PLANS FOR TEACHING DOMESTIC SCIENCE IN THE PUBLIC SCHOOLS.

by

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GRACE STREETER.
PLANS FOR TEACHING DOMESTIC SCIENCE
IN THE PUBLIC SCHOOLS.

OUTLINE.

I. Reasons for teaching Domestic Science.

II. The laboratory. (Equipment and cost).

III. Course of Study for 5th, 6th, 7th, and 8th, grades.

IV. Outline of Lectures.

V. Recipes.

The recipes are those used in the Domestic Science Course at the Kansas State Agriculture College.

References:-

National Educational Association Reports.

Dietetic and Hygiene Gazette.
Reasons for teaching Domestic Science.

It seems almost unnecessary in this age, to give any reason for putting Domestic Science in the schools and yet, even now there are few schools that have this work, in comparing with the number that do not have it. Could the people be made to see the importance of this study - the infinite good it does - there would no longer be a school without a cooking laboratory.

Some one has said, "Education in books is only one third of an education; education in the ways of the world and a knowledge of human nature is another third; and education or training of the will is the other third." This latter third is what the training in Domestic Science does for girls. The girls themselves like the Manual Training. Cooking commends itself to them. It is as natural for little girls to make mud-pies as to play with dolls, for the home making instinct is an essential part of her nature.

One great advantage of this training is the effect on the development of the girls character. The character of the teacher has a more direct influence because of the more intimate contact of teacher and pupil. It is one way to make the earnest girl into a good citizen, the happy home maker and the capable friend, because when a woman holds in her grasp ability to do her own especial task deftly, easily and rapidly then there will be time for her to exercise, read and think.

The study of Domestic Science encourages original thought on the part of the pupil. It gives physical activity, change of position, change of interest, change in form of mental activity, and the pupil goes from it, to her other tasks refreshed instead of wearied.
and better able to do more in the field of the common branches.

This training makes a three fold demand upon each girl: 1st Concentration of attention, this develops that quality so essential to success in any field of human endeavor; 2nd. It requires original thought — a demand which will be constant through out life; and 3rd. It demands an exercise of the will power resulting in doing for the realization of those ends, and through the doing there comes clarification of the thinking.

The industrial work should begin as soon as possible in the school work for "Construction is the Keynote of the education of the child between the ages of eight and fourteen". If the habit of care-taking, of the daily doing of the thousand and one things which insure the well being of the family is essential to women, if the race is not only to be preserved but advanced, then those grooves of habit should be made early while the child is one bundle of activities only eager to be used, which may just as easily fall into lines of constructive as of destructive application.

It is most important while the muscles are tractable, the hands pliable, such training should be given as will hold them directly in obedience to the will during the years to come. Manual training will do most towards accomplishing this end because it is definite regular education.

One more reason for placing Domestic Science so early in the course is, "if it is placed in the high school it reaches but five percent of the pupils and those five percent are the very ones who can afford best of all to get along without it." The great
majority drop out of school on the slightest pretense, usually from lack of interest both on the part of the pupil and of the parent. For that reason Domestic Science should be continuous throughout the grades.

Besides these children who drop out because of lack of interest, there are so many who are compelled to take up the burdens of life while about the ages of twelve or fourteen, who care for younger children, cook for them and watch over them while their Mothers work. If these girls are not provided for before this time the state has no hold on them. Could they be made interested in better living before this time what a vast difference it would make.

In addition to this training of brain and hand, there must come some knowledge of the principals upon which the training depends. When the training is along the line of preparation of food there goes with this training knowledge of the production of foods, of value of materials and of the general effects various foods have upon the body. If with this knowledge the appetite can be trained some what, the child has a foundation for strength that can not be estimated.

A girl's education should in some measure at least fit her for the work she will follow in life. "No one perhaps question what the natural and true function of woman is. She is the queen of the home. Why should not her education above all things fit her for the care of the home? By a girl's nature she must be a home maker, but her education does not mention things of that character.

Of the real power of money to make home healthful, beautiful, economical and consequently happy, she knows less than the birds of the air. The records of our divorce courts are filled with the recital
of troubles that would never materialized had the women been as able to manage the economics of the household as the man was to earn the support of the family."

If Domestic Science can train girls to more healthful, more economic, broader and more appreciative living it certainly has its place and a high place among the sciences of the day. The public schools, colleges, seminaries and universities if they fulfill their mission must offer training adequate for the responsibilities of life as most women ought to meet them and must meet them, a training which shall be broad, which shall send girls and women to their work cultivated in soul, mind and body and prepared to make life brighter and better for all with whom they come in contact.

The Laboratory.

The south east exposure is the best for the laboratory for it gives the best light. It may be either square or oblong. If it is oblong there will be better economy of room. The desks can then be arranged in one end leaving a space between stove and desk and a place for the teachers desk. The floor should be of hard wood waxed. Tiling is best for the walls if the tiles are glazed between. It is easily cleaned and not permeable. Oil finish is good for a room already built. Staining or plaster makes a good finish, it is cheaper than tile and can be renewed often. Paper never should be used. The wood work should be perfectly flat and set flush with the wall, so it can be easily cleaned. There should be at least half as much window space as floor space. To secure good ventilation the radiators may be set in the wall under the window with an air space to admit air
from the outside, which will be warmed as it flows over the radiators. There should be outlets in the walls to allow the escape of bad air. The desks may be arranged for individual work, for two, in a circle or in a square. There are other arrangements but the hollow square seems to be the most satisfactory. There should be at least four openings in to the square. There should be from twelve to sixteen desks as sixteen is the maximum number for a cooking class. The tops may be of glass, soap-stone, marble, porcelain, zinc, tiling, or wood. Glass is easily cleaned, will not stain, will not absorb grease, but it is not successful because it cracks easily. Soapstone is acted upon by acids, and absorbs grease. Marble is expensive, stains easily and is acted on by acids. Porcelain will not crack from heat, scour easily, is non-absorbant, will not stain but it is expensive and splinters from careless usage. Zinc is hard to keep clean, stains easily, dents easily, not very permanent and acids act on it. Varnished wood is easily cleaned, non-absorbant does not have to be scoured, but it is expensive and heat injuries it. Unvarnished wood stains easily, absorbs grease, may split and crack, requires scouring, but it is inexpensive and reasonably permanent. It is also more similar to home conditions. On the whole wood seems to be the best material. It should be fine grained and of a kind that will not splinter. Thoroughly seasoned ash is fine grained and does not splinter. Oak may be used but it is likely to crack and is rather coarse grained. Cypress splinters. Walnut is dark and expensive. Each desk will require two drawers, one for the utensils and one for note books. There should be a desk board and a bread board with each desk. They may be arranged to slide in above and below the drawers. Each desk
should have a small gas stove. Not less than four sinks will be required. Porcelain is the best material of which to make. The sinks and backs to be in one piece. Every thing about the sink should be easily cleaned. If it is possible to have gas there should be a gas range and a coal range. There should be plenty of closet space. The shelves in the closet not to be deeper than a foot or a foot and a half. The shelves in the closet not to be too high nor too low. There should be a desk for the teacher, a supply table and a table to serve on, at least one enamel lined refrigerator and plenty of black board space.

Desks:
Top 22 inches by 36 inches.
Height 34 inches.
Distance from wall 4 feet.
Large drawer 13 inches by 20 inches by 4 inches.
Small drawer 8 by 12 by 4 inches.
Bread board 18 inches by 20 inches.
Desk board 18 inches by 12 inches.
Sinks 22 inches by 30 inches by 8 inches.

Desk Equipment and Cost.
1 Plate to put soiled knives, etc, on. .18
Enameled cup and saucer .18
2 Bowls .14
1 Enameled bottle, 6 inches in diameter .23 -.28
1 Measuring glass .05 -.06
1 Flour shake .05
1 Salt and 1 pepper box .06
<table>
<thead>
<tr>
<th>Item Description</th>
<th>Price</th>
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<tbody>
<tr>
<td>Small biscuit cutter</td>
<td>.03</td>
</tr>
<tr>
<td>Small dover egg beater</td>
<td>.08</td>
</tr>
<tr>
<td>Wooden spatula 10 inches long</td>
<td>.09</td>
</tr>
<tr>
<td>Wooden handle steel spatula</td>
<td>.22</td>
</tr>
<tr>
<td>Steel knife and fork</td>
<td>.23</td>
</tr>
<tr>
<td>Paring knife</td>
<td>.11 - .13</td>
</tr>
<tr>
<td>Table spoon</td>
<td>.03</td>
</tr>
<tr>
<td>Tea spoons</td>
<td>.04</td>
</tr>
<tr>
<td>Towels 8 yard long</td>
<td>.22</td>
</tr>
<tr>
<td>Towel 1/2 yard long</td>
<td>.055</td>
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Closet Equipment for each girl.

<table>
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<tr>
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<tr>
<td>Dish pan</td>
<td>.30</td>
</tr>
<tr>
<td>Small rice cooker, one pint</td>
<td>.68</td>
</tr>
<tr>
<td>Omelet pan, 6 inch, Steel</td>
<td>.06</td>
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<tr>
<td>Loaf bread pan</td>
<td>.08</td>
</tr>
<tr>
<td>Individual baking dish, crockery</td>
<td>.05</td>
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<tr>
<td>Pie tin, 4 1/2 inches diameter</td>
<td>.23</td>
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Closet Equipment for each two girls.

<table>
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<tr>
<td>Rolling pin</td>
<td>.12</td>
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<tr>
<td>Granite kettle</td>
<td>.40</td>
</tr>
<tr>
<td>Iron gem pans, 6 in set</td>
<td>.45</td>
</tr>
<tr>
<td>Light wire toaster</td>
<td>.05</td>
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<tr>
<td>Puree strainer</td>
<td>.17</td>
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Equipment for Room.
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<tbody>
<tr>
<td>Baking-sheet</td>
<td>1</td>
<td>.65</td>
</tr>
<tr>
<td>Roaster - Enameled</td>
<td>1</td>
<td>1.75</td>
</tr>
<tr>
<td>Large egg beater</td>
<td>6</td>
<td>.96</td>
</tr>
<tr>
<td>Egg whips</td>
<td>6</td>
<td>.24</td>
</tr>
<tr>
<td>Tea kettles</td>
<td>4</td>
<td>5.40</td>
</tr>
<tr>
<td>Lemons reamers</td>
<td>6</td>
<td>.60</td>
</tr>
<tr>
<td>Asbestos mats</td>
<td>12</td>
<td>.40</td>
</tr>
<tr>
<td>Pair of rubber gloves</td>
<td>2</td>
<td>2.00</td>
</tr>
<tr>
<td>Large rice cookers</td>
<td>4</td>
<td>3.52</td>
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<tr>
<td>Large pie tins</td>
<td>6</td>
<td>.72</td>
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<tr>
<td>Coffee pots (1 quart each) @ 35</td>
<td>4</td>
<td>1.40</td>
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<tr>
<td>Cake racks</td>
<td>6</td>
<td>.60</td>
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<tr>
<td>Dozen cake pans (layer, square)</td>
<td>1</td>
<td>.96</td>
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<tr>
<td>Meat cutters</td>
<td>2</td>
<td>3.50</td>
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<tr>
<td>Large puree strainers</td>
<td>4</td>
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<td>Potato ricers</td>
<td>4</td>
<td>1.20</td>
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<tr>
<td>Six quarts kettles (granite)</td>
<td>2</td>
<td>2.30</td>
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<td>Frying baskets</td>
<td>4</td>
<td>.30</td>
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<tr>
<td>Vegetable graters</td>
<td>4</td>
<td>.72</td>
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<tr>
<td>Two gallon ice cream freezer</td>
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<tr>
<td>Bread knife</td>
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<td>.50</td>
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<tr>
<td>Meat or butcher knife</td>
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<td>.75</td>
</tr>
<tr>
<td>Boning knife</td>
<td>1</td>
<td>.28</td>
</tr>
<tr>
<td>Dust pan</td>
<td>1</td>
<td>.21</td>
</tr>
<tr>
<td>Thermometers</td>
<td>6</td>
<td>10.50</td>
</tr>
<tr>
<td>Vinegar jug</td>
<td>1</td>
<td>.20</td>
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<tr>
<td>Can opener</td>
<td>1</td>
<td>.15</td>
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</table>
1 Hatchet                   .50
1 Garbage pail             1.50
6 Tin scoops               .72
2 Large steel kiddles - 9 inch  .90
2 Sifters                  .80
1 Ice shave                .40
2 Pails (12 quart)         2.00
1 Dipper                   .35
Supply jars                $13.75 per gross
1 Dozen large ones
1 Dozen small ones
1 Dozen small spice jars
1/2 Dozen essence bottles
1 Large glass jar for flour .96
1 Large glass jar for sugar .90
1 Glass jar for butter     .90
1 Pitcher for milk         .50

Tin Cans
Flour can to hold 50 pounds of white flour 1.25
Can to hold 25 pounds of graham flour 1.25
Can to hold 25 pounds corn meal 1.25
Can to hold 25 " whole wheat 1.25
Can to hold 25 " granulated sugar 1.25
Bucket to hold 10 pounds of brown sugar .75
6 Soap dishes               .60
6 Match holders             1.50
25 Scrub-brushes           1.00
<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Price</th>
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<tbody>
<tr>
<td>Stove brushes</td>
<td>2</td>
<td>.50</td>
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<tr>
<td>Frying baskets</td>
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COURSE OF STUDY FOR FIFTH GRADE.

26 lessons in Carbohydrates.
10 lessons in Proteids.

I. General instructions.

II. Rules

III. Apple Sauce

IV. Cranberry Sauce

V. Stewed Prunes

VI. Syrup

VII. Hoarhound candy

VIII. Clear peanut candy.

IX. Practice review.

X. Potato experiments.

XI. Boiled potato.

XII. Rice (cooked in double boiler)

XIII. Cream of wheat.

CHRISTMAS VACATION.

XIV. Practice review.

XV. Boiled cabbage.

XVI. Boiled onions.

XVII. White sauce (1st method).

XVIII. Creamed potatoes.
XIX  Creamed cabbage.
XX  Creamed onions.
XXI  Crisp crackers.
XXII  Potato soup.
XXIII  Onion soup.
XXIV  Buttered toast.
XXV  Practice review.
XXVI  Egg experiments.
XXVII  Soft cooked eggs.
XXVIII  Poached egg.
XXIX  Soft custard.
XXX  Practice review.
XXXI  Meat experiment
XXXII  Pan broiled steak
XXXIII  Hamburg steak.
XXXIV  Practice review.
XXXV  Examination.

COURSE OF STUDY FOR SIXTH GRADE.

25 lessons in Carbohydrates.
11 lessons in Proteids.

I  General instruction and rules.
II  Quartered apple sauce.
III  Baked apple sauce.
IV  Baked apples.
V  Blushing apples.
VI Fried apples.

VII Practice review.

VIII Peanut brittle.

IX Chocolate caramel.

X White fudge.

XI Practice review.

XII White sauce (1st method).

XIII White sauce (2nd method)

CHRISTMAS VACATION.

XIV Creamed peas.

XV Creamed turnips.

XVI Buttered crumbs (prepare crumbs).

XVII Scalloped potatoes.

XVIII Scalloped onions.

XIX Scalloped cabbage.

XX Croutons and sippets.

XXI Cream of celery soup.

XXII Cream of pea soup.

XXIII Practice reviews

XXIV Buttered toast

XXV Creamed toast.

XXVI Poached egg.

XXVII Scrambled egg

XXVIII Soft custard (caramel).

XXIX Baked custard.
XXX Practice review.
XXXI Pan broiled steak.
XXXII Roast beef.
XXXIII Meat loaf
XXXIV Cottage cheese,
XXXV Practice review.
XXXVI Examination.

COURSE OF STUDY FOR SEVENTH GRADE.

18 lessons in Carbohydrates.
13 in Proteids.
  5 in Fats.

I General Instruction and Rules.
II Review of rules.
III White sauce (3rd. method.)
IV Creamed cauliflower (white sauce 3rd. method)
V Creamed carrots (white sauce 2nd. method)
VI Cook corn meal, cook oat meal, part of class cook one, and the rest of the class cook the other.
VII Scalloped tomatoes.
VIII Scalloped cauliflower.
IX Scalloped Salsify.
X Maccaroni.
XI Maccaroni with tomato sauce.
XII Stuffed potatoes.
XIII Taco with apples.

CHRISTMAS VACATION.

XIV Tomato soup.
 XV Corn soup.
 XVI Corn starch pudding.
 XVII Rice pudding.
 XVIII Practice review.
 XIX Egg omelet.
 XX Egg souffle.
 XXI Floating Island.
 XXII Cheese custard.
 XXIII Maccaroni and cheese.
 XXIV Creamed oysters.
 XXV Scalloped oysters.
 XXVI Pot roast.
 XXVII Minced meat on toast.
 XXVIII Hash.
 XXIX Meat souffle.
 XXX Meat loaf.
 XXXI Practice review.
 XXXII Whipped cream and butter.
 XXXIII Cheese straws.
 XXXIV Apple pie
 XXXV Practice review (serve a dinner).
XXXVI Examinations.

COURSE OF STUDY FOR EIGHTH GRADE.

During the term each two girls must prepare and serve a dinner to four other girls.

I  General instruction and rules.

II  Can Peaches.

III  Can Blue plums.

IV  Can Tomatoes.

V  Apple jelly.

VI  Butter scotch and chocolate fudge.

VII  Pennuccia.

VIII  Fondant.

IX  Practice work.

X  Tea and coffee.

XI  Chocolate and cocoa.

XII Chocolate corn starch pudding.

XIII  Gelatin mould.

CHRISTMAS VACATION.

XIV  Practice review.

XV  Oven roast, browned potato and gravy.

XVI  Meat croquettes.

XVII  Pie and cheese straws.

XVIII  Pie and tarts.

XIX  French fried potatoes.
OUTLINE OF LECTURES FOR FIFTH GRADE LESSONS.

I General Instructions.
   a. Show children around Laboratory and Locker rooms.
   b. Explain about towels, holders, caps and aprons.

II Rules.
   Explain carefully to children.
   b. Individual.
c. Fire building.
d. Dish washing.
e. Scrubing.
f. Washing towel.
g. Directions for measuring.

III Apple sauce.
   a. Growth of apple.
   b. Part of apple.
   c. Recitation on fire building and ranges

IV Stewed prunes.
   a. growth of prunes.
      1. Show picture of trees, fruit
         and blossom.
      2. Drying of prunes.
      3. Pit of prunes.
   b. Recitation on dish washing.
   c. Cleaning agents.

V Cranberry sauce.
   a. Growth of cranberries
   b. Water.
      Composition and uses.

VI Syrup.
   a. Sugar.
      1. Source, Manufacture, Effect of
         heating too much, Uses.
VII  Hoarhound Candy.
    a. Hoarhound.
    b. Candy.
        1. Good effects of eating.
        2. Bad effects of eating.
    c. Review of individual Rules.

VIII Clear peanut candy.
    a. Peanuts.
        1. Growth, Drying, Roasting.
        2. Show pictures.

IX  Practice review.
    a. Oral review.

X  Potato Experiments.
    a. Potato.
        Growth, structure, use, starch and how it thickens when cooked.

XI  Boiled potato
    a. Review of potato.
    b. Review of former lessons.

XII Rice.
    a. Rice.
        Growth, Manufacture, Uses — starch

XIII Cream of Wheat.
    a. Wheat.
        Growth
        Show picture and make drawings of plant grains.
XIV  Practice review.
    a. Oral review.

XV  Boiled Cabbage.
    a. Cabbage.
        Growth, Use as a food.

XVI. Boiled Onions.
    a. Onion.
        Growth, Use as a food.

XVII  White Sauce.
    a. Cooking of starchy foods.
    b. Review of previous lessons.

XVIII  Creamed Potatoes.
    a. Serving creamed dishes.

XIX  Creamed Cabbage.
    a. Table setting.

XX  Creamed Onions.
    a. Review of cleaning.

XXI  Crisp Crackers.

XXII  Croutons.
    a. Use of bread
    b. Review of rules.

XXIII  Potato Soup.
    a. Discuss soups and why used.

XXIV  Onion Soup.
    a. Discuss the need of the coarse foods
        in the diet.
XXV Bread Toast.
   a. Cost of bread.
   b. Economy of use of bread.
   c. Toast from stale bread.
   d. Good and poor bread.
   e. Value of toast in diet.

XXVI Practice Review.
   a. Oral review of any lesson or lessons in carbohydrates that is necessary.

XXVII Egg Experiments.
   Demonstration lesson.
   a. Show the effects of heat upon eggs.
   b. Show the effects of acid upon eggs (vinegar, lemon, etc.)
   c. Have children learn to break eggs and to separate white from yolk.

XXVIII Soft Cooked Eggs.
   a. Review of previous lesson
   b. Source of eggs.
   c. Structure of eggs (have children draw pictures.)

XXIX Poached Egg
   a. Preservation of eggs.
      Wrapping in paper.
      Packing in salt, bran, etc.
      Cold storage.
XXX  Soft Custard (Demonstrate.)
    a. Value of eggs in diet.
    b. Value of custards.

XXXI  Practice review.
    Custards for those who failed previous day, with extra review for others.
    a. Review of eggs.

XXXII Meat Experiments.
    a. Structure of meat.
    b. Soak out meat juices and heat to show effect of heat upon meat protein.
    c. Require drawings of meat structure.

XXXIII Pan broiled Steak.
    a. Kinds of meat.
    b. Quality of meat.
    c. Uses of meat.
    d. Show pictures giving good cuts of meat.

XXXIV Hamburg Steak.
    a. Value of meat in diet.
    b. Cheap cuts of meats.

XXXV Practice Review.
    a. Review of meats.

XXXVI Examination.
OUTLINE OF LECTURES FOR SIXTH GRADE.

I General Instructions and Rules.
   a. Same as for 5th. grade.

II Quartered Apple Sauce.
   a. Growth of apples.

III Baked Apple Sauce.
   a. Use of apples as a food.

IV Baked Apples.
   a. Review of rules for fire building
      and dish washing and cleaning agents.

V Blushing Apples.
   b. Review of apples.
   c. Water, composition and uses.

VI Fried Apples.
   a. Good and bad ways of cooking apples.
   b. Review of Individual rules.

VII Practice Review.
   a. Oral review of apples.

VIII Peanut Brittle.
   a. Peanuts.

IX Chocolate Caramel.
   a. Chocolate
      From what obtained manufacture, etc

X White Fudge.
   a. Digestion of candy.
XI Practice Review.

XII White Sauce, 1st.
   a. Simple classification of foods.

XIII White Sauce - 2nd.
   a. Classification of foods.
   b. Classify wheat, milk, butter.

XIV Creamed Peas.
   a. Peas — growth, uses as food, etc.

XV Creamed Turnips.
   a. Turnips.
   Growth, Use in diet ---- classify

XVI Buttered Crumbs.
   a. Uses of stale bread.

XVII Scalloped Potatoes.
   a. Potato.
   Growth, Uses, Cookery.---Classify

XVIII Scalloped Onions.
   a. Onion.
   Growth, Uses, Cooking, Classify.

XIX Scalloped Cabbage.
   a. Cabbage.
   Growth, Uses, Cooking,---Classify.

XX Croutons and Sippets.
   a. Review of potatoes and onions.

XXI Cream of Celery Soup.
   a. Celery.
   Growth, Cooking ---Classify.
XXII  Cream of Pea Soup.
   a.  Review of peas, cabbage, and celery and classify.

XXIII Practice review.
   a.  Oral review of apples, peanuts and chocolate.

XXIV Buttered Toast.
   a.  Classify bread and butter.

XXV Creamed Toast.
   a.  Classify materials used and review classification.

XXVI Poached Eggs.
   a.  Demonstrate egg experiments in 5th grade.
   b.  Sources of eggs.
   c.  Structure of eggs.

XXVII Scrambled Egg.
   a.  Preservatives of eggs.

XXVIII Soft Custard (Caramel).
   Demonstrate.
   a.  Uses of custard in diet.

XXIX Baked Custard.
   a.  Increase classification.

XXX Practice Review.
   a.  Oral review of eggs.

XXXI Pan-broiled Steak.
   a.  Good cuts of meat.
XXXII Roast Beef.
   a. Structure of beef.
   b. Poor cuts of meat.

XXXIII Meat Loaf.
   a. Digestion of meat.

XXXIV Cottage Cheese
   a. Milk --- Souring and Curding and loss when cheese is made.
      Composition, Uses, Care of milk.

XXXV Practice Review.
   a. Oral review.

XXXVI. Examinations.

OUTLINE OF LECTURES FOR SEVENTH GRADE.

I General Instruction.
   a. Table setting.
   b. Review of rules.
   c. Review of cleaning agents.
   d. Review of water.

II White Sauce (3rd. method)
   a. Table serving.
   b. Classification of foods.

III Creamed Cauliflower (White sauce 1st. method)
   a. Growth of Cauliflower.
   b. Composition of Cauliflower.
   c. Digestion of Cauliflower, Classify.
IV Creamed Carrots. (White sauce 3rd. method.)
   a. Growth of carrots.
   b. Composition of carrots.
   c. Digestion of carrots, classify.

V Cook Corn Meal and Oat meal.
   a. Preparation of cornmeal, classify.
   b. Preparation of oatmeal, classify.

VI Scalloped Tomatoes.
   a. Growth of tomatoes.
   b. Composition.
   c. Use in diet.
   d. Classify tomatoes.

VII Scalloped Cauliflower.
   a. Review of cauliflower, Classify.
   b. Review of preparation of cornmeal.

VIII Scalloped Salsify.
   a. Growth of salsify.
   b. Composition of salsify.
   c. Digestion of salsify, Classify.

IX Macaroni.
   a. Preparation of macaroni.
   b. Cookery, classify.

X Maroconi with Tomato Sauce.
   a. Lesson on wheat.
   b. Review food classification.

XI Stuffed Potatoes.
   a. Growth, cookery, digestion of potatoes
XII  Tapioca.
    a. Manufacture and cookery of tapioca.

XIII Tomato Soup.
    a. Serving of soups.

XIV Corn Soup.
    a. Use of soups in diet.

XV Corn-starch Pudding.
    a. Manufacture of cornstarch.

XVI Rice Pudding.
    a. Growth of rice.

XVII Practice Review.

XVIII Egg Omelet.
    a. Source, structure, composition.
        Use of eggs.
    b. Classify eggs.

XIX Egg Souffle.
    a. Preservation of eggs.

XX Floating Island.
    a. Care of milk.

XXI Cheese custard.
    a. Composition and digestion of milk, classify.

XXII Macaroni and Cheese.
    a. Review of eggs and cheese.
XXIII  Creamed Oysters.
   a. Composition and value as a food.

XXIV  Scallops Oysters.
   a. Review of milk.

XXV  Pot Roast.
   a. Cheap cuts of meat.

XXVI  Minced Meat on Toast.
   a. Expensive cuts of meat.

XXVII  Hash.
   a. Composition and structure of meat.
      b. Classify meat.

XVIII  Meat Souffle.
   a. Digestion of meat.

XXIX  Meat Loaf.
   a. Uses of meat in diet.

XXX  Practice Review.

XXXI  Whipped Cream and Butter.
   a. Uses in diet.
      b. Butter making and care of butter.
      c. Classify cream and butter.

XXXII  Cheese Straws.
   a. Pastry as a food.

XXXIII  Apple Pie
   a. Uses of apple in diet.
      b. Growth composition and digestion.
XXXIV Practice Review.

a. Oral review.

Prepare and serve as a dinner.

Tomato soup.

Hamburg steak -- Gravy.

Baked potatoes.

Creamed peas.

Pie.

XXXV Examinations.

OUTLINE OF LECTURES FOR EIGHT GRADE.

I General Instructions and Rules.

II Canned Peaches.

a. Direction for canning fruit.

b. Direction for selecting fruit to can.


III Canned Blue Plums.

a. Manufacture of sugar.


IV Can Tomatoes.

a. Digestion of sugar.

V Apple Jelly.

a. Jelly making, which fruits are good for jelly making.

VI Butter Scotch and Chocolate Fudge.

a. Manufacture of chocolate.

b. Composition of chocolate.
VII Pennuccia.
   a. Nuts as a food. Composition, Classify

VIII Fondant.
   a. Direction for using fondant in different ways.

IX Practice Review.

X Tea and Coffee.
   a. Growth, drying of tea, uses: Classify
   b. Growth, roasting and uses of coffee Classify.

XI Chocolate and Cacao.
   a. Composition and value in diet. Classify

XII Chocolate Cornstarch Pudding.
   a. Direction for moulding.
   b. Manufacture of cornstarch -- Classify

XIII Gelatin Mould.
   a. Gelatin as a food -- Classify.

XIV Practice Review.

XV Oven Roast, Browned Potatoes and Gravy.
   a. Carving and serving.

XVI Meat Croquettes.
   a. Structure of meat.
   b. Digestion of meat.

XVII Pie and Cheese Straws.
   a. Cheese Manufacture.
b. Composition of Cheese.

XVIII Pie and Tarts.
   a. Digestibility of pie.
   b. Review food classification.

XIX French Fried Potatoes.
   a. Directions for frying in deep fat.

XX Potato Chips.
   a. Cooking of starch.
   b. Digestion of starch.

XXI Vegetable Croquettes.
   a. Use of egg in making croquettes.
   b. Cellulose -- Digestion, Classify.

XXII Salmon Croquettes.
   a. Fish as a food.
   b. Kinds of fish.

XXIII Doughnuts.
   a. Review of digestion of carbohydrates.
   b. Digestion of fats.

XXIV Popovers.
   a. Leavening agents.

XXV Biscuits.
   b. Home test.

XXVI Yeast.
   a. Care of yeast.
   b. Yeast plant - Examine with microscope
XXVII Bread.
   a. Good qualities of bread and how to obtain them.

XXVIII Whole Wheat Bread.
   a. Manufacture of flour.
   b. Bad qualities in bread and how to avoid them.

XXIX Practice Review.
   a. Oral review.

XXX Cake.
   a. Direction for putting ingredients together.
   b. Direction for baking cake.

XXXI Hermits.

XXXII Gingerbread and Sandwiches.
   a. Making sandwiches.
   b. Planning for picnics or lunches.

XXXIII Salad Dressing.
   a. Classify ingredients.

XXXIV Celery and Nut Salad.
   a. Composition and digestion of celery.
   b. Composition and digestion of nuts.

XXXV Practice Review (Sandwiches and salad eggs)
   a. Oral review.

XXXVI Examinations.
HOUSEKEEPER'S RULES.

1. Open windows.
2. Put on cap and apron.
3. Close windows when class enters.
4. Lay fire and blacken stove.
5. Light fire and polish stove.
6. Fill tea-kettles and keep them filled during class.
7. Brush up around the stove.
8. Clean closet shelves (number will depend upon grade of pupils.)
10. Wash general utensils.
11. Scrub supply table.
13. Leave laboratory in order.

INDIVIDUAL RULES.

1. Put on cap and apron.
2. Wash hands and clean finger-nails.
3. Take places in laboratory.
4. Stand when teacher takes her place.
5. Stand to recite.
6. Take out desk board and plate at beginning of practice work.
7. At close of lesson place stool in position and stand for dismissal.
DIRECTION FOR FIRE BUILDING WITH SOFT COAL.

1. Close all drafts.
2. Empty fire box.
3. Put in crumpled paper, then fine kindling, then a few pieces of coarse kindling and lastly a shovel full of coal.
4. Light paper and open drafts-
5. Polish the stove.
6. Fill tea-kettles.
7. Brush up around the stove.
8. Close drafts, as soon as fire is well started.

RULES FOR DISH WASHING.

Remove remnants of food with a piece of bread. Collect dishes and sort into piles. Have plenty of clean dry towels. Soak the dishes in hot water, soft if possible. If the water is very hard use washing soda. Wash the dishes in the following order:-

1st. Cooking utensils in the order of wooden, porcelain, granite, tin, and iron.

2nd. Table dishes in the order of glass, silver, china cup and saucers, small plates, small individual dishes, large plates, and lastly the serving dishes such as platters and vegetable dishes. Have two pans, one for suds and one for scalding water. Change the water often. If the dishes are very much soiled it is often well to rinse before washing.
METHODS FOR CLEANING.

Wooden ware should not be scraped and especially not against the grain of the wood. Use a brush on wood with soap or sapolio but never put brick or sapolio on wood. Stains on wood can usually be removed with thorough scrubbing and a little boiling water poured over them. If flour has been used rinse with clean cold water being in the suds. The porcelain and granite ware, besides being washed thoroughly should be scrubbed with cork which has been rubbed on sapolio.

Tin should be carefully washed in suds and when necessary scoured with sapolio or whiting but never scraped. Sapolio should be applied with a brush or cork never rubbed on directly.

Iron: When oily material has been used, pour a small amount of hot water in the utensil and add a lump of washing soda. Wash thoroughly with hot suds and scrub with either soft red brick, bath brick or sapolio applying the brick directly to the utensil wash again, scald wipe with dish towel and dry over the heat.

Table Dishes: Glass should never be washed in strong alkali water as the alkali acts on glass. Roll glasses in scalding water and polish with dry soft linen towel.

Fine China: The pieces should be washed separately. If several pieces are put in the water together they are likely to be nicked.

Silver: Should be washed in hot suds and scoured with whiting or one of the commercial silver polishes. A little scouring every time silver is used will save accumulated work. Certain substances stain silver, such as sulphur in eggs, certain vegetables,
etc. If silver ware is not in constant use, keep it wrapped in canton flannel to prevent discoloration. Each piece of silver should be wrapped and handled separately and carefully.

Dish Towels: Should be washed in good, hot, clean suds, then rinsed scalded and whenever possible hung in the sun. Even with this care they will require regular trips to the laundry.

DIRECTION FOR MEASURING.

Make all measurements level.

To measure 1/2 of a table or teaspoon, level off the spoon-full and divide lengthwise. Divide again crosswise for 1/4.

Fill dry materials into cup with spoon to avoid air space.

ABBREVIATIONS AND EQUIVALENTS.

tsp. Equals teaspoon.

thsp " tablespoon.

C " cup.

spk " speck.

4 tsp of liquid equals 1 tbspn.

2 C " " 1 pint (pt)

4 C " " 1 quart (qt)

4 C of flour " 1 pound (lb)

2 C " butter " 1 "

10 eggs without shell equals 1 lb.

8 " with " 1 lb.
RULES FOR THE PREPARATION OF VEGETABLES.

1. Wash thoroughly, scrub with vegetable brush to insure cleanliness.
2. Pare or scrape according to the kind and let stand in cold water until put over to cook.
3. Never pare any vegetable over the pan containing the others. Pare in to separate dry pan.
4. Vegetables are usually cooked in boiling salted water, but if the water is hard the salt is added when the vegetables are partly cooked.
5. Soda may be added to vegetables containing much cellulose using 1/4 tsp. soda to 2 qts. of water. The soda water must be replaced with fresh boiling water after 5 or 10 minutes cooking.
6. As soon as vegetables are tender they should be drained.

APPLE SAUCE.

1 apple.
1 tbspn sugar.

Wash and pare apple. Quarter and cook in small kettle, with 1/2 C water, when tender add sugar, Serve cold.

CRANBERRY SAUCE.

1/4 C cranberries.
2 tbspn. sugar.
1/4 C. water.

Use only sound berries. Wash berries and cook five minutes after they begin to boil, strain, add sugar and let boil again. Serve cold.

PRUNE SAUCE.

Ten prunes each two girls.
1 tbspn. sugar.
1/2 C water.

Wash prunes, cook in small kettle with 1/2 C. water, add sugar.
Cook half an hour. Serve cold.

SYRUP.

1/2 C. sugar.
1/4 C. water.
Boil until it thickens.

HOARHOUND CANDY.

1 tsp. pressed hoarhound.
1/2 C. boiling water.
1/2 C. sugar.

Pour boiling water over hoarhound. Let stand one minute. Strain through a fine cloth. Add sugar to strained hoarhound water. Boil to 192 degrees centigrade. Pour out and cut in squares while soft.

CLEAR PEANUT CANDY.

1/2 C granulated sugar.
1/4 C water.
1/4 C of chopped peanuts.

Add sugar to water and boil until hard crack stage -- Remove from fire and pour over peanuts.
BOILED POTATOES.

1 potato.

Boiling water to cover.

1/4 tsp. salt to every C of water.

Wash, pare, remove eyes and rinse potato in water. Place in boiling water and boil 20 to 30 minutes, according to size of potato. As soon as done drain away water, remove cover and shake over heat until dry. Serve immediately.

RICE.

2 tbspn. of rice.

3 tbspn. of water (1/2 c)

Spk. of salt.

Wash rice thoroughly, and cook in double boiler 30 to 40 minutes.

CREAM OF WHEAT.

2 tbsp. of cream of wheat.

1/2 C of water.

1/4 tsp. of salt (scant).

Have water boiling, slowly scatter cereal in upper part of boiler in boiling water -- boil 5 minutes over direct heat stirring constantly, place in lower part of boiler and cook about 30 minutes.

BOILED CABBAGE.

1/4 C of cabbage.

1 C of water.

1/2 tsp. of salt.

Wash cabbage and put over to cook with 1 C water and 1/2 tsp. salt.
Cook until tender. Do not cover while cooking.

**BOILED ONIONS.**

1/2 onion.
1 C of water.
1/2 tsp. of salt.

Directions are same as above. If onions are very strong change the water.

**WHITE SAUCE.**

1 C of liquid. (milk.)
1/2 tbsp. starchy material.
1/2 tbsp. fat.
1/2 tsp. salt.

Starch plus part of cold liquid. Scald remaining liquid. Add starch and cook 10 minutes stirring constantly -- Add butter and salt just before serving.

**CREAMED POTATOES.**

1/2 C (1 - 1) white sauce.
2 small potatoes.

Boil potatoes according to directions. Cool and cut into 1/2 inch cubes - Heat in the white sauce and serve.

**CREAMED CABBAGE.**

1/2 C (1 -1) white sauce.
1/2 C boiled cabbage.

Boil cabbage according to directions.
Put in white sauce and serve.
CREAMED ONIONS

2 medium sized onions.
1/2 C (1 - 1) white sauce.

Wash and peel onions, cut in quarters. Cook uncovered in boiling salted water until tender -- about 45 minutes -- when done drain off water -- Cover with hot white sauce and serve.

CRISP CRACKERS.

2 small crackers.
1 tsp. butter.

Spread butter on crackers, place on pan and brown in oven.

CROUTONS.

1 slice of bread 1/3 inch thick.
1 tsp. butter.

Trim crust from bread, spread with butter, cut in strips 1/3 inch wide, brown in oven. Serve with soup.

POTATO SOUP.

1/2 small potato.
1/2 C milk.
1 tsp. butter.
1 tsp. flour.
Spk. salt.

Cook potatoes in boiling salted water; when soft, rub through strainer; Scald milk and make thin white sauce with milk, flour and butter -- add potatoes and cook one minute.
ONION SOUP.

1 onion.
1/2 C white sauce.

Boil onion — Make thin white sauce, add onion that has been cooked soft and rub through a strainer.

BUTTERED TOAST.

1 slice of bread cut thin.
Trim off crust and toast thoroughly.

Dip in boiling salted water and spread with butter. Serve hot.

SOFT COOKED EGG.

1 egg.
1 1/2 C boiling water.

Boil the water, remove to back of stove, drop in the egg, cover and let stand 4 minutes — Remove from the water and serve.

POACHED EGG.

Oil omelet pan and fill with boiling water to a depth of 1 1/2 inches
Open egg carefully into saucer and slide into the water. Do not let the water boil after the egg is placed into it. Cook until white is delicately coagulated. Remove from water and salt. Serve.

SOFT CUSTARD.

1/2 C milk.
1/2 egg.
1 — 2 tbsp. of sugar.

Flavor.

Bring milk to scald in double boiler. Beat eggs and sugar together in bowl. Slowly pour scalded milk on eggs stirring all the time.
Return to double boiler and finish cooking and flavor.

PAN BROILED STEAK.

Have the pan oiled with bits of fat from steak. It must be smoking hot at first to seal in the juices. Put the meat in and when well seared turn -- Turn at every 10th. count until meat is done.

HAMBURG STEAK.

1 lb. meat.
1 egg.
1 1/2 tsp. salt.
1 tsp. onion juice.
1/4 tsp. pepper.

Grind the meat and add the seasoning. Beat the egg slightly and mix with the meat. Shape into small cakes and saute as for pan broiled steak.

QUARTERED APPLE SAUCE.

1 apple.
1 tbsp. sugar.
1/2 C of water.

Wash apple and pare. Cut in fourths and cook in small kettle until tender. Add sugar and serve when cold.

BAKED APPLE SAUCE.

1 apple.
2 tbsp. of sugar.
1/4 C of water.

Wash and pare apple. Cut in eights, put in small kettle add sugar
and water. Cover and bake an hour or more in a moderate oven. Add more water if necessary.

**BLUSHING APPLES.**

- 1 tsp. of orange juice.
- 1 Red apple.
- 1 tbsp. sugar.
- 1/2 C water.

Wash and core the apples. Place in small kettle add sugar and water and boil until tender, turning as often as is necessary. When done lift from the water and carefully remove the skin. Scrape off red part of pulp from skin and put on apple. Boil the water, in which it was cooked, to a syrup. Remove from fire add orange juice and pour over the apple. Serve cold with whipped cream.

**FRIED APPLES.**

Wash and slice tart apples. Fry in omelet pan in bacon fryings. Remove from pan when tender add two tsp. sugar for each apple.

**BAKED APPLES.**

Wash and core the apple. put in covered baking dish add a tbsp. of sugar and 2 tbsp. water. Bake in moderate oven 45 minutes.

**PEANUT BRITTLE.**

- 1/2 C granulated sugar.
- 1/2 C chopped peanuts.
- 1/2 C water.

Add sugar to water. Stir till sugar is dissolved. Remove spoon and boil rapidly to 192 degrees centigrade or until the liquid is a golden brown. Add peanuts, mix thoroughly. Pour on bottom of tin
pan. Press into shape with knives. Cut into bars immediately.

CHOCOLATE CARAMEL.

1/2 C brown sugar.
2 tbsp. of milk or cream.
2 tbsp. molasses.
1/2 square chocolate.
2 tbsp. butter.
1/4 tsp. vanilla.

Cook all the ingredients together except the vanilla, having heat moderate after boiling point is reached to prevent scorching as it should not be stirred. Boil to 124 degrees or until soft ball stage.

Remove from fire, add vanilla. Pour into shallow, well buttered pan. Cut into 3/4 inch squares, and when cool wrap in paraffin paper.

WHITE FUDGE.

1/2 C sugar.
1/4 C milk.
1 tbsp. butter.
1/2 tsp. vanilla.

Mix sugar and milk and stir until sugar is dissolved. Boil to 115 degrees centigrade or soft ball stage, add butter, remove from fire add vanilla, beat until thick and creamy and pour into buttered pans. Cut into squares while soft.

WHITE SAUCE.

1 C milk.
1/4 tbsp. flour.
1/4 tbsp. butter.
1/2 tsp. salt.

1st. Method: Mix flour and salt with an equal quantity of cold milk to smoothness. Scald remainder of milk in a double boiler. Add flour and milk mixture to hot milk. Cook 20 minutes stirring until thick. Remove from heat and stir in the butter.

2nd. Method: Scald milk in double boiler. Rub butter flour and salt to a smooth paste. Stir into hot milk and cook 20 minutes stirring until it thickens.

CREAMED PEAS.

1 tbsp. flour.
1 tbsp. butter. White sauce.
1 C milk.
1/2 tsp. salt.

Peas.
Drain the peas in a colander and rinse. Bring to a boil in fresh, drain off water and add to white sauce. Serve in bread boxes or crustades.

CREAMED TURNIPS.

1 tbsp. flour.
1 tbsp. butter.
1 C milk.
1/2 tsp. salt.
1/2 C cooked turnips.

Make a white sauce and add the diced turnips. Heat and serve.
BUTTERED CRUMBS.

Dry stale bread, crush and sift or grind in a food cutter. Maybe sifted with a puree strainer. May be used in preparing scalloped dishes, breading fried foods and as thickening for sauces.

Buttered crumbs.

6 tbsp. crumbs.
2 tbsp. butter.
Melt butter and stir in crumbs.

SCALLOPED POTATOES.

1/2 C white sauce (1 to 1 method)
1/2 C diced potatoes.
6 tbsp. buttered crumbs.

Place diced potatoes in buttered baking dish cover with white sauce.
Place buttered crumbs over top. Bake until sauce bubbles through crumbs.

SCALLOPED ONIONS.

1/2 C white sauce (1 to 1).
1/2 C cooked onion.
6 tbsp. buttered crumbs.

Place cooked onion in buttered baking dish cover with white sauce and cover with buttered crumbs. Bake till crumbs brown.

SCALLOPED CABBAGE.

1/2 C white sauce.
1/2 C cooked cabbage.
6 tbsp. buttered crumbs.

Place cabbage in baking dish add white sauce and cover with crumbs. Bake till crumbs brown.

CROUTONS.

1 slice of bread 1/3 inch thick.
1 tsp. butter.


SIPPETS.


CELERY SOUP.

1/2 C white sauce.
1/4 C chopped celery.
1 C chopped celery.

Wash celery. Cook in water till tender. (Liquid should be reduced to 1/2 cup.) Force through puree strainer. Add pulp and liquid to white sauce. Reheat and beat with dover egg beater.

CREAM OF PEA SOUP.

1/2 C white sauce.
1/4 C peas.
1/2 C water.

Drain and rinse the peas. Cook in boiling water till tender. Press through a prune strainer. Add pulp and liquid to hot white
sauce. Reheat, beat with Dover egg beater and serve.

BUTTERED TOAST.

1 slice of bread cut thin.

Trim off crust and toast thoroughly. Dip in scalding hot milk and spread with butter. Serve hot.

CREAMED TOAST.

1/2 C scalded cream.
1 1/3 tsp. flour.
spk. salt.
1 slice toast.

Add 1 tbsp. water to flour to make smooth thin paste. Add to scalded cream, cook ten minutes stirring all the while. Add salt. Dip toast in sauce and remove to serving dish. Add remainder of cream.

POACHED EGG.

Oil omelet pan and fill with boiling water to a depth of 1 1/2 inch. Open the egg carefully into saucer and slide into the water. Do not let the water boil after the egg is placed in it. Cook until the white is delicately coagulated. Remove from water and salt. Serve hot.

CARAMEL CUSTARD.

1 C milk.
1 egg.
2 tbsp. sugar.
Spk. of salt.
10 drops of vanilla.
Heat milk scalding hot in double boiler. Add sugar and salt to egg and beat thoroughly. Pour hot milk slowly into the egg. Return to the double boiler. Cook, stirring constantly until spoon when lifted from mixture is coated. Lift upper from lower part of boiler occasionally to avoid too rapid cooking. Add vanilla after custard is cooked.

**SCRAMBLED EGG.**

1 egg.
2 tbsp. milk.
Spk. salt.
1 tsp. butter.

Beat eggs slightly with fork; add salt and milk. Heat omelet pan, put in butter, and when melted turn in mixture. Cook until of a creamy consistency, stirring and scraping from bottom of pan.

**BAKED CUSTARD.**

1/3 C milk.
2 eggs.
1 tbsp. sugar.
Spk. salt.
10 drops vanilla.

Beat eggs moderately, add sugar, salt vanilla and milk and stir until sugar is dissoveled. Pour into baking dish. Set dish in pan of water. Bake in slow oven until firm. When cold unmold and serve.

**PAN BROILED STEAK.**

Remove from steak all bone, fat and cartilage. Have omelet pan
smoking hot. Put the steak in the un-oiled pan. When one side is seared turn. Turn every few seconds until done. Lift onto hot platter. Sprinkle with salt and serve. Avoid puncturing with fork when turning.

OVEN ROAST BEEF.

Choose a compact roasting piece. Wipe with a clean damp cloth. Place on rack in roasting pan. Put in hot oven with roaster uncovered. When well seared draw from oven, sprinkle with salt and add a small amount of water to roaster and put cover on. Finish cooking at lower temperature. 25 minutes for each pound and 25 minutes for the pan will cook completely to the center.

MEAT LOAF.

Use Hamburg steak recipe, shape into loaf and bake in oven.

COTTAGE CHEESE.

Put thick sour milk in upper part of boiler. Stir till it is completely separated from the whey. Strain through puree strainer, add salt and cream and serve cold.

- Sour milk
- Cream
- Salt

WHITE SAUCE.

CREAMED CULIFLOWER.

1/2 C white sauce.
1/2 C culiflower.

Boil culiflower according to directions. Heat in white sauce and serve.

CREAMED CARROTS.

1/2 C white sauce (1 - 1)
1/2 C carrots.

Wash and scrape the carrots. Cook in boiling water until tender, drain, cool and cut in small pieces. Heat in white sauce and serve.

COOKED CORN MEAL.

1/2 C corn meal.
3/4 C milk.
1 C boiling water.
1/2 tsp. salt.

Mix meal, salt and milk and stir into boiling water. Cook three hours in double boiler. Serve with sugar and cream.

COOKED OAT MEAL.

1/2 C oat meal.
1 C boiling water.
Spk. of salt.

Mix ingredients together and cook in double boiler for four hours. Serve with cream and sugar.
SCALLOPED TOMATOES.

Butter a baking dish. Cover bottom with bread crumbs and cover this with tomatoes salt and pepper and butter. Repeat until dish is full and cover with buttered bread crumbs.

SCALLOPED CAULIFLOWER.

Cauliflower should be placed flower down in salted water and remain there 20 minutes. Trim off outer leaves to edge of flower and remove stem close up to flower. The object in putting head down is to remove dust and insects. Remove from cold water and place in boiling salted water. Boil till tender usually from 20 to 30 minutes. (It may be served with white sauce, creamed.)

For Scallop, -- Butter a baking dish and alternate layers of cooked cauliflower and cream sauce. Cover with buttered crumbs and allow to bake till brown.

SCALLOPED SALSIFY.

Wash, scrub and scrape the roots, cut straight across in pieces not more than 1/8 inch thick. Allow them to remain for about 10 min. in slightly acidulated water. Place in salted boiling water and cook until tender. Butter a baking dish and fill with alternate layers of white sauce and cooked salsify. Cover with buttered bread crumbs and bake until brown.

MACCARONI.

Break maccaroni into inch (or less) pieces, wash thoroughly and rub in hands. Place in boiling salted water and cook in direct heat for 5 minutes stirring constantly. Then place in double boiler
and cook from 30 to 45 minutes.

MACCARONI AND CHEESE.

2 tbsp. macaroni.
2 tbsp. cheese.
1/8 tsp. salt.
1/2 C white sauce.
6 tbsp. buttered crumbs.

Prepare macaroni as above. Cover bottom of buttered baking dish with layers of macaroni, add layer of white sauce and sprinkle with cheese. Omit cheese from top layer. Cover with buttered crumbs and bake until white sauce bubbles.

STUFFED POTATOES.

1 potato, medium sized.
1 tsp. butter.
1/8 tsp. salt.
1 tsp. milk, or cream.

Bake potato according to directions. Upon removing from oven cut in halves cross wise. Scrape out inside, season and force through ricer. Pile lightly into shells, set in baking pan and return to oven. Bake until delicately browned.

TAPIOCA.

2 tbsp. tapioca.
2 tbsp. sugar
1 C milk.
1 egg.
Spk. salt
10 drops vanilla.

Put tapioca in cold milk, add sugar, salt and cook one hour in double boiler. Pour over beaten egg, return to boiler and finish cooking. Add vanilla when cooked.

**CREAM OF TOMATO SOUP.**

1/2 C white sauce.
1/4 C strained tomato juice and pulp.
Spk. of baking soda.

Bring tomatoes to a boil and add soda. Combine with white sauce and reheat quickly. Avoid bringing to a boil. Whip with a dover egg beater and serve.

**CREAM OF CORN SOUP.**

1 C corn.
1 pt. boiling water.
1 pt. milk.
1 tbsp. butter.
2 tbsp. flour.
1 tsp. salt.

Chop corn, add water and simmer 20 minutes. Run through a sieve.
Scald milk and add corn to milk — add butter and flour creamed — add salt — Cook.

**CORN STARCH PUDDING.**

1/2 C Milk.
1 tbsp. sugar.
3 tsp. corn starch.
Spk. salt.
7 drops of vanilla.
Mix corn starch, sugar and salt thoroughly, and add enough of the cold water to make smooth paste. Scald rest of milk -- Stir cornstarch mixture into this and cook 20 minutes. Pour into wet moulds when chilled unmould and serve with sugar and cream.

RICE PUDDING.

1 C milk.
1 tsp. of rice.
Spk. salt
2 tsp. sugar.

Wash rice, mix ingredients, and pour into buttered pudding dish; bake in slow oven, stirring frequently at first to prevent rice from settling.

EGG OMELET.

1 egg yolk.
2 tbsp. liquid.
1/8 tsp. salt.
1/2 tsp. butter.
1 egg white.

Beat yolk slightly, add liquid and salt. Beat white until stiff and dry. Melt butter in omelet pan. Fold yolk mixture into white and pour into omelet pan. Cook slowly until set and under portion is delicate brown.

Slip spatula under half of omelet next to handle of pan. Fold omelet and turn onto heated plate. Serve immediately.
EGG SOUFFLE.

1/2 tbsp. butter.
1/2 tbsp. flour.
1/3 C scalded milk.
1/4 tsp. salt.
4 egg yolks.
1 egg white.

Make white sauce of butter, flour, milk and salt. Cool slightly and beat in yolk. Fold stiffly beaten white into mixture. Pour into buttered baking dish, and set in pan of water and bake until firm in moderate oven. Serve immediately.

FLOATING ISLAND.

1/2 C milk.
1 egg.
1 to 2 tsp. sugar.

Make as for soft custard using yolks of eggs. Whip whites and when custard is cooked pour into dishes and put into it the beaten whites.

CHEESE CUSTARD.

2 thin slices of bread buttered.
1/3 C of cheese grated or broken fine.
1/2 C milk.
1 egg.
1/3 tsp. salt.
1 pinch soda.

Cut one slice of bread to fit bottom of dish. Place cheese on
top of bread, put on second slice and pour over it the egg, milk and salt beaten together. Set in pan of water and bake.

CREAMED OYSTERS.

1/3 C milk.
2 tsp. flour.
2 tsp. butter.
1/8 tsp. salt
1/3 C oysters.

Make white sauce of milk, flour and butter. When cooked add oysters and heat in white sauce until edges begin to curl. Serve immediately.

SCALLOPED OYSTERS.

1/2 C white sauce (1 - 1)
1/3 C oysters.

Put alternate layers of sauce and oysters in baking dish. Cover with buttered crumbs and brown in the oven.

POT ROAST.

Choose a compact piece of beef. Wipe with clean damp cloth. Sear all surface, plunge in boiling water and boil rapidly 5 minutes. Choose kettle to fit roast to avoid excess of water. Add 1 tsp. of salt to each pound of meat, draw to back of range and cook slowly until done, at least 30 minutes to the pound and 30 minutes to the pot. During the latter part of the process have kettle uncovered until all water is vaporated. Brown meat in kettle.
MINCED MEAT ON TOAST.

Chop fine any cold lean meat. Season, and warm in gravy or sauce sufficient to moisten it. Spread on slices of crisp toast dipped in salted water.

BEEF HASH.

Remove skin and gristle from cooked beef, then chop the meat. When meat is very fat, discard most of the fat. To chopped meat add an equal quantity of cold boiled chopped potatoes. Season with salt, put in hot omelet pan, moisten with milk or cream, stir until well mixed, spread evenly, then place on a part of the range where it may slowly brown underneath.

MEAT SOUFFLE.

1/3 C milk.
1 tbsp. butter.
1 tbsp. flour.
1/2 tsp. salt.
1 egg.
2/3 C meat that has been run through cutter

Make a thick white sauce, cook slightly and add yolk of egg, stir into this ground meat and fold in stiffly beaten white. Bake set in water.

MEAT LOAF.

Use recipe for Hamburg steak. Shape into loaf and bake in oven.

WHIPPED CREAM.

1/2 C cream.
2 tbsp. sugar.
Set cream in pan of cracked ice. When chilled whip with egg beater
Add sugar

BUTTER.
Beet cream with dower egg beater until butter comes. Wash thorough-ugly and work in salt; Keep in cool, clean place.

CHEESE STRAWS.
Once the recipe for plain pastry.

1/3 C grated
Sprinkle with cheese 1/2 of the rolled pastry. Fold over and roll Repeat three times. Cut into strips 1/2 inch wide and 4 inch long. Bake 8 minutes in hot oven.

APPLE PIE.
Wash, pare and slice into thin slices, tart easily cooked apples. Cover pie tin with pastry, arrange sliced apples smoothly in pan, sprinkle liberally with sugar and lightly with cinnamon. Add small particles of butter. Make perforations in upper crust. place lightly over apples and press edges of pie together with fork and trim.
Bake until a delicately brown. When it is done it will turn in the tin.

PLAIN PASTRY.
1/2 C flour.
3 tbsp. butter.
Spk. salt.
Ice water to moisten.
Measure butter and flour and chill. Add salt to flour and cut butter into flour with knife. Use just enough cold water to make the particles of the mixture adhere. Pour on to unfloured board and push together with knives. Roll very thin handling as little as possible.

CANNED PEACHES.

Take 20 peaches, wash, pare and cook. In preparing the fruit do not break the halves any more than is necessary. After filling the jar pour in the juice.

One bushel of good peaches will usually can 20 quarts.

BLUE PLUMS (perserves.)

Wash, pit plums by cutting in halves. Weigh and add to plums before cooking 3/4 as much sugar as there were plums. Simmer gently with only enough water to keep from burning for at least 1/2 hour. Can in sterile jars.

CANNED TOMATOES.

Twelve solid medium sized tomatoes. Drop them into boiling water. Allow them to stay about 3 minutes, then remove the skin and the hard core, slice them up and put them on to cook in their juices — You may or may not add a small amount of salt. Boil them 30 minutes and then can as directed.

APPLE JELLY.

Ten apples. Wash apples and remove all decayed portions. Cut up with peeling on, using core if they are solid. Put on just enough water that you may see it among the pieces and boil until the apples are done. Strain out juice and measure. Put on to boil. Never
have juice deeper than 1 1/2 inches. Boil rapidly for 20 minutes, then add 3/4 as much sugar as you had juice at the beginning. Bring to a boil and skim, pour in glasses.

**BUTTER SCOTCH.**

1/4 C sugar.
1 tbsp. molasses.
1/4 tbsp. vinegar. (1tsp.)
1 tbsp. butter.

Boil ingredients together until brittle — Turn into well buttered pans. Cut into squares while warm.

**CHOCOLATE FUDGE.**

1/2 C sugar.
1/4 C milk.
1/2 square chocolate.
1 tbsp. butter.
1/2 tsp. vanilla.

Mix sugar, milk and chocolate and stir until chocolate is melted. Boil to soft ball stage, add butter, remove from fire, add vanilla, beat until thick and creamy and pour into buttered pans. Cut into squares while soft.

**PENNUCCI.**

1/2 C brown sugar.
2 tbsp. milk.
1 tbsp. butter.
1/4 C walnut meats.
5 drops of vanilla.

Boil sugar, milk and butter together, without stirring, to 113 degrees centigrade. Remove from fire, add vanilla and beat until creamy. Add walnut meats and pour quickly into buttered pans.

FONDANT.

2 C granulated sugar.
3/4 C water.
1/4 tsp. cream of tartar.

Place ingredients in pan, stir until just before the boiling point — Cook without stirring until soft ball stage. Pour on oiled platers, and allow to cool until about 90 degrees, then work with a spatula until thick and creamy. Pack in a jar and use after it has stood at least 24 hours. It will keep indefinitely if kept in a cool place.

TEA.

1 tsp. of tea to each cup. Have the teapot hot, add the tea to the boiling water and let stand 3 minutes and drain. Never let it boil nor stand on the leaves.

COFFEE (Boiled,)

1 C coffee finely ground.
1 egg.
2 1/2 C cold water.
6 — 8 C boiling water.

Mix coffee, egg and 2 C cold water. Boil 3 minutes — add boiling water and allow to boil up once. Draw to back of range. Add 1/2 C cold water and allow to stand 1 min. to settle. Decant in heated
coffee pot.

CHOCOLATE.

One square of bitter chocolate to 1 pt. of milk. Grate chocolate and add 2/3 as much sugar as chocolate. Cook chocolate in water thoroughly and add hot milk. Beat with egg beater.

COCOA.

2 tsp. cocoa.
1 tsp. sugar.
2 tbsp. water.
1 C milk.

Cook cocoa in water and add to scalded milk and beat with dover egg beater.

CHOCOLATE CORN STARCH PUDDING.

1 C milk.
1/4 square chocolate.
1 tbsp. sugar.
3 tsp. corn starch.
Spk. salt.
7 drops of vanilla.
Make as for corn starch pudding.

GELATIN MOULD.

1 C liquid.
1 -- 2 tsp. granulated gelatin.
1 1/2 tsp. sugar.

1st. Method: -- Hot method. Soak gelatin in cold water, have
liquid to be used boiling hot. Pour liquid upon the swollen gelatin -- Put in bowl and put away.

2nd. Method: Cold method.

Swell gelatin in cold water -- Set dish in a pan of boiling water and stir until it dissolves. Have liquid used, cold, and pour hot gelatin into it.

OVEN ROAST.

Use a compact roasting piece. Wipe with clean damp cloth. Place on rack in roasting pan. Put in hot oven with roaster uncovered. When well seared draw from oven, sprinkle with salt, add small amount of water and put lid on. Finish cooking at lowered temperature. 25 minutes for each pound and 25 minutes for pan will cook completely to center.

PAN GRAVY.

3 tbsp. fat from pan in which meat is cooked.
3 tbsp. flour.
2 C water.
2 tbsp. tomato juice.

Remove all fat from roasting pan except 3 tbsp. Add flour and brown. Pour in water and tomato juice and cook until it thickens.

BROWNED POTATOES.

Prepare potatoes as for boiling -- Place in pan with oven roast and cook until done.

MACCARONI AND TOMATO SAUCE.

Prepare macaroni as usual.

For tomato sauce take regular white sauce recipe substituting to-
mato juice and pulp, which has been run through a strainer, for milk. Salt slightly more than for white sauce.

PIE.
Recipe given in 7th grade notes.

CHEESE STRAWS.
Also given in 7th grade notes.

TARTS.
Take pastry, roll thin, cut out with biscuit cutter, bake and serve with jelly.

FRENCH FRIED POTATOES.
Wash and pare small potatoes, cut in eights length-wise, and soak one hour in cold water. Dry between towels, and fry in deep fat. Drain on brown paper and sprinkle with salt.

POTATO CHIPS.
Cut potatoes in very thin slices, soak one hour in cold water. Dry between towels and fry in deep fat. Drain on brown paper and sprinkle with salt.

MEAT CROQUETTES.
1 C white sauce \((4 \div 1)\)
1 1/2 C cold, cooked ground meat loosely measured.
1 egg.
1 C dry bread crumbs.
Add meat to hot white sauce. Spread in dish and cool. When cold shape as desired. Crumb, egg and crumb again — Fry in deep fat
and drain on absorbant crumbled paper — Serve hot.

SALMON CROQUETTES.

Same as above, using salmon in place of the chopped meat.

VEGETABLE CROQUETTES.

Same as above using vegetable in place of meat.

DOUGHNUTS.

1 C sour milk.
3/4 tsp. soda.
2 tsp. baking powder.
2 eggs.
1 C sugar.
1 tbsp. melted butter.

Enough flour to make a dough just stiff enough to handle. Roll thin 1/4 - 1/2 inch in thickness -- Shape and fry in deep fat.

POPOVERS.

1 egg.
3/4 C milk.
3/4 C flour.

Beat egg until light, add milk and flour alternately a little at a time, beating constantly -- Beat thoroughly with dower egg beater. Oil gem pan with butter and fill 2/3 full. Bake in rather hot oven from 30 -- 40 minutes.

BISCUITS.

1 C flour.
1 tbsp. baking power.
1/2 tsp. salt.
1 tbsp. butter.
Milk enough to make into soft dough, about 2/3 cup.

YEAST.
1 C rapidly boiling water.
1 raw potato.
1 tbsp. sugar.
1/4 C dried yeast.

Grate the raw potato into the rapidly boiling water, boil a few minutes until it looks clear. Add sugar and salt and cool down to luke warm. Add yeast which has been soaked in a little warm water.

Put in a bowl and cover and let grow for 24 hours. Bottle in pint jars, label and it is ready for use. Keep in refrigerator.

BREAD.
1 C liquid.
1 tbsp. butter.
1 tbsp. sugar.
1 - 1/4 tsp. salt.
1/4 C yeast.

Flour enough to make dough stiff enough to knead smoothly.

Dough Method.

Put in all flour at the beginning - a little at a time kneading smooth each time flour is added. Allow to rise - Cut down with knife and let rise again. Make into loaf, let rise and bake fifty minutes.
Sponge Method.

Use 2 C flour making it into a drop batter, beat thoroughly, put into crock or pan, cover and let rise until two or three times original bulk. Add remainder of flour and knead until smooth and velvety -- After it has risen to a little over twice its bulk, shape into buttered buttered pan, allow to rise and bake in a hot oven.

WHOLE WHEAT BREAD.

1 C liquid.
1/3 C yeast.
2 tbsp. sugar.
2 C white flour.
About 2 C whole wheat flour.
Make as for white bread.

CAKE.

Whites of 5 eggs.
2 C sugar.
1 C milk.
2 1/2 C flour.
4 level tsp. baking powder.

Cream butter, add sugar slowly creaming as you add it. Add 1 C liquid and stir a very little, add 1 C flour and beat, add 2nd cup of flour and beat, add whites of eggs beaten stiff but not dry. Sift baking powder in last of flour and stir in dough, place dough in pan that has been covered with heavy paper buttered. Bake in moderate oven until a tooth pick put in middle comes out clean.

Will cut 24 to 34 pieces. Ice with any good icing.
HERMITS.

1/3 C butter.
1/2 C sugar.
2 eggs.
4 tbsp. milk.
2 C or more flour.
4 tsp. baking powder.
1/2 C raisins.
1/2 tsp. cinnamon.
1/2 tsp. allspice.
1/4 tsp. cloves.
1/4 C chopped walnuts.

Cream butter and sugar, add beaten eggs, flour mixed with baking powder, scalded spices, floured raisins and nuts. Drop about 3/4 tbsp. in each place in pan bake in hot oven.

GINGER BREAD.

1/4 C molasses.
1/2 tsp. soda.
1/4 tsp. salt.
1/2 tbsp. ginger.
1/4 C sugar.
1/2 tbsp. softened butter
1/2 C sour milk.
1 C flour,
BOILED SALAD DRESSING.

1/2 tsp. butter.
1 tsp. salt.
2 tsp. sugar.
2 whole eggs or 4 egg whites.
1 spk. red pepper.
1/2 C vinegar (diluted)

Mix butter, salt, sugar and eggs. Heat vinegar, pour over the egg mixture and cook over hot water until thick. Whip 1 C heavy cream (either sweet or sour) and when dressing is cold fold in the cream.

CELERY AND NUT SALAD.

Use same dressing as above, add chopped celery and nuts and serve.

SANDWICHES.

Butter thin slices of bread, cut in halves and place together with peanut butter between.

PEANUT BUTTER.

Shell and grind peanuts. Add butter to make thick paste.

SALAD EGGS.

Cut one hard cooked egg cross wise. Remove yolk, mash moisten with cream, add salt, sugar, mustard and vinegar. Refill whites and serve on lettuce leaves.