The Nutrition Unit of the Iowa Department of Public Health developed a school and community nutrition education program in 1948. The program consisted of an initial three-day diet survey, a subsequent nutrition education program carried out by the people of the community and a resurvey of dietary habits to measure the effects of the educational program.

In 1948-49 a total of 3,288 Iowa rural and city children in six counties participated. The diets were evaluated on the basis of the entire diet, nine food groups essential to a good diet and breakfast. The results indicated a serious need for nutrition education. Almost half of these children were receiving poor diets. Only 38% of these children drank enough milk each day. In general the intake of meat, potatoes, bread and cereal was good, the intake of citrus fruits, other fruits and vegetables and eggs needed to be improved, but the intake of milk and green and yellow vegetables was shockingly low. Also 32% of the children surveyed ate a poor breakfast or none at all. Almost half or 44% of the children showed some improvement in their eating habits after a period of nutrition education.

In 1950-51 a total of 4,188 children in seven Iowa counties participated in the program. The results were almost identical to the 1948-49 survey, usually within one or two percentage points. The results of the survey are shown in Table I (next page).

Five of the counties did a resurvey of dietary habits several months after the educational program. The improvement was not as great as in 1948-49. This time 29% of the children had improvement in their diet. The results for the 2,177 children who were resurveyed after the education are shown in Table II (next page).

I was in elementary school at the time and all I can say is I must have been very deprived, because I did not consume anywhere near the amount of any of those items. Of course the nutritionists and dentists would probably say I was privileged rather than deprived.

The Dental Division was also proposing a 5% tax on chewing gum and cola beverages, the proceeds to be used to promote the Iowa Plan for Dental Health Education and to provide the essential dental care for all indigent students in grades 1-12 through private dental practice.

### Junior High

<table>
<thead>
<tr>
<th></th>
<th>Per Day</th>
<th>Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candy Bars</td>
<td>0.55 Bar</td>
<td>3.85 Bars</td>
</tr>
<tr>
<td>Chewing Gum</td>
<td>1.00 Stick</td>
<td>7.00 Sticks</td>
</tr>
<tr>
<td>Soft Drinks</td>
<td>0.39 Bottle</td>
<td>2.73 Bottles</td>
</tr>
<tr>
<td>Ice Cream</td>
<td>0.39 Cone</td>
<td>2.73 Cones</td>
</tr>
</tbody>
</table>

### Senior High

<table>
<thead>
<tr>
<th></th>
<th>Per Day</th>
<th>Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candy Bars</td>
<td>0.82 Bar</td>
<td>5.74 Bars</td>
</tr>
<tr>
<td>Chewing Gum</td>
<td>1.62 Sticks</td>
<td>11.20 Sticks</td>
</tr>
<tr>
<td>Soft Drinks</td>
<td>0.74 Bottle</td>
<td>5.18 Bottles</td>
</tr>
<tr>
<td>Ice Cream</td>
<td>0.47 Cone</td>
<td>3.29 Cones</td>
</tr>
</tbody>
</table>
Table I.
Summary--Initial Study of Three-day Diet Records from 4,100 Iowa Children

CLASSIFICATION OF DIETS

<table>
<thead>
<tr>
<th></th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>24</td>
<td>30</td>
<td>46</td>
</tr>
</tbody>
</table>

ANALYSIS OF DIETS BY FOOD GROUPS

<table>
<thead>
<tr>
<th></th>
<th>Reported</th>
<th>Recommended</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green and Yellow Vegetables</td>
<td>15</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Citrus Fruits</td>
<td>47</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Potatoes</td>
<td>30</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Other Fruits and Vegetables</td>
<td>42</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Milk</td>
<td>34</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Meat</td>
<td>79</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Eggs</td>
<td>52</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Bread and Cereals</td>
<td>71</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Butter and Margarine</td>
<td>43</td>
<td>14</td>
<td>14</td>
</tr>
</tbody>
</table>

According to the results of the initial survey given in Table I only 24 per cent or approximately one-fourth of the children were eating a good diet whereas 46 per cent or nearly one-half had a poor diet. The children's diets were most often lacking in milk and green and yellow vegetables. There was excellent cooperation in carrying out the educational program in each county when the survey results were known. Most of the children could have easily had an adequate diet if they and their parents had realized the importance of a good diet to health and well being. This could be accomplished by education.

The value of the nutrition education program was shown by the five counties that did a resurvey of dietary habits several months after the educational program. Over one-fourth or 29 per cent of the children had shown improvement in their diet. There was a higher percentage of children consuming the recommended amounts of each food group and some improvement in the breakfast situation as shown by a comparison of Tables I and II.
### Table II. Summary—Study of Three Day Diet Records
From 2,117 Iowa Children after Nutrition Education Programs

#### Classification of Diets

<table>
<thead>
<tr>
<th>Classification</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>39</td>
</tr>
<tr>
<td>Fair</td>
<td>29</td>
</tr>
<tr>
<td>Poor</td>
<td>32</td>
</tr>
</tbody>
</table>

#### Analysis of Diets by Food Groups

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Reported</th>
<th>Recommended Amounts</th>
<th>Reported None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green and Yellow Vegetables</td>
<td>18%</td>
<td></td>
<td>36%</td>
</tr>
<tr>
<td>Citrus Fruits</td>
<td>54%</td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Potatoes</td>
<td>84%</td>
<td></td>
<td>3%</td>
</tr>
<tr>
<td>Other Fruits and Vegetables</td>
<td>52%</td>
<td></td>
<td>9%</td>
</tr>
<tr>
<td>Milk</td>
<td>42%</td>
<td></td>
<td>9%</td>
</tr>
<tr>
<td>Meat</td>
<td>87%</td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>Eggs</td>
<td>66%</td>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>Bread and Cereals</td>
<td>85%</td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>Butter and Margarine</td>
<td>50%</td>
<td></td>
<td>10%</td>
</tr>
</tbody>
</table>

#### Assistance in Nutrition Education

In nutrition education in the schools has been given in a number of other counties. The nutritionists have participated in three of the county health education conferences for rural teachers and one rural teachers’ meeting. Emphasis was placed on the part the teacher can play in helping children to form good eating habits and extend nutrition information to the children and their parents.

A leaflet entitled “Score Your Diet” has been prepared and used by many school and adult groups in studying dietary habits.

**Dental Program**—A one-day nutrition institute for dentists was held at Iowa State College in cooperation with the Division of Dental Hygiene. Several outstanding speakers appeared on the program and presented the relationship of nutrition to various phases of dental health. Dentists are in a position to do a great deal of nutrition education.

**Public Health Nursing**—Some of the nutrition teaching must be done by individual contacts in the home, therefore the public health nurse plays an important role in the nutrition education program.

Since the public health nurses relay nutrition information to individuals, they are given consultation, advisory service and in-service