Observations and Experiences with the Nutritionist in the Public Health Service Indian Hospital, Pine Ridge, South Dakota

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To the Graduate Council:

I am submitting herewith a thesis written by Soekati Tjokrowirono entitled "Observations and Experiences with the Nutritionist in the Public Health Service Indian Hospital, Pine Ridge, South Dakota." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Nutrition.

Florence L. MacCleod, Major Professor

We have read this thesis and recommend its acceptance:

Beth Duncan, Harold H. Walker

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)
June 30, 1961

To the Graduate Council:

I am submitting a thesis written by Soekati Tjokrowirono entitled "Observations and Experiences with the Nutritionist in the Public Health Service Indian Hospital, Pine Ridge, South Dakota." I recommend that it be accepted for nine quarter hours credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Nutrition.

[Signature]
Major Professor

We have read this thesis and recommend its acceptance:

[Signature]
[[Signature]
Accepted for the Council:

[Signature]
Dean of the Graduate School
OBSERVATIONS AND EXPERIENCES WITH THE NUTRITIONIST IN THE
PUBLIC HEALTH SERVICE INDIAN HOSPITAL, PINE RIDGE,
south dakota

A THESIS
Submitted to
The Graduate Council of
The univernity of Tennessee

In Partial Fulfillment
of the Requirements for the Degree
of Master of Science

by
Soekati Tjokrowirono
August 1961
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S. T.
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INTRODUCTION

The two weeks of observation in the United States Public Health Service Indian Hospital in Pine Ridge as a part of the student's year of graduate study in nutrition was planned for several reasons. The purpose of this observation was to gain knowledge of the organization and functioning of a local unit of a national health agency in the United States and to learn about public health work in the Indian Reservation of South Dakota, and about the nutrition section particularly.

Throughout the field experience period the student attempted to gain an understanding in one locale of how the nutrition services are integrated with the total Indian health program. The writer was particularly interested in the general nutrition and health conditions of the Dakota or Sioux Indians, the factors which had influenced the present conditions affecting the population, and what was being done to improve such conditions. This would provide an opportunity to compare the conditions with similar ones in Indonesia.

Another major objective was to become acquainted with procedures used by the nutritionist in determining the nutrition needs of the Indians in Pine Ridge and in planning the overall nutrition program to meet these needs. The student hoped to gain from her field training valuable experience that would be of help in her future work as a teacher in foods and nutrition in Indonesia.

To help the student accomplish the objectives, a program of varied experiences was planned by the Pine Ridge Hospital nutritionist of the United States Public Health Service under the supervision of the Nutrition and Dietetics Branch, Division of Indian Health at Aberdeen. Conferences
with the directors or staff members in various divisions of the Public Health Service Indian Hospital served to present a picture of the over-all health program. Since limited opportunity was provided for participation by the student, the major part of the time was spent in observation of the nutritionist carrying out various activities of the nutrition program. In reporting major nutrition activities, co-operation between the nutritionist and other public health personnel of the Indian Hospital or with allied agencies has been indicated.
THE STATE OF SOUTH DAKOTA AND THE PINE RIDGE RESERVATION

Characteristics of the State

South Dakota is in the heart of the prairie region of North America (Gunther, '47). It covers an area of 77,047 square miles and ranks 15th in area in the nation. It contains the Bad Lands. This largely uninhabited district in the west of the state beyond the Missouri River and on the dry side of the 98th meridian has been described as a "part of hell with the fires burnt out." This area is populated only by rabbits, rattle snakes, birds of prey and coyotes. Behind the Bad Lands lie the Black Hills covered with dense black-green pine and fir. The soil in the western part of South Dakota, called gumbo, is very hard when the weather is dry, and muddy and sticky when it rains (Gunther, '47).

The population of South Dakota is of German and Scandinavian descent. There is a considerable Indian population, mostly Sioux. Indians hold approximately one-tenth of all land in the state. Thirty-three per cent of its 677,000 people live in urban areas with 67 per cent residing in rural areas.

Homestake goldmining in the Black Hills is one of the important enterprises of the State. Oats, barley and wheat are the main agricultural products in the county of Sioux Falls. This place has been called the pheasant capital of the world. These birds bring the community a good income.
Pine Ridge, Oglala Sioux Reservation

History

Prior to the arrival of white settlers, the Sioux or Dakota Indians were located in the greater part of the present states of Minnesota, North and South Dakota. By the treaty of April 29, 1868 (U. S. Stat. 15, 635), certain lands were set aside in the Dakota territory and called the Great Sioux Reservation. This reservation was subsequently broken into reserves, under the authority of the Act of March 2, 1889 (U. S. Stat. 25, 889), with the Pine Ridge Reservation in southwestern South Dakota set up for the Oglala Sioux Tribe. The others were the Cheyenne River, Crow Creek, Fort Totten, Flandreau, Rosebud, Sisseton and Fort Yates reservations (see figure 1, page 5).

The original area of the Pine Ridge Reservation was 2,721,597 acres. Much of the reservation was subsequently allotted to individual members of the tribes. The present area of the reservation comprises 1,822,349 acres which are tribally owned. Range land constitutes the most important economic asset on the reservation with about 1,349,010 acres devoted primarily to this use. Less than half of the land is in Indian use. The total forest land is 93,593 acres, none of which has any commercial value at the present time. The normal rainfall is considered to be about 17 inches a year which usually occurs during the early part of the growing season. The average length of the growing season is about 150 days.

Population

The latest figures on the total membership of the Oglala Sioux is 12,196. Of the total membership of the tribe, 3,854 are listed as full bloods, and 778
Figure 1. Federal Indian Reservations in North Dakota, South Dakota and Nebraska
cannot speak English. There are approximately 1,350 families living in the reservation. The Sioux call themselves Dakota or Lakota, and the name Sioux, given to them by the whites, is said to be derived from an Algonquin word meaning the "snake-like ones," or enemies (The Encyclopedia Americana, '59).

**Family Life in the Past**

The Dakota Indians were a nomadic people and were unusually mobile with their herds of ponies. About 100 years ago the men's duty was to protect the home, provide materials for food and clothing, make bows, arrows, household equipment and supervise the hunt. The elders' occupations were craftwork and the holding of councils.

Three generations formed the family unit and each generation had its appointed and accepted tasks. The woman's work was the preparation and care of the food, including the drying of meat, wild fruits, vegetables, rice and herbs; gardening which means raising squaw corn and drying it, storing and transporting all the food; and making clothes and tepees from the hides of buffaloes by dressing the skins and decorating them. The care of the young children and the instruction and protection of the young girls fell to grandmothers. Children gathered wood and carried water, the boys hunted small game, and the girls sewed on hides and learned to decorate them with porcupine quills and beads (North Dakota, '38).

The dome-shaped lodges varied from 30 to 90 feet in diameter. The doorway of a lodge was protected by a kind of porch and hung with a buffalo hide, serving as a windshield. In the center of the lodge was the fireplace which was a stone-lined depression. An opening in the roof carried off the smoke
and served as a skylight. To the right of the doorway was the stall for the
favorite ponies. On the other side were box-like beds for the head of the family,
his wife or wives, and his children. Usually two or three families and their
relatives lived in one lodge (South Dakota, '52).

Early Food Habits

Animals which were numerous in the early days were buffaloes, deer,
antelope, wolves, bobcats, rabbits and prairie dogs. Buffalo was the animal
from which most of the meat was obtained. Wissler ('10) in speaking of meats
eaten says that dogs were used for food sometimes. Dog meat was considered a
delicacy among the Dakota Indians. He also said, in regard to methods of
preparation, that boiling was their favorite method and that they were especially
fond of soups. In the line of vegetables and fruits they found a few wild
turnips and a number of wild plums and choke cherries (Lewis and Clark, '04).
Will and Hyde ('17) in their studies stated that the amount of vegetables
used by the Dakota Indians was uncertain.

Some bands of Sioux practiced agriculture in a desultory way at times,
but for the most part the western bands depended for their food on the hunt
and the theft or purchase of a little corn from their neighbors (Will and
Hyde, '17).

Wissler ('10) described the methods of preparing vegetables. Wild fruit
was dried in the sun. Wild cherries were gathered when ripe and pounded on
stones until fruit and pits were reduced to a thick paste, dried and used in
making pemmican, which was sometimes eaten alone, but often used in soups.
Prairie turnips were often peeled, strung and hung up to dry. A great many
were consumed in the raw state. Sometimes they were dried, ground and used for thickening soup. Practically all kinds of vegetable foods were dried and stored.

One regular meal a day seems to have been the rule among the early Indians (Morgan, 1881; Wissler, '12; Wough, '16). In regard to the amount of food consumed, Hrdlicka ('08) says that this depended upon the supply which varied greatly at different times of the year or month. The Indians did not raise much and, therefore, they did not have much to eat. They consumed large amounts when the supply was abundant by having feasts.

Present Conditions

An overwhelming majority of the Indians are poor, even extremely poor, and they are not adjusted to the economic and social system of the white man. The houses, if they could be termed as such, are primitive dwellings. Some families live in tents which are of ordinary canvas. Overcrowding is conducive to the development and spread of disease. Sanitary facilities are generally lacking. Except among relatively few well-to-do Indians, the houses seldom have a private water supply. Water is ordinarily carried considerable distances from natural springs or streams. Although the government has materially improved this situation, the supply is inadequate in many sections. The income of the typical Indian family is low. The Indian generally receives money from leases of his land, the sale of land and per capita payments from tribal funds.

The main occupations of the men are mostly of an agricultural nature, but the number of real farmers is comparatively small. It should be said that many of the Sioux are living on lands on which a trained and experienced white man could scarcely live. Some people believe that the Indians prefer to live
as they do, but there is too much evidence of real suffering and discontent to assume that the Indians are reasonably satisfied with their conditions. A report submitted by the Institute for Government Research ('28) to the Department of Interior states the following: "Having moved the Indians from their ancestral lands to restricted reservations as a war measure, the government undertook to feed them and to perform certain services for them which a normal people do for themselves. The Indians at the outset had to accept this aid as a matter of necessity, but promptly they came to regard it as a matter of right, as indeed it was at the time and under conditions of the inauguration of the ration system. They felt, and many of them still feel, that the government owes them a living, having taken their lands from them, and they are under no obligation to support themselves."

Bosley ('59) stated that meat was considered the most important food in the past and that generally all parts of the animal were consumed except the bones. The strict regime of the War Department prohibited the Indians from leaving the reservation without permission. Thus, the supply of wild food soon became exhausted and it was necessary to distribute meat, flour, coffee and sugar. This dietary is similar to the present one.
Scope of the Program


Under the direction of the Surgeon General, this federal agency is charged with responsibilities for protecting and promoting the health of the people of the nation. It is also responsible for collaborating with governments of other countries and with international organizations in world health activities.

Federal health services for Indians began under the War Department in the early 1800's and were placed in the Interior Department in 1849. As was mentioned previously on August 5, 1954, in recognition of advantages to be gained by placing the program in a health agency, the program was transferred to the Public Health Service.

Indian health facilities in the United States include 48 hospitals, 18 health centers, about 200 field stations or locations, and 13 boarding school infirmaries (Perrott and West, '57).
For many years the Government has sought in one way or another to assist Indians in becoming independent members of states and localities in which they live. As Indians participate increasingly in the life of the general community, it seems reasonable that they should also receive necessary services, including health services, as citizens and members of the community.

Depressed conditions of health are partly a result of inadequate health services. Although the Federal Government began to provide health services for Indians in the early 19th century, these services never have been adequate. Half of the Indians in the country are less than 20 years old, in contrast to the total population where only about one-third are under 20 (Health Services for American Indians, '57).

The health problems of greatest urgency among the Indians today appear to be: (1) tuberculosis, (2) pneumonia and other respiratory diseases, (3) diarrhea and other enteric diseases, (4) accidents, (5) eye and ear diseases and defects, (6) dental disease, and (7) mental illness. Most of these problems are particularly severe among infants and children. Current Indian health activities of the Public Health Service are administered at an annual cost of about $35 million.

The following outline summarizes what the Public Health Service believes to be the requirements for a health program adequate to meet the major health needs of Indians. The outline takes into account the social and economic resources available for Indian health purposes, and suggests some ways of working toward systematic integration of Indian and non-Indian health services (Health Services for American Indians, '57).
Preventive and Curative Services

In direct operation of the Public Health Service, preventive and curative care should not be separated from each other. The preventive health program should be expanded with special attention to sanitation and the control of tuberculosis, diarrheal diseases, respiratory diseases, accidents, eye and ear diseases, and dental caries. There is a need for additional preventive services for infants and children.

Dental Care

A realistic approach to meeting dental needs requires beginning with an adequate service program to school children, and extending it each year to the new class entering school, with the goal of providing adequate, continuing maintenance service to the persons who have been participating in the program since childhood.

Mental Health Services

Mental health problems among Indians are shown by such manifestations as excessive use of alcohol, high incidence of accidents and violence, desertion, and juvenile delinquency. More service should be provided in an effort to meet the emotional and mental health problems among Indians.

Sanitation

Safe, accessible and adequate water supplies are needed. Provision should be made also for adequate disposal of refuse, excreta and liquid waste, and for
control of insects. Services to help Indians understand the need for improved sanitation should be intensified. To correct important deficiencies in sanitary facilities in Indian homes and communities there is also need for a federally aided construction program.

Medical Facilities

Hospital and clinic facilities as well as other plant facilities operated by the Public Health Service must be adequate, safe and properly equipped.

Records and Statistics

Adequate and complete reporting of vital statistics and medical services is required as a basis for program planning. Therefore, sufficient personnel should be provided to insure that adequate medical records and vital statistics can be maintained. More accurate population data must also be developed, with special attention to birth and death registration.

Research

In the Indian health program there should be a planned development of research to cover the main problems faced in the operation of the program. Pilot projects such as one already in operation on the Navajo Reservation (Smith, '57; Hadley, '55), combining health services with studies of ways to promote health among Indians, should be undertaken in selected areas. Studies are needed also of certain diseases or conditions which are major Indian
health problems, or which seem to take unusual forms among Indians. Wherever possible, studies should be organized on a co-operative basis with participation by state and local health or welfare authorities, Indian groups, and other federal agencies as well as by the Public Health Service.

As a conclusion and summary it can be said that an adequate program of curative and preventive health services for Indians cannot be achieved at once. Time is required to recruit and train an adequate staff, to build facilities, and to develop program methods. A satisfactory level of services for the Indians might be reached in from 5 to 10 years with a reduction in program possible thereafter as health and socio-economic status improve.

Staffing

Staff Requirements

The number of staff providing health and medical care to Indians is inadequate and therefore overworked. Because of the shortage of technical and clerical assistance, such professional staff as is available must spend much time on functions that could be performed by other personnel. Personnel policies should be such as to encourage young doctors, dentists, nutritionists, and others to find satisfaction in the program and to continue with it.

Professional Staff Training

Most of the physicians and others serving the Indian health program have come with little if any knowledge of Indians. Staff members should receive orientation before they go into the field and periodic training and professional consultations should be made a regular part of their field service.
Training of Indians

The Indian health program is making a significant contribution both to education and to health in its existing programs of training Indian practical nurses, sanitary aide workers, and community workers for work with their own people in the health program. Scholarships for professional training would be a valuable addition.

Transportation and Communications

Long distances, poor roads, limited commercial communication facilities, and the wide dispersion of the Indian population place unusually heavy demands on transportation and communication facilities. Provision for cars and for their maintenance and operation must be liberal. Telephone service should be improved and the use of radio telephones should be extended.

Housing for Personnel

The general lack of acceptable staff quarters is a great obstacle to the reinforcement and retention of staff. Staff quarters should be provided for all Indian health personnel serving in areas removed from well-established communities or serving in other circumstances when adequate housing is not otherwise available.
The United States Public Health Service Indian Hospital of Pine Ridge

The Public Health Service Indian Hospital of Pine Ridge is under the Bureau of Medical Services which is a part of the Division of Indian Health in the United States Public Health Service. The administrative organization chart shows the services (see figure 2, page 17). The hospital was established in 1930, rebuilt and modernized in 1960.

This hospital serves the Pine Ridge Indian Reservation (see figure 3, page 18). The town of Pine Ridge is located in the reservation. The services are provided for approximately 7,600 people estimated to live in the Public Health Service area in 1957 (Division of Indian Health, '59).

There are 20 to 30 Indian communities on this reservation of which the best known are Denby, Kyle, Manderson, Oglala, Pine Ridge, Wanblee, and Wounded Knee. The student had the opportunity to visit Calico Hall, Potato Creek, Wanblee, Allen, Wounded Knee, Martin and Manderson. The purpose of the visits was to get a general picture of the countryside, the people and their activities. Specific sections of the community which were visited and observed were (1) Indian homes, (2) wells and creeks which were used as sources of drinking water, (3) public buildings such as the Court House, the First Traders' store, etc., and (4) elementary and secondary schools at Porcupine and Pine Ridge.

There were 42 beds available in the hospital in the 1958 fiscal year; 1,538 admissions and 247 births were registered. The average daily inpatient load was 28.0, while there were 22,577 outpatient visits in 1958. Patients may be referred to the Public Health Service Indian Hospital at Winnebago, Nebraska, for consultative medical care. Units of the Public Health Service
ORGANIZATIONAL CHART - ABERDEEN AREA 1-1-59
U.S. PHS Indian Hospital, Pine Ridge, South Dakota

Area Medical Officer in Charge

*Medical Officer in Charge

HOSPITAL & MEDICAL CARE SERVICES
1 Deputy
2 Staff

Hospital Nursing Section
1 Director of Nursing
4 Staff Nurses
1 Staff Nurse
2 Staff Nurses
6 Nursing Assistants
4 Nursing Assistants

Dietetic Unit
1 Cook
3 Cook's Helpers

Laboratory & X-Ray Section
2 Med. & Rad. Technicians

Medical Records Section
1 Med. Records Librarian
1 Clerk-Typist

Pharmacy Section
1 Pharmacist

ADMINISTRATIVE SERVICES
1 Hospital Adm. Officer
1 General Clerk
1 Clerk-Typist

Maintenance & Repair Section
1 Electrician
1 Carpenter

Housekeeping & Transportation Section
1 Seamstress
6 Laborers

Dental Section
2 Dental Officers
2 Dental Assistants

*Dual Capacity

FIELD & PREVENTIVE HEALTH SERVICES
*Medical Officer in Charge
1 Staff, Field Health
1 Clerk-Typist
3 Laborers
1 Laborer

Public Health Nursing Section
2 Public Health Nurses
1 Public Health Nurse
1 Public Health Nurse
2 Nursing Assistants
1 Clerk-Typist

Health Education Section
1 Training Officer (Community Health)

Sanitation Section
1 Sanitarian Aide
1 Sanitarian Aide

Medical Social Services Section
1 Chief Clinical Soc. Worker

Public Health Nutrition Section
1 Public Health Nutritionist

Figure 2. Organization Chart of the U. S. PHS Indian Hospital, Pine Ridge, South Dakota
Figure 3. Pine Ridge Indian Reservation, South Dakota
Indian Hospital maintain clinics as part of their activities. Periodical visits are made to Allen, Kyle, Manderson, Porcupine and Wanblee where the health stations are located. The physicians allowed the student to watch them examining and consulting with patients in two of the clinics. The patients who attended clinics came from long distances and from nearby areas. Cases observed were obesity, dermatitis, tuberculosis, gastrointestinal disorders, other diseases and accidents. Severe cases were sent to the main hospital in Pine Ridge. In addition to hospital inpatient care and outpatient medical services, field health services are available from Public Health Service personnel including physicians' services, public health nursing, dental services, sanitation, health education, medical social service, and nutrition consultation.

The student had a conference with the sanitary engineer. The latter stated that, in order to improve the health of the Indians, sanitary facilities are designed to create a more sanitary environment which will reduce the amount and occurrence of sickness, especially communicable diseases, prevalent in the area. July 31, 1959 was the day that the President signed into law a measure long sought by the Public Health Service to bring about better control of many communicable diseases through the improvement of sanitation facilities. This law authorizes the Public Health Service to construct sanitation facilities for the Indians and Alaska natives with their co-operation. Included are individual and community water supplies and distribution facilities, sewage and waste disposal facilities, and drainage facilities.

The dentists, in a conference with the trainee, explained that dental care is started as early as possible, tooth decay starts at an early age, and
tooth decay is mainly due to improper care of teeth and high carbohydrate diets.

The Aberdeen Area Report ('59) stated that for several years heart disease was the leading cause of death at Pine Ridge with a rate far above that for other Indians in South Dakota or in the entire United States, but malignant neoplasm became the leading cause of death in 1957. High incidence of influenza and pneumonia, and scarlet fever and streptococcal sore throat exists. Disease of the respiratory and digestive systems, and accidents are among principal causes of hospital admissions at Pine Ridge Hospital, fiscal year 1957.

Other services relating to the economic and social well-being of Indians continue to be administered by the Bureau of Indian Affairs, Department of Interior with which the Division of Indian Health, United States Public Health Service, maintains close working relationships. In both agencies program operations are conducted through a system of area offices, one of which is located in Aberdeen. Basically, the Indian Health Area structure conforms with that of the Bureau of Indian Affairs.
PROGRAMS AND PLANS OF THE NUTRITION AND DIETETIC BRANCH OF
THE DIVISION OF INDIAN HEALTH

Background for the Program

When in 1955 Congress transferred the responsibility for providing health services to the Indians from the Bureau of Indian Affairs of the Department of the Interior to the United States Public Health Service in the Department of Health, Education and Welfare, there was no organized nutrition and dietetic service (Bosley '59). There were dietitians in 11 of the 56 reservation hospitals and one nutritionist in a small demonstration health unit on one reservation. In the other hospitals each food service department operated independently without any guidance of a qualified dietitian or nutritionist. The small number of professional personnel in each hospital was too busy to learn about living conditions, where food was obtained, or what was eaten by ill patients in their homes. Bosley ('59) further reported that patients who needed to continue on modified diets when discharged from the hospitals were either given textbook diets without reference to food habits or available food supplies or were sent home without dietary instruction because "They won't follow the diet anyway."

During her study in Pine Ridge, the trainee found it strange that no more attention had been directed toward determining the nutritional status of the American Indians in the past while they lived side by side with a more advanced race who possessed all the knowledge, skill and facilities needed. However, Dr. James R. Shaw, Chief, and Dr. J. O. Dean, Assistant Chief, Division
of Indian Health, Department of Health, Education and Welfare had stated that a health program without nutrition and dietetic services for Indians was not sound. Thus they argued that emphasis on nutrition was essential in the preventive aspects of health as well as in medical care. One of the most important problems in the improvement of Indian health is the lack of understanding by many of the Indians of the basic principles of good health. Health education is, therefore, a major objective. This fits into the nutritional element of the health program.

Therefore, the therapeutic and preventive aspects of nutrition are being planned to permit complete nutrition services to families. The nutrition information will be consistent in content and adapted to the cultural practices in so far as they are known and to the available food resources.

Foods eaten by Indians frequently are not acceptable to non-Indians, but difference in acceptability should not condemn such foods. The student in her reading on facts and information of Indian health during her stay in Pine Ridge found very little information concerning the nutritive value of the established dietary pattern. She believes that a study of the nutritive value of the existing diets would be of great value before an attempt is made to suggest practical ways of improving them.

The objective of the nutrition services is to help provide an understanding of the importance of the establishment of sound dietary practices as one means of attaining better health. According to Bosley ('59) facts on diet and nutritional status are needed to know how to modify the Indians' diets and adapt their existing food practices to acceptable patterns which will provide the nutrients considered essential for good health. Some of the questions
which require answers with respect to nutrition of the Indians are: (1) What are the present dietary practices of the Indians on the reservations and in the villages? (2) What is the nutritional status of Indians living on the reservations and in the villages? What effect will a change in diet have on an organism nutritionally adapted over several generations to a level lower than considered desirable? Will the balance be altered adversely? (3) Is the incidence of diabetes really higher among Indians than non-Indians, and if so, why? (4) Why does the evidence of cholecystitis and cholelithiasis among Indians appear high? (5) What accounts for the apparent low blood cholesterol levels of the Indian groups, despite indications of diets high in animal fat? (6) Will a change in the Indians' customary diet to one more nearly resembling the diet of the non-Indian create in the Indian some of the chronic types of diseases prevalent among non-Indians? (7) What is the best way to convey nutrition education and demonstrate its importance to some of the non-English-speaking people, remembering that in the Indian culture important decisions are made by the older people?

The answers to these questions are considered important by Bosley in establishing a sound program in nutrition and dietetics which can contribute to health improvement.

In a conference with the Area Nutritionist of the United States Public Health Service at Aberdeen, the latter pointed out that a good nutrition program does not attempt to have every one eat the same diet or the same number of meals each day, or even meals at certain specific hours. The student believes that this is certainly a good philosophy to begin with. The area
nutritionist said further, that a good nutrition program takes into account (1) the existing dietary practices, (2) the reasons for their existence, and (3) the nutritional adequacies and inadequacies. Plans for changing dietary practices should be made carefully to assure their practicability at any specific time. They must also be possible.

The logical conclusion to this philosophy is that improvement in the nutritional status of individuals is dependent upon (1) analyzing the existing food patterns, (2) determining their food adequacy, (3) planning an educational program which will be consistent with the needs, (4) ascertaining that all health workers will be teaching the same basic facts, and (5) utilizing an educational approach which will result in improved food habits not merely better food knowledge.

The nutrition education program of the hospitals and of the field services should be in close agreement. Hence, the hospitalized person's nutrition education experience should begin while he is a patient. This should take into account the type of food patients can secure and prepare after discharge.

Patients who will need to follow a modified diet upon discharge require particular attention. Likewise, persons attending clinics or those who are seen only in their homes or those attending schools should have the opportunity to learn about foods consistent with the needs presented. The area nutritionist then concluded that if a nutrition program is to reach its goal, all health workers should understand the basic principles of nutrition and every health worker should practice good dietary habits himself.
**Administrative Procedures**

The nutrition section has the same status as any of the other sections in the Public Health Service Department. Just as with other health personnel, the nutritionist must meet merit qualifications, and the classifications and salaries are determined according to education, training and experience. Although the nutrition consultant is administratively responsible to the medical officer in charge, she receives technical supervision from the area nutritionist of Aberdeen. One nutritionist and one clerk make up the staff of the nutrition section in Pine Ridge. This means that nutrition services are available for about 7,600 American Indians widely dispersed in the reservation and living in very small communities. This also means that the nutritionist has had to adjust herself to an entirely different culture and to a race living as it did in a previous century. The student was deeply impressed by the nutritionist's genuine enthusiasm for her work and outstanding characteristics such as tact, understanding and patience.

Supervision by the Aberdeen area nutritionist is given at regular times. Valuable information based on facts is reported and discussed with the area nutritionist and suggestions are given later which may assist in obtaining the best possible results in the services rendered.

The nutritionist in Pine Ridge is fully responsible for the development of the nutrition program in the reservation. Daily activities are recorded and are summarized at the end of each month. These monthly reports are sent to the Aberdeen area nutritionist who in turn sends them to the Nutrition and
Dietetics Branch, Division of Indian Health in Washington. The medical officer in charge at Pine Ridge approves the monthly reports.

**Attendance of Nutritionist at Staff Meetings**

The nutritionist attends the weekly staff meetings, usually called the Grand Round Meetings, conducted by the medical officer in charge. These meetings are attended by the physicians of the hospital and the director of nurses, the Public Health nursing supervisor, the medical social worker and the nutritionist. The meetings are planned to encourage close working relationships so that the staff members can help each other in carrying out their program.

Reports on activities and on special or unique cases are given by each attendant in order to keep other members of the staff informed on what is being done in the different sections. The medical officers discuss the diagnosis and treatment of a special case after which they ask the nurse to report on the patient's behavior during the treatment in the hospital or obtain information on specific diets from the nutritionist in regard to this particular patient. The medical social worker then reports on the housing problems or other social conditions in the patient's family. The medical officer in charge takes this opportunity to ask pertinent questions, make suggestions and inform the members of any new health regulations and specific events. Articles from journals, books or magazines are sometimes reviewed by the staff-members to provide the group with the newest information published about health. After attending two of the Grand Round Meetings the writer saw them as giving an excellent opportunity for the staff members to keep informed of various health programs,
exchange ideas, and aid each other in over-all planning of health education activities. These meetings serve as an important part of the inservice training program of the health department in general and of the nutrition section particularly. Other meetings attended by the nutritionist are an all-personnel meeting once a month and a case conference once a month. The trainee attended one of the all-personnel meetings which was very informal and one field staff meeting.

Services Rendered by Nutritionist

The services of the Public Health Service nutritionist at Pine Ridge are available to the staff members of the local Public Health Service Indian Hospital, to other governmental or voluntary agencies in the reservation, to groups in the community and to either families or individuals. Nutrition assistance is rendered both as direct and indirect service. When indirect service is offered by the nutritionist it is done on a lecture basis to nurses and other health workers to discuss how specific nutrition problems may be met and what teaching techniques and tools may be used. It may be said that the work of the nutrition consultant is part of the continuous inservice training program carried on by health departments in the United States adapted to the health conditions of the Indians. As a part of her service she also gives suggestions and advice as to menu planning and food preparation to official and non-official agencies, to groups in the community and to individuals. An important service of the nutritionist is the preparation of nutrition education materials. Considerable time has been spent in making acceptable dishes from surplus commodity foods, particularly non-fat dry milk and cereals.
Field Training Experience of Students. The nutrition section provides field training experience for graduate students in public health nutrition. The various divisions of the Public Health Indian Hospital co-operate with the nutrition section in orienting the students to the overall public health program (See Appendix, pages 44, 45, 46, and 47). By providing these training experiences for students, the nutrition section makes an important contribution to their preparation for positions in the field of nutrition.

The student became acquainted with the nutritionist's activities and the existing program through reading the monthly reports written since September 1959, when the nutritionist began to work, until December 1960. These reports have helped the writer to understand something of the types of problems met and the methods used in handling them and resulted in a great respect for the nutritionist's role in this particular area.

Orientation. When the nutritionist began work with the Indian Service, her first step was to get acquainted with the staff members of the health department and their tasks. Many people outside the health department such as teachers, members of the Tribunal Council, social workers, extension workers, Indian leaders, and officials of the Bureau of Indian Affairs were visited.

Another step in her orientation to conditions was to visit grocery stores and trading posts, and have conferences with the health community worker, sanitarians and many others, and to learn something of what foods people like to buy and eat. Her findings on native foods and foods found on grocery shelves are reported (See Appendix, pages 48 and 49). Noticeable is her observation of the distribution of surplus commodity foods and the use made of them by the Indian population. Head cooks of school lunchrooms and the hospital get her attention.
Home visits were made with sanitary aide and field nurses to find out about housing, health conditions, and economic problems of the population. Several meetings and festivities were attended to learn about customs and eating habits of Indians.

After orientation, the nutritionist submitted a plan of work to the medical officer in charge. Her plan of work is reflected in the activities to be described.

**Demonstrations.** These were held in Prenatal and Well-Child Clinics, general medical clinics, at the Agricultural Extension office and in individual homes. Cooking with dry skim milk obtained from the surplus commodity foods was demonstrated. Milk drinks were prepared and offered to the audience.

Indian recipes were reviewed and the nutrient content improved by adding skim milk to them. New recipes were prepared and the written recipes distributed to the audience. (See Appendix, pages 50, 51, 52, and 53). Ways of using cereals such as rice, cornmeal or oatmeal, obtained from the surplus commodity foods were shown. Following the food demonstrations short discussions were usually held concerning the contribution which milk makes to strength and the fact that its inclusion in recipes increases the strength-giving values of such foods as rice and cornmeal. There were 8 to 11 adults at each meeting; there were some men and there were several children. It has been taken for granted that children are welcome. The cooking is done in a simple if not primitive kitchen. At the conclusion of each demonstration the group has to decide whether or not it wishes to meet again and has to choose, from several suggestions made, the food to be demonstrated.

Prior to a meeting, the nutritionist has to drive many miles away from her office to pay visits to individuals to invite the people to come to her
meeting or to remind them if a meeting is to be held. This is a tremendous task as the roads are sticky and muddy when it rains and dusty and dry in summer. Houses are dispersed and located in the middle of fields and are difficult to approach by car. The situation is worse in winter when the car cannot go as far and help is not available. All of the public health workers carry blankets and foods in their cars when doing field work in winter time.

**Consultation in Clinics.** The nutritionist participates in Public Health Service clinics. The chief purpose of this activity is to observe the work of the physicians and to show them how her skills might fit into the total health programs. Patients are referred to the nutritionist by the physicians. While waiting for further instructions from the medical doctors, the nutritionist mingle with the patients, talking with them individually and discussing strength-giving values of the foods used. Leaflets of newly tried recipes such as enriched corn wasna and potato soup made with non-fat dry milk are distributed when patients ask for them. The reason for this type of performance is to find out more about the Indian's dietary pattern so that she can obtain ideas for future work.

Another purpose of the nutritionist's attendance at field clinics is to try out and initiate the use of modified diets for calorie control. In each case the physicians have been asked to refer patients needing such instructions to the nutritionist. A small supply of 1200, 1500 and 1800 calorie diet plans was left at each station for the physician's use on a trial basis.

Patients referred by the physicians to the nutritionist received consultation on modified diets recommended by the medical officers. Many of the patients needed reducing diets. Many other referrals needed diabetic diets.
After consultation in the clinics conferences with individuals were continued either at the nutritionist's office or in the patient's homes as a follow-up.

**Prenatal Program.** Another important aspect of the nutritionist's activities is the concentration on the nutritional needs of the prenatal mother and on ways of helping individuals meet these needs. The nutritionist started by (a) finding ways of improving the common Sioux diets to meet the needs of a pregnant woman, (b) calculating the cost of an adequate low cost diet for a pregnant woman and comparing that cost with the family budget, (c) learning more about foods commonly eaten on the reservation and (d) giving instruction concerning maternal nutrition. A series of four bi-monthly meetings was held in several areas which were attended by mothers of child-bearing age. Thus the immediate goal of this series was to help women of child-bearing age learn to improve their food patterns and thereby their health.

**Inservice Education.** An inservice education program for the nursing staff was carried out in a series of 6 to 8 meetings. Points discussed were (a) the relationship of the diet of the mother before and during pregnancy upon the condition of the infant at birth, (b) an estimate of the nutritional value of the common Sioux diet and the improvement which could be made in it with the addition of one cup of non-fat dry milk, (c) distribution of tables showing the percentage of recommended nutrients provided by the common Sioux diet plus one cup of non-fat dry milk (See Appendix, pages 54, 55 and 56) and the distribution of bar graphs showing the nutrients in certain foods such as sugar, non-fat dry milk, cornmeal cooked in water and cornmeal cooked in non-fat dry milk.
Educational Materials. Preparation of educational materials is an important part of the nutritionist's activities. An effort is made to prepare simple and clear-cut leaflets. The nutritionist works closely with the public health nurses and the community worker for content and illustrations. Prepared were low-cost recipes and others adapted from Sioux recipes supplied by leaders of the Indian community. In order to increase the food value of the dishes, the nutritionist adds non-fat dry milk to the ingredients used in the recipes. Temporary drafts of modified diet instructions to be used when calorie control is a part of treatment have been provided for trial use, and physicians and nurses are asked for suggestions and criticism. Those drafts were entitled (a) Your Food Plan for Mild Sodium Restriction, (b) Your 1800 Calorie Sodium Restricted Diet, (c) Your 2400 Calorie Sodium Restricted Food Plan.

Posters for display at festivals, fairs, demonstrations and other meetings have been made in co-operation with the nursing staff and the community worker. Other visual aids such as bar graphs have been produced. They picture (a) the percentage of the recommended allowances of nutrients for the pregnant woman and for a child one to three years of age, contained in a common Sioux diet, (b) the improvement which could be made in the diets by adding one cup of non-fat dry milk, (c) the percentage of the recommended daily allowances which the surplus commodity foods, being distributed at the time, will supply a child of one to three years who lives in a family of 10 persons. These graphs are shown in displays and discussed during nurses-training programs.

Articles are frequently written and sent to local newspaper and weekly publications. Films provided by the United States Public Health Service are
reviewed and discussed as to whether or not they present sound nutrition facts. Only after these procedures are carried out can films be shown.

Educational material is also frequently provided by the Aberdeen area office. Emphasis in these leaflets has been given on the maternal and child health program (See Appendix, pages 57, 58, 59, 60 and 61). This office has provided a guide for ordering and preparing therapeutic diets. It is interesting to note that the nutritional value of the general diet is consistent with the basic nutritional reference standard of the Division of Indian Health. Insofar as possible every diet is patterned after and is a modification of the general diet. This contributes to better acceptance by the patient both in the hospital and, after discharge, in the home. Impressions gained thus far about Indian people's food preferences, customs, income and food supply will be utilized in the preparation of these diets, e.g., the high value the Indians give to beef and glandular organs, their preference for boiled meat, their preference for cabbage rather than lettuce, for root-type vegetables rather than green leafy varieties, their high acceptance of tomatoes in any form of surplus commodities, and their generally limited incomes. In addition, consideration has been given to impressions of the nutritional quality of existing home diets, e.g., the food supply in the home appears to be extremely variable, from day to day and season to season. The Indian diet is high in carbohydrate and fat, and low in protein and protective nutrients. In the hospital, therefore, emphasis is placed on the generous use of practical, available, and acceptable foods that are rich in nutrients lacking in home diets, e.g. extensive use of milk including non-fat dry milk, liver, lean meat, dried beans, cabbage, all forms of oranges and tomatoes, melons and berries in season.
Consultation to Hospital Personnel. Mealtime in the hospital is considered a valuable educational opportunity. The seeing of attractively served nutritious meals, followed by tasting, eating, and enjoying familiar food is an important way to influence food choices after discharge. These experiences are valuable when the physician personally initiates a discussion with the patient on a general diet about the importance of food and strength, encouraging him to eat the variety of foods served to him.

A good aspect of the hospital diet manual furnished by the Aberdeen area nutritionist is that it serves as a baseline for use by the physician and all persons concerned with diet procedures. When the doctor orders a modified diet he can explain to the patient the reasons for giving him the diet and why it is a part of treatment. He should check regularly on the patient's response to his food. He can direct members of the hospital to encourage each patient to at least taste every food served. When a patient is discharged on a therapeutic diet it is very important that he should know and understand his diet. In this way continuity in patient care is initiated. Follow-up by the nutritionist and field health nurses can easily continue education initiated in the hospital. Unfortunately, there was no dietitian employed at the hospital at that time. As a result of this, diets provided by the hospital kitchen might not be satisfactory.

When the student made a tour in the hospital with the medical social worker, she saw a big piece of paper hanging on a little patient's bed with the note, "Give this child foods she likes," signed by the doctor. The medical social worker explained to the student that the food annoyed the child. She
expressed her anger by throwing the food on the floor. The child suffered from paralysis on one side of her body. The nutritionist is not able to do the dietitian's job, for the major objective of the nutrition program is direct service to families and other groups in the community. Therefore, she only offers consultant services on food service problems to the hospital cook.

**Health and Dental Survey.** As a part of the public health team the nutritionist participated in the nutritional phase of the Indian health and dental study. Physical examinations were given to 500 to 600 children by a team which consists of a pediatrician and physician, and a specialist in mass examination techniques. Blood samples were taken from every seventh child. Findings of these examinations are useful as guide lines in building a sound nutrition education program.

**Evaluation of Program.** Periodic evaluation of previous and existing nutrition programs is essential in planning new and more effective nutrition activities. Because the nutrition program was initiated approximately one year before the student came for her field experience, changes of food habits are not readily evident. Definite improvements may be seen in an increase in the amounts of non-fat dry milk being allotted to needy families. Moreover it is understood that families may ask for increased amounts of milk if they need it. More and more patients are referred by the physician to the nutritionist for dietary advice which means a recognition by the physicians of the need of the services of the nutritionist in an over-all health program. It is hoped that future health information will show decreased incidence of health problems related to poor food habits.
SUMMARY AND EVALUATION OF FIELD TRAINING

The two weeks of field experience directed by the nutritionist of the nutrition section of the United States Public Health Service Indian Hospital at Pine Ridge, South Dakota have made some lasting impressions on the student. The field training gave the student a better understanding of the various divisions of the Public Health Service and the programs being offered.

Furthermore the staff members of the public health team together with the nutritionist gave the student experience which has enriched her knowledge and appreciation of the theories and techniques of nutrition education learned in previous academic training.

The nutrition program is co-ordinated and integrated with the other programs within the agency, but nutrition services are also extended to other agencies and institutions according to the needs for service. Emphasis has been placed on direct service for the individual need is great.

The student was fortunate in being able to observe some phases of the mode of living, diets and physical conditions of the Sioux Indians of the Pine Ridge Reservation. It is a fact that the nutritional status of the Indonesian people is still unsatisfactory, both quantitatively and qualitatively, thus affecting the infant mortality rate and resistance to common diseases, such as tuberculosis, night blindness, gastrointestinal disorders and others. This status relates to the socio-economic and cultural sphere and also to governmental administration in the past. The student noticed that this relation is somewhat similar to that of the Indians.
A great variety of nutrition activities observed and studied by the student provided a clear picture of how the nutrition program was developed and what problems could be involved. This was accomplished by conferences and field trips with personnel of the various divisions of the Public Health Indian Hospital.

The training experience helped the student to realize that progress in improving the nutritional status of Indians and of other groups is slow and is very difficult to evaluate. But results are achieved when the nutritionist not only has thorough knowledge of basic nutrition facts, but also the ability to win the confidence and acceptance of the Indians before an attempt is made to present information to the people. The nutritionist must co-operate fully with other members of the health team and allied agencies in working toward the common goal of improving the health and physical well-being of the people. In other words she should have skill in helping the Indians understand the role of nutrition in obtaining a "Good Long Life".

It was evident that a nutritionist must take advantage of professional resources such as meetings, lectures, workshops and periodicals for keeping up with nutrition surveys and research. It is also essential that the nutritionist be able to meet and work with people of all ages and all economic, social and educational levels.

The amount of time and interest taken in the training of the student by the nutritionist as well as by other public health workers was greatly appreciated. The training experience brought the student to a further realization of the great need for nutrition services and inspired a greater
desire to help meet this need. Because of this excellent learning experience she feels better prepared to accept the responsibility of guiding Indonesian students toward the aim of helping in the improvement of health and physical well-being of the Indonesian people.
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PLANNED SCHEDULE OF FIELD TRAINING EXPERIENCE FOR GRADUATE STUDENT

Miss Soekati Tjokrowirono  
University of Tennessee  
August 30 - September 17, 1960

August 30  
Public Health Service Indian Hospital  
8:30 a.m. Outline of plans for field work experience, Mrs. B. Roth.  
Meet Medical Officer in Charge and other staff members of the Public Health Service Indian Hospital.

Field Trip  
1:00 - 5:00 p.m. Tour of the Pine Ridge Indian Reservation for orientation. Objects: Indian homes, wells and creeks, public buildings of Pine Ridge and Wounded Knee.

August 31  
Public Health Service Indian Hospital  
8:30 a.m. Reading on facts and information about the area.

Field Trip  
11:00 a.m. - 5:00 p.m. Continuing tour of the Indian reservation. Objects: Martin, Allen, Potato Creek, Wanblee, Manderson, Calico Hall, the Bad Lands, Day School at Porcupine.

September 1  
Public Health Service Indian Hospital  
8:30 a.m. Conference with the nutritionist on organization of the Nutrition Branch.

Field Trip  
11:00 a.m. - 5:00 p.m. Observation of patients at the Wanblee Clinic with the Field Health Unit.

September 2  
Public Health Service Indian Hospital  
8:30 - 11:00 a.m. Readings on facts and information about the Bureau of Indian Affairs.

11:00 a.m. - 2:30 p.m. Conference with sanitary engineer.

2:30 - 4:00 p.m. Home visit with the nutritionist.
4:00 - 5:00 p.m. Discussing home visit with the nutritionist.

September 3-4-5

Holiday. Sightseeing trip to the Black Hills and Mount Rushmore.

September 6

Field Trip
7:30 a.m. - 2:30 p.m. Visit to the school of the Holy Rosary Mission. Observation of school lunchroom and classes.

2:30 p.m. - 5:00 p.m. Readings on programs of the Public Health Service, Indian Division.

September 7

Public Health Service Indian Hospital
8:00 a.m. - 10:00 Readings on nutrition programs and discussion with the nutritionist.

10:00 a.m. - 12:00 Attending the Grand Round Meeting.

1:00 - 2:00 p.m. Home visit with the Public Health Service nutritionist.

2:00 - 3:30 p.m. Conference with the dentists.

Field Trip
3:30 - 5:00 p.m. Visit to the Shannon County Welfare office with the Public Health Service Medical Social Worker.

September 8

Public Health Service Indian Hospital
8:00 - 10:30 a.m. Reading and discussion on food patterns of the Sioux Indians.

Field Trip
10:30 a.m. - 5:00 p.m. Home visits with the Home Demonstration Agent and visit to the Agriculture Extension Office.

September 9

Public Health Service Indian Hospital
8:00 a.m. - 9:00 Reading on surplus commodity foods of the Welfare Department.
Field Trip
9:00 a.m. - 4:00 p.m. Visit to the Oglala Community Sioux Boarding School. Observation of the curriculum, the class schedules and the physical set up of the classrooms.

September 12
Public Health Service Indian Hospital
8:00 - 10:00 a.m. Reading on monthly reports of the nutrition branch.

Field Trip
10:00 - 11:00 a.m. Visit to the Tribal Health Committee Office.
11:00 - 12:00 a.m. Home visits with the nutritionist.
12:00 Typical Indian lunch at the hospital.

Public Health Service Indian Hospital
1:00 p.m. - 5:00 Readings on monthly reports and discussions on problems met by the nutritionist.

September 13
8:00 a.m. - 10:00 Readings on educational material prepared by the nutrition branch.
10:00 a.m. - 12:00 Attending the Grand Round Meeting.
1:00 p.m. - 5:00 Conference with Miss Minna Gutsch, Public Health Service nutritionist of the Aberdeen area, about plans and programs of the nutritionist in the Indian Reservation.

September 14
8:00 - 10:00 a.m. More readings on facts and information.

Field Trip
10:00 a.m. - 5:00 p.m. Home visits with the Public Health nurse.

September 15
8:00 a.m. - 5:00 p.m. Whole day trip to Aberdeen.

September 16
Division of Indian Health, Public Health Service Aberdeen Area
8:00 a.m. - 5:00 p.m. Introduction to staff members of the Public Health Service of the Aberdeen Area.
Conference with the supervisor of the Public Health nurses. Conference with the anthropologist. Conference with the Area Medical Officer in Charge. Readings on programs and plans of the Nutrition and Dietetic Branch. Discussions of programs and plans with the Area Nutritionist.
WHAT FOODS ARE EATEN BY THE INDIANS OF PINE RIDGE?

October 29, 1959:

In an attempt to find partial answers to this perplexing question, the writer has talked with health committee members, school lunch room workers, the community worker health, sanitarian aides, and field nurses. She has visited grocery stores and trading posts to learn about foods available for purchases. Following is a brief summary which, of course, is far from conclusive in any way.

I. Native Foods Mentioned by Indians:

1. Wild game as deer and pheasant is available at times. Meat in excess of immediate needs is dried.

2. Wild grapes, buffalo berries, choke cherries, plums and turnips are gathered. The fruits mentioned grow along creek beds. Canning and drying are methods used for preservation.

II. Foods Found on Grocery Shelves at the Red and White Store in White Clay and at the Oglala, Wounded Knee and Potato Creek Trading Posts are:

Milk: Evaporated Cereals: Oats, Cornflakes, other prepared cereals.

Meats: Beef stew, kidney, liver, heart, ground beef, sausage; canned corned beef.

Fresh fruits: Apples, bananas, oranges, pears, peaches.

Legumes: Dry beans, canned pork and beans, peanut butter.

Vegetables: Tomatoes, cabbage, onions, corn, sauerkraut, green beans.

Sweets: Sugar, syrup, in quart and ½ gallon cans;

Fats: Bacon, salt pork, lard, tallow, suet.

Bread stuffs: White bakery bread, sweet rolls, pancake flour.

The foregoing information indicates those foods which grocers find people will buy. Fortunately, organ meats, which are higher in certain nutritive values.
than muscle meats, are said to be popular. Moreover, we are told that the
(Pueblo) Indian when slaughtering an animal uses practically every part of the
animal for food. He mixes the blood with ground corn, and stuffs the mixture
into the stomach to make blood sausage. He uses all parts of the head, even
the eyes. Parts containing muscles are "jerked" and the meat dried for future
use. Individuals when asked "what food does the Indian like best?" have
invariably answered "meat".
The most common use of vegetables is said to be in soups. If this be true,
cooking waters are probably used. In this respect the Indian cook excels the
non-Indian cook, who is prone to pour cooking waters down the drain. Often
children are said to prefer raw to cooked vegetables.
Home made biscuit and fry bread are mentioned most often. When the writer has
asked "what do people do with cornmeal?" she has been told repeatedly "make
corn wasna". This dish contains cornmeal, sugar, tallow and raisins. It is
rich and sweet. Salt is not a part of olden Sioux custom but children are
learning its taste in the school lunch room.
As yet the writer has little or no knowledge concerning the types of meals
served, the amount of different types of foods used, the facilities for food
preparation, the nutritive value of the basic Sioux diet.

/S/Bernice H. Roth
Nutritionist
GOODIES FOR CHRISTMAS

Enriched Corn Wasna

3 cups cornmeal 1 teaspoon salt
1¼ cups sugar 1 cup raisins
1½ cups nonfat dry milk 1 cup plus 5 tablespoons hot tallow

1. Put meal in a flat pan.

2. Heat meal in a moderate oven or on top of stove until it is very brown. Stir often. (If heating on top of stove stir all the time.)

3. Mix meal, milk, sugar, raisins and salt together.

4. Add tallow and mix well.

5. Press wasna into a pan and allow to cool.

6. Cut into squares.

Golden Pop Corn Balls

3 quarts popped corn 1½ cup sugar
1/2 teaspoon salt 1 tablespoon butter
1 cup molasses or oleomargarine

1. Pick over corn, taking out hard or burned kernels. Put in large pan. Sprinkle with salt.

2. Melt butter or oleomargarine. Add molasses and sugar.

3. Boil until a sample of mixture will become brittle when tested in cold water (270°).

4. Pour mixture slowly, while stirring constantly, over corn. Shape into balls with greased hands. Press as little as possible.
Cinnamon Jumbles

1/2 cup soft shortening
1 cup sugar
1 egg *
3/4 cup milk (Made from nonfat dry milk)

1. Mix together shortening, sugar and egg.

2. Add vanilla to milk and stir it into the first mixture.

3. Sift together flour, baking powder and salt. Stir this into the first mixture.

4. Drop by teaspoonsful about 2 inches apart on lightly greased baking sheet or back of a pan.

5. Sprinkle each cooky with a mixture of cinnamon and sugar (1/4 cup of sugar mixed with 1 teaspoon cinnamon).

6. Bake in a moderately hot oven (400°) for 8 to 10 minutes. Are done when set but not browned.

7. Remove from baking sheet while hot.

Oatmeal Cookies

3/4 cups soft shortening
1 cup brown sugar
1/2 cup granulated sugar
1 egg *
1/4 cup milk (made from nonfat dry milk)

1 teaspoon vanilla
1 cup sifted flour
1 teaspoon salt
1/2 teaspoon soda
3 cups oats (not cooked)

1. Sift together, flour, salt and soda.

2. Place shortening, sugar, egg, milk and vanilla in a mixing bowl or pan. Beat until well mixed. Add flour, and beat until smooth.

3. Stir in the oats.

4. Drop by teaspoonsful onto a greased cooky sheet or back of a pan.

5. Bake in moderate oven (350°) 12 to 15 minutes.
6. Remove from baking sheet while hot.
   (Note: For variety, chopped nuts or raisins may be added to the dough.)

*Powdered whole eggs may be used safely in any recipe which is to be oven cooked or baked. For one egg beat 2½ tablespoons sifted powdered egg with 2½ tablespoons water.

**Monkey-Faced Cookies**

<table>
<thead>
<tr>
<th>1/2 cup soft shortening</th>
<th>2 teaspoons baking powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 cup brown sugar</td>
<td>1/2 teaspoon soda</td>
</tr>
<tr>
<td>1/2 cup molasses</td>
<td>1/2 teaspoon salt</td>
</tr>
<tr>
<td>1/2 cup milk (made from nonfat dry milk)</td>
<td>1/2 teaspoon ginger</td>
</tr>
<tr>
<td>2½ cups sifted flour</td>
<td>1/2 teaspoon cinnamon</td>
</tr>
<tr>
<td>Raisins</td>
<td></td>
</tr>
</tbody>
</table>

1. Mix shortening, sugar, and molasses together very well. Stir in milk.
2. Sift together flour, soda, baking powder, salt, ginger and cinnamon.
3. Stir the flour mixture into the sugar and milk mixture.
4. Drop dough by teaspoonful, about 2½ inches apart, on ungreased cooky sheet or back of pan.
5. Place three raisins on each cooky for eyes and mouth.
6. Bake in a moderately quick oven (375°) for 10 to 12 minutes.
7. Remove from baking sheet or pan soon after baking.

Faces take on droll expression while baking, reminding one of monkey faces.
Peanut Butter Cookies

1/2 cup fat
1/2 cup peanut butter
1/4 teaspoon salt
1/2 teaspoon vanilla
1/2 cup granulated sugar
1/2 cup brown sugar, firmly packed
1 cup sifted flour
1/2 teaspoon soda
1 cup nonfat dry milk
2 or 3 tablespoons water, if needed

1. Sift flour, soda, salt and dried milk together three times.
2. Blend fat, peanut butter, and vanilla.
3. Add sugar to fat mixture, creaming thoroughly. Add egg and beat well. Stir in flour mixture.
4. Add water only if mixture crumbles too much to handle.
5. Roll into balls 3/4 to 1 inch across.
6. Place balls on a lightly greased baking sheet or back of a pan, allowing room to spread.
7. Press with a fork to flatten and make attractive tops.
8. Bake in a moderate oven (325° to 350°) about 15 minutes. Do not overcook.

*Powdered whole eggs may be used safely in any recipe which is to be oven cooked or baked. For one egg beat 2 1/2 tablespoons sifted powdered egg with 2 1/2 tablespoons water.
## Recommended Prenatal Diet: Based on "A Common Sioux Diet"*

<table>
<thead>
<tr>
<th>Food</th>
<th>Amount</th>
<th>Calories</th>
<th>Protein (gm)</th>
<th>Calcium (mg)</th>
<th>Iron (mg)</th>
<th>Vit. A. I.U.</th>
<th>Thiamine (mg)</th>
<th>Vit. C. (mg)</th>
<th>Riboflavin (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Nutrient Needed</strong></td>
<td></td>
<td>2500-2600</td>
<td>78</td>
<td>1500</td>
<td>15</td>
<td>6000</td>
<td>1.3</td>
<td>100</td>
<td>2.0</td>
</tr>
<tr>
<td>Milk Nonfat</td>
<td>1 qt.</td>
<td>434</td>
<td>34.4</td>
<td>1560</td>
<td>0.7</td>
<td>50</td>
<td>0.42</td>
<td>9</td>
<td>2.35</td>
</tr>
<tr>
<td>Bread, enriched 8 slices</td>
<td></td>
<td>504</td>
<td>16.0</td>
<td>144</td>
<td>3.2</td>
<td>0</td>
<td>0.48</td>
<td>0</td>
<td>0.32</td>
</tr>
<tr>
<td>Rice</td>
<td>3/4 cup</td>
<td>150</td>
<td>2.6</td>
<td>11</td>
<td>0.5</td>
<td>0</td>
<td>0.02</td>
<td>0</td>
<td>0.02</td>
</tr>
<tr>
<td>Potato</td>
<td>2 med.</td>
<td>196</td>
<td>4.8</td>
<td>26</td>
<td>1.6</td>
<td>40</td>
<td>0.22</td>
<td>34</td>
<td>0.10</td>
</tr>
<tr>
<td>Liver or kidney</td>
<td>3 1/2 oz.</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>Dry Beans</td>
<td>1 cup</td>
<td>268</td>
<td>18.0</td>
<td>128</td>
<td>5.4</td>
<td>0</td>
<td>0.48</td>
<td>2</td>
<td>0.18</td>
</tr>
<tr>
<td>Veg. or fruits one selection:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>Cabbage, raw</td>
<td>1 cup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>Tomato</td>
<td>1 cup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>Carrots, diced</td>
<td>1 cup</td>
<td>83</td>
<td>1.5</td>
<td>45</td>
<td>0.9</td>
<td>4227</td>
<td>0.10</td>
<td>65</td>
<td>0.44</td>
</tr>
<tr>
<td>Orange</td>
<td>1 med.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>1 med.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>Lard</td>
<td>4 T.</td>
<td>504</td>
<td>3.5</td>
<td>5</td>
<td>1.0</td>
<td>0</td>
<td>0.15</td>
<td>0</td>
<td>0.10</td>
</tr>
<tr>
<td>Flour</td>
<td>5 T.</td>
<td>125</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>Sugar</td>
<td>2 T.</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
<td>0</td>
<td>0.06</td>
</tr>
</tbody>
</table>

**Total Nutrients per day**: 2574

- **Protein**: 94.3
- **Calcium**: 1925
- **Iron**: 16.4
- **Vit. A**: 8321
- **Thiamine**: 1.9
- **Vit. C**: 113
- **Riboflavin**: 3.75

**Percentage of N.R.C. allowance**:

- **Protein**: 100
- **Calcium**: 121
- **Iron**: 128
- **Vit. A**: 108
- **Thiamine**: 139
- **Vit. C**: 158
- **Riboflavin**: 113

*Additions to "A Common Sioux Diet":
- 1 c. nonfat dry milk solids
- 1/2 cup cooked dry beans
- 1 vegetable or fruit selection per day.
- 3 1/2 ounces liver of kidney once per week.

*Subtractions from "A Common Sioux Diet":
- 4 tablespoons lard
- 6 tablespoons sugar

Food values taken from: Food Values in Shares and Weights; Second Edition; Clara Mae Taylor.
### Percentage Recommended Nutrients in Pregnancy (1) Provided by a Common Sioux Diet Plus One Cup Nonfat Dry Milk

<table>
<thead>
<tr>
<th>Food</th>
<th>Amount</th>
<th>Calories</th>
<th>Protein (gms)</th>
<th>Calcium (mg)</th>
<th>Iron (mg)</th>
<th>Vit. A (I. U.)</th>
<th>Thiamine (mg)</th>
<th>Vit. C (mg)</th>
<th>Riboflavin (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enriched Whitebread</td>
<td>8 slices</td>
<td>504</td>
<td>16.0</td>
<td>144</td>
<td>3.2</td>
<td>0</td>
<td>0.48</td>
<td>0</td>
<td>0.32</td>
</tr>
<tr>
<td>Cornmeal Mush</td>
<td>1 c.</td>
<td>119</td>
<td>2.6</td>
<td>2</td>
<td>1.0</td>
<td>100</td>
<td>0.14</td>
<td>0</td>
<td>0.09</td>
</tr>
<tr>
<td>Potato</td>
<td>2 med.</td>
<td>196</td>
<td>4.8</td>
<td>26</td>
<td>1.6</td>
<td>40</td>
<td>0.22</td>
<td>34</td>
<td>0.10</td>
</tr>
<tr>
<td>Lean Beef</td>
<td>1 oz.</td>
<td>66</td>
<td>7.7</td>
<td>3</td>
<td>1.0</td>
<td>0</td>
<td>0.02</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>Dry Beans, cooked</td>
<td>1/2 c.</td>
<td>134</td>
<td>9.0</td>
<td>64</td>
<td>2.7</td>
<td>0</td>
<td>0.24</td>
<td>1</td>
<td>0.09</td>
</tr>
<tr>
<td>Rice, cooked</td>
<td>3/4 c.</td>
<td>150</td>
<td>3.1</td>
<td>11</td>
<td>0.5</td>
<td>0</td>
<td>0.02</td>
<td>0</td>
<td>0.02</td>
</tr>
<tr>
<td>Lard</td>
<td>8 T.</td>
<td>1008</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Flour</td>
<td>5 T.</td>
<td>125</td>
<td>3.5</td>
<td>5</td>
<td>1.0</td>
<td>0</td>
<td>0.15</td>
<td>0</td>
<td>0.10</td>
</tr>
<tr>
<td>Sugar</td>
<td>8 T.</td>
<td>384</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td>2686</td>
<td>46.7</td>
<td>255</td>
<td>11.0</td>
<td>140</td>
<td>1.27</td>
<td>35</td>
<td>0.78</td>
</tr>
</tbody>
</table>

#### Recommended Daily Dietary(1)

| Allowances for Pregnancy (second half)2500-2600 | 78 | 1500 | 15 | 6000 | 1.3 | 100 | 2.0 |

#### Percentage of Recommended Allowances provided by the Common Sioux Diet

<table>
<thead>
<tr>
<th>Nutrients Provided by 1-cup nonfat dry-milk:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
</tr>
<tr>
<td>%of R. Allow</td>
</tr>
<tr>
<td>Total Percentage</td>
</tr>
</tbody>
</table>

Vit. D - 400 I.U. Recommended; Supplementary Source probably indicated. All food values taken from: Food Values in Shares and Weights; Clara Mae Taylor, MacMillan Co. Ph.D.

1) Food and Nutrition Board, National Research Council
2) Lard or sugar may be reduced enough to keep calorie level constant.
Computing the Cost of a "Low Cost Adequate Diet" (1) for a Family of Five: March 1960

<table>
<thead>
<tr>
<th>Food</th>
<th>Pregnant Woman</th>
<th>Man</th>
<th>Child 1-3</th>
<th>Child 4-6</th>
<th>Child 7-9</th>
<th>Total Amounts</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonfat dry milk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16 qts.</td>
<td>$0.09</td>
<td>$1.44</td>
</tr>
<tr>
<td>Evap. milk, tall</td>
<td>7 qts.</td>
<td>3½ qts.</td>
<td>5½</td>
<td>5½</td>
<td>5½</td>
<td>11 tall</td>
<td>0.18</td>
<td>1.98</td>
</tr>
<tr>
<td>Meats</td>
<td>2½ lbs.</td>
<td>3-3/4 lb.</td>
<td>1-1/4 lb.</td>
<td>1½ lb.</td>
<td>2 lb.</td>
<td>11 lbs.</td>
<td>0.486</td>
<td>5.35</td>
</tr>
<tr>
<td>Eggs</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>2-5/12 dos.</td>
<td>0.09</td>
<td>0.85</td>
</tr>
<tr>
<td>Dry beans, peas, nuts</td>
<td>1/4 lb.</td>
<td>3/8 lb.</td>
<td>1 oz.</td>
<td>2 oz.</td>
<td>1/4 lb.</td>
<td>1-1/4 lb.</td>
<td>0.25</td>
<td>0.35</td>
</tr>
<tr>
<td>Grain products</td>
<td>2½ lb.</td>
<td>4-1/4 lb.</td>
<td>1-1/4 lb.</td>
<td>2 lb.</td>
<td>2-1/4 lb.</td>
<td>12-1/4 lb.</td>
<td>0.15</td>
<td>1.84</td>
</tr>
<tr>
<td>Citrus fruits, tomatoes</td>
<td>3½ lb.</td>
<td>2-1/4 lb.</td>
<td>1½ lb.</td>
<td>1-3/4 lb.</td>
<td>2 lb.</td>
<td>11 lb.</td>
<td>0.20</td>
<td>2.20</td>
</tr>
<tr>
<td>Dark green and deep yellow vegetables</td>
<td>1¼ lb.</td>
<td>3/4 lb.</td>
<td>1/4 lb.</td>
<td>1/4 lb.</td>
<td>1/2 lb.</td>
<td>3-1/4 lb.</td>
<td>0.20</td>
<td>0.62</td>
</tr>
<tr>
<td>Potatoes</td>
<td>2 lb.</td>
<td>3-1/4 lb.</td>
<td>3/4 lb.</td>
<td>1-1/4 lb.</td>
<td>2 lb.</td>
<td>9-1/4 lb.</td>
<td>0.5</td>
<td>0.46</td>
</tr>
<tr>
<td>Other Veg. and Fruits</td>
<td>3 lb.</td>
<td>5½ lb.</td>
<td>2-1/4 lb.</td>
<td>3-1/4 lb.</td>
<td>4-1/4 lb.</td>
<td>20-1/4 lb.</td>
<td>0.19</td>
<td>3.65</td>
</tr>
<tr>
<td>Fats</td>
<td>3/8 lb.</td>
<td>3/4 lb.</td>
<td>1/4 lb.</td>
<td>3/8 lb.</td>
<td>1/2 lb.</td>
<td>2-1/4 lb.</td>
<td>0.18</td>
<td>0.39</td>
</tr>
<tr>
<td>Sugar and sweets</td>
<td>1/2 lb.</td>
<td>1 lb.</td>
<td>3/8 lb.</td>
<td>5/8 lb.</td>
<td>2-3/4 lb.</td>
<td>0.30</td>
<td>0.68</td>
<td></td>
</tr>
</tbody>
</table>

Welfare Allowance for Food (per mo.): $101.15

<table>
<thead>
<tr>
<th>Value Surplus Commodities</th>
<th>(March, 1960)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flour</td>
<td>50 lb. at .094 = $4.70</td>
</tr>
<tr>
<td>Cornmeal</td>
<td>15 lb. at .105 = 1.58</td>
</tr>
<tr>
<td>Rice</td>
<td>15 lb. at .160 = 2.40</td>
</tr>
<tr>
<td>Nonfat dry milk</td>
<td>3 boxes or 63.6 qts. at .09 per qt. = 5.72</td>
</tr>
<tr>
<td>Lard</td>
<td>9 lb. at .250 = 2.25</td>
</tr>
</tbody>
</table>

Total Cost for one week: $19.81
For 4-1/3 wks.: $85.84

(1) U. S. Dept. of Agriculture
(2) Based on prices collected from Pine Ridge, Porcupine and Wounded Knee; March, 1960.

April, 1960; 3 lb. only of lard; other items total value in April - $14.15 as in March.
YOUR BABY'S FIRST SIX WEEKS
FOODS HELPFUL FOR A STRONG, HAPPY BABY
Vitamin Drops Every Day

Vitamin C Rich Food Every Day

Other:

WHEN YOUR BABY IS TWO WEEKS OLD

Vitamin Drops EVERY DAY - Vitamin D is needed to build strong bones and teeth.

Measure carefully the amount of Vitamin Drops the doctor tells you to give the baby.

Hold the baby in a partly sitting position. Let the drops fall in the corner of his mouth. Close his lips until he swallows.
WHEN YOUR BABY IS THREE WEEKS OLD

Vitamin Drops EVERY DAY

Keep on giving baby his Vitamin Drops every day,

and

Vitamin C Rich Food EVERY DAY

Kinds: ORANGE JUICE

Begin with one teaspoon of strained fresh or canned unsweetened orange juice. Mix it with one teaspoon of cooled boiled water. Do not add sugar.

or

TOMATO JUICE

Begin with two teaspoons of tomato juice or with juice strained from canned tomatoes.

Tomato juice has less strength than orange juice so the baby needs more.

While baby is young, give him his strained orange juice or tomato juice from a bottle.
WHEN YOUR BABY IS FOUR, FIVE, AND SIX WEEKS OLD

Vitamin Drops EVERY DAY

Keep on giving baby his Vitamin Drops

and

A Vitamin C Rich Food EVERY DAY

ORANGE JUICE

Give baby one tablespoon orange juice mixed with two teaspoons of cooled boiled water. Do not add sugar.

or

TOMATO JUICE

Give two tablespoons of tomato juice.

AT SIX WEEKS

BRING YOUR BABY TO THE WELL BABY CLINIC. YOUR DOCTOR WILL EXAMINE YOUR BABY. HE CAN THEN TELL YOU WHICH OTHER FOODS YOUR BABY IS READY TO LEARN TO EAT FOR HEALTH AND STRENGTH.

Division of Indian Health, Public Health Service Nutrition and Dietetic Branch, Aberdeen Area '59
YOUR BABY FROM 6 TO 12 WEEKS
YOUR BABY FROM 6 TO 12 WEEKS

FOODS HELPFUL FOR A STRONG, HAPPY BABY
YOUR BABY'S FOOD

Doctor's Notes for Your Baby

☐ Vitamin Drops Every Day
☐ Vitamin C Rich Food Every Day
☐ Cereals ________ Weeks
☐ Other:

YOUR BABY FROM 6 - 12 WEEKS

Vitamin Drops EVERY DAY - Vitamin D is needed to build strong bones and teeth.

Measure carefully the amount of drops the doctor tells you to give the baby.
**Vitamin C Rich Food EVERY DAY**

**Kinds: ORANGE JUICE**

<table>
<thead>
<tr>
<th>Age of baby</th>
<th>Amount of orange juice</th>
<th>Amount of cooled boiled water</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 weeks</td>
<td>1 tablespoon</td>
<td>2 teaspoons</td>
</tr>
<tr>
<td>7 weeks</td>
<td>2 tablespoons</td>
<td>1 tablespoon</td>
</tr>
<tr>
<td>8-12 weeks</td>
<td>4 tablespoons</td>
<td>None</td>
</tr>
</tbody>
</table>

Do not add sugar to orange juice

Use fresh, strained orange juice or canned unsweetened orange juice.

**OR**

**TOMATO JUICE without added water**

<table>
<thead>
<tr>
<th>Age of baby</th>
<th>Amount of tomato juice</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 weeks</td>
<td>2 tablespoons</td>
</tr>
<tr>
<td>7 weeks</td>
<td>4 tablespoons</td>
</tr>
<tr>
<td>8-12 weeks</td>
<td>4 tablespoons TWO times every day</td>
</tr>
</tbody>
</table>

Tomato juice has less strength than orange juice so the baby needs more.

Use tomato juice or strain juice from canned tomatoes.
CEREALS

Your doctor will tell you when to start giving cereal.

Cereals along with other food, help build a strong baby.

You do not need to buy special cereal for the baby. Cook cereal for the family with nonfat dry milk. Use Oatmeal, Cornmeal, Pettijohn, Farina, Cream of Wheat.

For the young baby, rub some of the family cereal through a tea strainer. Dilute cereal with a little boiled water.

Begin cereal by giving baby about 1 teaspoonful. Let him suck the cereal off the end of the spoon. Don't be surprised if he spits it out the first few times.

After the baby learns to swallow his cereal, slowly give him bigger servings.

For recipes to cook cereal in powdered milk, ask your doctor, dentist, nurse, community worker, social worker, or sanitarian aide.

***************

BRING YOUR BABY TO THE WELL BABY CLINIC. YOUR DOCTOR WILL EXAMINE YOUR BABY. HE CAN THEN TELL YOU WHICH OTHER FOODS YOUR BABY IS READY TO LEARN TO EAT FOR HEALTH AND STRENGTH.

***************

Division of Indian Health, Public Health Service Nutrition and Dietetic Branch, Aberdeen Area '59
YOUR BABY FROM THREE TO SIX MONTHS
FOODS HELPFUL FOR A STRONG, HAPPY BABY
**YOUR BABY'S FOOD**

Doctor's Notes for Your Baby

- Vitamin Drops Every Day
- Vitamin C Rich Food Every Day
- Cereal. (Strain and thin family cereal cooked in nonfat dry milk.)
- Start vegetables and fruits at _______ months.
- Start egg yolk, liver, dried beans, and cheese at _______ months.
- Other:

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**Vitamin Drops - EVERY DAY**

**Vitamin C Rich Food - EVERY DAY**

Kinds: ORANGE JUICE - 4 tablespoons or  TOMATO JUICE - 5 tablespoons  
TWO times during day

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Cereal - one or two times EVERY DAY

Rub through a strainer some of the family cereal cooked in nonfat dry milk. Thin baby's cereal with a little boiled water.
VEGETABLES AND FRUITS

At first begin with about one teaspoon of vegetables and fruits.
Rub some of the family vegetables or fruit through a strainer for the baby.
Cooked carrots, beets, green beans, potatoes, squash, applesauce, pears and peaches are good when the baby is young.
Scrape a washed, ripe apple or mash a ripe banana for the baby once in a while.
Slowly give the baby bigger servings of strained vegetables and fruits until he is eating 2 tablespoonsful every day. Often a baby spits out a food the first few times he tastes it until he learns to swallow it.

HARD COOKED EGG YOLK

Cook an egg in water that is not quite boiling for about 20 minutes.
Peel egg. Mix about 1/4 teaspoon of the egg yolk with baby's vegetable and cereal. Each day give the baby a little more until he is eating the whole egg yolk.
DO NOT GIVE YOUR BABY EGG WHITE UNTIL HE IS ABOUT ONE YEAR OLD.

LIVER - DRIED BEANS - CHEESE

Plain boiled and strained dried beans, mashed liver or mashed cottage cheese can be used in place of egg yolk. Begin with a teaspoonful. Slowly give the baby more until he is taking one tablespoonful.
Below are some meals you might like to try for the baby. The baby begins to eat the same foods for strength that are good for the whole family.

SAMPLE MEALS FOR BABY AT FIVE MONTHS (IN ADDITION TO HIS MILK)

MORNING

6 tablespoons tomato juice.
2 tablespoons strained family cereal
    cooked in powdered milk.

NOON

Vitamin Drops.
1 tablespoon strained family
    vegetables or fruit.
1 teaspoon hard cooked egg yolk.
5 tablespoons tomato juice.

EVENING

1 tablespoon cooked strained dried beans
    or liver.
2 tablespoons strained family vegetables
    or fruit.
5 tablespoons tomato juice.

TRY NOT TO GIVE YOUR BABY FOODS THAT ARE FRIED.

BRING YOUR BABY TO THE WELL BABY CLINIC.
YOUR DOCTOR WILL EXAMINE YOUR BABY. HE CAN THEN TELL YOU WHICH OTHER FOODS ARE BEST FOR YOUR BABY'S HEALTH AND STRENGTH.

Division of Indian Health, Public Health Service
Nutrition and Dietetic Branch, Aberdeen Area '59
YOUR BABY FROM SIX MONTHS TO ONE YEAR
YOUR BABY FROM SIX MONTHS TO ONE YEAR

FOODS HELPFUL FOR A STRONG, HAPPY BABY
YOUR BABY'S FOOD

Doctor's Notes for Your Baby

☐ Vitamin Drops Every Day
☐ Vitamin C Rich Food Every Day
☐ Cereal and Bread
☐ Vegetables and Fruits
☐ Egg yolk, Liver, Dried Beans, Cheese
☐ Learning to drink from a cup
☐ Other:

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Vitamin Drops - EVERY DAY

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Vitamin C Rich Food - EVERY DAY
Kinds: Orange Juice - 6 tablespoons
or
Tomato Juice - 8 tablespoons TWO times during day.

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Cereal and Bread
One or two times every day give baby 2 or 3 tablespoons of family cereal cooked in powdered milk.
Begin to give your baby a bread crust to chew on after a meal.
VEGETABLES AND FRUITS

Mash with a fork 2 tablespoons of the family cooked vegetables and fruits each day. Before your baby is one year old, chop instead of mashing vegetables and fruits.

EGG YOLK - MEAT - CHICKEN - FISH - CHEESE

DRIED BEANS

When your baby is eating mashed liver, mashed dried beans, cottage cheese and egg yolk, begin to cut into tiny pieces some of the same tender boiled or baked lean meat the family eats. Begin giving the baby 1 tablespoonful of these foods and slowly give him more until he is eating about 3 tablespoonsful every day.

HELP YOUR BABY STAY STRONG AND WELL

1. Keep a supply of boiled water for him in a clean, covered jar.

2. Remember that during hot weather, fresh milk, open canned milk or milk powder mixed with water spoils quickly. Spoiled milk can make you and your baby sick. You can help protect your baby from sickness when you buy small cans of milk for him. You can help protect your family from sickness when you mix powdered milk with safe water just before using it.
Below are some meals you might like to try for the baby. The baby is learning to eat the same foods for strength that are good for the whole family.

**SAMPLE MEALS FOR BABY AT NINE MONTHS**

(IN ADDITION TO MILK)

**MORNING**

\( \frac{1}{2} \) cup tomato juice from a cup.  
3 tablespoons family cereal cooked in powdered milk.

**NOON**

Vitamin Drops  
2 tablespoons chopped boiled beef.  
2 tablespoons chopped cooked fruit.

**EVENING**

\( \frac{1}{2} \) cup tomato juice from a cup.  
1 egg yolk.  
2 tablespoons family vegetables

**TRY NOT TO GIVE YOUR BABY FOODS THAT ARE FRIED.**

**BRING YOUR BABY TO THE WELL BABY CLINIC. YOUR DOCTOR WILL EXAMINE YOUR BABY AND HELP YOU KEEP HIM IN GOOD HEALTH.**

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Division of Indian Health, Public Health Service, Nutrition and Dietetic Branch, Aberdeen Area
YOUR CHILD FROM ONE TO SIX YEARS
FOODS TO BUILD A STRONG, HAPPY CHILD
Doctors Notes for your Child

☑ Vitamin Drops
☑ Vitamin C Rich Food
☑ Cereal and Bread
☑ Vegetables and Fruits
☑ Meat, LIVER, Eggs, Dried Beans, Cheese
☑ Other

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What your child eats is as important as ever.

To be strong, to grow and to keep well, he must have strength giving foods - eggs, meat, milk, fruit, vegetables, bread, and cereal.

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<table>
<thead>
<tr>
<th>Foods Daily</th>
<th>Average size of serving for each age</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1 yr.</td>
</tr>
<tr>
<td><strong>MILK</strong> - to drink &amp; in or on foods. 3 - 4 cups daily.</td>
<td>$\frac{1}{2}$ to 1 cup</td>
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<tr>
<td><strong>EGGS</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>MEAT, POULTRY, FISH, DRIED BEANS</strong></td>
<td>1 tablespoon</td>
</tr>
<tr>
<td><strong>POTATOES</strong></td>
<td>2 tablespoons</td>
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<tr>
<td><strong>OTHER-cooked vegetable</strong> (mostly dark green or deep yellow)</td>
<td>2 tablespoons</td>
</tr>
<tr>
<td><strong>RAW VEGETABLES</strong> - (carrots, cabbage, tomatoes, lettuce, etc.)</td>
<td>Small portion (such as one-fourth medium-sized carrot)</td>
</tr>
<tr>
<td><strong>FRUIT for Vitamin C</strong> (orange or juice, tomato or juice)</td>
<td>$\frac{1}{3}$ to $\frac{1}{2}$ cup</td>
</tr>
<tr>
<td><strong>OTHER FRUITS</strong> -(apples, apricots, bananas, pears, prunes, most berries.)</td>
<td>$\frac{1}{4}$ cup</td>
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<tr>
<td><strong>BREAD, whole grain or enriched</strong></td>
<td>$\frac{1}{2}$ to 1 slice</td>
</tr>
<tr>
<td><strong>CEREAL, whole grain, enriched or restored.</strong></td>
<td>$\frac{1}{4}$ cup</td>
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</tbody>
</table>
Between Meal Foods that have High Strength Value

You can help your child grow strong and have better teeth. Between meals, give him foods as:

- Apples, Oranges, Bananas, Peaches,
- Plums, Grapes, Cherries
- Fruit juices, Tomato juice
- Raw vegetables
- Oatmeal, molasses or peanut butter cookies
- Bread
- Popcorn

(Low strength value foods are sweet foods as candy, pop, sweet rolls.)