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FOOD FACTS

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NUTRITION SECTION

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### FOREWORD

This bulletin is written for individuals and groups interested in the relation of food to health in the hope that it may be helpful in developing the nutrition outlines used over the state.

## FOOD SELECTION

While there are many factors that contribute to a long and healthful life, a careful selection of foods and the observance of the simple laws of health will be large contributors.

The undernourished child or adult is a prey to all sorts of unwholesome influences.

Lack of the right food does not presuppose poverty. It may mean poor selection of food or possibly too large an amount of the wrong kind of food.

The best line of pursuit is to know more about the principles that underlie the selection of food, to know more about what food does to the body and how it does it and to understand the relation of food to health.



Group of Community Leaders in Leader Training Class.

There are things that everyone should know about the food that goes to make his daily supply:

1. We should know what substances give fuel value and what foods should be selected to supply it.
2. We should know what substances build tissue and what foods are building foods.
3. We should know what foods give body regulating substances in the forms most usable.

### What Foods Do For the Body

Each of the three large food groups has an important part in the body structure, in supplying fuel or energy and in promoting growth and vigor.

1. Food materials that build and maintain the body structure are:

- a. Protein helps make flesh and blood.
- b. Calcium helps make bone and teeth.
- c. Phosphorus helps make bone, teeth and muscle.
- d. Iron helps make blood.
- e. Roughage foods help eliminate waste materials.

2. Food materials that supply energy are:

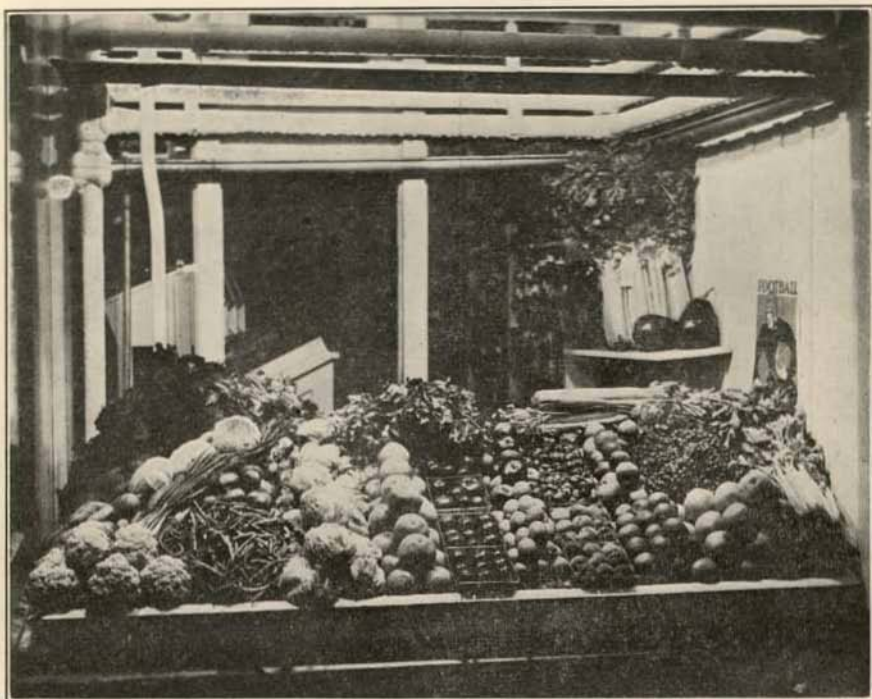
- a. Starch.
- b. Sugar.
- c. Fat.
- d. Protein.

3. Food materials that are known as protective foods:

Vitamine A—Promotes growth, seems to increase resistance to specific eye disease.

Vitamine B—Promotes growth, stimulates appetite, protects against nerve disease.

Vitamine C—Prevents scurvy, contributes to the proper formation of good teeth.



A Source of Vitamine Supply



### Relation of Food to Pre-Natal Life

The meals of the mother have a telling effect on pre-natal life as well as upon her own health.

**Food—the right kind and amount will insure proper nourishment to both mother and child.**

A large responsibility rests upon any mother because the child depends upon her for its nourishment during a most critical time of its life, the pre-natal and nursing periods.

**UNDERNOURISHED**

**REMEDY**

**FOODS WHICH THE HEALTHY CHILD EATS**

MILK	CORN
CREAM	PEAS
EGGS	RAISINS
BUTTER	PEARS
DATMEAL	PEACHES
PRUNES	BREAD
APPLES	GRAPEFRUIT
ORANGES	TOMATOES
GRAPES	CABBAGE
CARROTS	SPINACH
LETTUCE	BETS
BEANS	POTATOES
ONIONS	CAULIFLOWER

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**FOODS WHICH THE PHYSICALLY UNFIT CHILD EATS**

FRIED MEATS
PICKLES
GRIDDLE CAKES
COFFEE
TEA
PIE
HOT DOGS
SOFT DRINKS
CANDY

Posters Used in Developing Nutrition Plan.

#### **Foods that must be included:**

Foods that contain lime, phosphorus and vitamins are needed to assure good teeth, bone structure and growth development. By consulting the meal plan guide, these foods can easily be found. The daily meals of the mother should contain:

Fruit (fresh—when possible) two times a day.

Milk—one quart, used either in cooking or as a drink. Butter-milk also is valuable.

Vegetables—two or more a day. A leafy vegetable should be included.

Cereals—graham bread or bran bread and well cooked coarse cereals, especially if there is a tendency toward constipation.

Eggs—occasionally. (They can supplant the use of meat occasionally.)

Water—drink plenty of water between meals.

One of the finest legacies to give to children is furnished in parents that are well and strong. A careful selection of food will help make this possible.







Group of Mothers in Nutrition Project Studying Pre-School Age Meals

### Meal Planning—Pre-School Age

The years from one to six are critical years—the time when right habits must be established.

It pays well to give the best care in child feeding.

1. To give them simple foods in an atmosphere of contentment.
2. To have the food carefully prepared.
3. To know that the right kind of food develops a child's digestive powers.
4. To understand that the adult is responsible for the selection of food for the child.
5. To realize that the growing child needs the right kind of food at regular meals.

The diet for these years should include milk, eggs (especially the yolk), well-cooked cereals, fruit and vegetables. Some form of dry bread should be included for tooth and jaw development. Fruits are necessary in child diet to furnish the anti-scurvy vitamine, for their laxative effect and as appetizers. If digestion is feeble, only the fruit juices should be used. One quart of milk per day per child is the best amount for favorable development of bones and teeth. Butter should be used on bread. Vegetables form an important factor in child diet. They contain necessary minerals and vitamins. They may be cooked, or such vegetables as carrots, cabbage and celery may be served raw. Cereals are also an important part of meals suited to children.





Enjoying a Pre-School Age Meal

Feeding during the fifth, sixth and seventh years differs little from that of the fourth year, except in the increasing quantity required to meet the needs of the larger child. All the kinds of nutritive material essential to growth already have been introduced into the dietary.

### Meal Planning—School Age

During the first years in school a child has many changes to meet:

1. The excitement of mingling with a large number of persons.
2. Going away from home.
3. Changing from play to a schedule.
4. A possible change in the hours of eating.

All these have a part that will cause extra strain and will call for care in watching the meals or food habits. Good health has an economic as well as a personal value and regularity, simplicity and pleasant surroundings at meal times are good requirements.

The growing child needs the right kind of food at proper times or he runs a risk of malnutrition. Irregularity of meals is a common error in child feeding.

The simple diet of seven years can be extended. The number of foods is still limited but the inclination to choose one food for a meal and refuse all others should be discouraged.

It often is a difficult matter to get a child to eat the right foods. Many lines of approach may be necessary.

### Points to Remember in a Child's Meals

#### Does your child fuss about his food?

1. Perhaps it is your fault.
  - a. Don't talk about his eating habits to other people in his presence. All children like to feel important.
  - b. Let him feed himself as soon as possible.
  - c. Older members of the family should not be too free to discuss their likes and dislikes. (Children like to imitate.)
2. Choose his food wisely.
  - a. Have plain nourishing foods. (Fresh fruit and vegetables, cereals, milk, cream, butter, eggs.)
  - b. Don't let him "taste" everything adults eat.
  - c. Have his meals regular.
  - d. Don't create an unpleasant scene in order to compel him to eat the right foods. (Children are very sensitive.)
  - e. Don't be worried if he refuses the right food. Missing a meal won't hurt so much as eating the wrong food.
  - f. Show confidence rather than doubt. Any child will refuse if he thinks you expect him to. He may think he can get other food if he persists.
  - g. Start early to develop right food habits. Train a child to like foods by starting early and forming a right attitude toward foods.
  - h. Food dislikes are not inherited—they are acquired.
  - i. Finickiness about food should be regarded as something of which one should be ashamed and not proud.

# COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

University of Idaho College of Agriculture.

## GUIDE FOR MEAL PLANNING

Food Facts.

GROWTH PROMOTING AND PROTECTIVE FOODS			BODY BUILDING AND REGULATING FOODS MUSCLE, BONE, TEETH AND REGULATING					ENERGY GIVING FOODS		
A	B	C	Protein	Lime or Calcium	Iron	Phosphorus	Roughage	Starches	Sugar	Fats
Cream	Whole	Oranges	Whole or	Milk	Spinach	Milk	Green	Bread	Syrup	Butter
Butter	cereals	Lemons	skim Milk	Cheese	Dried beans	Cheese	vegetables	Macaroni	Honey	Cream
Egg yolks	Milk	Tomatoes	Eggs	Carrots	Peas	Codfish	Beans	Rice	Sugar	Cheese
Spinach	Spinach	(Fresh or	Cheese	Cauliflower	Dates	Lean Beef	Cabbage	Tapioca	Preserves	Lard
Lettuce	Beets	Canned)	Lean Meat	Figs	Prunes	Oat meat	Celery	Cornstarch	Jellies	Bacon
Sweet	Tomatoes	Raw Cabbage	Fish	Oranges	Figs	Celery	Asparagus	Potatoes	Dried fruits	Salad Oils
potatoes	Carrots	Raw carrots	Dried Peas	Rutabagas	Egg yolk	Egg yolk	Onions	Breakfast	Candy	Chocolate
Carrots	Turnips	Raw onions	Cereals	Butter milk	Red Meat	Spinach	Prunes	Foodstuffs	Cake	Salt Pork
Rutabagas	Cabbage	Raw turnips	Nuts	Collage	Molasses	Cauliflower	Dates	Crackers	Cookies	Peanut butter
		Raspberries		cheese	Bran	Asparagus	Bran			
						Whole cereals	Apples			
							Turnips			

## To fit yourself for work or play Let Mother Nature have her way.

Pep and Vim - represented by groups  
3-7-8

1 Foods to Give Energy

Rosy Cheeks - represented by group  
4

2 Protein Foods

Strong muscle - represented by group  
2

3 Foods for Lime

Correct weight - represented by groups  
1-2-3-4-5-6-7-8-9

4 Foods for Iron

Fat - represented by group  
1

5 Roughage Foods

Slenderness - represented by groups  
2-3-4-5-6-7-8-9

6 Vitamine 'A'

Sweet Disposition - represented by groups  
1-2-3-4-5-6-7-8-9

7 Vitamine 'B'

Sound Teeth & Bones - represented by groups  
3-6-8

8 Vitamine 'C'

Red Blood - represented by group  
4

Regular Elimination - represented by group  
5

9 Balanced Meals

Resistance to Disease - represented by groups  
6-7-8

100% Health - represented by groups  
1-2-3-4-5-6-7-8-9



### Meal Planning—Meals During Adolescence

During adolescence development is sometimes very rapid. Unsuitable and insufficient food at this time hinders development as much as it does in infancy and sometimes the child that seems to have a healthy start does not develop into the strong man or woman because of undernourishment at this time.

The drinking of milk should be encouraged and tea or coffee should be forbidden. Griddle cakes should not appear in the meal of a child under fourteen years of age. Regularity of meals may be difficult to secure but it needs to be emphasized as much as ever. Girls of high school age should not be permitted to go to school without breakfast. It is during this period that the welfare of the woman's nervous system is largely determined.

### Meal Planning—The Family Meal

Probably the most trying problem that the housewife faces is the selection of food or planning the family meal so that it is suited to each member's needs. Foods should be suited to age and occupation.

Take the day as a unit in planning rather than the meal.

The ideal meal is the simple one (whether for the family meal or the meal where guests are included) in which the different types of food are represented but the types should not be repeated.

**The diet for elderly persons:** One of the difficulties of old age is loss of the power of mastication. Food that does not require chewing, such as milk and soft-cooked egg, should be provided instead of meats. For carbohydrates, well-cooked cereals and baked potatoes will suffice. Digestive juices flow less rapidly and therefore fats should be used sparingly. Warm food is valuable to help stimulate gastric secretion. In many ways the diet of elderly persons is similar to that of children.

### Helps in Preventing Constipation

Since constipation is one of the most common ailments and one of the forerunners of much illness, it is well for all to emphasize the foods and habits that will help prevent and remedy constipation.

See that right habits are established between the ages of one to six years. This should include regularity of bowel movement.

Follow these suggestions as aids to health habits:

1. Breathe lots of fresh air.
2. Get plenty of sleep and rest.
3. Drink water freely.
4. Take active exercise.
5. Develop good posture and deep breathing.
6. Discourage the use of laxatives.
7. Encourage regularity of habits.

**These will help:****1. Foods Rich in Cellulose**

Cabbage      Celery      Spinach      Green beans  
 Cauliflower      Baked potato (eat skin)      Baked apple  
 Orange      Prunes      Oatmeal      Bran      Whole wheat bread

**2. Foods Producing Gas Formation**

Honey      Molasses      Onions      Spinach      Cabbage  
 Sauerkraut      Cauliflower      Butter      Milk

**3. Foods Having Stimulating Acids**

Oranges      Tomatoes      Lemons      Apples      Cider  
 Rhubarb

**4. Lubricants**

Cream      Butter      Bacon      Olive oil



Posters Made by Club Girls Meeting and Studying Meal Planning.



**A suggested meal plan to aid in regular bowel movement:****Breakfast—**

Laxative fruits, as  
 Baked apple  
 Stewed prunes  
 Orange  
 Grapefruit  
 Rolled oats, cream and sugar  
 Bran muffins or  
 Graham toast  
 Bacon and eggs

**Middle Forenoon:** Drink glass buttermilk. Cider also is especially good, if available.

**Noon Meal:**

Two vegetables, such as  
 Cabbage and turnips  
 Meat—roast or stewed  
 Whole wheat bread or bran muffins  
 Laxative fruits for dessert

**During Afternoon:** 2 glasses water.

**Evening Meal:**

Carrots  
 Baked potato  
 Lettuce or green beans  
 Graham bread  
 Laxative fruits for dessert

Eat an apple before retiring.

**Influence of Food Selection on Sound Teeth**

The teeth are governed by laws of nutrition similar to those determining the formation of the bones. Clean teeth and hard foods that necessitate chewing are of great importance. A careful selection of foods for her own meals and a wise choice for the young child should be made by the mother.

The baby teeth are formed before the child is born. During pre-natal life the child is dependent on the mother's choice of foods for the materials of which teeth are made. The permanent teeth develop just under the milk teeth during infancy. The right food at this time is very important.

Fruits, raw vegetables and cereals, coarse hard breads such as dry toast, help keep the teeth clean.

Thoro mastication is necessary for two reasons:



1. Nourishment of the body depends on proper digestion of the food and this is possible only when the food is thoroughly masticated.
2. Exercise of the teeth and gum tissue is necessary to their health and development and as any other part of the body, teeth are best exercised by use.

### Food as a Preventive of Rickets

Rickets usually is found in infancy or early childhood, as a rule developing from the seventh month to the second year. It is characterized by means of flabby muscles, nervousness and irritability and disinclination to play. Rickets may exist without these symptoms. The teeth come late and decay early. The bones are afflicted. Children growing most rapidly suffer first. Lowered resistance to disease results, in addition to deformities.

Milk, eggs, cheese, butter and fish prevented the occurrence of rickets in experimental work. The relation or correct ratio of foods containing calcium and phosphorus is of greater importance than the quantity. In treatment for rickets cod liver oil, besides foods high in calcium and phosphorus is important.

The meals of the mother and of the infant or young child should be considered seriously from the point of selection to help prevent rickets.

Sunlight is another factor that enters into the cure of rickets. We must not lose sight of the necessity of having foods chosen from the building group, or those high in calcium and phosphorus.

Finally then the best course to pursue in preventing rickets is:

1. A well chosen diet for the mother.
2. The careful selection of food for the infant.
3. Cod liver oil.
4. Sunlight.

Vitamine "D" found especially in milk and egg yolk and not yet known to a certainty in plant life, seems to control utilization of lime and phosphorus in bone formation and helps in the prevention of rickets.

### MALNUTRITION

Malnutrition is a lowered physical condition brought about thru faulty or insufficient diet or thru bad health habits.

Malnutrition leads to physical and mental disability. It paves the way for every ill known to childhood. Malnutrition is not confined to poor districts in cities. It is found in homes of wealth and in country neighborhoods where food of the right kind abounds.

The specific causes of malnutrition are:

1. Faulty diet.
  - a. Not enough vegetables and fruit.

- b. Lack of sufficient milk.
  - c. No breakfast.
  - d. Unpalatable food.
  - e. Hurried meals.
  - f. Indiscriminate eating between meals.
  - g. Lack of knowledge and appreciation of food values.
2. Bad food habits.
    - a. Irregular meals.
    - b. Bolting of food.
    - c. Eating between meals.
    - d. Coffee or tea instead of milk.
    - e. Unsuitable foods, such as rich pastry; excessive use of fried foods, etc.
    - f. Too much candy or sweets of any kind.
  3. Faulty hygiene.
    - a. Too little sleep.
    - b. Too little fresh air (closed windows or unventilated room at night).
  4. Defects and disease.
    - a. Bad tonsils.
    - b. Adenoids.
    - c. Bad teeth—caused by improper food or lack of care.
    - d. Tuberculosis.

The symptoms of malnutrition are:

1. Underweight for height.
2. Pale.
3. Dark circles under the eyes.
4. Hair rough as tho poorly cared for.
5. Tongue coated.
6. Decayed teeth, diseased tonsils and adenoids.
7. Listless about work and play.
8. Tire easily.
9. Irritable.
10. Finicky about food.
11. Flabby muscles.
12. Expression of eyes dull.
13. Fatigue posture.
14. Lacking in mental power of concentration and attention.

Malnutrition is preventable. As formerly mentioned, a complete understanding by mothers of the great value of the following:

Milk

Butter

Eggs

Fresh vegetables

Fresh fruits



will have a telling effect in lessening malnutrition and in developing stronger vitality and fitness physically and mentally.

The following health rules should be a part of every child's home training:

1. Live as much as possible out of doors.
2. Breathe deeply.
3. Bowel movement every day.
4. Stand, sit and walk erect.
5. Keep the body clean by frequent bathing.
6. Wear clean, loose clothing.
7. Take out of door exercise.
8. Brush the teeth regularly.
9. Rest during the day.
10. Sleep in fresh air.

Constant watchfulness will give the boy or girl the vigor and health that are the foundation of future happiness and prosperity.

### SCORE CARD FOR JUDGING HEALTH AND FOOD HABITS

	Points
Eats any food set before him.....	20
Likes at least ten kinds of vegetables.....	10
(Deduct 1 point for each one disliked)	
Drinks only water, milk, cocoa.....	10
(Tea and coffee should not be used. Deduct 5 if tea or coffee is used. Deduct 5 if water isn't drunk between meals.)	
Normal bowel movement.....	10
(Deduct 10 if laxatives have to be used.)	
Regular meal hours.....	10
(Eats only at meal time, three meals a day including breakfast. Deduct 5 for irregularity of meals, deduct 5 for going without breakfast.)	
Eats ice cream and candy only at regular meals.....	5
(Deduct 5 if candy and ice cream cones are eaten between meals.)	
Eats simple desserts.....	5
(Deduct 5 for eating pastry and rich puddings, etc.)	
Eats only suitable foods.....	10
(Consult Lessons 6, 7, series I and Lessons 3, 4, series II, as well as meal plan guide. Deduct 5 for griddle cakes and hot breads unless bran or graham bread. Deduct 5 for fried foods or highly seasoned foods.)	
Thoroly chews food.....	10
(Deduct 10 for hurried eating or bolting of food.)	
For choosing foods that are properly cooked.....	10



## HEIGHT—WEIGHT—AGE TABLE FOR BOYS FROM BIRTH TO SCHOOL AGE

Ht. (ins.)	Av. Wt.		1 mo.	3 mos.	6 mos.	9 mos.	12 mos.	18 mos.	24 mos.	30 mos.	36 mos.	48 mos.	60 mos.	72 mos.
	for Ht. (lbs.)													
20	8		8											
21	9½		9	10										
22	10½		10	11										
23	12		11	12	13									
24	13½		12	13	14									
25	15		13	14	15	16								
26	16½			15	17	17	18							
27	18			16	18	18	19							
28	19½				19	19	20	20						
29	20½				20	21	21	21						
30	22				22	22	22	22	22					
31	23				23	23	23	23	24					
32	24½				24	24	24	25	25					
33	26					26	26	26	26	26				
34	27						27	27	27	27				
35	29½							29	29	29	29			
36	31							30	31	31	31			
37	32							32	32	32	32		32	
38	33½								33	33	33	33	34	
39	35								35	35	35	35	35	
40	36½									36	36	36	36	36
41	38										38	38	38	38
42	39½											39	39	39
43	41½											41	41	41
44	43½												43	43
45	45½													45
46	48													48
47	50													50
48	52½													52
49	55													55

Notes: Weight is stated to the nearest pound; height to the nearest inch; age to the nearest birthday.

Up to and including 34 inches the weights are net. Above this the following amounts have been added for clothing (shoes, coats and sweaters are not included).

35 to 29 in. 1¼ lb.

40 to 44 in. 1½ lb.

45 to 49 in. 1¾ lb.

Prepared by Robert M. Woodbury, Ph. D. Children's Bureau, U. S. Department of Labor.

## HEIGHT—WEIGHT—AGE TABLE FOR GIRLS FROM BIRTH TO SCHOOL AGE

Ht. (ins.)	Av. Wt.		1 mo.	3 mos.	6 mos.	9 mos.	12 mos.	18 mos.	24 mos.	30 mos.	36 mos.	48 mos.	60 mos.	72 mos.
	for Ht. (lbs.)													
20	8		8											
21	9		9	10										
22	10½		10	11										
23	12		11	12	13									
24	13½		12	13	14	14								
25	15		13	14	15	15								
26	16½			15	16	17	17							
27	17½			16	17	18	18							
28	19				19	19	19	19						
29	20				19	20	20	20						
30	21½					21	21	21	21					
31	22½		*		21	21	22	23	23	23				
32	24						23	24	24	24	25			
33	25							25	25	25	26			
34	26½							26	26	26	27			
35	29							29	29	29	29	29		
36	30							30	30	30	30	31		
37	31½							31	31	31	31	32		
38	32½								33	33	33	33		
39	34								34	34	34	34	34	34
40	35½										35	36	36	36
41	37½											37	37	37
42	39											39	39	39
43	41											40	41	41
44	42½												42	42
45	45													45
46	47½													47
47	50													50
48	52½													52

Notes: Weight is stated to the nearest pound; height to the nearest inch; age to the nearest month.

Up to and including 34 inches the weights are net. Above this the following amounts have been added for clothing (shoes and sweaters are not included).

85 to 39 in. 1 lb.

40 to 44 in. 1½ lb.

45 to 49 in. 1¾ lb.

Prepared by Robert M. Woodbury, Ph. D. Children's Bureau, U. S. Department of Labor.

## HEIGHT AND WEIGHT TABLE BOYS

Ht. (ins.)	Av. Wt. for Ht. (lbs.)	5 Yrs.	6 Yrs.	7 Yrs.	8 Yrs.	9 Yrs.	10 Yrs.	11 Yrs.	12 Yrs.	13 Yrs.	14 Yrs.	15 Yrs.	16 Yrs.
39	35	35	35										
40	36	36	36										
41	38	38	38	38									
42	39	39	39	39	39								
43	41	41	41	41	41								
44	44	44	44	44	44								
45	46	46	46	46	46	46							
46	48	47	48	48	48	48							
47	50	49	50	50	50	50	50						
48	53		52	53	53	53	53						
49	55		55	55	55	55	55						
50	58		57	58	58	58	58	58					
51	61			61	61	61	61	61	61				
52	64			63	64	64	64	64	64	64			
53	68			66	67	67	67	67	68	68			
54	71				70	70	70	70	71	71	72		
55	74				72	72	73	73	74	74	74		
56	78				75	76	77	77	77	78	78	80	
57	82					79	80	81	81	82	83	83	
58	85					83	84	84	85	85	86	87	
59	89						87	88	89	89	90	90	90
60	94						91	92	92	93	94	95	96
61	99							95	96	97	99	100	103
62	104							100	101	102	103	104	107
63	111							105	106	107	108	110	113

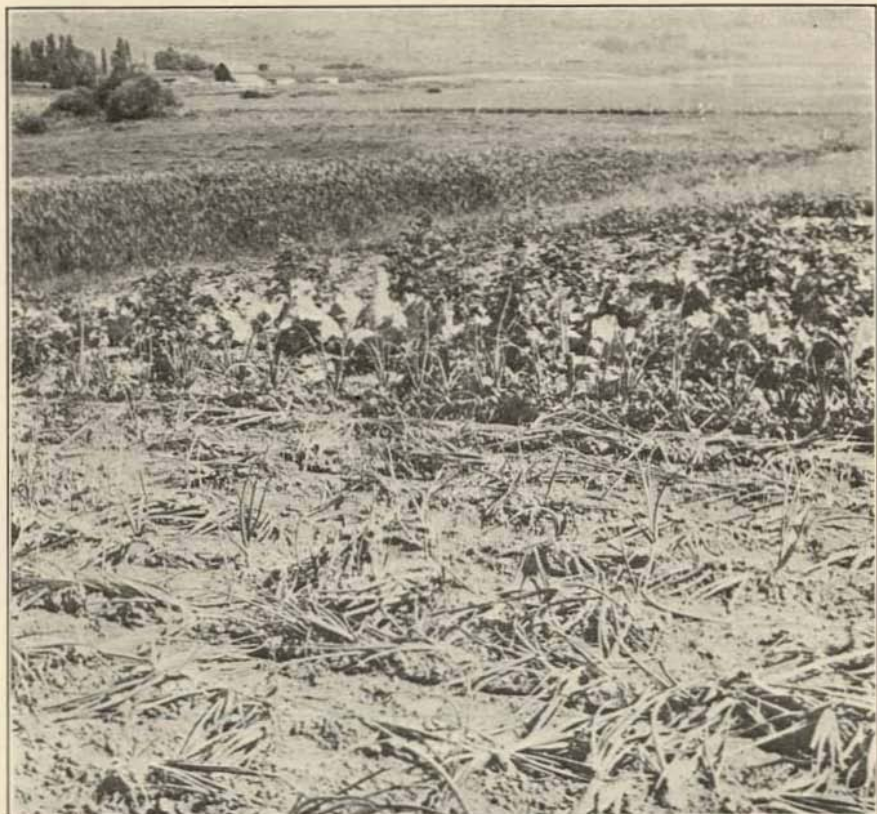
Table prepared by Dr. Bird T. Baldwin and Dr. Thomas D. Wood.

## HEIGHT AND WEIGHT TABLE GIRLS

Ht. (ins.)	Av. Wt. for Ht. (lbs.)	5 Yrs.	6 Yrs.	7 Yrs.	8 Yrs.	9 Yrs.	10 Yrs.	11 Yrs.	12 Yrs.	13 Yrs.	14 Yrs.	15 Yrs.	16 Yrs.
39	34	34	34										
40	36	36	36	36									
41	37	37	37	37									
42	39	39	39	39									
43	41	41	41	41	41								
44	42	42	42	42	42								
45	45	45	45	45	45	45							
46	47	47	47	47	48	48							
47	50	49	50	50	50	50	50						
48	52		52	52	52	52	53	53					
49	55		54	54	55	55	56	56					
50	58		56	56	57	58	59	61	62				
51	61			59	60	61	61	63	65				
52	64			63	64	64	64	65	67				
53	68			66	67	67	68	68	69	71			
54	71				69	70	70	71	71	73			
55	75				72	74	74	74	75	77	78		
56	79					76	78	78	79	81	83		
57	84					80	82	82	82	84	88	92	
58	89						84	86	86	88	93	96	101
59	95						87	90	90	92	96	100	103
60	101						91	95	95	97	101	105	108
61	108							99	100	101	105	108	112
62	114							104	105	106	109	113	115
63	118								110	110	112	116	117

Table prepared by Dr. Bird T. Baldwin and Dr. Thomas D. Wood.





Picture of Demonstration Garden Developing Nutrition Plan.

### Storage and Preservation of Foods for the Family's Yearly Supply

Does your family have for use thruout the year the foods of inestimable value furnished by the vegetable garden, fresh from the garden in summer and preserved for winter use by canning or storage? This is a problem for the wise and resourceful parents of healthful, industrious boys and girls.

Store, dry or can a supply of vegetables for use in meals during those periods of the year when fresh vegetables cannot be obtained from the garden.

Learn to like a variety of vegetables and then plan to serve them.

Serve tomatoes two or three times a week. Don't forget that the tomato is a food suited to infant as well as adult.

Serve a green vegetable, such as *green beans, asparagus, peas, cabbage, carrots* and *onions* not less than once a day.

Plan to have *seven* meals each week using stored vegetables.

Then plan to have *seven meals* each week using canned vegetables.

In most sections of Idaho, it is possible to have a greater variety of vegetables in the garden.

Root vegetables average fifty pounds to the bushel; one pound of such vegetables as carrots, turnips, onions, potatoes and beets will serve three or four so that a bushel will make an average of two hundred servings.

One pound of raw cabbage will make seven or eight servings.

One pound cooked cabbage will make four or five servings.

One quart kraut will make four servings.

One pound dried vegetables will make six or eight servings.

If there is a question with anyone as to the safety of canning greens, such as spinach, beet tops, etc., they can be brined satisfactorily. One pound of brined vegetables serves seven.

### Food Preservation and Storage Budget

	FRESH	STORED	DRIED	CANNED
Carrots.....	25 lb.	30 lb.		
Cabbage.....	10 lb.	20 lb.		
Onions.....	12 lb.	20 lb.		
Beets.....	8 lb.	10 lb.		
Parsnips.....	7 lb.	10 lb.		
Turnips.....	12 lb.	20 lb.		
Cauliflower.....	8 lb.			7 pt.
Celery.....	10 serv.	10 serv.		
Potatoes.....	45 lb.	140 lb.		
String Beans.....	1/4 bu.		2 lb.	7 pt.
Asparagus.....	1 bu.			5 pt.
Corn.....	30 cobs			6 pt.
Lima Beans.....	2/3 bu.			6 pt.
Tomatoes.....	25 lb.			6 pt.
Peas.....	1/3 bu.			10 qt.
Lettuce.....	30 serv.			
Spinach.....	20 serv.		10 lb. brined	
Beet Tops.....	5 serv.		10 lb. brined	
Berries.....	9 qt.			7 qt.
Apples.....	1 pk.	2 bu.	3 lb.	6 qt.
Pears.....	1/2 pk.			4 qt.
Peaches.....	1/2 pk.			4 qt.
Rhubarb.....	15 serv.			4 qt.
Cherries.....	6 qt.			4 qt.
Prunes.....			3 lb.	4 qt.

## GARDEN PLAN FOR FAMILY OF FOUR

KIND	VARIETY	LENGTH OF ROW	AMT. OF SEED	NO. OF PLANTS	TIME OF PLANTING
Cauliflower	Early Snowball	40	½ pkt.	25	In hotbed March 1-15
Celery	Giant Pascal	20	½ pkt.	40	In hotbed March 1-15
Spinach	New Zealand	50	1 oz.		April 1-10
Swiss Chard	Any variety	50	1 oz.		April 1-10
Carrots	Half long Danver	150	1½ oz.		April 1-10
Parsnips	Hallow Crown	100	½ oz.		April 1-10
Beets	Any variety	100	2 oz.		April 1-10
Salsify	Sandwich Island	20	¼ oz.		April 1-10
Beans, pole	Kentucky Wonder	100	1 pt.		June 1st.
Cucumbers	White Spine Everbearing	50	½ oz.		May 27th to June 1st.
Squash	Hubbard or Banana	30	¼ oz.		May 27th to June 1st.
Cantaloupe	Emerald Gem	20	¼ oz.		May 27th to June 1st.
Beans, string	Any variety	100	1 pt.		May 27th to June 1st.
Peppers	Neapolitan	10	1pkt.	10	In hotbed March 1-15.
Tomatoes	Red Head	150	1pkt.	50	In hotbed March 1-15.
Corn	Golden Bantam Country Gentleman	300	1¼ lb.		May 1st to 10th.
Onions	Some early variety	150 seed 50 sets	¼ oz. ½ pt.		March 1st to 15th.
Cabbage	Copenhagen Market	80	1 pkt.	40	In hotbed March 1-15.
Potatoes, early	Early Ohio Irish Cobblers Bliss Triumph	300	24 lb.		April 25.
Turnips	Purple Top White Globe	150	¾ oz.		March 1-15
Peas	Alaska Any late variety	200	2 qt.		Alaska—March 1-15. Late—April 15-May 1.
Spinach	Any variety	100	1 oz.		March 1-15.
Lettuce, head	New York Head	50	⅛ oz.		March 1-15.
Radishes	French Breubbort White Icicle	100	1oz.		Alternately after March 1.
Lettuce	Paris White Coos	50	⅛ oz.		June 1st.



There is value in planning to have raw vegetables served often. These have a protective value that is lost to a large degree in cooking. Such vegetables as cabbage, carrots, celery, onions and lettuce can be easily prepared and they have great value as foods.

### CHART SHOWING FOOD SUBSTANCES OF VEGETABLES AND FRUITS

GROWTH PROMOTING AND PROTECTIVE FOODS			BODY BUILDING AND REGULATING FOODS MUSCLE, BONE, TEETH AND REGULATING					ENERGY GIVING FOODS	
"A"	"B"	"C"	PROTEIN	LIME OR CALCIUM	IRON	PHOSPHORUS	ROUGHAGE	STARCH	SUGAR
Tomatoes Spinach Carrots Cabbage Lettuce Parsnips Sweet potatoes String beans	Tomatoes Spinach Carrots Cabbage Potatoes Rutabagas Turnips Celery Radishes Sweet potatoes Cucumbers Parsnips Onions Lettuce Oranges Lemons Apples Grapefruit	Tomatoes Cabbage Carrots Oranges Lemons Rhubarb Grapefruit Apples Potatoes	Beans Peas Dried Apricots Figs	Beans Chard Celery Cauliflower Dates Raisins Greens Peas Prunes Turnips	Beans Spinach Prunes Carrots Dates Raisins Greens Peas Corn Potatoes Asparagus Cabbage Lettuce Onions Carrots Beets Turnips Celery Tomatoes Apples Oranges Grapes Pears	Beans Peas Raisins Sweet corn Prunes Spinach Tomatoes Dates Turnips Carrots Onions Lettuce Beets Celery Cabbage Cauliflower Oranges Gooseberries	Cabbage Celery Onions Turnips Beets Cauliflower Carrots Squash Greens Dates Prunes Parsnips Kohlrabi	Potatoes Corn Bananas Beans	Figs Grapes Raisins Prunes Plums Apricots Apples Peaches Oranges Cherries Peas Carrots Lemons Sweet corn Sweet potatoes Parsnips