etc. When the preparation of the food item is completed, it should be attractively presented. Pictures may be taken for a portfolio.
23.4 To demonstrate basic competencies of individual effort and interpersonal interaction.	For student assessment and evaluation, consider the following criteria: independent learning, innovation, use of resources, teamwork and leadership, responsibility, safety and sanitation, correct use of tools and equipment, and completion of a report.
23.5 To analyze factors that influence the nature and success of an entertainment event. (COM, CCT, IL)	<p>Discuss factors that influence the type of entertaining to be selected: occasion, lifestyle, culture, family traditions, available resources (money, skills, experience, time), number and ages of guests, and level of formality. Give examples for each factor.</p> <p>Different styles of service (buffet, family style, plate, modified English, formal, etc.) may be outlined and discussed, if time permits.</p> <p>List some examples of more nutritious foods that may be served at entertainment events. Consider foods with less fat and fewer calories.</p> <p>Outline some of the important entertainment events in your community and what factors might influence the outcome of each event.</p>

Module 24: Foods for Special Occasions (Optional)

Suggested time: 5-8 hours

Foundational Objectives

- To apply independent learning skills in the preparation of nutritious foods.
- To understand better the social and cultural aspects of food for all people.

Common Essential Learnings Foundational Objectives

- To practise cooperation and teamwork when working in groups. (COM, PSVS)
- To explore the relationships between culture and the social influences on food customs. (PSVS, CCT)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	<p>Ideas for practical applications.</p> <p>Have students choose two or three foods that their families traditionally serve and prepare them in class. Calculate the cost of the foods, do a nutritional analysis, and explain the significance of foods to the family.</p> <p>Prepare a class feast, having each class member contribute one dish that has special meaning to his/her family or culture.</p> <p>Plan and prepare a Christmas dinner for staff, students, or community.</p>
24.1 To create an awareness of the various festive occasions and the foods that are part of these occasions.	<p>Compile a list of festive occasions throughout the year and name some foods or beverages traditionally served. Mark with an asterisk the foods that are eaten in students' homes.</p> <p>Discuss the importance of holiday times and festive foods.</p> <p>Check the Internet for examples of festive foods and recipes.</p>
24.2 To examine factors that influence the selection of food for special occasions. (IL, PSVS)	<p>Have the students discuss and give examples of the factors that influence traditions and how they are celebrated. Factors include religion, culture, family traditions, lifestyle, financial resources.</p> <p>List some special occasions and the foods that are served for each.</p> <p>Have students list various questions that may be used as a guide to interview three generations (grandparents, parents, and siblings) regarding food traditions and celebrations.</p> <p>Interview a parent, relative or friend to learn about his or her cultural heritage and the role that food plays on special occasions.</p>

Learning Objectives	Notes
24.3 To identify and analyze the social situations that are associated with food. (COM, CCT)	Define the term symbolism. Discuss with students the food or food traditions associated with prestige, status, affection, friendship, hospitality, neighbourliness, comfort, and sympathy.
24.4 To plan, organize, and evaluate a holiday feast.	List the steps that would be necessary to prepare a feast to celebrate a special occasion or a special holiday. Name two special holidays or occasions and plan two menus for each. Choose one of the occasions and include recipes, a time plan, and a grocery list. Consider the foods that can be made ahead of time as part of the time plan. Evaluate the time management and the sequence of tasks in the plan.
24.5 To demonstrate basic competencies of individual effort and interpersonal interaction. (COM, IL)	For assessment and evaluation purposes, the teacher may consider criteria such as: independent learning, innovation, use of resources, teamwork and leadership, responsibility, safety and sanitation, correct use of tools and equipment, and the completion of assigned work.
24.6 To apply knowledge in planning and preparing for special events.	<p>If time permits, a class Christmas (or another holiday time) meal may be planned and prepared. Design invitations and invite guests. Tickets may be sold to cover the cost of the food. This could be a major project.</p> <p>Holiday baking may be prepared and sold to students in the school. Special holiday baking could be done in class and then shared with everyone.</p> <p>If a special event is happening in the school, students could become involved in the food preparation.</p> <p>Work study placements may be possible with a local caterer.</p>

Module 25: Food Preservation (Optional)

Suggested time: 5-8 hours

Foundational Objective

- To understand and practise safety in the preparation and storage of food.

Common Essential Learnings Foundational Objective

- To develop various skills related to selecting, preparing and storing foods. (TL, IL)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	<p>Ideas for practical application.</p> <p>Using fruit that is in season or fruit concentrates, prepare a jam or jelly. It may be helpful to have students bring containers from home.</p> <p>If time permits and there is good quality food available for "canning," one of the home canning methods could be experienced in class. For ideas, consult recipes for pickled beets, pickled carrots, zucchini salsa, freezer tomato sauce, vegetable relishes, etc.</p> <p>Make use of produce that is available locally (possibly free of charge) to preserve and to take samples home.</p> <p>Have students prepare at home and share recipes for preserving produce.</p>
25.1 To define the term food preservation and to examine the reasons for preserving food. (COM)	<p>Ask students to list ways to prevent food spoilage. Define food preservation.</p> <p>List reasons for preserving food at home in the summer and early fall. Explain the reasons for preserving food commercially.</p> <p>Explain that almost all the food we buy is preserved in some way. Consider all the items in a food store.</p> <p>Identify ways food is preserved in the students' homes today. List the reasons why many people in our society today do not do much food preservation.</p> <p>Evaluate the trend of farmers' markets and specialty shops selling "home preserves."</p> <p>Give some examples of foods that could easily be preserved at home.</p>

Learning Objectives

Notes

25.2 To understand the factors that cause food spoilage.

Discuss microorganisms (moulds, yeast, bacteria), enzymes within living cells, and the oxidation of food.

Identify the conditions that are necessary for the microorganisms, enzymes, and oxidation spoilage agents to work and how they can be controlled.

Describe the fermentation process. Give examples of foods where it is desirable to have fermentation and foods where it is undesirable.

Give examples where mould growth is desired.

Discuss the danger of bacteria growth, especially botulism, and how to prevent botulism poisoning. Include a description of spores and how they survive.

Examine different foods that have spoiled and state reasons why spoilage has occurred. Examples that may be used: mould on bread or cheese, souring of milk, overripe fruit, soft vegetables, and brown lettuce.

Leave different cut fruits and vegetables in open air for several days. Record the changes that occur and evaluate the results. Review guidelines to prevent the growth of pathogens in food.

Note: Some of the experiment ideas may be divided among the students. Students should report results to other class members.

Consult with the Biology teacher.

25.3 To identify the basic food preservation techniques. (TL)

Make a list of ways to preserve foods. These methods include the use of temperature control (high or low temperature), exclusion of air, removal of moisture, irradiation, and addition of preservatives. Discuss these methods, giving examples of foods preserved by each method. Outline advantages and disadvantages of each food preservation method. Determine why freezing is the most common method used at home. Analyze why certain methods are used for specific foods. Discuss examples of foods that are preserved by industry as well as at home.

List types of preservatives that are used in processed foods.

Discuss the process of irradiation. Look at the issues involved. Give examples of irradiated foods in Canada and in other countries.

Make a bulletin board with a title "Make It Last A Little Longer" and large letters for the word "Safely." Find or draw pictures of a refrigerator, freezer, pressure cooker, vinegar, salt, sugar, sun, packaging materials, etc.

Learning Objectives	Notes
25.4 To explore food preservation methods in the past. (COM, IL)	<p>List the methods used in the past to preserve foods such as salting, pickling, drying, and smoking.</p> <p>Discuss food preservation methods of Aboriginal peoples and early Canadian settlers.</p> <p>Research the history of one method of preserving foods. Ask students to bring old recipe books and examine them.</p>
25.5 To recognize the terminology of food preservation.	<p>Define some of the terms involved in the home canning of foods. Examples include: preserve, jam, jelly, conserve, butter, marmalade, freezer burn, blanching, hot pack, raw (cold) pack, high-acid, low-acid, boiling water bath, brine, and vacuum packed.</p> <p>Explain the reasons for sterilizing jars and using rubber rings or paraffin wax. Describe full rolling boil and the sheeting test.</p>
25.6 To discuss techniques involved in successful and safe food preservation. (TL)	<p>Design a list of techniques that are necessary for preserving food safely:</p> <ul style="list-style-type: none"> • follow tested recipes exactly • be informed; use up-to-date information • choose high quality food • use proper containers and equipment • practise cleanliness • package, label, and store properly. <p>Determine sources of reliable information for preserving foods such as the pectin companies and cookbooks. Information from the Internet may require evaluation.</p> <p>Demonstrate the proper way to use a pressure cooker or pressure canner. Explain how a pressure canner works. Discuss the importance of pressure on boiling point. Discuss the importance of the high temperature used to kill botulism spores.</p>
25.7 To understand the chemistry involved in making jam and jelly.	<p>This may be a good time to illustrate the partnership between cooking and chemistry. Jelly is an example of a gel. Explain what this means and the role of and relationship among pectin, acid, and sugar. Discuss why it is important to get the right balance.</p> <p>Explain that making jams and jellies requires the use of a preservative, namely sugar.</p> <p>Do the pectin experiment with some different samples of fruit juices. List fruits that are high in pectin and those low in pectin.</p> <p>Compare and evaluate the different types of pectin in the retail market.</p>

Learning Objectives	Notes
25.8 To examine the proper techniques involved in freezing foods.	<p>List information necessary for successful and safe freezing of foods. Include information on:</p> <ul style="list-style-type: none"> • types of containers • double-wrapping • length of storage time • temperature of freezer • proper labeling • first in first out rule • blanching • use of ascorbic acid • freezing quickly, etc. <p>Explain why some foods can be frozen successfully while some foods cannot.</p> <p>List foods that cannot be frozen successfully.</p> <p>List foods that can be frozen successfully and have students describe how to freeze them indicating the length of storage time.</p>
25.9 To examine the proper techniques involved in home canning.	<p>Discuss the different processing methods that are used for home canning: pickling, the pressure canner, boiling water bath, steamer, hot pack, and raw pack.</p> <p>Identify guidelines that are important for successful home canning. Factors include using proper temperatures, sterilizing equipment, using proper containers, and sealing jars.</p> <p>Provide a list of different foods that can be preserved. Have the students, in pairs, explain how each example may be preserved. Students may give reasons for their decisions.</p>
25.10 To discuss the dehydration of foods and the equipment necessary to do it in the home. (TL)	<p>Dehydration of food is a popular food trend.</p> <p>Make a list of examples of dried foods that we buy.</p> <p>Examine the way in which drying preserves food, the advantages of dried food, and what types of foods can be dried.</p> <p>Explain the different methods for drying food. Suggest foods that can easily be dried at home. Try drying some foods at home or in the lab (e.g., microwave fruit leather).</p> <p>Invite a retailer who sells food dehydrators to explain how a food dehydrator works.</p>

Learning Objectives	Notes
25.11 To identify the proper storage conditions that are necessary for preserved foods. (TL)	<p>This is a good time to review storage conditions for the many different kinds of food products. Make some generalizations about the safe storage of dried, frozen, canned, and perishable foods (conditions necessary and storage time).</p> <p>Visit a grocery store to chart how, where, and why milk, fresh fruits, vegetables, and meat are stored.</p> <p>Identify the signs of food spoilage to look for when shopping for foods and at home.</p> <p>Discuss the danger in tasting home canned low-acid type foods and what to do to make them safe.</p> <p>Create some problem scenarios.</p> <ul style="list-style-type: none"> • Explain what to do with your freezer if the electrical power goes off. • A neighbour gives you a gift of home canned fish or beans. • What do you do if you buy canned food with bulging ends? <p>Have the students come up with some problems of their own.</p>
25.12 To explore ways for using home preserved foods in meal planning.	<p>List some home preserved foods and commercially preserved foods. Design menus using these preserved foods. Stress originality.</p>
25.13 To create an awareness of the Saskatchewan Food Industry and its involvement specifically in the area of preserving Saskatchewan's regional foods. (COM, TL)	<p>Research what types of foods are grown and preserved here in Saskatchewan. Find out about Saskatchewan's food industry and where information about it can be found. One source is the Saskatchewan Food Growers' Association. Invite a guest speaker from the Saskatchewan Food Growers' Association.</p> <p>Is there an opportunity here for a work study?</p>
25.14 To demonstrate knowledge of food preservation.	<p>The teacher may give students an exam and evaluate their labs and classroom activities.</p>

Module 26: Food Additives (Core)

Suggested time: 4-5 hours

Foundational Objective

- To understand and practise safety in the selection, preparation, and storage of food.

Common Essential Learnings Foundational Objective

- To gain the knowledge and develop the skills required to make appropriate food choices and to become discriminating consumers. (CCT, IL)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
26.1 To develop and explain the meaning of the term food additive.	Do a Label Game Activity. Students will write out the list of ingredients from ten food packages found at home. Other students in the class will try to identify the food from the list of ingredients. Analyze the information that must be on food labels. Define additive as a “substance added to a food product for a specific purpose.”
26.2 To recognize that the use of additives in foods has a long history.	Explain that certain substances have been used in foods to keep food longer or to improve the flavour. Using salt and spices to make the flavour more appealing and to hide the flavour of overripe or spoiled foods is a long-time practice. Expand on preservation methods used by early settlers and Aboriginal peoples mentioned in the previous module.

Learning Objectives

Notes

26.3 To understand the role of food additives in commercial foods. (COM, CCT)

According to regulation, food additives are used for one or more of these functions:

- maintaining nutritional quality of food
- improving storage quality
- making the food more attractive, but not in a deceptive manner
- aiding in food processing.

Give examples of food additives used for each of the functions and cite examples of foods that contain them.

Design a crossword puzzle using various food additives and/or their functions.

List some of the more commonly used food additives and have students identify their functions.

Discuss shelf or storage life and how improved transportation has given us a wider variety of foods. Make a list of foods we have available because of food additives. Evaluate the importance of these in the daily diet.

Discuss whether vending machines could operate without the use of food additives.

Evaluate the foods in vending machines by looking at the food additives in the list of ingredients. Identify functions.

Using three or four convenience foods, explain the use of each of the ingredients. A Dictionary of Food Additives may be helpful or use information from Health Canada.

Make a display or poster showing a food product that contains five or more food additives. Indicate the purpose of each additive and the source of the additive, where possible.

26.4 To create an awareness of the role of the Health and Protection Branch of Health and Welfare Canada.

Examine the role of the Health Canada and the Health Protection Branch in monitoring, regulating, controlling, and protecting the safety of our foods and drugs. Point out that it makes decisions about food additives.

Collect newspaper articles of current food-related issues and examine the involvement of the Health Protection Branch.

Check the Internet for information.

Learning Objectives	Notes
26.5 To create an awareness of the debate regarding the use of food additives. (CCT)	<p>Discuss the advantages and disadvantages of using food additives. Consider why some people perceive them as being harmful.</p> <p>Explain the difference between organic, inorganic, and natural foods.</p> <p>The Organic Food Growers' Association in Saskatchewan is a possible resource. Invite an organic grower to discuss regulations and benefits.</p> <p>Identify where people can find accurate information on controversial food issues. Discuss how, as individuals, we can control the food additives we consume. Make a list of foods that do not contain food additives.</p>
26.6 To examine the food additives that cause allergic reactions for some people.	<p>List the food additives that can cause allergic reactions. Examples include sulfites and monosodium glutamate (MSG). Examine the symptoms of an allergic reaction and what to do if an individual has an allergic reaction. Discuss why these particular additives are used and identify foods that contain them. Determine what people need to do to protect their health and safety.</p> <p>Resources: journals such as Nutrition Today, Allergy Foundation of Canada, Allergy Information Association.</p>
26.7 To explain the meaning of the acronym GRAS and to examine the additives that are part of this list.	<p>Understand that GRAS is an acronym for Generally Recognized as Safe and includes such substances as salt, sugar, and spices. Explain that additives on the GRAS list may be used by a manufacturer without special permission. All other additives are known as regulated food additives and permission for use must be obtained from the Health Protection Branch of Health Canada.</p>
26.8 To find information about the additives used as sugar or fat substitutes. (COM)	<p>Locate articles from the Internet or the periodical index in a library to gather information about sugar or fat substitutes. Summarize findings. Express opinions about the particular product.</p> <p>Make a list of foods where sugar or fat substitutes are used. Suggest possible consumers for these products.</p>
26.9 To be a knowledgeable and critical consumer. (IL, CCT)	<p>Write a one page essay expressing a viewpoint on the use of food additives.</p> <p>Discuss the statement: Many food products exist because of food additives.</p> <p>Research a topic related to food additives. Examples: safety of irradiated foods, use of antibiotics in food animals, hyperactivity in children and food additives, the history of artificial sweeteners, Olestra, Ginseng or another popular health promoting products. Express opinions regarding the research information.</p>

Module 27: Current Food Issues (Core)

Suggested time: 5-8 hours

Foundational Objectives

- To develop the desire and ability to access knowledge about issues and obtain factual information before forming opinions about food-related issues.
- To be aware of and practise environmental protection through conservation and recycling.

Common Essential Learnings Foundational Objectives

- To explore present technology and its relationship to the world's food supply. (TL)
- To explore the relationships between culture and the social and geographic influences on food customs. (PSVS)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
Preamble.	<p>Ideas for practical application.</p> <p>Prepare foods with lentils, legumes, rice, or grains. Identify countries where these foods are grown and processed.</p> <p>Prepare foods of choice and use foods from a variety of countries. Check labels to discover where the food was packaged.</p> <p>Have students, working in groups, plan and prepare a meal representing a specific country.</p> <p>Plan ways to make staple foods more nutritious. Have students research and present information about each of the topics in this module.</p>
27.1 To develop a global perspective regarding food production and consumption. (IL)	<p>Define the term global perspective. Discuss where the food we eat comes from, who produces it, and how is it produced. List some foods commonly eaten and the countries that produce them.</p> <p>Keep track of foods eaten in one day. Discover where the foods are produced/grown.</p> <p>Discuss how interrelated the world is in terms of food production.</p> <p>Discuss what individual responsibilities we have when making food choices.</p> <p>Have students discuss their feelings and ideas about why they choose to eat the foods they do. Consider if foods are chosen for flavour, variety, health, nutrition, etc.</p>

Learning Objectives	Notes
27.3 To understand that diet depends, in part, on where a person lives. (COM)	<p>Compare nutritional adequacy of diets in specific countries around the world. In particular, note amount of protein, vitamins, minerals and fat consumed.</p> <p>Discuss sources of protein in some of the developing nations.</p> <p>Find a typical diet from a developing country and analyze it in terms of Canada's Food Guide.</p> <p>Using a world map and pictures of available food, identify basic foods from different countries.</p> <p>Most hunger deaths are due to nutrition-related sickness and disease. Identify deficiency illness common in developing countries.</p>
27.4 To examine some myths regarding world hunger. (CCT)	<p>There is enough food in the world to meet universal nutritional needs. Determine what some of the complicating factors are. One factor is that food resources are not evenly distributed. About 25% of the people consume 70% of the food. Who owns the land is another issue.</p> <p>Observe World Food Day in October.</p>
27.5 To understand the meaning of food security.	<p>Food security has always been an issue for many people in the world. It is a relatively new concept discussed in Canada. "Everyone has a right to food security...everyone having access to enough safe, nutritious and affordable food at all times for an active, healthy lifestyle regardless of income." Discuss the implications of this statement for Canadians in general and for people in your community.</p> <p>Look at poverty and hunger in Saskatchewan communities. Invite resource people from the community to talk about the issues.</p>
27.6 To understand the links between agriculture and the consumer. (TL)	<p>Discuss agriculture in Saskatchewan and its links with the consumer.</p> <p>List foods and food products that originate in Saskatchewan. Discuss the importance of these foods in your daily diet. Decide if these foods can be identified as staple foods. List the foods that are exported.</p> <p>Discuss how agricultural issues in Saskatchewan or Canada affect everyone. Using current issues of <i>The Western Producer</i>, <i>GrainNews</i>, and the <i>Country Guide</i> have students scan headlines and editorials to identify some issues facing agriculture. Review "Agriculture and You" published by the Canadian Western Agribition.</p> <p>Recognize how world farming issues are Canadian farming issues. Invite guest speakers or take an Agribition tour, if in or near Regina.</p> <p>Consult the <i>Agriculture Studies 30 Curriculum Guidelines</i> and/or teacher.</p>

Learning Objectives	Notes
27.7 To understand the relationship between biotechnology in agriculture and your food. (CCT, TL)	<p>Define the term biotechnology. Be aware of how often it is discussed today.</p> <p>Discuss the issues and benefits of biotechnology in agriculture and for the food you eat.</p> <p>Check the Internet for agri-food information regarding biotechnology. There is a lot of information available and considerable controversy regarding this current agriculture issue.</p>
27.8 To demonstrate how the five Rs may be applied to daily lives. (PSVS)	<p>Identify the 5 Rs. The 5 Rs are reduce, reuse, recycle, revalue, and refuse. Discuss ways in which individuals may act locally for each of the Rs.</p> <p>Prepare a bulletin board with ideas for the 5 Rs.</p> <p>Prepare environmentally friendly cleaning products for use at home and in the classroom.</p> <p>Put the 5 Rs into action in the classroom.</p>
27.9 To provide opportunities for taking action to be responsible world citizens. (PSVS, IL)	<p>Understand that taking action to express and uphold values is important. Research the issues well first to get the facts so that all consequences for people involved are considered. Keep in mind that some actions may have harmful consequences and that some solutions may not solve the problem for the people involved.</p> <p>Invite guest speakers who are involved in national and international issues. Guests may include people working for NGOs (non-governmental organizations), SCIC, CUSO, CIDA, government agencies, or a food company. Ask about their work, research, organizational policies, etc.</p> <p>Discuss and explore ways to become involved locally for global results.</p>
27.10 To demonstrate understanding of concepts discussed in this module.	<p>Refer to news clippings on current food issues, nutrition, biotechnology, agriculture, etc. Present the summary of one or two of them in class.</p> <p>Include summaries of current food issues in school newsletters.</p> <p>Research and report on a current global issue. Examples are: agribusiness in developing countries, the use of chemicals and fertilizers in farming practices, the role of women and children in subsistence farming, ways to reduce waste in consumer goods, issues of biotechnology, or any of the issues surrounding the terminology at the beginning of the module. Deal with the issues through role play, debate, panel discussion, etc.</p>

Module 28: Exploring Careers (Optional)

Suggested time: 5-6 hours

Foundational Objectives

- To identify and evaluate personal qualities related to career choices.
- To be aware of career and employment opportunities related to diet, food, and food preparation.

Common Essential Learnings Foundational Objectives

- To develop various technological skills related to accessing information. (TL, IL)
- To develop an awareness of career and employment opportunities related to diet, food, and food preparation. (PSVS)

Note: Other CELs may be emphasized.

Learning Objectives	Notes
28.1 To examine how to prepare now for a successful career. (CCT)	<p>Ideas for practical application.</p> <p>As a class list basic skills that are necessary now for success in any field of employment. Some ideas are: be responsible, be willing to learn, have basic computer and math skills, practice teamwork, communicate effectively, etc.</p> <p>Have students discuss how these skills and qualities may be developed and applied in their daily lives.</p>
28.2 To discover what personal skills, abilities, and interests can be applied to careers in food and nutrition. (PSVS)	List all personal attributes that would be useful and/or necessary if considering a career in this area. Ideas include: working well with people, having an interest in food, being creative, working well with your hands, being a leader, etc.
28.3 To explore careers in food and nutrition.	<p>Brainstorm a list of careers in the area of food and nutrition: food production and marketing, food technology, food service, nutrition, research, etc. Give as many examples for each as possible. Students may also consider working for government departments or being an entrepreneur.</p> <p>Define entry level and list requirements for each.</p> <p>If the textbook <i>Food for Life</i> is available, the following are some suggested activities:</p> <ul style="list-style-type: none">• Review some of the career sketches. Students may select those that interest them.• Make a list of all career sketches and categorize into the areas listed.• Divide the class into groups to examine the career sketches from various chapters. Report back to the class. <p>Do a bulletin board of career ideas. Have students help with ideas, pictures, and drawings.</p>

Learning Objectives**Notes**

28.4 To identify how to choose a career.

List some careers to explore in the food industry. Pick a career of interest and research it. Draw up a list of areas to examine such as education required, working conditions, advantages and disadvantages, availability of employment, wages, personal qualifications.

Develop a list of questions to ask about the career or job. Interview an employer in that job/career. Report back to class.

Participate in a job shadow.

Invite guest speakers.

Access the Saskatchewan Education website and visit "Careers called Success."

Check with the guidance counselor in your school, scan post-secondary calendars, and search the Internet for information regarding continuing education and careers.

28.5 To demonstrate understanding of concepts and information. (COM, CCT, IL)

Evaluation should include that of completed class assignments and classroom activities.

Module 29: Work Study Preparation and Follow-up Activities (Optional)

Note: Module 29 Work Study Preparation and Follow-up Activities is 5-10 hours. If students have participated in a work study module in a previous Practical and Applied Arts course, a review of this module is still required but less time is needed.

Note: look for opportunities to introduce and reinforce ideas about Labour Standards, Occupational Health and Safety, and Workplace Hazardous Materials Information System (WHMIS). Use the *Work Experience Education Guidelines* (Saskatchewan Education 1989), the Saskatchewan Labour website, and other recommended resources.

Suggested time: 5-10 hours

Foundational Objectives

- To identify and evaluate personal qualities related to career choices.
- To be aware of career and employment opportunities related to diet, food, and food preparation.

Common Essential Learnings Foundational Objectives

- To practise cooperation and teamwork when working in groups. (PSVS, IL)

Learning Objectives	Notes
29.1 To create an awareness of the expectations of each of the partners in the work study component.	<p>In order to establish a successful working relationship with all of the partners involved in the workplace, it is important to define the expectations of each partner.</p> <p>Refer to the Guidelines for Work Study, a component of the <i>Practical and Applied Arts Handbook</i> for expectations of business, the student, the teacher monitor/supervisor, and the school.</p>
29.2 To determine factors that would affect the student contribution in the workplace. (CCT)	<p>The students may list what they can bring to the workplace and how each may impact on their job:</p> <ul style="list-style-type: none">• school subjects• past experiences• self-concept and personality• needs, interests, and values• knowledge, skills, and attitudes• career goals and plan <p>Ask students to do a self-assessment of skills using the items in the above list as a guide. They are to explain how these attributes and experiences would be valuable to the food service industry. Try to incorporate the value of communication and teamwork in the discussion.</p>

Learning Objectives

Notes

29.4 To develop a résumé and cover letter that can be forwarded to a potential employer. (CCT, COM)

The student will develop a résumé and cover letter using the correct format. The résumé and cover letter may be used as an introduction of the student to the employer in a workplace site prior to an interview with the student.

The résumé: It is suggested that teachers work with other staff members to ensure résumé and cover letter preparation is taught. The résumé and cover letter is currently included in *English Language Arts 20 and 30A*, *Information Processing*, and *Work Experience Education 20* courses.

Students should develop the résumé on a computer disk and update the résumé during the course, as references are accumulated.

If students have already completed the résumé and cover letter in another course, the teacher may do a review and encourage students to update their résumés. Students shall submit résumés for teacher approval prior to going to the workplace.

29.5 To determine student guidelines in preparation for an interview.

Using class or group discussions, students may list guidelines for an interview. The instructor may add missing items to the list.

Outline and describe the three stages of an interview. Point out to the students in what stage each of their guidelines, previously discussed, will be used.

The **greeting** involves an introduction between the student and employer. Discuss or demonstrate how this should be done.

The **exchange** is where the employer asks a series of questions and engages in a conversation with the student about information on the résumé and other matters relating to the job placement.

The **parting** brings the interview to a close. It can be just as important as the greeting. Explain how this can be done.

Provide the students with a list of questions frequently asked by employers or ask students to list and role play the stages of the interview.

29.6 To discuss the post interview. (COM, PSVS, IL, CCT)

After the student has completed the interview with the employer, do a follow-up activity. Review the interview with the student using the three stages as points for discussion.

If more than one placement has been made in the course, follow-up activities must be completed after each placement.

Learning Objectives

Notes

- 29.7 To develop procedural guidelines for the worksite. (COM)
- Discuss the following prior to placement:
- a) transportation
 - b) absence and tardiness
 - c) problems arising on the worksite
 - d) teacher-student-supervisor relationships
 - e) evaluation criteria
 - f) expected hours of work.
- 29.8 To analyze feedback from the work placement. (CCT)
- Discuss with the students how the above issues were handled during placement.
- Ask students to respond to the points listed below (in an assignment or in a verbal interview):
- a) expected hours of work
 - b) dress code
 - c) job description
 - d) school expectations
 - e) employer expectations
 - f) role of the supervisor
 - g) goal definition.
- Students' feedback about work placement should include: where they were placed, type of business, duties, most rewarding experience, most difficult situation, and how it was handled. It is recommended that each student send a thank you note or card to the employer upon the completion of each work placement.
- Using case studies, have students role play problems that arise in a workplace setting. Discuss possible solutions.
- 29.9 To relate feedback from the work placement. (CCT)
- Students provide feedback about work placement including: where they were placed, type of business, duties, most rewarding experience, most difficult situation and how you handled it. It is recommended that each student send a thank you note or card to the employer upon the completion of each work placement.

Module 30: Work Study (Optional)

Suggested time: 25-50 hours

Foundational Objectives

- To be aware of the careers and opportunities in the field of food studies that exist in Saskatchewan and other provinces.
- To integrate classroom learning with work-related learning.
- To increase awareness of employability skills as they relate to the work environment.

Common Essential Learnings Foundational Objectives

- To engage in a work study experience and develop entry level workplace skills that may lead to sustainable employment. (PSVS)
- To expand career research beyond the classroom setting. (IL)

For more information about implementing work study in schools see the Work Study Guidelines for the Practical and Applied Arts included in the *Practical and Applied Arts Handbook* (Draft Saskatchewan Education 1999). Teachers need to use or design appropriate learning objectives for this module; for instance, to demonstrate ability to follow a “Training Plan”. The training plan for the student should be designed to relate to the objectives of the course modules, in cooperation with the workplace mentor.

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Appendix A: Recordkeeping Chart

Food Studies 10

Student Name _____

Student Number _____

Module Code	Module	Date	Teacher Initial
FOOD01	Module 1: Kitchen Basics C		
FOOD02	Module 2: Kitchen and Food Safety C		
FOOD03	Module 3: Baking Basics C		
FOOD04	Module 4: Food and Health C		
FOOD05	Module 5: Grains C		
FOOD06	Module 6: Vegetables and Fruits C		
FOOD07	Module 7: Milk and Dairy Products C		
FOOD08	Module 8: Eggs C		
FOOD09	Module 9: Snacks C		
FOOD12	Module 12: Cakes and Pastries O		
FOOD13	Module 13: Baking with Yeast O		
THER05	Module 5: Food Safety and Sanitation O (from Tourism, Hospitality, and Entrepreneurship A30, B30 Curriculum Guidelines)		

C = core module

O = optional module

* = refers to modules required for post secondary articulation/recognition

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Food Studies 30

Student Name _____

Student Number _____

Module Code	Module	Date	Teacher Initial
FOOD10	Module 10: Canada's Food Guide and Beyond C		
FOOD11	Module 11: Food Through the Life Cycle O		
FOOD14	Module 14: Keep it Cold C		
FOOD15	Module 15: Protein Foods C		
FOOD16	Module 16: Make Mine Quick and Healthy O		
FOOD17	Module 17: The Science of Nutrition C		
FOOD18	Module 18: The Canadian Food Mosaic C		
FOOD19	Module 19: International Cuisine O		
FOOD20	Module 20: The World of Soups O		
FOOD21	Module 21: Sauces O		
FOOD22	Module 22: Creative Baking O		
FOOD23	Module 23: Entertaining with Food O		
FOOD24	Module 24: Foods for Special Occasions O		
FOOD25	Module 25: Food Preservation O		
FOOD26	Module 26: Food Additives C		
FOOD27	Module 27: Current Food Issues C		
FOOD28	Module 28: Exploring Careers C		
FOOD29	Module 29: Work Study Preparation and Follow-up Activities O		
FOOD30	Module 30: Work Study O		

C = core module

O = optional module

* = refers to modules required for post secondary articulation/recognition

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