HEALTH
THE FOURTH H

Montana State College Extension Service
Bozeman
The Health H

By

PAULINE BUNTING,
Assistant State 4-H Club Leader

“I pledge my Health to better living for my club, my community, and my country.” Without good health one cannot train the head, the heart, and the hands for service. So the best development of these three H’s depends on the fourth H—Health.

MOTTO: BE YOUR OWN BEST EXHIBIT

There are standards for livestock, for canned food, for clothing, and other club products. Why not Health Standards for 4-H club members? Would it not be a good plan to take an inventory of health assets?

1. Check carefully the standards for healthful living, with the idea of finding where improvement may be made.

   Not all, perhaps very few, can achieve the highest standard because nature may have given greater possibilities to some. But everyone is interested in doing one’s best to grow physically fit for a successful life. The material given in this bulletin explains some of the habits and practices which tend toward a high standard. Remember that building strong bodies at the start is the best preventive of ill health.

2. It is recommended that the club member make a list of the ways for improving his or her health conditions during this club year. Have an examination by a physician, if possible, and try to make the improvements he suggests.

STANDARDS FOR HEALTHFUL LIVING

1. Physical Growth—Good posture, indicating good bone and muscle development.

2. Well Conserved Physique—Correction of defects as they occur.

3. Care and Cleanliness—Teeth clean and free from cavities; skin clean, clear, and smooth; nails clean; hair lustrous.
4. Recreate for Health—Plenty of fresh air and sunshine, plenty of sleep with windows open; happy associations and interesting things to do.

5. Suitable Food—Select variety to meet needs of the body; eat regularly, of right amounts.

6. Combat Diseases—Proper care of individual; prevent spread to others.

7. Be prepared to act wisely in emergencies.

8. Cultivate an enthusiastic and cheerful disposition.

WHAT DOES WEIGHT INDICATE?

To watch weight and height changes is the best single way of finding the state of growth. Charts which consider type, as well as age and height, are the most satisfactory for finding average weights. These tables are the averages of large numbers of people, which indicate, in a general way, whether the individual is much above or below the average for his years. The newer Measuring Scale, giving weight in relation to age, height, and physical type, may be secured for about 13¢. Ask the County Extension Agent to order one for the club, or several clubs in one community might use one.

It is more important to gain regularly at a satisfactory rate than to be exactly up to any standard average weight.

Being underweight may be due to some physical defect, or just not eating the right kinds and amount of food. If food habits are good, as indicated by the score in keeping the food habits score card, it would be best to let the physician decide what is the cause. Even more serious effects than fatigue and unpleasant disposition may result from poor nutrition.

Keeping a weight curve will help check on the condition of health. A record of weight and height may be kept on the following chart. Make date line across top to fit the calendar of club work. Write numbers for weight in the first column, placing present weight number near the bottom of the chart. Weigh regularly and make a dot on succeeding date lines. Connect the dots, making a curve which shows the rate of gain. The weight curve should, if possible, be kept for a year, since there is often a great variation during seasons of the year.
**WEIGHT CURVE**

<table>
<thead>
<tr>
<th>Lbs.</th>
<th>Months</th>
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GOOD POSTURE—GOOD HEALTH

"Good posture consists in putting the whole body from toe to head in such a position that muscles and internal organs can work without interference or friction—that is, feet parallel, waist line drawn in and the whole body stretched up tall with head erect. This means ease and elasticity, giving the appearance of poise and balance, not of rigidity, tension, and self-consciousness."

The desire to have good posture comes first. With this mental attitude practice correct posture until it becomes a habit. Remember to "stand tall, sit tall, walk tall, think tall."

Since the way the feet are used so largely determines posture, it seems logical to consider the feet first. Strong feet are necessary for carrying the weight of the body and for the comfort and efficiency of the individual. The weight of the body should be carried forward over the balls of the feet and not back upon the heels. In walking with the feet pointed straight to the front, the weight falls over the strongest part of the foot—the arch and outer side. With the feet pointing outward, the weight falls upon the inner border of the feet, which eventually breaks down the arch.

Badly built shoes cause weak feet and broken arches probably oftener than any other one factor. Girls' shoes, as well as boys, should be the same shape as the foot, allowing room for the slight spreading and curling under movement of the toes in walking which keeps the short muscles underneath the arch in good condition. The inside line of the shoes should be straight. The heel should be low, broad and flat, and should run well forward under the foot to give support to the weight of the body. Stockings as well as shoes should be long and wide enough to allow movements of the foot. A famous man once said to his son, "Select a good bed and good shoes; you are in one or the other 24 hours each day."

Standing on a good foundation, it is easy to have erect, well-balanced posture. This can be tested by standing against the wall, with heels about four inches from the wall and touching all the way up the back and head. One should be able to swing forward and keep this same position in walking.

Another test is made by holding a weighted string. An imaginary plumb line dropped from the side of the head should pass through the ear, the middle of the shoulder, the hip, knee, and the ankle bone. If a person has correct standing posture.

A picture in a bathing suit or a silhouette picture helps in studying posture.

"Positive health is an adequate balance of everyday living. Good feet, good posture, good shoes, straight foot walking and exercise contribute much toward a good foundation for health."

The exercises on the following pages are recommended for achieving good posture.
THE POSTURE EXERCISE IN A NEW VERSION

Head up, chest high,
Pull your “tummy” in,
Turn your toes right straight ahead,
And then pull in your chin.

“The human body has grown, improved, evolved—on the basis of exercise out of doors. That which man has done with his hands, with his physical side has developed his brain. The intellect develops through the experience of muscles. And so it behooves us to give attention to bodily exercise—which means to train through use. It behooves us to give serious consideration to Posture and Exercises to improve it. It behooves us to seek activities which will help us acquire grace of movement, the ability to breathe well, to find satisfaction and joy and so help us to cultivate from the physical side—this thing we covet—PERSONALITY.”

“The Law of Beauty is Health.”

“The Law of Grace is Walking.”

“The Law of the Speaking Voice is Breathing.”
IF YOU DO THIS

Sleeping

Climbing Stairs

Sitting Down and Getting Up

Working Out of Doors or In The House

Reading and Studying

Walking

Standing

(Engravings through courtesy of Colorado Agricultural College)
SIMPLE HOME EXERCISES

These exercises will help correct posture defects. In order not to over­
tire, rest between the exercises, particularly at first, and start with only
four or five. "Do all exercises in good posture," advised Miss Mary Stewart,
director of Physical Education for Women, Montana State College, when
suggesting these exercises.

**Bicycle—**
Abdominal and hallow back

**Rowing—**
Hollow back and shoulder muscles

**Prone lying—**
Round shoulders

**Aeroplane—**
Abdominal and side muscles

**Lying, leg raising and lowering—**
Abdominal

**Mosher exercise—**
Abdominal

**Stretching—**

Lying on back, hands under head, legs moving in motion of peddling bi­
cycle—until tired.

Sitting erect, elbows bent at side of chest as if pulling back with ears. Reach forward, touch fingers to toes, pull up to first position. 30-40 pulls.

Lying face down, fold hands in back below hips, pull back and together on shoulder lifting the upper trunk from floor. Care should be taken that there is no bending back from the waist. 10-15 times.

Stand astride, arms raised to shoulder height. 1. Bend and twist trunk so that right arm will touch left toe, keeping knees straight. 2. To erect position. 3. Left arm touch right toe. 4. To erect position in rhythm 16 or 20 counts.

1. Lying, arms at sides.
2. Bend one leg over hip; then the other; then both together until tired. 3. Still lying, raise one leg with knee stiff (back flat), then slowly lower, then raise second leg—raise both together. 4-5 times.

Lying on floor, right hand resting on abdomen. Contract abdomen muscles exhaling with force; hold a second, then inhale slowly pushing up abdomen. Repeat in slow rhythm 8-10 times.

Hanging from bar, draw knees as far as possible up toward chest.
For Good Standing Position

1. Strengthening—Metatarsal arch (across foot)
2. Strengthening Arch
3. Stand on book or low stool—For muscles of the soles of the feet
4. Foot circling—To limber the arch joints
5. Strengthening Foot Muscles—

Stand against the wall, heels together and 4 inches from wall. Flatten back against wall, pushing hips down and abdomen in so that hips, small of back, shoulders, and head touch. With hands push away from wall. Walk forward and return and test position against wall.

Sitting, picking up marbles with toes, and take from foot when as high as opposite knee. Do 15 times with each foot.

Standing, knee rotation outward. Arch raising on inner border. Do 5 times with each foot.

Stand on book or low stool with edge just under the interior arch (running from big to little toe). Flex toes under as if trying to grip edge of book. 10-12 times.

Sitting. Cross one leg over the other so that the leg hangs free. Extend arch, push downward with toes, then turn foot inward and upward in a circle, flexing the ankle strongly. 15-20 times.

Sitting, foot drawing. Place feet about 30 inches apart, foot flat on floor throughout; leg extended; make 1/2 circle on floor toward each other and back to chair.
Set the goal of acquiring the charm that comes from a strong vigorous body, clean skin, sparkling eyes, glossy hair, and the radiation of health and energy. Cleanliness, outside and in, will go far in achieving this goal. Form habits by repeating good practices of cleanliness until the acts become automatic.

Some of the ways of improving appearance are:

1. Care for the Hair, by frequently washing and brushing the hair and massaging the scalp.

2. Care for the Nails, by cleaning daily and manicuring often. Push back the cuticle when drying hands.

3. Care for the Skin and Teeth, by cleaning before going to bed, by drinking 6 to 8 glasses of water daily, eating fruits and vegetables each day, and eating no sweets between meals. It is as easy to develop tastes for foods that provide health and growth as for foods which lack these qualities. Establish the habit of going to the toilet at the same hour each day. Take a warm bath for cleansing one or more times per week. Each person own and use own toilet articles. Wash hands before each meal and after toilet.

4. Care for the Feet, by wearing well fitting shoes and stockings. Change stockings every day if possible, bathe feet frequently and trim nails.

5. Care for one's clothes, by keeping shoes polished and wearing only clean, well-aired, and well-pressed clothing in good condition.

How personal toilet articles will help prevent the spread of disease such as measles, scarlet fever, chicken pox, and whooping cough:

The early signs of many contagious diseases are similar, therefore, they are difficult to diagnose, and since it is in the early stages of most diseases that they are most contagious, one of the best ways of preventing their spread is for everybody to have his own toilet articles such as wash cloth, towel, comb, and toothbrush. Have individual space and hooks.

The hands are considered one of the chief carriers of disease germs. It is as important to wash hands before eating at a picnic, a church social, or a lunch at school, as it is at home. Dr. Ray Lyman Wilbur, President of Stanford University, says, “If I had to name one health measure which would be most effective in the control of the great transmissible diseases, I would say that a thorough washing of hands, at east each time before food was taken, would be most effective.”

What can the club group do to make the surroundings either at school, home, or in the community, cleaner, or more orderly, or more beautiful?
National 4-H Health Motto: A clean, quick mind in a clean, strong body.

SLEEP AND REST

The body depends upon its owner to give it rest and sleep in the right amounts. The body works all the time, building, repairing, keeping the heart going, keeping the blood in circulation, and breathing, even when resting or sleeping, as well as when running, jumping, talking, and doing many other things. A tired body does not work well. The poisons of fatigue which have accumulated during these activities are thrown off during rest.

HOURS OF SLEEP
(Thomas C. Wood, M. D.)

6-8 years of age—12 hours of sleep per day.
7-10 years of age—11 1/2 hours of sleep per day.
10-12 years of age—11 hours of sleep per day.
12-14 years of age—10 1/2 hours of sleep per day.
14-16 years of age—10 hours of sleep per day.
16-18 years of age—9 hours of sleep per day.

If the correct number of hours of sleep are observed, better health and appearance will follow. Rest during the day is often necessary.

When the body is treated right, it works wonderfully well all of the time.

FOOD HABITS AFFECT HEALTH

The body is built of the materials found in the food which is eaten. In order for it to grow and build well, the important materials needed by each part of the body structure for its growth, repair, and working must be furnished.

The framework of the body is built of bones. The bones should be straight and strong. Lime is the most important material used in bone construction. The teeth also are built of lime. In order to grow good bones and teeth and to keep them repaired and in good condition, the body needs each day as much lime (Calcium) as is furnished in a quart of milk.

The fleshy part of the body is chiefly muscle. The materials that build muscles are classed as proteins and are obtained from such foods as milk, cheese, eggs, meat, and fish.

Blood is another very important part of the human body. Building and repair materials are carried to all parts of the body by the blood. It is iron that makes good red blood. The foods which furnish the most iron are green, leafy vegetables, egg yolk, whole cereals, and fruits.
The minor parts of the body will be properly built along with these more important parts from these same materials.

The whole structure must be kept in repair and good running order. Fresh fruits, vegetables, and whole cereals will supply these regulating materials, known as vitamins and minerals.

Since the human body must move itself about in work or play it must have energy. The fuel which provides this energy is found in the foods classed as carbohydrates and fats. Carbohydrates are found most abundantly in such foods as cereals, starches, sugars, and other sweets.

Plenty of water is needed to cleanse the body internally and to keep it healthy. It is necessary to drink at least six glasses of water each day, in addition to other liquids.

Keep the Foods Habit Score Card each day for a week at the beginning and end of the club year. This will indicate whether the necessary materials for nourishing the body are being provided.
### FOOD HABITS SCORE CARD

<table>
<thead>
<tr>
<th>Category</th>
<th>First Scoring</th>
<th>Second Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credit</td>
<td>Date</td>
</tr>
<tr>
<td>1. MILK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 cups a day</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>3 cups a day</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2 cups a day</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>2. VEGETABLES (besides potatoes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 times a day including one</td>
<td></td>
<td></td>
</tr>
<tr>
<td>leafy vegetable</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Once a day</td>
<td>10</td>
<td></td>
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<tr>
<td>3. FRUIT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 times a day, one to include</td>
<td></td>
<td></td>
</tr>
<tr>
<td>raw fruit or tomatoes</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Once a day</td>
<td>5</td>
<td></td>
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<tr>
<td>4. WHOLE GRAIN (Bread or cereal)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twice a day</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Once a day</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5. MEAT, CHEESE, EGGS, FISH OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRIED BEANS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two of above each day</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>One of above each day</td>
<td>10</td>
<td></td>
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<tr>
<td>6. WATER</td>
<td></td>
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</tr>
<tr>
<td>6 glasses a day</td>
<td>10</td>
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<tr>
<td>3 glasses a day</td>
<td>5</td>
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<tr>
<td>7. EATING 3 REGULAR MEALS,</td>
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<td></td>
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<tr>
<td>Including breakfast</td>
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<td></td>
</tr>
<tr>
<td>8. NO TEA OR COFFEE</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>9. NO SWEETS BETWEEN MEALS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

After scoring for one week, add the scores for each class of food to get total (T) for the week, divide by seven to get the average (Av.). Add averages to get the total food score for the week. The weekly score should be above 80 to indicate good food habits.
SAFETY AND FIRST-AID RULES

1. Protect by vaccination or toxin-anti-toxin against smallpox, diphtheria, typhoid and any other diseases for which preventive treatment is possible.

2. Know safety rules and try to follow these and encourage others to do so by example, in order to prevent accidents at play, in school, at home, and in the community.

3. Collect a First-Aid Outfit and learn simple first-aid measures for common injuries and what to do until the doctor comes in more serious cases.

4. Protect self and others by observing the quarantine laws and by isolation or separation from others when ill with any contagious disease, from the common cold to those usually considered more serious. “Drs. Kerr and Lagen of the University of California Medical School have definitely found that when people come into direct contact with those having severe colds, they acquire colds only in a state of lowered resistance or poor physical condition.”

MENTAL HEALTH HABITS

1. Adjust easily to environment.
2. Keep cool in emergency.
3. Meet difficulties calmly and settle them without delay.
4. Persevere in spite of difficulties.
5. Acknowledge error.
6. Correct mistakes if there is opportunity.
7. Concentrate on work at hand.
8. Think clearly, accurately, and constructively before acting.
9. Secure happiness in whatever work is undertaken.
10. Assume responsibility without nervousness or worry.
11. Believe in own ability.
12. Attempt to attain ideals.
13. Recognize but do not advertise own short comings.