Developed as part of the Marine Corps Institute (MCI) correspondence training program, this course on salads, sandwiches, and desserts is designed to provide Marine food service personnel with a general background in the proper techniques for the preparation of these items. Introductory materials include specific information for MCI students and a study guide (guidelines to complete the course). The 11-hour course consists of three chapters or lessons. Each unit contains a text and a lesson sheet that details the study assignment and sets forth the lesson objective. A written assignment is also provided. Topics covered in the lessons include salads, salad dressings, and gelatins; sandwiches; and desserts. (YLB)
1. ORIGIN

MCI course 33.20, Salads, Sandwiches, and Desserts, has been prepared by the Marine Corps Institute.

2. APPLICABILITY

This course is for instructional purposes only.

J. M. D. HOLLADAY
Lieutenant Colonel, U. S. Marine Corps
Deputy Director
Welcome to the Marine Corps Institute training program. Your interest in self-improvement and increased professional competence is noteworthy.

Information is provided below to assist you in completing the course. Please read this guidance before proceeding with your studies.

1. MATERIALS

Check your course materials. You should have all the materials listed in the "Course Introduction." In addition you should have enough envelopes to mail all lessons back to MCI unless your lesson answer sheets are of the self-mailing type. If your answer sheets are of the preprinted type, check to see that your name, rank, and social security number are correct. Check closely, your MCI records are kept on a computer and any discrepancy in the above information may cause your subsequent activity to go unrecorded. You may correct the information directly on the answer sheet. If you find a discrepancy and correct it, ensure that you correct this information on all your answer sheets. If you did not receive all your materials, use the enclosed Student Request/Inquiry (MCIR14) to notify MCI of this fact and what you require. (Note: The MCIR14 may be mailed to MCI without envelope or stamp).

2. LESSON SUBMISSION

Submit your lessons on the answer sheets provided. Complete all blocks and follow directions on the answer sheet for mailing. In courses in which the work is submitted on blank paper or printed forms, identify each sheet in the following manner:

DOE, John J. Sgt 332-11-9999
44.1, Procedures of Legal Administration
Lesson 3
Military or office address
(RUC number, if available)

Otherwise, your answer sheet may be delayed or lost. If you have to interrupt your studies for any reason, contact your training NCO who will request a single six month extension of time, which is added to the original Course Completion Deadline (CCD) date. If you are not attached to a Marine Corps unit you may make this request by submitting the enclosed MCI-R14, or
by calling the Registrar Division on AUTOVON 288-4175/2299/6293 or commercial (202) 433-5174/2299/2691. You are allowed one year from the date of enrollment to complete this course. Your commanding officer is notified of your status through the monthly Unit Activity Report. In the event of difficulty, contact your training NCO or MCI immediately.

3. ENROLLMENT/MAIL TIME DELAY

Presented below are the Enrollment/Mail Time delays. Column I represents the First Class mail time from MCI to the designated geographical location or from your location to MCI. All correspondence is sent via First Class mail. Course materials are sent via Special Fourth Class Book Rate.) You should add five working days for our processing. Example: Eastern U.S. - 3 days mailing time to MCI + 5 working days MCI processing + 3 days mailing time back to the unit = 11 days. Column II represents Regular Mail from the time when the enrollment application is mailed until the unit receives the course. Example: Eastern U.S. - Enrollment application 3 days mailing time to MCI + 5 working days MCI processing + 6 days mailing time to the unit = 14 days.

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<td>FPO SEATTLE</td>
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Note: These times represent the service standard. The actual time may vary. If the delay you are experiencing is excessive, please contact the MCI Registrar by phone, message, or letter, so that we may take action.

4. GRADING SYSTEM

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<td>BELOW 70</td>
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You will receive a percentage grade for your lessons and for the final examination, along with a reference sheet (MCI R69), indicating the questions incorrectly answered. All lessons must be COMPLETED AND PASSED before you will be administered an exam. The grade attained on the final exam is your course grade.

5. FINAL EXAMINATION

ACTIVE DUTY PERSONNEL: When you submit your LAST LESSON, your exam will be mailed automatically to your commanding officer. The administration of MCI final examinations must be supervised by a commissioned or warrant officer, or a staff NCO (equivalent or higher), and it must be validated by the administrator.

INACTIVE DUTY OR CIVILIAN EMPLOYEE: The exam may be supervised by a director of civilian personnel, civilian training officer, clergyman, or local school official.

6. COMPLETION CERTIFICATE

The completion certificate will be mailed to your commanding officer. For non-Marines, it is mailed to your supervisor or directly to you, as appropriate.

7. RESERVE RETIREMENT CREDITS

Reserve retirement credits are awarded to inactive duty personnel only. Credits awarded for each course are listed in the "Course Introduction" and are only awarded upon successful completion of the course. Reserve retirement credits are not awarded for MCI study performed during drill periods if credits are also awarded for drill attendance.

8. DISENROLLMENT

Only your commanding officer can request your disenrollment from an MCI course since this action will adversely affect the unit's completion rate.

9. ASSISTANCE

Consult your training NCO in the event of course content problems. If he is unable to assist you, MCI is ready to help you whenever you need it. Please use the enclosed Student Course Content Assistance Request (TAE-1) or call the Autovon telephone number listed below for the appropriate course writer section.

PERSONNEL/ADMINISTRATION/LOGISTICS/CORRECTIONS 288-3259
COMMUNICATIONS/ELECTRONICS/AVIATION/NBC 288-3604
INFANTRY 288-3611
ENGINEER/MOTOR TRANSPORT/UTILITIES 288-2275
SUPPLY/FOOD SERVICES/FISCAL 288-2285
TANKS/ARTILLERY/SMALL ARMS REPAIR/AAV 288-2290

For administrative problems call the MCI Hotline: 288-4175

For commercial phone lines, use area code 202 and prefix 433 instead of 288.
10. STUDY HINTS

By enrolling in this course, you have shown a desire to improve the skills you need for effective job performance, and MCI has provided materials to help you achieve your goal. Now all you need is to develop your own method for using these materials to best advantage.

The following guidelines present a four-part approach to completing your MCI course successfully:

1. Make a "reconnaissance" of your materials;
2. Plan your study time and choose a good study environment;
3. Study thoroughly and systematically;
4. Prepare for the final exam.

5. MAKE A "RECONNAISSANCE" OF YOUR MATERIALS

Begin with a look at the course Introduction page. Read the COURSE INTRODUCTION to get the "big picture" of the course. Then read the MATERIALS section near the bottom of the page to find out which text(s) and study aids you should have received with the course. If any of the listed materials are missing, see paragraph 1 of this pamphlet to find out how to get them. If you have everything that is listed, you are ready to "reconnoiter" your MCI course.

Read through the table(s) of contents of your text(s). Note the various subjects covered in the course and the order in which they are taught. Look through the text(s) and look at the illustrations. Read a few lesson questions to get an idea of the types that are asked. If MCI provides other study aids, such as a slide rule or a plotting board, familiarize yourself with them. Now, get down to specifics!

6. PLAN YOUR STUDY TIME AND CHOOSE A GOOD STUDY ENVIRONMENT

From looking over the course materials, you should have some idea of how much study you will need to complete this course, But "some idea" is not enough. You need to work up a personal study plan; the following steps should give you some help.

1) Get a calendar and mark those days of the week when you have time free for study. Two study periods per week, each lasting 1 to 3 hours, are suggested for completing the minimum two lessons required each month by MCI. Of course, work and other schedules are not the same for everyone. The important thing is that you schedule a regular time for study on the same days of each week.

2) Read the course introduction page again. The section marked ORDER OF STUDIES tells you the number of lessons in the course and the approximate number of study hours you will need to complete each lesson. Plug these study hours into your schedule. For example, if you set aside two 3-hour study periods each week and the ORDER OF STUDIES estimates 2 study hours for your first lesson, you could easily schedule and complete the first lesson in one study period. On your calendar you would mark "Lesson 1" on the appropriate day. Suppose that the second lesson of your course requires 3 study hours. In this case, you would divide the lesson in half and work on each half during a separate study period. You would mark your calendar accordingly. Indicate on your calendar exactly when you plan to work on each lesson for the entire course. Do not forget to schedule one or two study periods to prepare for the final exam.
Stick to your schedule.

Besides planning your study time, you should also choose a study environment that is right for you. Most people need a quiet place for study, like a library or a reading lounge; other people study better where there is background music; still others prefer to study outdoors. You must choose your study environment carefully so that it fits your individual needs.

c. STUDY THOROUGHLY AND SYSTEMATICALLY

Armed with a workable schedule and situated in a good study environment, you are now ready to attack your course, lesson by lesson. You will find your first study assignment and your first written assignment on page 1 of lesson 1. On this page you will also find the lesson objectives, a statement of what you should be able to do after completing the assignments.

DO NOT begin by reading the lesson questions and flipping through the text for answers. If you do so, you will prepare to fail, not pass the final exam. Instead, proceed as follows:

1. Read the study assignments carefully. Make notes on the ideas you feel are important and mark any portion you have difficulty understanding.

2. Reread the portions you marked in step 1. When you have mastered the study assignment, start to work on the written assignment.

3. Read each question in the written assignment carefully.

4. Answer all questions that you are sure of and leave the others blank.

5. Reread the portions of the study assignment that explain the items you left blank.

6. Complete the written assignment and send it to MCI for grading.

7. Go on to the next lesson.

Follow the same procedure for each lesson of the course. If you have problems with the text or lesson questions that you cannot solve on your own, ask your section OIC or NCOIC for help. If he cannot aid you, request assistance from MCI on the MCI Student Course Content Assistance Request included in this pamphlet.

When you have passed the final lesson, the final exam will be sent to your training officer or NCO.

4. PREPARE FOR THE FINAL EXAM

How do you prepare for the final exam? Follow these three steps:

1. Review each lesson objective as a summary of what was taught in the course.

2. Reread all portions of the text that you found particularly difficult.

3. Review all the lesson questions, paying special attention to those you missed the first time around.

If you follow these simple steps, you should do well on the final. GOOD LUCK!
SALADS, SANDWICHES, AND DESSERTS

Course Introduction

SALADS, SANDWICHES, AND DESSERTS is designed to provide you with a general background in the proper techniques for the preparation of salads, salad dressings, sandwiches, and desserts. Although the actual skills must be gained by practical experience, the course will instruct you in the fundamentals of salad and salad dressing combinations and the use of various vegetables, meats, fish, poultry, paste and dairy products, eggs, and gelatins in the preparation of salads. The storage of salads, salad dressings, and sandwiches will be covered including the requirements for preparing and dispensing box lunch sandwiches and appetizers. Finally, it covers the preparation of the types of desserts used in Marine Corps dining facilities.

ORDER OF STUDIES

<table>
<thead>
<tr>
<th>Lesson Number</th>
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<td>Desserts</td>
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EXAMINATION: Supervised final examination, without textbooks or notes; time limit, 3 hours.

MATERIALS: MCI 33, 20, Salads, Sandwiches, and Desserts,

Lesson sheets and answer sheets.

RETURN OF MATERIALS: Students who successfully complete this course are permitted to keep the course materials.

Students disenrolled for inactivity or at the request of their commanding officer will return all course materials.

* * *
PREFACE

SALADS, SANDWICHES, AND DESSERTS has been designed to provide Marine food service personnel, MOS 3371, private through sergeant, with a source of study material on the types, techniques of preparation, and importance of salads, sandwiches, and desserts. It covers proper salad and salad dressing combinations and the use of various vegetables, meats, fish, poultry, pasta and dairy products, eggs, and gelatin in the preparation of salads. It will teach the basic ingredients, storage sanitary precautions, and preparation procedures for sandwiches including the preparation and dispensing of box lunch sandwiches and appetizers. Finally, the course covers the preparation of the types of desserts used in Marine Corps dining facilities.

SOURCE MATERIALS

MCO P10110.16B, Armed Forces Recipe Service, Sep 1972 (w/changes to 1 Sep 1976)
NavSup Publication 421, Food Service Operations, Jan 1971 (w/changes to 3 Apr 1972)
Food Service Course, Student Workbook, MCSS, CLNC
NavMed P5010, Manual of Naval Preventive Medicine, Apr 1965 (w/changes to Apr 1973)
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Chapter 1. SALADS. SALAD DRESSINGS. AND GELATINS

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Chapter 1

SALADS, SALAD DRESSING, AND GELATIN

Section I. SALADS

1-1. INTRODUCTION

The increasing use of speed lines in most dining facilities has given a more important role to salads. Since the user of the serving line is free to select or reject foods, salads must be attractively prepared to entice him. When a user selects an attractive salad, he is selecting an item which is made of fresh vegetables and fruits. These foods contribute important vitamins and minerals to his nutrition. A thorough knowledge of the types of salads, the ingredients used in salads, and the preparation of these ingredients is essential to the success of your salad section.

1-2. CLASSES OF SALADS

Although recipe directions are essential to a well managed dining facility operation, salads are one item on the menu where a little imagination and creativity on the part of the cook will contribute immensely to the quality and eye appeal of the meal. Variations in salads and garnishes can supply an endless variety of salads and salad combinations which will add freshness to what might otherwise be a tired menu. Salads listed in the Armed Forces Recipe Service (MCO P10110.16) are grouped into seven general classes. In addition, some salads have special ingredients which put them into distinctive groups according to their major ingredients. Following each class are some examples of salads in that class.

a. Fruit salads.
   - Banana
   - Fruit salad
   - Grapfruit and orange
   - Mixed fruit

b. Fruit-vegetable combination salads.
   - Apple, celery, and pineapple
   - Cabbage, apple, and celery
   - Apple, celery, and date
   - Waldorf

c. Cheese-fruit or cheese-vegetable combination salads.
   - Cottage cheese salad
   - Cottage cheese and peach
   - Cottage cheese and tomato
   - Garden cottage cheese
   - Pineapple cheese

D. Fish and seafood salads.
   - Salmon
   - Tuna
   - Shrimp

E. Vegetable salads.
   - Cabbage and sweet pepper
   - Carrot
   - Carrot combination
   - Chef's salad
   - Cole slaw
   - Cucumber and onion
   - Garden salad
   - Kidney bean
   - Lettuce
   - Lettuce and tomato
   - Macaroni
   - Pickled beets and onion
   - Pickled green bean
   - Potato
   - Hot potato salad
   - Spring salad
   - Three bean
   - Tossed cucumber and tomato
   - Tossed green
   - Tossed vegetable
   - Vegetable
f. *Meat or poultry salads.*

- Chicken
- Turkey

- Ham

1.3. **VEGETABLES FOR SALADS**

The list of salad making ingredients is quite long but the most commonly used item is salad greens. There are about twenty products on the commercial market considered as salad greens in addition to the various varieties of lettuce. Following is a discussion of salad greens and other salad ingredients used in the preparation of salad.

a. Salad greens. An attractive salad begins with clean, cold, crisp salad greens. Fresh young greens should be used. Greens have a tendency to wilt from day to day even when refrigerated. All greens used for salads are considered to be fragile and must be properly cared for at all stages of preparation. As a cook you should become acquainted with available salad greens so that you may combine the different colors and tastes effectively.

(1) **Lettuce.** Lettuce is the most important of all the greens used in salads. It is used in greater quantities and more often than any other salad green. There are various types, each of which has its own distinct flavor. The color may vary from a pale, almost white green to a deep green. Iceberg, Boston, or Romaine lettuce are the types which can be procured by dining facilities.

(a) **Iceberg lettuce.** This lettuce is the most widely used variety of the lettuces. It is readily available and is in good supply throughout the year but reaches its peak from May through July. Iceberg lettuce can be identified by its compact head with tightly packed cup like leaves. The outer leaves are dark green in color and can be used as a base for an arranged salad plate, in sandwiches, or shredded and mixed with other salad greens. The inner leaves are medium to pale green and can be used to make the cup which will hold a salad mixture for an individual salad.

(b) **Boston lettuce.** This lettuce is available all year long also. It has large, tender, smooth dark green leaves. The outer leaves separate easily since the head is not as compact as the head of some other varieties of lettuce. The inner leaves are semi-crisp, tender, and have a butternut feel and taste. Boston lettuce is used frequently in the preparation of tossed green salads or as a garnish for salad plates.

(c) **Romaine lettuce.** This lettuce can be procured throughout the year by most military dining facilities. Sometimes referred to as Cos lettuce, it can be identified by its elongated shaped head and its long straight spoon shaped leaves. The leaves are crisp and dark green and have thick midribs. Romaine lettuce has a sharp nutty flavor.

(2) **Endive and escarole.** These two salad greens can be procured throughout the year. Endive is also known as chicory, American endive, American chicory or curly endive. The outer leaves have a sharp, tangy flavor which adds a pleasant contrast to other greens in a salad. Escarole is much like American endive but has a broader leaf and not as sharp a flavor. The dark green leaves are edged in yellow and are twisted and wavy with heavy white midribs.

(3) Other greens used for salads. A wide variety of other greens which can be used for salads can be procured by the military. They are cabbage, tender green onion tops, parsley, celery leaves, and young, fresh, tender spinach leaves.
(a) **Cabbage.** Green, white, or red cabbage may be used for salads. The core of the cabbage should always be removed since it is very bitter and if used will tend to make the salad taste bitter. Dehydrated cabbage may be substituted for fresh. When using dehydrated cabbage, it should be reconstituted overnight in a tightly covered container under refrigeration.

(b) **Celery.** Pascal (green) celery is widely used and may be procured all of the year through the Armed Forces. This variety of celery has crisp stalks and is quite stringy. The stalks of pascal celery should be straight and free of pithiness. The stalks should be trimmed and the outer leaves removed before serving.

(c) **Green onions.** Green onions are available throughout the year. They add a deep green color to salads which enhances the appeal of the salads.

(d) **Parsley.** This green vegetable is available all through the year. It is dark green, has a distinct aroma, and is mainly used to add character and color to the dish.

(e) **Spinach.** Fresh spinach leaves are a seasonal salad green available in the spring and fall. The leaves are dark green and spoon shaped with thick midribs. The leaves have a strong flavor and are used to add a distinctive taste to tossed green salads.

(4) **Handling of salad greens.** Salad greens, including the lettuces, are packed by the distributor in cardboard or wooden crates ranging from 25 to 50 lbs and must be processed upon arrival at the dining facility before storage. When processing, be sure to check for spoilage. If some spoilage is found, it should be removed to preserve the remainder of the vegetables. After processing, the items should be placed in vegetable bins in the vegetable refrigerator. Greens should never be allowed to stand at room temperature for any length of time as they are highly perishable.

b. **Raw vegetables.** Several of the vegetables in this category are highly perishable. These include cucumbers, sweet peppers, radishes, and tomatoes. The less perishable vegetables, however, will require some special handling for maximum crispness in salad preparation. Some of the raw vegetables available for use are carrots, cauliflower, cucumbers, green peppers, radishes, tomatoes, and turnips.

1. **Carrots.** Carrots have thin skins and are easy to peel. Raw carrots may be cut in numerous ways for salads and garnishes.

2. **Cauliflower.** If you can obtain fresh cauliflower for the dining facility, it may be used as a salad vegetable. After soaking in salted cold water, it should be rinsed, drained, and broken into small flowerets and served with French dressing or oil and vinegar.

3. **Cucumbers.** Quality cucumbers received at the dining facility should have a fresh appearance and should not be shriveled or withered. They should be dark green with waxy skin. Cucumbers are one of the more flavorful salad vegetables used to achieve crispness and crunchiness.

4. **Green peppers.** Green peppers add color and zest to a salad and are available in three market forms: fresh, fresh frozen, and dehydrated. Dehydrated and fresh frozen peppers are preferable when the recipe requires diced peppers. Fresh peppers are highly perishable and must be handled with some care.

5. **Radishes.** Radishes are crisp, mild flavored, and colorful. When combined with any salad or used as a salad relish, they will enhance the eye appeal of the salad bar. To prepare radishes for use, cut off the stem and top ends, wash with cold water and drain. Radishes can be served whole, thinly sliced, or cut into rosettes for garnishing.
6. **Tomatoes.** There are two types of tomatoes procured for the military dining facility: the large tomato and the cherry tomato. When using the large tomato, rinse it under cold water, cut out the stem end, and cut the tomato into slices, quarters, or dice it, whichever the recipe may require. The cherry tomato should be rinsed with cold water and either left whole or cut in half and placed in a vegetable salad.

7. **Turnips.** Fresh turnips can be obtained throughout the year for the dining facility. Turnips must be peeled prior to being sliced or diced. They are eaten raw when used in salads. Turnips are seldom used in salads, but if desired they can be used in lieu of cucumbers in a vegetable salad.

c. **Cooked salad vegetables.** Many of the salad recipes in the Armed Forces Recipe Service require vegetable ingredients that have to be cooked. These vegetables may be selected from varieties that are canned, cooked fresh, frozen, or dehydrated. A number of these salads are composed completely of cooked vegetables. Some of these vegetables are as follows:

- Beans, wax, canned.
- Beans, kidney, canned or cooked.
- Beans, green, canned, cooked, frozen, or reconstituted dehydrated.
- Beets, canned.
- Carrots, canned or cooked fresh.
- Onions, dehydrated, chopped, or fresh.
- Peas, canned, cooked, frozen.
- Pimentos, canned.
- Potatoes, cooked fresh, reconstituted, cooked dehydrated slices, or canned whole white.

1-4. **FRUITS FOR SALADS**

Fresh fruits are used less frequently as salad ingredients than raw vegetables, but they do add variety to the menu from a flavor and texture standpoint. Some of the fruits used are apples, avocados, bananas, the citrus fruits, melons, peaches, pears, and pineapples. Preserved fruits may be used in addition to the fresh fruits available.

a. **Fresh fruits.**

1) **Apples.** Apples are a popular ingredient used in the preparation of salads. When using apples, select ones that are of uniform size and color, crisp and juicy, moderately acid, and that have some sweetness.

2) **Avocados.** This fruit combines very well with mixed salad greens. It is not included as a salad ingredient in the Armed Forces Recipe Service because season and perishability limit its use. Avocados are excellent sliced and served with grapefruit or orange sections or with an appropriate salad dressing. Halves of avocados filled with chicken or shrimp salad are summertime favorites.

3) **Bananas.** Bananas are normally procured in two stages of ripeness. The first stage is light green, breaking slightly towards yellow. In the second stage the fruit is yellowish green. These are stocked at local supply points for issue whereas the first stage bananas have a storage life of approximately 7 to 10 days and tend to handle better during shipment.

4) **Citrus fruits.** These include oranges and grapefruit. Lemon or lime juices may also be used to add flavor. When selecting citrus fruits for salads, always select large firm fruit.

5) **Melons.** Melons should be pared, diced or cut into uniform strips or wedges when they are used as an ingredient for fruit salads.

6) **Peaches and pears.** Fresh peaches and pears are other fruits not listed in the Armed Forces Recipe Service but which may be used. They are welcome additions to most salad menus when added to fruit salads or served with cottage cheese.
(7) **Pineapple.** When using fresh pineapple in jellied salads, it must be cooked because it contains a chemical substance which will prevent the gelatin from hardening. Fresh pineapples are used infrequently in the dining facility because there is a large amount of waste after preparing the fruit. When used, pineapples add a zesty, tangy flavor to any fresh fruit salad. They may be used as a decorative garnish.

b. **Preserved fruits for salads.** Many fruits are available all through the year due to present day methods of food preservation. A variety of fresh frozen, canned, or dehydrated (dried) fruits can be obtained and used in salad preparation.

1) **Fresh frozen fruits.** Frozen fruits are used less often than fresh or canned fruits due to perishability and cost but can be used to add variety and color. Sliced peaches and whole strawberries are the two frozen fruits most commonly used in the dining facility. Frozen fruits must be handled carefully since improper thawing methods can cause the fruit to become unfit for consumption. When using frozen fruits for salads, they should have a faint trace of ice-crystals in them to avoid discoloration and spoilage. These fruits should be thawed in the container in which they were packed.

2) **Canned fruits.** Canned fruits may be used in many ways as salad ingredients. The Armed Forces Recipe Service provides specific details. A point to remember is that all canned fruits must be well drained.

3) **Dehydrated or dried fruits.** Dates, prunes, and raisins are the fruits which are generally used in salads.

a) **Dates.** This fruit requires only cutting and removing of the seed.

b) **Prunes.** Dehydrated prunes must be rehydrated, cooked with an appropriate seasoning, and chilled before being used in salads.

c) **Raisins.** Raisins must be plumped or swelled to be a palatable salad ingredient. To prepare them for serving, place the raisins in a colander or strainer, then hold the container over boiling water (do not submerge the raisins in the water) for 5 minutes. Remove and chill the raisins before adding them to the salad.

1-5. **MEATS FOR SALADS**

When using meat, poultry, fish, or seafood for salads, insure that the food item is thoroughly chilled before it is put into the salad.

a. **Meats.** The meats most commonly used in the preparation of salads are beef, ham, bacon, salami, pepperoni, and bologna. When using meats in a salad, most recipes call for the meat to be cut into 1/2 inch cubes except when cold cut meats are used. These meats should be cut into julienne strips. Crisp bacon strips are crumbled or diced.

b. **Fish or seafood.** Salmon, shrimp, tuna, lobster, anchovies, and crab meat are the most widely used seafoods. Fish used for salads should be flaked. Lobster, king crab, and shrimp are usually cut into 1/2 inch pieces. Canned fish must be drained, boned, and have the skin removed before it is used. The liquid, skin, and bones can give the fish product an unsavory appearance but they are not harmful if consumed.

c. **Poultry.** Both chicken and turkey can be used for salad. Whole fryers, broilers, or canned chicken can be used in making chicken salad. When using turkey for salads, either boneless frozen raw turkey, boneless cooked turkey, ready to cook turkey, or canned turkey may be used. These meats may either be cut into 1/2 inch cubes or julienne strips depending upon the kind of salad being made.

1-6. **PASTE PRODUCTS FOR SALADS**

Macaroni and egg noodles are the most commonly utilized paste products used in the dining facility in the preparation of salads. These products are made of semolina, durum
wheat flour, farina, or hard wheat flour and water. The resulting mixtures are rolled, shaped, and dried into various forms. Rice is a grain product which is prepared and used in a manner similar to paste products.

a. Macaroni and noodles. These two paste products should be added to boiling salted water, cooked for 15 minutes or until tender, drained, washed in cold water, and set aside in a refrigerator to chill.

b. Rice. The rice procured for the Armed Forces is the long grain variety and is parboiled (partially cooked) before milling. Rice will double in bulk after cooking. The grains should appear light textured. The Armed Forces Recipe Service should be followed in the preparation of a salad using rice since the cooking time for the rice may vary. Incorrect cooking could cause an unacceptable, unpalatable, and wasteful product.

1-7. SALAD INGREDIENT PREPARATION

The cardinal rule for salads is to serve them fresh. The appetizing appearance is lost if the lettuce is wilted or the fruit has a dry stale look.

a. Salad greens. Select your salad greens carefully. Sort, trim, wash, and crisp the greens before making the salad. Wash them carefully to free the greens of sand and dirt particles. Drain them well. Break lettuce and cabbage into bite sized pieces. Place the prepared greens in pans and cover with wax paper and a clean damp cloth. Place the container and contents into the refrigerator to chill and crisp before using. When adding the crisp greens to your salad, be sure that they are free of any excess water so that the dressing will cling to the leaves. Your salad greens should be prepared as close to serving time as possible.

b. Raw salad vegetables. When fresh vegetables are used, they should be selected with care, washed thoroughly, trimmed and peeled as necessary, and cut into uniform pieces as required by the recipe you are using.

c. Cooked vegetables. When canned or reconstituted vegetables are used, they should be drained and the liquid retained for use in soups, sauces, or gravies. You may marinate the vegetables in French dressing to obtain a sharper flavor before using them in the salad. Whether you use fresh, canned, or dehydrated vegetables, the prepared ingredients should be covered with waxed paper and placed in the refrigerator to chill before combining them with the salad greens and dressings.

d. Fresh fruits. When using fresh fruits as salad ingredients, select firm, crisp, nesh fruits free of blemishes. The fruits should be washed and bruises or spots removed. Fruits such as apples, bananas, peaches, and pears should be dipped into an antioxidant solution to prevent discoloration. If an antioxidant is not available, lemon or pineapple juice can be substituted. The fruits should be dipped after they have been cut because fresh cut sides will discolor.

e. Preserved fruits. Preserved fruits whether they are fresh, frozen, canned, dried, or reconstituted dehydrated need little preparation, as most preserved fruits have been processed prior to packing. Dried or dehydrated fruits need reconstitution or plumping before use. Whenever such items are used, the Armed Forces Recipe Service directions or the manufacturer's recommended recipe should be followed.

f. Meat products. All meats should be cooked and well chilled before being mixed with other salad ingredients or when preparing a meat salad. The Armed Forces Recipe Service should be followed step by step since meat products are highly perishable and can become contaminated. Meats and poultry are usually cubed but fish is ordinarily coarsely flaked with a fork. Small shellfish such as shrimp can be left whole or diced if preferred. Canned salmon and tuna fish are difficult to prepare in a way that retains the form of the pieces, although tuna is firmer than salmon.
g. Eggs and dairy products.

(1) Eggs. All eggs used in salads are hard-boiled and have the shells removed. Whole eggs may be placed around a salad to serve a decorative function in addition to being an ingredient of the salad. Deviled eggs are made by removing the yolk from the eggs which have been cut in half, combining the yolk with spices and other ingredients, and returning the mixture to the egg white halves. Sliced eggs are frequently used on top of a salad to add color as well as nutrition. Diced or chopped eggs are mixed into a salad. The use of eggs in salads greatly increases their eye appeal and their nutritional value.

(2) Dairy products. These products include cheese items which are derived from milk. A great variety of cheeses can be used in the preparation of salads. Each cheese has its own distinctive flavor. Some of the most popular are cheddar, Swiss, and American cheese. Cottage cheese is the only cheese which is used as a basis for salads. Parmesan cheese is often used in grated form to sprinkle over salads. Other cheeses are cut into strips, diced, or served in chunks in salads. Processed cheese is natural cheese which has been mixed and reformed to give it a smooth texture.

1-8. COMBINATION SALADS

When preparing mixed salads or salads with a combination of vegetables, do not combine the ingredients until you are ready to serve the salad. An exception to this rule would be a recipe which calls for the salad ingredients to marinate in the dressing before this would be potato salad or possibly cucumbers, onions, and sour cream. Another exception would be making fruit or vegetable molds. When tomatoes or citrus fruits are being used, they should be the last ingredient added in a tossed salad. These acid foods tend to make the other salad ingredients soggy if they are allowed to stand in the salad and will wilt the crisp salad greens.

1-9. JELLIED SALADS

Though not quite so popular as vegetable salads, gelatin type salads should be included in the menu. Gelatin salads are nutritionally adequate especially when fruits or vegetables are added, and they add variety to the menu. Salads made with gelatin become increasingly firm on standing so it is advisable to make gelatin salads a day in advance of the serving time. Gelatin may be added to save time when a mixture must be stiffened quickly. Whenever using fresh pineapple juice, be sure to cook it first to destroy the enzymes. If the enzymes are not destroyed, the gelatin will not stiffen. When adding canned fruit to gelatin, be sure that the fruit is well drained and that the gelatin has a syrupy consistency. With these precautions fruits should not float on top of the salad.

1-10. CHARACTERISTICS OF AN APPEALING SALAD

An appealing salad is one that has a pleasing color combination, is arranged attractively, and is composed of foods that are compatible. Ingredients should be fresh and cold; green raw vegetables should be crisp, and fruits firm. When planning salads for different meals, always consider the color and flavor combinations from the standpoint of palatability and attractive appearance. Foods with high flavor should be used sparingly in mixtures as they mask the more delicate flavors. Pineapple, for example, is so pronounced in flavor that if used in excess in a fruit salad, it may be the only flavor that can be identified.

1-11. GARNISHING

A garnish is a food item (edible or inedible) which is used to adorn or decorate a main food dish. A single green pepper ring, a strawberry, a radish rose, or similar edible garnish will accent the appearance of a salad. Garnishing plays only a minor part in cooking but it is a very important part. The garnish should be artistic and should make the food more appealing to the eye. An appropriate garnish is one which is suitable in shape, color, texture, and size for the dish on which it is to be used. In most cases a garnish is made up of edible foods, but you may also use items such as plastic materials, ice carvings, or live flower arrangements.
a. Edible garnish. Edible garnishes are all gourmet foods which can be eaten either in the raw or cooked state and which are used to decorate a food item being served. Whenever a garnish is combined with a food item, it should be edible. The following are some examples of food items which can be used for garnish along with suggestions for preparing them.

1. Parsley sprigs may be used as a decoration around a salad or they may be chopped and sprinkled over food dishes.

2. Paprika may be sprinkled on any light colored food to add contrast and eye appeal.

3. Raw cranberries chopped and mixed with chopped apples make an appetizing garnish for fowl, meat, fish or green salads.

4. Radish roses are easily and quickly made by cutting through the skin of red radishes to form petals. These roses add a decorative garnish to vegetables, fish and meat salads.

5. Peanuts, raisins, shredded coconut, chopped candied fruit peels, or chopped cherries can be used for toppings on fruit salads.

6. Red or green peppers can be used to enhance the eye appeal of a vegetable salad. To prepare the peppers for use, wash under cold running water, remove the seeds, and slice into thin rings.

7. Ripe bananas will add flavor and variety when cubed or sliced and added to canned fruits or fruit salads.

8. Fruited gelatin cut into glistening cubes gives the salad a distinctive appearance.

9. Sliced tomatoes cut into wedges taste good, look good, and are a good accompaniment with greens, meat, fish, poultry, or vegetable salad.

10. Stuffed green olives thinly sliced and added to a vegetable salad or cole slaw will improve their acceptability.

11. Grated horseradish and chopped pimientos will add a zesty flavor to fish salad.

12. Crip crunchy flowerets of raw cauliflower can perk up a green salad dish.

13. Canned beets with their deep red color will increase the eye appeal of a variety of dishes.

14. Fresh beets left whole, sliced, diced or cut julienne style offer many salad color possibilities.

15. Carrot curls and rosettes can add that touch of color which will enhance the appearance of a cottage cheese salad or potato salad.

b. Nonedible garnishes. These garnishes can be used to enhance the appearance of a table arrangement, salad bar, serving line, or buffet line but cannot be eaten. The items used can be live floral arrangements, plastic flowers, fruit and ferns, or possibly an ice carving to emphasize the theme of the occasion. A variety of candles may also be used for elegance and atmosphere.

1-12. PREPARING INDIVIDUAL SALADS

When a large number of salads is being made up, it is more practical to use an assembly line system. Select the bowl for the particular salad to be served. Line up as many bowls as you have room for on the work table. When stacking the bowls, do not stack more than five at a time. The easiest way to put together a large order of salads and to obtain the most attractive uniform results is to add each ingredient to each bowl rather than to finish one salad at a time. An example would be to put the lettuce into the first layer of bowls and then to follow in succession with the remaining ingredients. The ingredients should be arranged so
that every item shows distinctively. Salads that are too uniform or too ornate lose eye appeal. Build from the back of the salad bowl to the front. The lettuce cup should be placed so that the frilly edge of the leaf is at the top or back of the bowl. The leaf should not extend over the edge of the bowl. When adding mixed salad ingredients, mound or mold them to give the salad bowl a distinct shape. When garnishing, add the garnish carefully so the eye travels upward toward the top of the salads. Do not make the salads too flat since this will produce an artificial effect and decrease eye appeal. Putting together an individual salad can be time consuming. An orderly arrangement of ingredients is essential to gain speed and uniform production.

I-13. RELISHES

There are several interpretations of what constitutes the group of miscellaneous ingredients known as relishes. They are any item which adds zest, flavor, and color to a meal. Usually relishes are a sweet-sour dish which accompanies meat. Pickled vegetables such as cucumbers, beets, carrots, onions, olives, tomatoes, cauliflower, and cabbage are in this category. In the Armed Forces Recipe Service there are a number of relishes of the sweet-sour type. In addition, salad bar items may feature two or three sliced vegetable relishes not combined with dressing which add crispness and color to the meal. The following are some sample relishes.

a. Curls made from carrots or celery.
b. Sticks or strips cut from carrots, celery, or green peppers.
c. Rings made from green peppers, onions, or celery.
d. Fans which are a bit time consuming to make but add a nice touch to the relish tray can be made from celery, carrots, or cucumbers.
e. Radishes cut into roses and accordions.
f. Raw cauliflower flowerets and green onions.
g. Cheddar cheese cubes.

I-14. SANITATION AND STORAGE

a. Sanitation. It is especially important in the preparation of salads to observe proper sanitation procedures. The working area and utensils should be kept clean and the spoilage of food should be prevented by proper refrigeration. Refrigeration is the key word in salad preparation and serving sanitation. The ingredients should be cold to start with. The salads should be refrigerated after preparation and the serving line should be iced. Salads should be prepared in small batches so that they will remain cold and fresh. Foods that contain protein which have been peeled, sliced, or diced by hand after cooking must never be used as leftovers, since the 3-hour limit at temperatures between 40° and 140° F is usually taken up in preparing, chilling, and serving the food. These foods include potato salad, chicken salad, turkey salad, macaroni salad, shrimp salad, egg salad, and similar items. Hand preparation not only increases the chance of contamination, but it also increases the length of time that these foods are held at room temperatures. It is also dangerous to return opened jars or bowls of mayonnaise and cooked salad dressings from salad bars to refrigerators for reuse at a later meal. Mayonnaise and cooked salad dressings should be placed on the salad bar in small quantities and should not be retained for reuse because of the danger of miscalculating the total lapsed time that these salad dressings have been held at temperatures between 40° and 140° F.

b. Storage. Salads should be stored under refrigeration and covered to prevent them from drying out and picking up odor contamination. The temperature should be held at 40° F for salads to prevent the wilting of vegetables. Salads should be chilled before serving to keep them fresh even if they are to be used immediately. Neither salad ingredients nor the prepared salads themselves should be stored in a freezer. Although a freezer will quickly chill salads, the temperatures always cause a loss of crispness which results in a totally unacceptable product. Salad ingredients that are procured in the frozen state are, of course, an exception to this rule.
1-15. VALUE OF SALADS IN THE DIET

Raw salad greens, raw vegetables, and raw fruits are rich in vitamins and minerals. Salads also contribute water, a mild acid, and roughage which are beneficial to the digestive tract. Salads are a means of serving greens, vegetables, fruits, and other foods which give variety to meals. If possible, a salad should be made and served at least once a day.

Section II. SALAD DRESSINGS

1-16. INTRODUCTION

A salad dressing is a savory sauce either mixed with or poured over a salad. It is used to improve the appearance, flavor, and nutrition of a salad. In this section you will be introduced to types of salad dressings, their ingredients, and preparation. Emphasis will be placed on the special problems of gelatin use in salads.

1-17. CLASSIFICATION OF SALAD DRESSINGS

Salad dressings used in Marine Corps dining facilities are prepared by using the Armed Forces Recipe Service (MCO P10110,16) as a basis. After considerable experience, you may be able to use variations on these recipes successfully, but it is always safer to follow the recipe cards carefully. Salad dressings in the AFRS fall into two major classes: the French dressings and its variations, and those whose basic ingredient is commercially prepared and procured salad dressing or whip. There are many variations of these two basic types.

a. French dressings. This group of dressings uses an oil and vinegar emulsion with the addition of various seasonings, vegetables, and other flavorings.

b. Salad dressing base. This group of dressings uses a commercially procured salad dressing or whip as a base to which other seasonings, vegetables, or flavorings are added. The use of this commercial preparation insures a uniform product and reduces the time required and the cost of the dressings.

1-18. SALAD DRESSING INGREDIENTS

a. Oil. This ingredient is of prime importance in making salad dressings. It must be fresh. Oil tends to become rancid when exposed to light, warmth, and air. Even a film of oil left exposed on the rim of a container can become rancid quickly, so you should wipe off any exposed surfaces before storing. When oil and a watery solution are mixed, the oil forms an emulsion. An emulsion may be shaken to form small oil droplets that will remain temporarily suspended. French dressing is a temporary emulsion. Beating will separate the oil into small droplets. This also makes the mixture more stable. In some salad dressings an emulsifier is added to prevent the separation of the oil and water into two separate layers. These are known as permanent emulsions. Mayonnaise is an example using egg yolks as an emulsifier.

b. Acid. After oil, the most important salad dressing ingredient is an acid. The most commonly used acid in salad dressings is vinegar. In fact, a simple salad dressing may be made using only oil, vinegar, and seasonings. Other acids include lemon juice and other fruit juices such as lime, orange, and pineapple to a lesser extent. The proportion of acid depends upon the type of dressing being made. French dressing uses more vinegar, while mayonnaise uses less.

c. Seasonings. These ingredients add their flavor to salad dressing or help bring out the flavor of other ingredients. Salt, pepper, and sugar are the traditional seasonings used. Other seasonings include mustard, cayenne pepper, garlic, oregano, and paprika.

d. Salad dressing base. Commercially prepared and procured salad dressing or whip is frequently used as an ingredient in salad dressings to save time and to reduce cost. It insures a uniform product. Mayonnaise may also be used for this purpose, but its cost and keeping qualities generally weigh against its use.

e. Thickeners. These ingredients prevent a thin and watery product for certain salad dressings. Egg yolks are used for thickening mayonnaise. Fresh or frozen eggs may be used...
but dehydrated eggs should not. Cornstarch is used in cooked salad dressing to absorb the liquid. The starch should be carefully cooked prior to combining with eggs.

f. Emulsifiers. Emulsifiers form a film around the small oil droplets and prevent them from clumping together and separating from the liquid. Egg yolks are often used as emulsifying agents in salad dressings.

g. Flavorings. The characteristic flavor and texture of individual salad dressings as well as secondary contributing flavors are the result of flavoring ingredients. These include several varieties of cheese, eggs, catsup, chili sauce, Worcestershire sauce, sour cream, pickle relish, and vegetables such as onion, celery, cucumber, cabbage, beets, parsley, and pimentos.

1-10. SALAD DRESSING PREPARATION

The preparation of salad dressings will determine the success and acceptability of salads in the dining facility. The proper procedures for the preparation of each type of salad dressing is given in the Armed Forces Publication Service. Column one of each recipe card lists the ingredients in groups as they are to be used. The second column indicates weights where applicable, and the third column gives the measure. The last column gives instructions on the procedures to follow in combining the ingredients. The following general principles apply to salad dressing preparation in a general way; however, follow the recipe card as closely as possible to produce an acceptable salad dressing.

a. Assemble your ingredients before starting to prepare the salad dressing.

b. Measure all ingredients carefully since the final product depends on the proportion of one ingredient to another. Weigh all ingredients that can conveniently be weighed as this is the most accurate method; however, many ingredients can be measured accurately if care is taken.

c. Many recipes require that you simply mix all ingredients.

d. Most recipes instruct you to cover the salad dressing and to refrigerate before using.

e. Thin dressings should be stirred or beaten in their preparation and again just before being used.

f. Ingredients such as hard cooked eggs, onions, celery, sweet peppers, parsley, pimientos, or pickles should be finely chopped with a sharp French knife before being added. This will prevent large lumps in your salad dressing.

g. When using dehydrated onions, sweet peppers, or parsley flakes, they should be reconstituted as directed on the package and drained before use. The ingredients may also be added dry and allowed to absorb the liquid from the mixture if the recipe card permits.

h. Pickle juice may be substituted for vinegar in some recipes.

i. In cooked salad dressing it is important to add cornstarch to a small amount of liquid and mix well and then add this mixture to the rest of the liquid to prevent the formation of lumps. When adding hot liquid to eggs, add slowly while mixing to prevent the eggs from scrambling. Do not boil cooked salad dressing as the dressing will curdle.

j. Spices used for salad dressings should always be fresh. Store them in a cool dry place. Once they are opened, store them in an airtight container.

k. Salad dressings should be prepared well in advance of use to allow the seasonings to blend. However, the salad and the dressing should be combined just before serving. In many cases the dressing is added to the salad by the persons being served.
I. When mixing dressings, be certain your container is large enough to permit adequate mixing without overflow.

Section III. GELATIN

1-20. GELATIN AND ITS USE IN SALADS

Gelatin is a protein food and derived from animal sources, yet the protein is low in nutritional value due to the lack of three essential amino acids. Regardless of the protein content, the amount of gelatin required to form a gel is so small (1 tablespoon per pint of liquid) that its nutritive contribution is insignificant. One tablespoon of granulated gelatin furnishes about 30 calories and 0 grams of protein. Gelatin salads and desserts are a means of including fresh fruits and vegetables in the diet, but it is the added food rather than the gelatin which is valuable. Almost all raw and cooked fruits and vegetables may be added to gelatin molds with the exception of raw or frozen pineapple which must be cooked. Raw or frozen pineapple contains a protein digesting enzyme called bromelin which prevents the gelatin from setting-up. This enzyme can be destroyed only by heating the pineapple to the boiling point before adding it to the gelatin mixture.

a. Gelatin foams and sponges. To vary the gelatin salad you can also produce a gelatin foam or sponge. A foam is light and frothy while a sponge is a firm substance. A gelatin solution may be beaten to form a foam. This causes an increase of two or three times its original volume depending largely on how long the solution is beaten. The best stage to begin beating the gelatin solution is just as it becomes like thin molasses. Do not start beating the gelatin solution while it is watery or after it has begun to set. Beating too thin a solution will result in a waste of time and effort, and beating a set up solution will produce finely broken bits of solidified gelatin. Beating is continued until the mass is very stiff in order to avoid partial liquidation and the formation of a clear layer in the bottom of the mold. An increase in gelatin, sugar, and flavoring is required to change the gelatin foam to a sponge. Whipped egg whites may also be used.

b. Effects of temperature on gelatin. The preparation of gelatin requires careful attention to temperature. Water or other liquid used to prepare gelatin must be at least 85° F in order to dissolve the gelatin; however, a gelatin solution should never be boiled. When the gelatin is completely dissolved, its temperature must be lowered below 60° F in order for it to set or gel. When preparing gelatin, it is often advisable to cool the solution quickly in order to speed the setting process. This can be done by substituting ice for an equal amount of the cold water used to make the solution. Thus, half the water is heated to 85° or higher and is used to dissolve the gelatin. When it is completely dissolved, the remaining half of the water is added in the form of ice. The hot solution melts the ice to produce the necessary additional water. At the same time it lowers the temperature of the hot solution. In this way, the solution is rapidly cooled and the gelatin will finish setting in the refrigerator in a short time.

c. Effects of salts and sugar on gelatin. When preparing gelatin some of the ingredients that you can add to the solution may aid in making a firmer gel or some may hinder the process.

(1) *Salts.* The gel strength can be increased if milk is used as a liquid in gelatin mixtures due to chemical salts present in milk. If hard water is used to make a gelatin solution, the mineral contents of the water will produce a firmer gel than if soft water were used.

(2) *Sugar.* The amount of sugar commonly used in gelatin mixtures has no noticeable effect on gelatin, but an excessive amount of sugar will weaken the gel and retard the rate of setting.

1-21. SUMMARY

In this chapter you have learned the definition of salad dressing and the two major classes of salad dressings, the French dressing and the commercial salad dressing base. You have been shown that the ingredients of salad dressings consist of an oil, an acid, seasonings, and
flavorings with the occasional use of an emulsifier or a thickener. Salad dressing preparation has been covered with some general rules to use along with the Armed Forces Recipe Service recipe cards. You have also seen the use and importance of gelatin in salads. In the last section you have been introduced to the classes of salads with examples of each and to salad ingredients such as vegetables, fruits, meats, and paste products and their use in salad preparation. You have been shown the special precautions to be considered in preparing combination salads, individual salads, and jellied salads, as well as the use of garnishes and relishes. The characteristics of salads, sanitation procedures, and storage have also been discussed.
SALADS, SANDWICHES, AND DESSERTS

Lesson I
Salads, Salad Dressing, and Gelatin

STUDY ASSIGNMENT: Information for MCI Students
Course Introduction
MCI 33, 20, Salads, Sandwiches, and Desserts, chap 1.

LESSON OBJECTIVE: Upon successful completion of this lesson, you will be able to identify the classes of salads and their ingredients including vegetables, fruits, and meats. Emphasis will be placed on combination salads, jellied salads, garnishes, relishes, and salad characteristics of an individual salad. You will also be able to identify the classes of salad dressings and the ingredients used to prepare salad dressings. You will cover the effect of temperature and ingredient variation when preparing a gelatin solution for salads as well as the method of forming foams and sponges from gelatin.

WRITTEN ASSIGNMENT:
A. Multiple Choice: Select the ONE answer which BEST completes the statement or answers the question. After the corresponding number on the answer sheet, blacken the appropriate box.

Value: 1 point each

1. Directions for preparing a salad can be found in the
   b. Armed Forces Recipe Service.
   c. Navy Recipe Service.

2. A Waldorf salad is classified in which group of salads?
   a. Fruit-vegetable combination
   b. Cheese-vegetable combination
   c. Fruit salad
   d. Vegetable salad

3. Spring salad would be an example of what type of salad?
   a. Cheese
   b. Fruit
   c. Vegetable
   d. Gelatin

4. Which type of salad is golden glow salad?
   a. Meat salad
   b. Fruit salad
   c. Cheese and fruit combination
   d. Gelatin based or molded salad

5. The salad green which has a compact head and tightly packed cup like leaves is known as
   a. cos lettuce.
   b. Boston lettuce.
   c. endive.
   d. iceberg lettuce.

6. Endive can be identified by its
   a. large cup like leaves.
   b. large dark green wavy leaves.
   c. curly, slightly bitter leaves.
   d. large, tender, smooth dark green leaves.
7. Which other vegetable can be considered a salad green?
   a. Red cabbage  
   b. Green peppers  
   c. Cucumbers  
   d. Cauliflower

8. Fresh cauliflower to be used in a salad should be soaked in which solution before use?
   a. Salted cold water  
   b. Lemon juice  
   c. Baking soda solution  
   d. Antioxidant solution

9. Which characteristics should radishes have in addition to being well formed?
   a. Soft and pithy  
   b. Crisp and mild flavored  
   c. Smooth and strong flavored  
   d. Firm and slightly green

10. Which two types of tomatoes are procured for military dining facilities?
    a. Large and small  
    b. Cherry and Big Boy  
    c. Italian and cherry  
    d. Large and cherry

11. When using wax beans, beets, and potatoes for salads, what processing is necessary?
    a. Refrigeration  
    b. Cooking  
    c. Blanching  
    d. Freezing

12. When selecting citrus fruits for salads, you should select ______ fruits.
    a. small, soft  
    b. firm, small  
    c. large, firm  
    d. large, soft

13. Why is fresh pineapple infrequently used in the dining facility?
    a. It is too sweet.  
    b. It is too sour.  
    c. There is a large amount of waste in preparation.  
    d. Its flavor does not blend with other ingredients.

14. Which market form of preserved fruit is used the least due to perishability and cost?
    a. Canned  
    b. Dehydrated  
    c. Frozen  
    d. Dried

15. Which market form of preserved fruit must be well drained before being used in a salad?
    a. Dried  
    b. Frozen  
    c. Reconstituted  
    d. Canned

16. Which form of preserved fruit are dates, prunes, and raisins?
    a. Canned  
    b. Dehydrated or dried  
    c. Fresh  
    d. Fresh frozen

17. Before adding to a salad, meat items should be thoroughly
    a. drained  
    b. chilled  
    c. soaked  
    d. seasoned

18. How should the flesh of fish be prepared for use in salads?
    a. Julienne strips  
    b. Cut into cubes  
    c. Left whole  
    d. Flaked
19. Which paste product is most commonly used in salad preparation?
   a. Spaghetti  
   b. Rice  
   c. Macaroni  
   d. Vermicelli

20. When should salad greens be prepared?
   a. As close to serving time as possible  
   b. The day before they are used  
   c. When the salad bar is depleted  
   d. Once a week

21. What should be done with the liquid from canned or reconstituted vegetables?
   a. Discard it.  
   b. Use it for soups.  
   c. Use it in salad dressings.  
   d. Serve it as a health food item.

22. Which fruit should be dipped into an antioxidant solution to prevent its discoloration in a salad?
   a. Cherries  
   b. Grapes  
   c. Pineapple  
   d. Apples

23. How are meats and poultry most frequently cut for use in salads?
   a. Flaked  
   b. Balls  
   c. Cubes  
   d. Ground

24. How should eggs which are used in salads be cooked?
   a. Fried  
   b. Scrambled  
   c. Poached  
   d. Hard-cooked

25. Which cheese is the only cheese used as a basis for salads?
   a. Swiss  
   b. Parmesan  
   c. Cheddar  
   d. Cottage

26. At which stage of preparation are combination salad ingredients mixed together?
   a. First, before serving  
   b. As they are prepared  
   c. After marinating  
   d. On the salad bar at serving time

27. When are salads made with gelatin normally prepared?
   a. One day before serving  
   b. Two days before serving  
   c. The same day as served  
   d. Just before the meal

28. Which fresh fruit juice must be cooked before being used in a gelatin salad?
   a. Apple  
   b. Orange  
   c. Pineapple  
   d. Peach

29. To keep fruits and vegetables suspended in a gelatin mixture, the solution should be
   a. Liquid.  
   b. Syrupy.  
   c. Hot.  
   d. Completely jelled.

30. The three characteristics of an appealing salad are
   a. taste, content, and size.  
   b. the amount, location, and serving method used.  
   c. color combination, attractive arrangement, and compatibility.
31. Should a salad garnish be edible or nonedible?
   a. Edible
   b. Nonedible
   c. A combination of both edible and nonedible

32. What purpose does a garnish serve?
   a. To develop an aroma
   b. To increase the flavor
   c. To improve eye appeal
   d. To contribute vitamins and minerals

33. When making a large number of individual salads, the bowls should be stacked no more than ______ high.
   a. three
   b. four
   c. five
   d. six

34. How should a fruit salad be arranged when placed on individual salad plates?
   a. In lettuce leaf cups and flattened
   b. Placed on watercress and flattened out
   c. Placed on the plate, flattened, and covered with garnish materials
   d. In lettuce leaf cups, mounded, and lightly garnished

35. Why are relishes used?
   a. To add zest, flavor, and color to a meal
   b. To help fill up the salad bar
   c. To change the appearance of some food items
   d. To regulate the amount of salad used

36. Potato salads and egg salads which have been on the serving line for 3 hours at 40° F must be
   a. discarded.
   b. used as leftovers within 4 hours.
   c. refrigerated before use at the next meal.
   d. added to a new batch of salad before serving.

37. What is the key word in salad preparation and serving?
   a. Ripeness
   b. Garnishing
   c. Refrigeration
   d. Preparation

38. What is the recommended refrigeration temperature to prevent salad vegetables from wilting?
   a. 30° F
   b. 40° F
   c. 45° F
   d. 50° F

39. A savory sauce either mixed with or poured over a salad is known as a
   a. gelatin
   b. relish
   c. mayonnaise
   d. salad dressing

40. Recipes for salad dressings can be found in the
   b. Armed Forces Restaurant Manual
   c. Armed Forces Recipe Service
   d. Joint Forces Salad Recipes Manual

41. Which group of dressings uses an oil and vinegar emulsion?
   a. Cooked dressings
   b. French dressings
   c. Mayonnaise
   d. Sour cream dressings
42. Which commercially prepared product is used as a base for many salad dressings?
   a. Mayonnaise  
   b. Salad dressing or whip  
   c. Milk  
   d. Gelatin

43. Why should oil be carefully cleared from the lip of the container before storing?
   a. The container label will fade.  
   b. The oil will become rancid.  
   c. Shelves will become oily.  
   d. The oil will change color.

44. A mixture of oil and water is known as a (an)
   a. emulsion.  
   b. gelatin.  
   c. relish.  
   d. garnish.

45. What is the purpose of an emulsifier?
   a. To prevent spoilage  
   b. To improve flavor  
   c. To enhance appearance  
   d. To prevent separation of oil

46. What is the most common acid used in the preparation of a salad dressing?
   a. Lemon juice  
   b. Apple juice  
   c. Vinegar  
   d. Orange juice

47. What are the traditional seasonings used in salad dressings?
   a. Oregano, thyme, sage  
   b. Vinegar, lemon juice, and cider  
   c. Eggs, cornstarch, and oil  
   d. Salt, pepper, and sugar

48. Which salad dressing ingredient is often used as an emulsifier?
   a. Oil  
   b. Vinegar  
   c. Egg yolks  
   d. Lemon juice

49. What is the purpose of cornstarch in a cooked salad dressing?
   a. Seasoning  
   b. Thickener  
   c. Emulsifier  
   d. Flavoring

50. What information does the first column of the Armed Forces Recipe Service recipe cards give?
   a. Methods of preparation  
   b. Ingredients  
   c. Weight  
   d. Measures

51. The second column of the AFRS card gives the
   a. ingredients.  
   b. weights.  
   c. measures.  
   d. instruction.

52. Which column of the AFRS card contains the instructions for making a particular dressing?
   a. First  
   b. Second  
   c. Third  
   d. Last

53. What is the most accurate way to determine quantity of ingredients?
   a. Measures  
   b. Weights  
   c. Can sizes  
   d. Teaspoonful

33, 20

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34. After preparation, salad dressing should be
   a. placed on the salad bar.
   b. held at room temperature until served.
   c. covered and refrigerated.
   d. frozen to prevent separation.

55. Stirring is essential for thin salad dressings at which two times?
   a. During preparation and before serving
   b. Before and after combining
   c. Before and after freezing
   d. Before and after refrigeration

58. All solid ingredients for salad dressings should be
   a. crumbled.
   b. roughly chopped.
   c. finely chopped.
   d. added uncut.

57. What should be done to dehydrated onions and sweet peppers before adding them to a salad dressing?
   a. Add to dressing in a dry form.
   b. Reconstitute in water and drain before adding.
   c. Reconstitute in water and add with the water.
   d. Reconstitute with vinegar and add with the vinegar.

59. What procedure will prevent the formation of lumps when adding cornstarch?
   a. Add cornstarch to a little water before adding to mixture.
   b. Stir after making and again before serving.
   c. Store in a cool dry place.
   d. Add cornstarch all at one time and stir vigorously.

59. Why should cooked salad dressing NOT be boiled?
   a. It may boil over.
   b. It will coagulate the eggs.
   c. The cornstarch will form lumps.
   d. It will curdle.

60. Where should spices be stored?
   a. Over the oven
   b. In a cool dry place
   c. In a moist and humid area
   d. Under refrigeration and covered

61. Why should salad dressings be prepared well in advance of use?
   a. To fit the preparation schedule
   b. To permit thawing of frozen ingredients
   c. To allow the seasonings to blend
   d. To allow the oil and vinegar to blend

62. The contribution of gelatin in a salad to nutrition is
   a. important for fiber.
   b. large.
   c. for flavoring.
   d. insignificant.

63. Which fresh fruit has an enzyme which will prevent gelatin from setting?
   a. Apples
   b. Peaches
   c. Bananas
   d. Pineapples

64. At which stage should the gelatin solution be when making a gelatin foam?
   a. Partially set
   b. Completely set up
   c. A solution like molasses
   d. In a watery state
65. A sponge can be produced from a gelatin foam by the addition of
   a. whipped egg whites,             c. whipped cream,
   b. powdered milk.                  d. whipped whole eggs.

66. What is the lowest temperature of water necessary to dissolve gelatin?
   a. 32° F                        c. 95° F
   b. 80° F                        d. 212° F

67. What is the highest temperature at which gelatin will gel?
   a. 98° F                        c. 80° F
   b. 75° F                        d. 32° F

68. What is the fastest way to speed the setting of a gelatin solution?
   a. Add cold water to dilute it.
   b. Substitute ice for part of the required water.
   c. Place the solution in a freezer.
   d. Place the solution in the coldest part of a refrigerator.

69. What will be the effect on a gelatin if hard water is used to dissolve it?
   a. Softer                        c. Watery
   b. Firmer                        d. Cloudy

70. If excess amounts of sugar are added to a gelatin solution, what will be the effect?
   a. Slow down the rate of setting  c. Increase the volume of gelatin
   b. Speed up the rate of setting    d. Cause the gelatin to become rubbery

Total Points: 70
Chapter 2
SANDWICHES

2-1. INTRODUCTION

Sandwiches are made up of two or more slices of bread, a spread, and a filling. When combined, these ingredients will produce a very food that is in a convenient form for serving to personnel in the field, on troop trains, or on special assignment in lieu of the main meal. They may also be served as a main part of the lunch meal in the dining facility. Sandwiches should be attractive, wholesome, and designed to satisfy the appetite. The bread should not be paper thin, and the filling should be ample.

2-2. SANDWICH VARIATIONS

a. Box lunch. This consists of two slices of bread spread with butter or margarine, and a filling. The sandwich is cut in half.

b. Club. A club sandwich contains three or more slices of bread spread with butter or margarine, and put together with a different filling in each layer. Crusts are usually trimmed. Sandwiches are cut in triangles. Toothpicks are used to hold the layers together if necessary.

c. Grilled or toasted. Grilled or toasted sandwiches have two slices of bread and a desired filling. Cheese is often used. The whole sandwich is grilled on a lightly greased griddle at 375°F or is placed on a sheet pan and toasted in a 475°F oven. It is served while still hot.

d. French toasted. Here the whole sandwich is dipped in egg and milk batter, then in bread crumbs before browning in a deep fat fryer at 375°F or on a well greased 375°F griddle. It is served while still hot.

e. Hot. Two slices of bread or toast are placed on a plate with hot sliced meat. Gravy or sauce is poured over the sandwich.

f. Open-face. An open-face sandwich is made by placing two slices of bread side by side on a plate, covering the bread with a spread such as butter, and topping with a filling such as sliced meat, cheese, or tomato.

g. Submarine. These are often known as hero, hoagie, or poor boy sandwiches. A loaf of French bread or a hard roll is cut in half lengthwise; each half is spread with butter or margarine. Layers of thinly sliced salami, sharp cheese, ham, tomatoes, and lettuce are arranged on the bottom half. The sandwich is covered with the top half and cut into portions.

h. Sloppy Joe. For this sandwich barbecued ground beef is spread between a horizontally split sandwich bun.

2-3. SANDWICH INGREDIENTS

A sandwich is composed of three basic ingredients. These ingredients are bread, a spread, and a filling.

a. Bread and rolls. The bread used for sandwiches come in a great variety, e.g., white, rye, and whole wheat as well as a variety of rolls. Bread which is slightly firm can be handled more easily than freshly baked bread. Special handling is required to prevent bread and rolls from becoming stale. They should be kept in moisture proof wrappers and stored at a moderate temperature of 75° to 85°F. The storage area must be clean, dry, and separated from other stores to prevent the absorption of odors and flavors. When using galley baked loaves, they should be cut into 1/2 inch to 5/8 inch thick slices. The uniform slices of commercial bread may also be used. The use of hamburger rolls, hot dog rolls, hoagie rolls, or hard rolls is highly recommended as a variation if financially feasible.
b. **Fillings.** The ingredients used for sandwich fillings include an endless variety of fresh and preserved meats, poultry, fish, cheese, and eggs. Directions for types of salad mixtures, cold sliced meats, and hot sandwiches from meat mixtures, sliced cheese, or sliced meat, and gravies can be found in the Armed Forces Recipe Service. How and when sandwiches are to be used determines which kind of filling is appropriate. Meat and poultry sandwiches may be given never for such a purpose since they contaminate easily. Salad fillings and hot sliced meat sandwiches are suitable for use only in dining facility environments.

1. **Cold meats.** These fillings should be prepared by following the selected recipe from the Armed Forces Recipe Service. When meats are cooked for cold meat sandwiches, the meat should be drained and cooled before slicing or refrigerating. All meats should be covered with wax paper and refrigerated at 40° F or below. Meat should be sliced just before preparation of the sandwiches to retain the natural moisture and flavor. Sandwich meat should be free of gristle and excess fat, and should be thinly sliced. When practical, you should use a slicing machine to slice boneless cold meats or cheeses. Hand slicing such items will produce thick and uneven slices which reduces eye appeal. A uniform amount of filling should be placed on each sandwich. This will aid in portion control and spell the difference between an expensive or reasonably priced sandwich meal.

2. **Hot meats.** Hot sandwiches with appropriate salads and desserts make excellent and quick light lunch or dinner meals. If served with soup, potatoes, and vegetables, hot sliced meat sandwiches served open faced and covered with gravy are excellent main dishes for regular lunch or dinner meals. Examples of hot sandwiches are barbecued beef, roast beef with gravy, roast turkey with gravy, grilled ham and cheese sandwiches, and the old favorites grilled frankfurters, hamburgers, or cheeseburgers.

3. **Salad-type mixtures.** These mixtures contain salad dressing or mayonnaise and meat or other types of protein food which readily become contaminated and allow the rapid growth of bacteria. Salad-type mixtures are safe to use where sanitary production is practiced and prolonged holding periods without refrigeration are not necessary.

4. **Lettuce and tomatoes.** Lettuce and tomatoes should be wrapped separately for box lunch use. Do not place these items on a sandwich because not everyone likes them. Meat juices will wilt the lettuce, and the juices from the tomato will cause the sandwich bread or roll to become soggy.

5. **Other fillings.** Peanut butter, fruit preserves, jam, and jellies are in this category. Although these items are spread on bread or rolls, they are considered to be sandwich fillings. These fillings are very popular and are commonly used as a spread on open-faced sandwiches.

c. **Spreads.** Butter or margarines are excellent spreads for sandwiches which greatly enhance the flavor of the bread and filling. The use of butter or margarines also prevents moisture absorption (soggy bread) or moisture loss. Excessive amounts of butter or margarine should not be used because some people may not like either of the items. Butter or margarine should be spread evenly on both slices of bread covering the entire surface to the edges of each slice. Allow the spread to stand at room temperature until softened to spreading consistency. DO NOT melt it by heating. Always keep butter and margarine covered and away from strong food odors between use because they will absorb foreign odors. Do not spread mayonnaise, salad dressing, mustard, or catsup on bread or rolls. Individual tastes for these spreads vary, and this restricts their use in galley preparation of sandwiches. The use of salad dressing or mayonnaise on sandwiches to be held out of refrigeration risks bacterial contamination and possible food infection.

2-4. **SANITATION IN SANDWICH PRODUCTION**

Always prepare sandwiches under conditions where the least possible contamination can occur. Such conditions are affected by installations, equipment, quality of ingredients, and the health and cleanliness of the food handlers. The following rules and regulations should be observed in sandwich production:
a. Keep the preparation area and equipment clean and sanitary by thorough daily care.

b. Requisition and prepare refrigerated foods in such quantities as will guarantee top quality sandwiches, a rapid turnover, and reduced spoilage. Make an effort to avoid leftovers.

c. Clean the chill boxes and accessories regularly to keep mold and undesirable odors to a minimum.

d. Handle bread and fillings as little as possible during all production processes avoiding the use of hands in direct contact with foods if tools or equipment can do the job efficiently.

e. The primary rule in sandwich preparation is to “make to order.” Advance preparation risks food spoilage and possible infection. Hold up final assembly of sandwiches until you are ready to serve them. Sandwich fillings are made of protein foods, and spoilage is an ever present problem. Remember that protein foods must be held at temperatures below 40°F or above 140°F if their service is delayed for more than 3 hours cumulative time from preparation to consumption.

2-5. PREPARATION OF SANDWICHES FOR BOX LUNCHES

The first step in the preparation of sandwiches for box lunch production is to have all your materials ready and to allow yourself ample working space. If a large number of sandwiches is to be prepared, you should set up a production line system which will help speed up your operation.

a. Sandwich making. When ten or more sandwiches are to be prepared, a production line can reduce preparation time and produce a finished product of uniform quality. To set up this type of production line, the following steps are recommended:

1. Soften the required amount of butter by letting it stand at room temperature. Mix or whip it to a soft easily spread consistency.

2. Prepare and assemble all your sandwich material.

3. Arrange all the equipment and utensils (knives, spoons, spatulas, and wrapping paper) in the sequence in which they will be used.

4. Lay out two rows each of ten matching slices of bread. It is not advisable to lay out more than 20 pieces of bread at one time because bread dries out rapidly. Uniformity in the size of bread slices used for sandwiches can best be attained by using pullman or sandwich bread which is square in shape.

5. Your next step is to spread butter over the entire surface of the 20 slices of bread. When buttering the bread, spread the butter from the edges to the center. This will prevent the bread from tearing.

6. Place the filling on one row of the buttered bread. Follow the recipe as to the amount of filling to use on each sandwich to insure proper portion control.

7. Place the matching buttered slices of bread with the buttered side down over the filling thus completing the sandwich. Lettuce, tomatoes, and pickles should be wrapped separately and packed in the box lunch.

8. Stack the sandwiches in groups of two. Cut each group of sandwiches diagonally in half using a sharp knife. The sandwiches are now ready to be labeled and wrapped.

b. Labeling. Mark or write on a label what kind of sandwich is being placed in the wrapping material and enclose the label printed side up so that it can be read easily.

c. Wrapping. There are three methods of wrapping sandwiches. The three methods are diagonally wrapping cut sandwiches, the pharmacy wrapping method, and the sealed sandwich bag method. Illustrations of these methods can be seen in figures 2-1, 2-2, and 2-3.
Diagonal wrapping. Follow the steps in figure 2-1. Start by transferring the cut sandwiches to the center of a 12-inch square piece of sandwich wrapping material with a spatula. Stack one half of the sandwich on top of the other, placing the cut edge away from the person doing the packaging. The cut ends of the wrapping material should be placed corner to corner. Fold in the edges as shown in steps three to seven, and place the wrapped sandwich into the box lunch package.
(2) **Pharmacy method.** This method is not often used in wrapping sandwiches. Steps one through four in figure 2-2 should be followed using this method of sandwich wrapping.

Step 1: Tear off a rectangular piece of wrapping material. Center a sandwich on the paper. The short side should be parallel to the edge of the table.

Step 2: Bring the two short sides of the paper together above the sandwich, fold them over once or twice in a narrow flap, and then flatten the paper against the bread.

Step 3: Turn both ends of the top, fold down and tuck them firmly under the bottom slice of bread.

Step 4: Tuck the bottom part of the paper neatly and tightly under the bottom slice of bread.

Fig 2-2. Steps in wrapping sandwiches by the pharmacy fold.

(3) **Sandwich bag method.** Sandwich bags may be used for wrapping uncut sandwiches. These bags are made of cellophane or some other type of plastic material which will seal when a hot sealing iron is used. Figure 2-3 illustrates this method of sandwich wrapping.

Fig 2-3. Sandwich bag method.
d. **Storage.** Sandwiches should not be stacked in large numbers or placed in thick cardboard boxes. This will insulate the food and prevent the sandwiches from reaching the proper cooling temperature quickly. The ideal storage temperature for sandwiches is 40°F. The sandwich bags or box lunch boxes should be dated with the time of preparation as an added sanitary precaution. Consumption time should be within 3 hours from the time of preparation. Refrigeration of the box lunch **DOES NOT** extend consumption time. The box lunch should be marked or stamped with a statement such as the following:

At (location)  
Flight Galley, MCAS, Cherry Pt., N.C.  
By John STRAM  
Rank SSgt  
Date 10 July 1971  
To be eaten before 10 July 1971  

2-6. **PREPARATION OF SANDWICHES WITH SALAD-TYPE FILLINGS**

Sandwiches with salad-type fillings are prepared by spreading the filling on one of the pre-buttered slices of bread and then covering it with the other buttered slice. Next the sandwich is cut diagonally. Then the sandwich may be placed on a serving tray or individual plate, garnished, and served. Sandwiches with salad-type fillings should **NOT** be used for box lunch meals, since these sandwiches are usually made of high protein foods combined with either mayonnaise or salad dressing. Both high protein foods and the dressings tend to become contaminated rapidly when out of refrigeration.

2-7. **PREPARATION AND SERVING OF APPETIZERS**

Appetizers consist of an unlimited assortment of food combinations designed to excite the appetite and make one eager for what is next to come. Appetizers must be attractively prepared and temptingly flavored. Appetizers are classified into three major groups: canapés, hors d'oeuvres, and cocktails (fruit juice). Antipasto and smorgasbord are also considered to be appetizers. Antipasto is of Italian origin and consists of highly spiced pickled meats and vegetables, dried sausages, canned and smoked fish products, and selected vegetables served with olive oil, wine-vinegar, and various wine marinades. The smorgasbord is of Scandinavian origin consisting of a platter or buffet of appetizers. The smorgasbord, however, has been expanded into an elaborate arrangement of various hot and cold foods.

a. **Canapés.** A canapé is a bite sized bit of savory food spread on an edible base (crackers or toast) and attractively garnished or decorated. It should be small and easy to handle since it is eaten with the fingers. A canapé can be as simple or as elaborate as you wish. Caviar (salted roe (eggs) of large fish and pate de foie gras (paste of fat goose liver) are top luxury spreads while cheese and inexpensive seafood spreads dominate the simpler ones. Canapés require care during preparation if they are to look attractive. Their festive appearance helps create a party atmosphere in any gathering.

1. **Preparation.** Canapé base, fillings, and garnishes may be prepared several hours in advance, but the actual assembling should be done as near to serving time as possible. If the fillings or garnish are prepared ahead of time, they must be covered and placed under refrigeration immediately.

2. **Serving.** When preparing canapés for serving, be sure that the cutting utensils are sharp in order to insure even shapes. The serving plate should be covered so that the finished product will have a balanced appearance. The plates should be chilled thoroughly before serving unless the canapés are to be served hot. Hot canapés, although prepared from the same basic ingredients as cold canapés, are more complicated in their serving than the cold variety. The key to success with hot canapés is to keep a close watch on the serving time.
b. Hors d'oeuvres. Hors d'oeuvres, like canapés, are prepared from the same mixtures. The distinction between the two is simple. The canapé mixture is always served on a firm edible base while hors d'oeuvres can be eaten with the fingers or from cocktail picks. Although hors d'oeuvres provide an excellent method of using leftover food, their highly spiced seasonings and attractive appearance suggest that they are a luxury item.

(1) Preparation. Mixes may be prepared from one or more varieties of meat or cheese. They may be shaped into bite-sized croquettes or balls, fried, baked, or broiled, and served as appetizers. Small cubes of cheese or sausage meat may be placed on cocktail picks. Stuffed olives or pickled vegetables may also be prepared for serving in this manner.

(2) Serving. Hors d'oeuvres should be arranged in groups of the same variety and not placed on the serving tray in a haphazard manner. The tray should be arranged so that the darker colors are on the outside edges arranged so the foodstuffs will harmonize and appear artistic. Remember, hors d'oeuvres should be replaced when they are about two-thirds depleted. Never replenish the tray which is on display but take the depleted tray into the galley and do it.

c. Cocktails. Cocktails consist of vegetables, fruits, seafood mixtures, or juice from fruits or vegetables. They must be chilled thoroughly and served at the beginning of the meal. Cocktails should be tangy and highly seasoned. Crackers, pretzel sticks, or potato chips are good accompaniments for cocktails.

2-8. SUMMARY

In this chapter you have seen the importance of sandwiches, their composition which consists of a bread covering and a filling, the sanitation precautions needed in their preparation, the special procedures used in preparing sandwiches for box lunches, and the use of salad-type fillings. The preparation and serving of appetizers has also been discussed.
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SALADS, SANDWICHES, AND DESSERTS

Lesson 2

Sandwiches

STUDY ASSIGNMENT: MCI 33.20, Salads, Sandwiches, and Desserts, chap 2.

LESSON OBJECTIVES: Upon successful completion of this lesson, you will be able to identify the basic ingredients needed in sandwich preparation, the sanitary precautions required during sandwich preparation and storage, the procedures for making sandwiches for box lunches, the methods of sandwich making using salad-type fillings, and the methods of preparing appetizers.

WRITTEN ASSIGNMENT:

A. Multiple Choice: Select the ONE answer which BEST completes the statement or answers the question. After the corresponding number on the answer sheet, blacken the appropriate box.

Value: 1 point each

1. A club sandwich differs from other sandwiches in that it is
   a. served open-faced and hot.
   b. prepared on a grill.
   c. composed of three or more slices of bread and several fillings.
   d. made from French bread.

2. Which sandwich is prepared by dipping it in egg butter and browning it in deep fat?
   a. Sloppy Joe
   b. Submarine
   c. Club
   d. French toasted

3. Which sandwich is made with a slice of meat covered with gravy?
   a. Hot
   b. Submarine
   c. Club
   d. French toasted

4. Which sandwich consists of a variety of thinly sliced meats, cheeses and vegetables on French bread or a hard roll?
   a. Sloppy Joe
   b. Open-face
   c. Club
   d. Submarine

5. The ideal storage temperature to prevent bread and rolls from becoming stale should be
   a. 55° to 65° F.
   b. 66° to 74° F.
   c. 75° to 85° F.
   d. 86° to 94° F.

6. Galley baked bread used for sandwiches should be sliced at a thickness of ___ inch.
   a. 3/8
   b. 1/2
   c. 3/4
   d. 7/8
7. A variety of sandwich filling recipes may be found by consulting the
   d. Armed Forces Recipe Service.

8. When sandwiches are to be eaten in the field, which type of filling should NOT be used?
   a. Salad
   b. Meat
   c. Poultry
   d. Peanut butter

9. What must be done to cooked meats when they are to be used in cold meat sandwiches?
   a. Sliced hot and panned off to drain while under refrigeration
   b. Drained, cooled, and then sliced and placed into refrigeration
   c. Refrigerated until cold and sliced as needed

10. How should meat for sandwiches be sliced?
    a. Thick
    b. Medium
    c. Thin
    d. Chunks

11. Which sandwich is an example of a hot meat sandwich?
    a. Hamburger
    b. Barbecued beef
    c. Egg salad
    d. Tuna fish

12. Since salad-type sandwich fillings contain some form of salad dressing and high protein food, they will
    a. become stale rapidly.
    b. become soggy and fall apart.
    c. spoil easily.
    d. last longer due to the extra moisture.

13. How should lettuce and tomatoes be included in box lunch sandwiches?
    a. Separately wrapped
    b. Coated with mayonnaise
    c. In the center of the sandwich
    d. Frozen

14. What should be done with butter or margarine so that it will spread easily on sandwich bread?
    a. Heat the butter until it is liquified.
    b. Spread the butter with a hot knife.
    c. Warm the bread before applying the butter.
    d. Bring the butter to room temperature before spreading.

15. Spreads are used on sandwich breads to
    a. prevent the bread from becoming stale.
    b. prevent the bread from becoming soggy.
    c. make the bread soft.
    d. save on the amount of filling used.

16. How often must sandwich preparation areas be cleaned?
    a. Daily
    b. Once every 2 days
    c. Only when told by the chief cook
    d. Weekly

17. When preparing sandwiches, spoilage is reduced by using
    a. weekly leftovers.
    b. mayonnaise.
    c. mustard.
    d. freshly prepared foods.
18. What are the temperature ranges for holding protein sandwich filling for more than 3 hours?
   a. Below 0° or above 212° F
   b. Below 35° or above 120° F
   c. Below 40° or above 140° F
   d. Below 42° or above 130° F

19. Why are only 20 slices of bread laid out at one time when making large numbers of sandwiches?
   a. Personnel get in each other’s way.
   b. Bread and equipment take up too much room.
   c. One loaf of bread contains 20 slices of bread.
   d. Bread dries out rapidly.

20. Uniformity of bread size for sandwiches can be obtained by using what type of loaf bread?
   a. Pullman
   b. French
   c. Hearth
   d. Continental

21. Butter is spread from the edge of the bread to the center in order to
   a. cover the bread evenly.
   b. prevent the bread from tearing.
   c. reduce preparation time.
   d. keep the butter from getting on the preparation table.

22. The same amount of filling should be used on each sandwich to insure
   a. easy handling of the sandwich.
   b. the sandwich will fit into the sandwich bag.
   c. portion control in sandwich production.

23. How many sandwiches are normally stacked and cut diagonally in half at one time?
   a. 2
   b. 3
   c. 4
   d. 5

24. What are the three methods of wrapping sandwiches?
   a. Parallel, delicatessen, and paper sack
   b. Diagonal, pharmacy, and sandwich bag
   c. Horizontal, supermarket, and chuckwagon
   d. Diagonal, delicatessen, and chuckwagon

25. Storing large numbers of stacked sandwiches or placing them in thick cardboard boxes prevents
   a. spoilage.
   b. the sandwiches from drying out.
   c. the loss of refrigeration space.
   d. the sandwiches from reaching a proper cooling temperature quickly.

26. The ideal storage temperature for prepared sandwiches which are being refrigerated until use is
   a. 32° F.
   b. 35° F.
   c. 40° F.
   d. 45° F.

27. The 3-hour time limit for consumption of box lunch sandwiches begins when the lunches
   a. are prepared.
   b. are relensed after a secondary refrigeration.
   c. are issued or leave initial refrigeration.
   d. leave secondary refrigeration.
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<thead>
<tr>
<th>Question</th>
<th>Options</th>
<th>Correct Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>28. When salad-type fillings are used in sandwiches, how are they prepared?</td>
<td>a. Spread on two unbuttered slices of bread. b. Spread on one buttered slice and covered with an unbuttered slice of bread. c. Spread on one unbuttered slice of bread and covered with a buttered slice. d. Spread on one buttered slice of bread and covered with another buttered slice.</td>
<td>b. Spread on one buttered slice and covered with an unbuttered slice of bread.</td>
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<tr>
<td>29. Which type of filling MUST NOT be used in box lunch sandwiches?</td>
<td>a. Sliced roast beef b. Sliced bologna c. Egg salad d. Sliced ham</td>
<td>c. Egg salad</td>
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<td>31. What is the difference between hors d'oeuvres and canapés?</td>
<td>a. Hors d'oeuvres are served hot. b. Canapés are only served cold. c. Hors d'oeuvres are not served on a firm edible base. d. Hors d'oeuvres are served after the meal.</td>
<td>d. Hors d'oeuvres are served after the meal.</td>
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<td>33. In what manner are hors d'oeuvres arranged on the tray or service plate?</td>
<td>a. In groups of assorted varieties b. In groups haphazardly arranged c. In groups of the same variety with darker colors on the outside edge</td>
<td>c. In groups of the same variety with darker colors on the outside edge</td>
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<td>34. Hors d'oeuvres trays should be replenished when the tray is</td>
<td>a. Half b. Two-thirds c. Three-fourths d. Completely</td>
<td>d. Completely</td>
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A dessert is usually considered to be a sweet dish served at the end of a meal. The tradition of having a treat at the conclusion of the evening meal is well established in our culture. It enhances the enjoyment of the whole meal, helps add variety, and can add to nutrition. One should be careful to serve light desserts with heavy meals and more complicated desserts with simple meals so that the dessert complements the meal rather than dominating it. This chapter will consider the use of fruits, gelatins, puddings, and other desserts as well as toppings and sauces on desserts. Remember, use variety in selecting desserts so that you maintain their significance in the overall meal pattern.

3-2. DESSERT FRUITS

a. Types. When serving fruit as a dessert you can use raw fresh fruit, frozen fruit, fresh cooked fruit, or canned fruits.

   (1) Fresh and frozen fruits. Seasonally available fresh fruits and those year-round fruits such as apples, oranges, grapefruits, bananas, and frozen fruits offer a pleasing variety to any meal when served as a dessert. They offer an alternative to weight conscious personnel who wish to avoid high calorie desserts. Most fresh fruits can also be combined with canned or frozen fruits. An example of this type of fruit blending would be a fruit cup. Here pared apples and oranges are combined with canned peaches, pears, and pineapple chunks producing a nutritious, tasty, colorful, and eye appealing dessert.

   (2) Fresh cooked or canned fruits. Cooked fruit desserts such as baked crisps, tarts, and fruit puddings are prepared from canned or dehydrated fruits. Other fruit desserts such as baked apples or bananas are prepared from fresh fruit. Fruit may also be readily used with egg whites as in whips and soufflés or as an added ingredient to ice cream and sherberts. Although many canned or frozen fruits are packed in a syrup or sugar liquid, they are generally considered as light desserts and may be served at the end of a heavy meal.

b. Preparation of dessert fruits for serving.

   (1) Fresh fruits. Fresh fruit should be chilled and washed well with cool water before being used. Fruits such as apples and pears are prepared for serving with the skin of the fruit left on in many cases. The skin of these fruits helps to add color and eye appeal to the dessert product. The following paragraph will discuss the preparation of individual fruits commonly used.

      (a) Apples and pears. These two fruits must be washed thoroughly and cored if the recipe requires before using or serving as a chilled whole (raw) fruit. Should the recipe require these fruits to be quartered, diced, or sliced, you should dip the fruit pieces into an antioxidant or edible acid (citrus juice, usually lemon) solution. This will prevent the fruit from discoloring. Most white fleshed fruits are high in sugar content and will turn brownish in color when cut and exposed to air.

      (b) Bananas. When preparing bananas for serving, they must be washed with cool water prior to use. If you are required to cut the bananas for use with a particular recipe, the banana pieces should be dipped into an antioxidant or edible acid solution to prevent discoloration. Care in handling is must with bananas since they bruise easily and ripen very rapidly.

      (c) Citrus fruits. This group of fruits includes grapefruits, oranges, lemons, and limes. Of these fruits the oranges and grapefruits are most widely used in the preparation of fruit desserts. Citrus fruits require washing under cool water before peeling and further preparation. Oranges and grapefruits are usually peeled, sectioned, and seeded before being added to other ingredients. When sectioning either...
fruit, be sure that your paring knife is sharp. This will aid you in separating the tough white membranes and cutting apart each section.

(d) Peaches. When using this zesty fresh fruit, it is advisable to remove the skin since it is slightly bitter and can alter the flavor of the fruit dessert to which it is added. Peaches are also high in sugar content and will require dipping into an edible acid solution to prevent discoloration after having been peeled and sliced or halved. When served whole as a fresh chilled fruit, all that is required is a thorough washing under cool water.

(e) Pineapple. Fresh pineapple should be prepared in the following manner. The brittle leaf top is twisted until it separates from the fruit; then with a sharp all-purpose knife (French knife) cut the pineapple into quarters and slice the prickly rind away from the fruit. After removing the rind, cut away the core and any eyes that remain. Now the pineapple is ready to be cut into quarter slices, chunks, or sticks. Should you desire whole pineapple slices, you would omit quartering the fruit at the beginning of the preparation process and coring would be done after each slice or ring is cut.

(f) Melons. Cantaloupe, honeydew melons, and watermelon are very popular with most people when served as a dessert. Cantaloupes and honeydew melons are usually cut into quarters or eighths for serving, but watermelons are cut into 3/4 to 1 inch slices and then halved or quartered before being served. When preparing melons, especially cantaloupes and honeydews, you must scoop out the seeds with a spoon before quartering or further cutting. Watermelon seeds are not removed from each individual slice as the seeds are scattered throughout the fruit and their removal would prove to be impractical. To change the appearance of melons when serving them for dessert, try scooping out melon balls or cutting your melons into small cubes no larger than 3/4 inch. Combine the three melons, place the fruit into individual serving dishes, and garnish them with a sprinkle of toasted coconut.

(g) Other fresh fruits. Cherries, grapes, and strawberries can also be served as dessert fruits and will add variety to your dessert menu. When preparing these fruits prior to serving, they should be washed with cool running water and checked for spoilage. They should be handled carefully as these fruits (especially strawberries) are quite easily bruised. If at all possible, you should procure the seedless variety of grapes whenever serving fresh grapes.

(2) Canned fruits. Due to the modern preserving technique of canning, there are many fruits available for use in the dining facility year-round. Since the canning process requires heating to sterilize the contents of the can, these fruits are only available in the cooked form. Many of these fruits are packed in a syrupy liquid or their own natural juices. They are ready to eat simply by opening the can, portioning into individual serving dishes, and topping with whipped cream, ice cream, shredded coconut, or chopped nuts. They may also be served chilled without a topping.

(3) Frozen fruits. Fruits available in the frozen form are limited in variety and are quite expensive. Many fruits cannot be frozen due to the structure of the fruit or because they will not keep satisfactorily when frozen. The berry fruits are the most common frozen fruits available to the military. These include blackberries, blueberries, boysenberries, rasberries, and strawberries. All are packed in a syrup or sugar liquid with the exception of blueberries and boysenberries. Blueberries and boysenberries are individually quick frozen and packed into polyethylene bags for issue. Peach halves or sliced peaches and sour cherries are the only other fruits available in the frozen form. These two fruits are also packed in a syrupy liquid. Frozen sliced peaches and strawberries are commonly used in the dining facility in the preparation of shortcake or as a fruit topping for ice cream desserts. The other fruits are often used in the preparation of pastry food items. All frozen fruits must be thawed either partially or completely depending upon the recipe requirement.
3-3. DESSERT GELATIN

a. General. Gelatin is an animal protein which produces a jelly-like product when combined with water. When flavoring, coloring, and sweetening are added, it makes a most agreeable dessert. Most gelatin dishes are considered to be light desserts and complement the heavier types of meats. These desserts are also relatively easy to produce and economical in cost.

b. Preparation. Gelatin comes in several market forms. Each of these requires special mixing procedures to produce an acceptable dessert. Follow the directions completely to insure success.

(1) Plain gelatin granules. The least expensive to use and the least convenient to use of the market forms of gelatin is the package of gelatin granules.

(c) Ingredients. To prepare a gelatin dessert using these granules, you must use a number of ingredients. The dry gelatin granules produce the gel. A liquid dissolves the gelatin and other ingredients. This liquid may be water or fruit juice. A flavoring gives the basic taste to the dessert. The coloring should match the flavor. For example, red coloring would be used for a cherry dessert and green would be used for a lime dessert. Granulated white sugar is almost always needed as a sweetening. Fruits suspended in the gel are optional but frequently used.

(b) Procedure. First soak the dry gelatin in cold water to soften and swell the granules. Heat one half of the liquid to be used. Mix the flavoring, coloring, and sweetening. Add the heated liquid and the soaked gelatin to the mixture and stir until the mixture is thoroughly dissolved. At this point add the rest of the cool liquid and stir again. This lowers the temperature of the mixture and speeds the setting of the gel. The mixture is next refrigerated to lower its temperature which helps the gel to set. When the mixture reaches the consistency of molasses, any fruit to be used should be added. This will aid in suspending the fruit so that it does not float to the top or sink to the bottom. Return the dessert to the refrigerator to complete the setting process.

(c) Commercial gelatin mix. While this mixture is a little more expensive than the locally mixed form, it more than makes up for this in convenience and is preferred when it is available. The mix contains gelatin, sugar, coloring, and flavoring. It is available in many different flavors such as cherry, lemon, lime, orange, raspberry, and strawberry. The mix is premixed before packaging by the manufacturer and needs only the correct amount of hot and cold liquid added. Success is assured by following the manufacturer's recommended recipe or the Armed Forces Recipe Service directions. Basically, you must dissolve the mix in one half of the required hot liquid, stir until dissolved, add the rest of the cool liquid, and refrigerate. Do not use the freezer to cool gelatin, since freezing will ruin its structure.

v. Uses. There are many ways to use gelatin in desserts. The following are some typical ways it is used in dining facilities:

(1) Molded. When gelatin is combined with water and other ingredients, it is liquid. This liquid takes the form of the container in which it is placed. If a container with a decorative shape is used, the gelatin will have the same shape when the gel has set. This method may be used with large gelatin desserts or for small individual desserts. When the gel has set, the gelatin may be unmolded by several methods. The mold can be partially submerged in warm to hot water to loosen the gelatin. The mold is then inverted over the serving dish. Another method is to use a towel which has been dampened in hot water. The towel is wrapped around the mold until the gelatin is loosened.

(2) Individual plates. Gelatin is most often served in individual dishes in the dining facility. The usual method is to make a large quantity of gelatin and slice it into individual servings which are placed in small dessert dishes.

(3) Cubed. Instead of slicing the gelatin, it may be cut into small cubes which can be served by the spoonful or mixed with other ingredients to make a more complicated dessert.
4. Whipped with cream. When gelatin reaches the consistency of syrup, heavy cream may be whipped into it to make a dessert that is both appetizing and different. This type of dessert is light in texture and offers a method of making a rather rich gelatin dessert.

d. Points to remember when making gelatin desserts.

1. Have the water used to dissolve the gelatin as near boiling as possible, but do not boil the gelatin solution.

2. Be certain that all gelatin and other ingredients are dissolved before beginning to cool the solution. Undissolved gelatin will form a rubbery layer at the bottom of the container. This rubbery gelatin is most unappetizing.

3. Add cold liquid or ice to complete the dilution and bring the temperature down. This will reduce the time required in the refrigerator for the gelatin to set.

4. If raw pineapple is to be added to gelatin, it should be boiled so that the chemicals in it will not prevent the gelatin from setting.

5. Always allow gelatin to set in a refrigerator. Never try to speed the process by placing the dessert in a freezer as this will cause the formation of ice crystals which will ruin the dessert. A cool room may be used in an emergency to set the gelatin, but it will take longer than refrigeration.

6. Make only the quantity of gelatin which will be used at one time. Storage of gelatin causes it to become rubbery as the water evaporates.

7. Use gelatin desserts often. Carefully prepared, they are a highly acceptable dessert which is low in cost and easy to make.

3-4. PUDDINGS

a. General. When eggs are added to a liquid and cooked, the result is a semisolid material that is the basis for dessert puddings. Milk is often used as the liquid to make the pudding richer, and flavoring agents are always used. The addition of rice or bread gives two popular variations. Cream puddings are a lighter variation and are made using cornstarch in place of some of the eggs or using various pudding mix powders.

b. Pudding preparation. Whenever you prepare puddings, the first and foremost thing to keep in mind is adherence to strict sanitation measures. The 3-hour rule must be observed in those recipes containing milk and eggs. (No more than 3 hours from preparation to serving is allowed to guard against spoilage and food poisoning.) The two major classes of puddings are custard and cream.

1. Custard puddings. A plain baked custard is simple to prepare and can be delicious. Plain custard has eggs as the only thickening agent and contains milk, sugar, salt and flavoring. It is baked at a moderate heat until firm. Some recipes may call for gentle heat over a water bath. The egg-milk-sugar mixture can be poured into steam table inserts and baked until firm. The use of steam table inserts will enable you to remove and serve the custard easily. If you are in doubt as to whether the custard is sufficiently cooked, take a knife and slip the tip into the middle of the mixture. If the knife tip comes out clean, the custard is ready to be removed from the heat and should be cooled immediately to prevent curdling or weeping. Baked custards are usually flavored with vanilla and nutmeg; however, they can be flavored with brown sugar or caramelized white sugar. Caramelized sugar is made by slowly cooking white granulated sugar over direct heat until a brown color is obtained. The sugar so heated becomes liquid as it melts and must be gradually added to the milk and stirred constantly.

a. Bread pudding. Bread pudding has a custard base and is an economical dessert to prepare because it can be made with leftover bread. The amount of eggs used in the custard mixture for bread pudding is also less than that used in the preparation
of plain custard. The bread contains a considerable amount of starch which helps thicken the mixture. When preparing a bread pudding, toasting and buttering of the bread and then arranging it in a neat and attractive pattern in the baking pan before adding the custard mixture will result in a more attractive finished product. Bread pudding is not baked over a water bath but is cooked directly on an oven rack. To test bread pudding for doneness, the same method is used as in testing custard, i.e., by inserting a knife halfway into the center of the pudding. Upon withdrawing the knife, the blade should show no residue of the pudding. Bread pudding tastes best when eaten hot and served with lemon sauce, cherry sauce, or a hard sauce. Portioning can be done by using a serving spoon or an ice cream scoop, placing the bread pudding on individual dessert plates, and topping the pudding with one of the sauces mentioned.

(b) Rice pudding. Baked rice pudding is another popular variation of baked custard. The rice should be thoroughly cooked before being combined with the custard mixture. The proportion of basic custard ingredients does not change when cooked rice is used since rice does not thicken the custard mixture. Rice pudding should also be served warm and topped with an appropriate sauce.

(2) Cream type puddings. There are large numbers of recipes for cream type puddings. They can be prepared from "scratch," from dessert pudding powders or from instant pudding powders.

(a) Cream puddings. Cream pudding and variations may be prepared by combining milk, sugar, salt, cornstarch, eggs, butter, and flavorings. Cornstarch provides the thickening in these desserts. The basic cream pudding consists of sweetened scalded milk (simmering temperature) added to a paste made with sugar, cornstarch, and cold water. This mixture is gradually combined with beaten whole eggs and cooked, stirring constantly to prevent the mixture from becoming lumpy. The pudding mixture is removed from the heat when it becomes smooth and creamy. It is then poured into individual serving dishes and chilled. Serve it topped with a whipped cream topping. Many variations can be prepared by adding other ingredients to the basic cream pudding such as bananas, coconut, pineapple, or chopped nuts such as pecans, walnuts, or toasted almonds.

(b) Desert pudding powders. These mixes are combined with nonfat dry milk and added to water, stirring the mixture until smooth. Then this mixture is added to hot water (180°F) and heated slowly, stirring constantly until the pudding thickens and just begins to boil. At this point the hot pudding mixture is removed from the heat and poured into individual serving dishes or serving pans, covered, and refrigerated until serving time. It is served with whipped cream or topping and garnished with a piece of fruit or a maraschino cherry.

(c) Instant desert pudding powders. These are flavored starch desserts that can be prepared with the addition of cold milk. Instant dessert powders are available in chocolate, vanilla, and butterscotch flavors. In addition to the flavoring materials, the powders contain sugar, starch, salt, gelling agents, coloring material, powdered shortening, and nonfat dry milk. Instant dessert powders can be served as pudding, used as a pie filling, and used as a filler in such recipes as Boston cream pie.

3-5. ICE CREAM

a. Commercial ice cream. Standard ice cream is purchased from commercial sources in the form of individually wrapped slices and in cups. These are convenient to use and their extra cost is covered by the elimination of waste.

b. Soft serve ice cream. The only ice cream that is made in the dining facility is known as soft serve ice cream. It is made in a machine which uses a liquid mix to heat and freeze the custard-like ice cream and also to serve the ice cream directly into individual containers. This machine uses a mix which is listed as "Ice Milk-Milkshake Mix" in Federal Supply Catalog (899081). It is packaged in 5-pound cans and is available in two flavors, vanilla and chocolate.
Directions for its use are printed on the can label. Care should be taken to prevent lumps in the reconstituted product, since they could clog the freezer. The recommended method for reconstituting the powdered mix with water is to use a power mixing machine. If a power mixer is not available, good results can be obtained by mixing with a wire whip. Since this type of product is especially susceptible to contamination, all utensils that come in contact with the mix should be sanitized before use. At first, only enough mix should be prepared to fill the top of the freezer. The remaining mix should be reconstituted in small batches with enough being added to the freezer to maintain efficient operation. Reserve supplies of reconstituted mix should be kept refrigerated at temperatures between 35° and 40° F. Never add warm mix to the freezer unit. While the freezer is in operation, do not leave it unattended. Once the mix is reconstituted and the machine is in operation, soft serve ice cream may be dispensed directly from the freezer into paper cups or ice cream cones.

3-6. BAKED GOODS

The purpose of a dessert is to be a pleasant last course which adds sweetness and rounds out a meal. Baked desserts meet this need especially well. They are satisfying and well accepted as desserts. Baked goods include such things as pies, cakes, cookies, and pastries. Although these desserts may be baked in the dining facility, they may also be prepared in a central bake shop or procured from commercial sources. The process of preparing and making these desserts is complex and will not be covered in this course. Consult the MCI course on pastry baking for further information.

a. Pies. There are two types of pies. The first is the pie made from a crust of dough and a filling which is baked after preparation. An apple pie is an example of this type. There are many modifications possible and the variety of pies is endless. The use of canned fruits and instant mixes as pie fillers greatly simplifies the preparation of this dessert. Pies should be cut into pieces (usually six) just before opening the serving line to give them a fresh look. Cut them only as needed to prevent drying out and so that leftover pie will be fresh. Place each piece on an individual plate and serve it with or without an appropriate topping.

b. Cakes. The cake prepared in the dining facility is usually a sheet cake which is baked in one layer, iced with frosting if appropriate, and served from the same pan it is baked in. This makes preparation and icing easier and aids in maintaining uniform servings. The icing on cakes makes a topping unnecessary.

c. Cookies. There are many varieties of cookies which vary in preparation makeup from the simple to the complex. Simple cookies are acceptable and much less trouble to make. Complex cookies are best prepared only for special occasions. Since cookies keep well, they may be prepared ahead of time and stored until needed. Of all the baked desserts, cookies are perhaps the most convenient to prepare and to serve. They are usually very popular.

d. Pastries. There are many types of pastries. They are made with sweet dough combined with fruit, syrup, honey, nuts, and other delicacies. They are the most complicated of the baked desserts to make, but they offer variety and satisfaction. Pastries are often served with breakfast as a simple but pleasant way to start the day.

3-7. TOPPINGS AND SAUCES FOR DESSERTS

a. Whipped Toppings. This type of topping consists of cream, sugar, and flavoring into which air is mixed to form a foam. This foam is used to give eye and taste appeal to desserts which might otherwise appear plain. Possible flavorings include brandy, rum, chocolate (cocoa), whipped coconut, fruit (well-drained), grated lemon and orange peel, and spices such as ground cinnamon, nutmeg, and cloves. Since cream will not whip unless it is cold, it is very important to start out with cream that has been well chilled and a chilled mixing bowl. Whip cream until stiff peaks form, but avoid overwhipping which will produce butter. Since whipped cream will separate on standing, it must be kept cold and covered from the time it is whipped until it is served. No more than one gallon of cream should be whipped at one time. If more is required, whip it in several batches.

(1) Types of whipped toppings. The following are the forms of whipped topping available in the dining facility.
(a) Fresh whipping cream. Fresh whipping cream is capable of producing the finest product. It has certain disadvantages, however, which make it the least suited for dining facility use. It requires refrigerator space for storage before use, it requires the utmost care in preparation, and it is the least convenient form available. Once fresh whipping cream is procured, it must be used within a relatively short time (usually 24 hours).

(b) Sterilized whipping cream. This form comes in cans and does not require refrigeration. Once a can has been opened, the cream must be stored and whipped just as fresh cream. The primary advantage of this form over the fresh whipping cream is the saving in refrigerator storage space and the longer storage periods possible.

(c) Dehydrated dessert and bakery topping. This form of topping has many advantages and is probably the best suited for dining facility use. It is procured as a dry powder in cans and can be stored in the storeroom for long periods until needed. This powder is added to cold water along with dry nonfat milk and flavoring. This is then mixed slowly to blend and then at high speed until stiff peaks form. The product formed is considerably more stable than fresh cream and has good stand up qualities.

(d) Frozen dessert and bakery topping. This form of dessert whipped topping is probably the most convenient to use. It is procured in the frozen form with air and sugar already beaten into it. The frozen topping is defrosted to a temperature of 40° to 50° F and then whipped along with the flavoring desired. Again it is essential that the topping and bowl be kept cold and that the whipped topping be kept cold before serving.

(2) Use of whipped toppings. These dessert toppings are very perishable and their stand up quality is poor. Therefore, every effort should be made to keep them cold and covered. They should be placed on desserts just before opening the serving line. The dessert should be well chilled before the topping is applied. Do not add topping to a large number of desserts at one time. Add the topping as needed. Toppings have two functions: one is to garnish or provide eye appeal, and the other is to add flavor and texture contrast to the dessert. A separated or dry topping will defeat the purpose of the topping altogether. When adding whipped topping made from fresh or sterilized cream, two to three tablespoons of confectioner's sugar should be added. Use a quarter of a cup of frozen and dehydrated whipped topping per serving since these are more economical and have better stand up quality. Whipped toppings used on pies should be applied as close to serving time as possible preferably after cutting and portioning.

b. Miscellaneous toppings. There are several standard miscellaneous toppings which are used as dessert garnishes. Their use can enhance an otherwise plain dessert, but their overuse greatly diminishes the effect.

(1) Chopped nuts. English walnuts, pecans, and mixed nuts are available in the dining facility. These may be chopped into medium fine pieces for use on desserts. These nuts may be sprinkled lightly on desserts such as ice cream, cakes, and puddings. They are frequently used on pastry desserts. Be careful that the topping provides the finishing touch and does not detract from the dessert itself.

(2) Fruits. The two fruits most commonly used as dessert toppings are maraschino cherries and crushed pineapple. Maraschino cherries may be used whole or cut into small pieces. Only one cherry or one piece of cherry is generally used per dessert where the bright red color provides a color contrast and center of focus for the dessert. Cherries are especially effective when placed in the center of whipped cream topping as on pie or ice cream. Crushed pineapple is a more specialized topping but can be used when it is effective as on ice cream. It is best used well drained or in a thick sugar syrup.

(3) Marshmallows. Occasionally small marshmallow pieces or miniature marshmallows are used as dessert topping. They are especially effective with dark colored desserts where they provide contrast. As with all toppings, sparing use is the key to success.

c. Dessert sauces. These sauces give the delightful finishing touch that raises dessert dishes above the average and enables the cook to be clever in offering many surprises in serving
puddings, cakes, fruit, and ice cream. Many dessert sauces are named for the chief flavoring ingredient such as butterscotch, lemon, nutmeg, orange, vanilla, and chocolate sauces. These sauces are made principally from pregelatinized starch or cornstarch, sugar, water, butter, salt, and the flavoring agent indicated by the name. Occasionally, milk and eggs are used in their preparation as added thickeners. The standard serving is two ounces, although exceptions are frequently called for.

1. **Fruit sauces.** Armed Forces recipes for fruit sauces call for fruit juice, pulp, whole canned fruit, or fresh fruit. The most frequently used fruits are apricot, cherry, lemon, orange, peach, and pineapple. If pregelatinized starch is used, cooking is not required. If corn starch is used, the blended ingredients must be brought to a boil and cooked until the sauce is clear and thick. Strawberry gelatin is used to thicken strawberry sauce so that cooking is not required. Fruit sauces may be served over cake, puddings, fruit dumplings, ice cream, and many other desserts. Usually a two ounce serving is the best to use.

2. **Ice cream sauces.** Butterscotch, caramel, and several variations of chocolate sauce may be used as toppings on ice cream. Chocolate is perhaps the most frequently used. The preparation of these sauces is simple with few ingredients and a short cooking time required. Since individual tastes vary, ice cream sauce should be self-service.

3. **Custard Sauce.** This sauce, which resembles custard, must be cooked regardless of the type of thickener specified because the main ingredient is raw whole eggs. In addition to eggs, it contains milk and flavoring. These are whipped while beating to give them a light consistency. Custard sauce is frequently used on cakes, puddings, and fruit desserts. It may be served hot or cold.

4. **Vanilla sauce.** This is a simple sweet thickened sauce flavored with vanilla. It can be cooked or uncooked depending upon the type of thickener used. This sauce is a good accompaniment for cakes and puddings.

5. **Cinnamon and nutmeg sauces.** These sauces may either be cooked or uncooked. The recipe will specify the use of cornstarch or pregelatinized starch as a thickener. Cinnamon sauce is served with apple dumplings and various puddings. Nutmeg sauce best complements such desserts as steamed puddings and rice puddings. Since these sauces have a strong flavor, only one ounce is used per serving.

6. **Hard sauce.** This is an uncooked sauce made from butter and confectioner’s sugar with flavoring as desired. The ingredients are beaten until smooth and fluffy. Hard sauce is served with fruitcake and bread pudding. This sauce should be made in advance to permit chilling before it is served. Use two tablespoons of chilled sauce per serving.

### SUMMARY

This chapter has given you an introduction to the types of desserts used in Marine Corps dining facilities. It has covered the preparation and use of fruit, gelatin, puddings, ice cream, baked goods, and dessert toppings and sauces. You have seen how fresh, frozen, and canned fruits are used in desserts; how gelatin is made, molded, and served; the preparation of bread pudding, rice pudding, and cream type puddings; how soft serve ice cream is made and served; and the advantages of pies, cakes, cookies, and pastries as desserts. Finally, you have seen the use of fresh, frozen and dehydrated whipped topping; the miscellaneous toppings such as chopped nuts, fruit, and marshmallows; and the types of dessert sauces.

### COURSE CONCLUSION

Now that you have completed the lessons for this course, it is time to prepare for the final examination. Your best preparation will be to review the lessons until you can answer all of the questions correctly without reference to the text. When you can do this, you may be sure you will have no trouble with the final examination. If you have the time available to you, a second reading of the chapters of the text will be helpful. Good luck on your final examination.
SALADS, SANDWICHES, AND DESSERTS

Lesson 3

Desserts

STUDY ASSIGNMENT: MCI 33.20, Salads, Sandwiches, and Desserts, chap 3.

LESSON OBJECTIVE: Upon successful completion of this lesson, you will be able to identify the types of fruits used for desserts and their preparation, the preparation and use of gelatin in desserts, the types and preparation of pudding and ice cream, and the types of baked goods used as desserts. In addition, you will be able to identify the types and methods of using dessert toppings and sauces.

WRITTEN ASSIGNMENT:

A. Multiple Choice: Select the ONE answer which BEST completes the statement or answers the question. After the corresponding number on the answer sheet, blacken the appropriate box.

   Value: 1 point each

1. Which kind of dessert would be served with a heavy meal?
   a. Light  
   b. Complex  
   c. Tart  
   d. Heavy

2. Which type of dessert fruit is best for overweight personnel?
   a. Canned  
   b. Cooked  
   c. Dehydrated  
   d. Fresh

3. Which type of fruit is used to prepare baked crisps, tarts, and fruit puddings?
   a. Fresh  
   b. Frozen  
   c. Canned or dehydrated  
   d. Instant

4. Although canned and frozen fruits are packed in sugar syrup, they are considered to be _______ desserts.
   a. heavy  
   b. fresh  
   c. light  
   d. low calorie

5. What is the first step in the preparation of fresh fruit for desserts?
   a. Paring  
   b. Washing  
   c. Slicing  
   d. Peeling

6. Why are apples, pears, and bananas dipped in a lemon juice solution after being sliced?
   a. To prevent discoloration  
   b. To insure crispness  
   c. To preserve their shape  
   d. To retard spoilage

7. What is the name given to the group of fruits which includes oranges, grapefruits, lemons, and limes?
   a. Melons  
   b. Tree fruits  
   c. Acid fruits  
   d. Citrus fruits

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8. Which fruits are peeled, sectioned, and seeded before being added to desserts?
   a. Lemons and limes  
   b. Oranges and grapefruits 
   c. Cantaloupes and watermelons 
   d. Grapes and cherries

9. Which fresh fruit has a slightly bitter skin which should be removed before adding it to desserts?
   a. Pears  
   b. Melons 
   c. Apples 
   d. Peaches

10. Which fresh fruit is prepared by twisting off the leaf top, removing the prickly rind, and cutting into quarters, chunks or slices?
    a. Banana  
    b. Pineapple 
    c. Honeydew melon 
    d. Peach

11. Which fresh fruits are prepared by cutting them in half, scooping out the seeds with a spoon, and then cutting them into quarters?
    a. Cantaloupes and honeydew melons 
    b. Apples and pears 
    c. Oranges and grapefruits 
    d. Peaches and pineapples

12. Fresh fruits which are served as half or quarter slices with the seeds left in are
    a. Apples  
    b. Pears 
    c. Watermelons 
    d. Peaches

13. Which fresh fruits are commonly scooped into balls for use in desserts?
    a. Citrus fruits  
    b. Pineapples and peaches 
    c. Melons  
    d. Apples and pears

14. Which two fresh fruits are especially susceptible to bruising?
    a. Peaches and pears  
    b. Bananas and strawberries 
    c. Oranges and lemons 
    d. Grapes and cherries

15. Which market form of fruit is only available in the cooked form?
    a. Canned  
    b. Frozen 
    c. Fresh 
    d. Dehydrated

16. When serving frozen fruits, the only preparation required is
    a. Soaking  
    b. Paring 
    c. Seeding 
    d. Thawing

17. Which market form of peaches and strawberries is commonly used in the preparation of shortcake and ice cream topping?
    a. Fresh  
    b. Canned 
    c. Frozen 
    d. Dehydrated

18. What type of dessert is made from animal protein, flavoring, coloring, and sugar?
    a. Gelatin  
    b. Pudding 
    c. Ice cream 
    d. Pastries

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19. Which market form of gelatin requires the addition of a liquid, flavoring, coloring, and sweetening?
   a. Pregelatinized starch  
   b. Plain gelatin granules  
   c. Commercial gelatin mix

20. What is the purpose of gelatin granules in a dessert?
   a. To dissolve the ingredients  
   b. To give the basic taste  
   c. To match the flavor  
   d. To produce the gel

21. What function does fruit juice or water serve when used in a gelatin dessert?
   a. To produce the gel  
   b. To give the basic taste  
   c. To match the flavor  
   d. To dissolve the ingredients

22. When making gelatin dessert from plain gelatin granules, what purpose does the coloring serve?
   a. It flavors the dessert  
   b. It matches the flavor  
   c. It aids in dissolving the gelatin  
   d. It sweetens the solution

23. What sweetening is used when making gelatin dessert from plain gelatin?
   a. Sugar  
   b. Honey  
   c. Sorghum  
   d. Saccharin

24. What optional ingredient is often suspended in a gelatin dessert?
   a. Gelatin granules  
   b. Partially dissolved gelatin  
   c. Small pieces of fruit  
   d. Tapioca granules

25. Why is only half the liquid heated when dissolving gelatin?
   a. To retain the color  
   b. To speed the cooling  
   c. To prevent sugar breakdown  
   d. To prevent the gelatin from sticking to the container

26. Why is fruit added to a gelatin dessert when it is in the molasses stage?
   a. So the fruit will float  
   b. So the fruit will sink  
   c. So the fruit will remain suspended  
   d. So the fruit will remain firm

27. Where should a gelatin mixture be stored while it is setting?
   a. In a dry storeroom  
   b. In a humid storeroom  
   c. In a deep freezer  
   d. In a refrigerator

28. What is the most convenient form of gelatin dessert available?
   a. Plain gelatin  
   b. Commercial gelatin mix  
   c. Pregelatinized starch

29. What step is important in the preparation of commercial gelatin mixes?
   a. Stir with liquid until dissolved  
   b. Soak in cold water to soften  
   c. Measure the ingredients  
   d. Match the color and flavor.
30. How is molded gelatin removed from its container?
   a. By using a spatula  
   b. By dropping on a table  
   c. By using hot water to loosen it  
   d. By pregreasing the container  

31. How is gelatin most often served in the dining facility?
   a. Molded  
   b. Individual plates  
   c. Cubed  
   d. Whipped with cream  

32. What form of gelatin is mixed with other ingredients to make more complicated desserts?
   a. Molded  
   b. Individual plates  
   c. Cubed  
   d. Whipped with cream  

33. How can a gelatin dessert be made rich and light in texture?
   a. Cut into cubes  
   b. Molded  
   c. Whipped with cream  
   d. Served warm  

34. Water used to dissolve gelatin should be boiling, but the solution should NOT be
   a. mixed.  
   b. boiled.  
   c. stirred.  
   d. refrigerated.  

35. If the gelatin and other ingredients are not dissolved before the solution is cooled, the undissolved gelatin will
   a. form a rubbery layer.  
   b. prevent the gelatin from setting.  
   c. cause the gelatin to stick.  
   d. cause the gelatin to become brittle.  

36. Why is ice used to dilute a gelatin solution?
   a. To prevent premature setting  
   b. To control spoilage  
   c. To prevent rubberizing  
   d. To speed setting  

37. Why should prepared gelatin desserts not be stored for extended periods of time?
   a. They will become rubbery.  
   b. Water will condense.  
   c. Gelatin will become brittle.  
   d. Gelatin will soften.  

38. Which dessert uses milk, eggs, and flavoring as its ingredients?
   a. Gelatin  
   b. Pastry  
   c. Cake  
   d. Pudding  

39. The 3-hour rule on sanitation states that
   a. less than 3 hours from preparation to serving is allowed.  
   b. more than 3 hours must be spent from preparation to serving.  
   c. there should be 3 hours of refrigeration before serving.  
   d. preparation should start 3 hours before serving.  

40. A pudding which uses eggs as the only thickening agent is called
   a. instant pudding.  
   b. custard pudding.  
   c. cream pudding.  
   d. Spanish cream.  

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41. How do you test a custard pudding to tell if it is sufficiently cooked?
   a. Tap the surface of the custard.
   b. Use a thermometer to check the temperature.
   c. Check the edges of the container for separation.
   d. A knife blade inserted in the custard will come out clean.

42. What are the two most frequently prepared custard puddings?
   a. Crisp and tortes.
   b. Soufflés and moussees.
   c. Parfaits and Spanish creams.
   d. Bread puddings and rice puddings.

43. Why do bread puddings require fewer eggs than rice puddings?
   a. Bread starch helps thicken the mixture.
   b. Bread soaks up the liquid.
   c. Bread is heavier by volume.
   d. Bread is already cooked.

44. What ingredient must be thoroughly cooked before being used in a rice pudding?
   a. Milk
   b. Eggs
   c. Rice
   d. Butter

45. Bread pudding and rice pudding are best served at what temperature?
   a. Cold
   b. Room temperature
   c. Hot
   d. Frozen

46. What ingredients are used to thicken cream puddings?
   a. Flour and eggs
   b. Sugar and butter
   c. Scalded milk and honey
   d. Cornstarch and eggs

47. Dessert pudding powders are prepared by heating them with
   a. dry milk and water.
   b. cold milk.
   c. sweetened, scalded milk.
   d. beaten whole eggs.

48. Instant dessert pudding powders are prepared by adding them to
   a. dry milk and water.
   b. cold milk.
   c. sweetened, scalded milk.
   d. beaten whole eggs.

49. How is standard ice cream procured in the dining facility?
   a. 5- and 10-gallon containers.
   b. Quart containers.
   c. Gallon containers.
   d. Individually wrapped slices and cups.

50. Ice cream that is made in the dining facility is known as
    a. soft serve.
    b. hard serve.
    c. commercial mix.
    d. home made.

51. When reconstituting ice cream mix, the best method is to use
    a. wire whip.
    b. hand blender.
    c. power mixing machine.
    d. shaker container.
52. Why is it necessary to sanitize all ice cream machine parts before use?
   a. Ice cream mix curdles easily.
   b. Bacteria grow in ice cream mix.
   c. The machine is cleaned only once a week.
   d. The machine corrodes easily.

53. Into how many pieces should a pie be cut?
   a. 4
   b. 8
   c. 8
   d. 10

54. Which type of cake is usually served in the dining facility?
   a. Layer cake with icing
   b. Layer cake without icing
   c. Strip cake without icing
   d. Sheet cake with icing

55. Why are dining facility cakes usually NOT served with a sauce?
   a. They would be too rich.
   b. They would soak up the sauce.
   c. The icing serves as a sauce.
   d. It is difficult to serve cake and sauce at the same time.

56. Which baked dessert keeps well enough to be stored for extended periods?
   a. Pies
   b. Cakes
   c. Pastries
   d. Cookies

57. Which type of dessert is made from sweet dough, fruit, and nuts?
   a. Pastries
   b. Pies
   c. Cakes
   d. Crisps

58. What is the purpose of toppings on desserts?
   a. To provide eye appeal
   b. To prevent spoilage
   c. To prevent drying out
   d. To hide preparation errors

59. What is the most important principle in preparing whipped toppings?
   a. Have ingredients and utensils at room temperature.
   b. Prepare ingredients in small batches.
   c. Keep ingredients and utensils cold.
   d. Overwhip to insure stiff peaks.

60. To what stage should whipped dessert topping be beaten?
   a. Until dry in texture
   b. Until smooth
   c. To soft peaks
   d. To stiff peaks

61. Which form of whipped topping is the least suited for dining facility use?
   a. Fresh
   b. Sterilized
   c. Dehydrated
   d. Frozen

62. Which liquid form of whipped dessert topping is supplied in cans, requires no refrigeration, and can be stored for long periods of time?
   a. Fresh
   b. Sterilized
   c. Dehydrated
   d. Frozen
61. Which whipped dessert topping is best suited for dining facility use?
   a. Fresh
   b. Frozen
   c. Dehydrated
   d. Sterilized

62. Which whipped dessert topping is the most convenient to use in the dining facility?
   a. Frozen
   b. Fresh
   c. Sterilized
   d. Dehydrated

63. When should whipped topping be added to desserts?
   a. Just prior to opening the serving line
   b. Immediately after preparing the dessert
   c. While dessert is under refrigeration
   d. While the dessert is hot

64. Before whipped topping is applied, what should be done to the prepared dessert?
   a. Preheat it.
   b. Thoroughly chill it.
   c. Coat it with sugar.
   d. Freeze it.

65. Why should more dehydrated whipped topping be used per dessert than fresh whipped topping?
   a. Dehydrated has less eye appeal.
   b. Dehydrated is more moist and adheres better.
   c. Fresh has more vitamins and minerals.
   d. Dehydrated is more economical and stands up better.

66. Which dessert is frequently garnished with chopped nuts?
   a. Gelatin
   b. Cooked fruits
   c. Pastries
   d. Puddings

67. Which fresh fruit looks attractive on whipped cream topped desserts?
   a. Banana slices
   b. Orange sections
   c. Apple slices
   d. Maraschino cherries

68. Which crushed fruit topping is used on ice cream?
   a. Pineapple
   b. Perch
   c. Strawberry
   d. Grape

69. When used as a dessert topping, marshmallows should be
   a. Finely ground
   b. Medium sized
   c. Cut in small pieces or miniature
   d. Large and whole

70. What quantity of dessert sauce is most often used per serving?
   a. 2 tbsp
   b. 1 oz
   c. 2 oz
   d. 1/3 cup

71. What is the advantage of using pregelatinized starch in dessert sauces?
   a. It does not require flavoring.
   b. It does not require cooking.
   c. It is more nutritious.
   d. It prevents the sauce from spoiling.
74. The most frequently used sauce for ice cream is
   a. butterscotch.  c. caramel.
   b. chocolate.    d. hard.

75. Which dessert sauce must always be cooked because it uses whole eggs?
   a. Custard
   b. Vanilla
   c. Cinnamon
   d. Hard

76. Which dessert sauces are used in half the usual quantity (1 oz) because of their strong flavor?
   a. Butterscotch and caramel  c. Cinnamon and nutmeg
   b. Chocolate and hard       d. Orange and lemon

77. The dessert sauce which can be made ahead and chilled until served is _____ sauce.
   a. hard
   b. custard
   c. fruit
   d. caramel

Total Points: 77
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