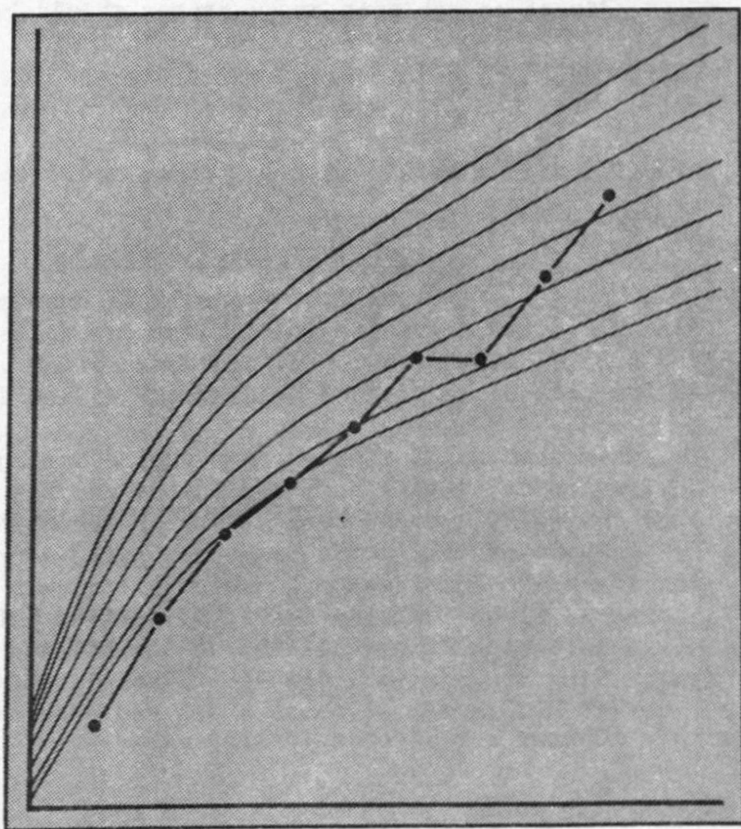


JANUARY-JUNE 1978  
ISSUED JUNE 1978

CENTER FOR DISEASE CONTROL

# NUTRITION

## SURVEILLANCE



## PREFACE

This report summarizes information, including selected indices of nutrition status, received from 15 participating states which comprise a group of contributors to a developing program of nutrition surveillance in the United States. We will consider adding other indices as their utility and availability become evident. To the extent possible, tabulations in subsequent issues will be presented in the same format unless experience indicates a change is appropriate.

The data presented in these tabulations come from a variety of sources including health department clinics, WIC screening, Head-start programs, and other health care situations. Because of the lack of uniformity of data sources, as well as methodology, direct comparisons among states should be made with caution.

Contributions to NUTRITION SURVEILLANCE are welcome. Please submit to:

Center for Disease Control  
ATTENTION: Nutrition Division, BSE  
Atlanta, Georgia 30333

Center for Disease Control. . . . . William H. Foege, M.D.  
Director

## NUTRITION INDICES

Data presented in Tables 1-6 represent children examined during the first and second quarters of 1978. They reflect initial visits to the health system and do not represent either the results of nutrition intervention or the nutritional status of the general population. Data from Colorado are included for the first time.

### CRITERIA FOR IDENTIFYING INDIVIDUALS WITH LOW OR HIGH VALUES

1. Low Hemoglobin and Low Hematocrit: Hemoglobin or hematocrit below the level specified in the following table for appropriate age and sex.

<u>Age</u>	<u>Hgb.</u>	<u>Hct.</u>
6-23 months	10 grams	31%
2-5 years	11 grams	34%
6-14 years	12 grams	37%
15 or more years (females)	12 grams	37%
15 or more years (males)	13 grams	40%

2. Low Height-for-Age: Height-for-age less than the 5th percentile of a person of the same sex and age in the reference population.
3. Low Weight-for-Age: Weight-for-age less than the 5th percentile of a person of the same sex and age in the reference population.
4. Low Weight-for-Height: Weight-for-height less than the 5th percentile of a person of the same sex and height in the reference population.
5. High Weight-for-Height: Weight-for-height greater than the 95th percentile of a person of the same sex and height in the reference population.

Reference Population: Smoothed distribution of percentiles of the following populations:

<u>Age</u>	<u>Reference Population Data</u>
Birth - 24 months	Fels Research Institute Growth Study
25 - 59 months	First Health and Nutrition Examination Survey (HANES)
60 - 143 months	National Health Examination Survey, Cycle II; and HANES
144 - 215 months	National Health Examination Survey, Cycle III; and HANES

Note: Growth percentiles represent heights and weights which have been standardized for sex and age, and sex and height (for weight-for-height). Therefore height and weight comparisons may be made between groups of individuals using percentiles without being concerned about the age and sex distributions of groups being compared. However, comparisons of height and weight among groups with persons of diverse ethnic origins should be made with care because of possible genetic differences in growth potential. Differences observed between groups may be due to differences in nutritional status of the individuals or in possible differences in the ethnic makeup of the groups.

Table 1

Nutrition Indices by State, January-March 1978  
Persons Less than 18 Years of Age

State	<u>Hemoglobin</u>		<u>Hematocrit</u>		<u>Height-For-Age</u>		<u>Weight-For-Age</u>		<u>Weight-For-Height</u>		
	No. Exam.	% Low	No. Exam.	% Low	No. Exam.	% Low	No. Exam.	% Low	No. Exam.	% Low	% High
Alabama	-	-	213	14.1	464	5.8	470	4.0	302	6.3	4.6
Arizona	1,425	6.1	2,331	14.9	4,733	13.9	4,706	8.9	3,007	4.7	12.3
California (Los Angeles County)	-	-	6	33.3	6	16.7	6	16.7	4	0.0	0.0
Florida	396	29.3	457	28.9	1,632	10.4	1,641	4.8	1,320	4.7	12.1
Illinois	239	13.0	464	21.8	579	14.2	579	5.7	568	5.6	18.1
Kentucky	714	16.8	1,279	20.8	3,146	10.8	3,163	5.9	2,370	3.8	11.8
Louisiana	2,388	17.7	538	17.7	3,544	12.3	3,541	5.8	2,522	4.0	10.8
Minnesota	300	7.7	440	7.0	603	6.3	634	5.4	482	3.7	7.9
New Jersey	42	7.1	59	30.5	146	19.9	146	7.5	118	0.8	16.9
Ohio	253	9.5	491	16.3	1,123	9.6	1,133	6.0	897	4.5	9.8
Oregon	210	10.5	964	12.0	2,006	12.3	2,015	8.0	1,717	3.6	10.7
Tennessee	129	3.9	5,636	20.9	8,457	11.6	8,504	5.1	6,433	3.3	12.1
Washington	213	14.6	2,300	17.5	3,521	12.8	3,529	5.7	2,845	3.6	13.7
Total	6,309	14.0	15,178	18.4	29,960	11.9	30,067	6.2	22,585	3.9	12.0

Table 2

Nutrition Indices by Sex and Ethnic Group, January-March 1978  
Persons Less than 18 Years of Age

Sex and Ethnic Group	<u>Hemoglobin</u>		<u>Hematocrit</u>		<u>Height-For-Age</u>		<u>Weight-For-Age</u>		<u>Weight-For-Height</u>		
	No.	%	No.	%	No.	%	No.	%	No.	%	%
	Exam.	Low	Exam.	Low	Exam.	Low	Exam.	Low	Exam.	Low	High
<b>Male</b>											
Black	1,149	19.8	1,602	23.3	3,774	13.2	3,784	6.4	2,812	4.6	11.3
White	1,502	10.2	4,536	16.8	8,670	12.0	8,724	6.3	7,168	3.7	11.4
Sp. American	380	9.5	650	18.3	1,250	15.4	1,250	7.4	932	3.3	14.8
Am. Indian	34	5.9	431	18.8	891	14.6	881	9.3	657	5.0	13.1
Oriental	11	18.2	47	4.3	81	23.5	82	12.2	77	5.2	13.0
Other	8	25.0	40	5.0	63	7.9	63	4.8	58	0.0	17.2
Unknown	6	0.0	39	7.7	52	13.5	51	5.9	44	4.5	11.4
Total	3,090	13.7	7,345	18.3	14,781	12.8	14,835	6.6	11,748	3.9	11.8
<b>Female</b>											
Black	1,205	21.6	1,691	22.9	3,842	10.6	3,869	4.8	2,608	4.5	11.2
White	1,553	10.8	4,824	16.7	8,832	10.7	8,868	5.7	6,582	3.5	11.7
Sp. American	402	7.2	717	20.5	1,369	13.0	1,361	6.8	853	2.8	15.2
Am. Indian	41	4.9	474	19.4	966	12.4	963	7.0	647	5.6	17.5
Oriental	9	22.2	39	20.5	92	18.5	92	10.9	83	6.0	12.0
Other	3	33.3	29	27.6	44	18.2	45	6.7	33	0.0	6.1
Unknown	6	0.0	27	7.4	34	11.8	34	11.8	31	0.0	6.5
Total	3,219	14.4	7,801	18.6	15,179	11.1	15,232	5.7	10,837	3.8	12.2

Table 3

Nutrition Indices by Sex and Age, January-March 1978  
Persons Less than 18 Years of Age

Sex and Age Group	Hemoglobin		Hematocrit		Height-For-Age		Weight-For-Age		Weight-For-Height		
	No.	%	No.	%	No.	%	No.	%	No.	%	%
	Exam.	Low	Exam.	Low	Exam.	Low	Exam.	Low	Exam.	Low	High
Male											
<1	482	8.3	1,243	9.3	6,325	13.9	6,348	7.2	4,388	5.1	11.1
1	656	11.6	1,624	10.2	2,124	15.1	2,136	7.3	2,102	4.8	15.7
2-5	1,123	15.3	3,105	24.6	4,023	11.8	4,030	6.1	4,002	2.6	11.4
6-9	340	20.3	504	30.4	992	7.0	996	4.4	970	3.2	8.4
10-12	239	14.6	384	20.6	649	8.9	651	4.3	286	2.1	10.1
13-17	250	12.4	449	12.2	668	13.2	674	8.6	-	-	-
Total	3,090	13.7	7,345	18.3	14,781	12.8	14,835	6.6	11,748	3.9	11.8
Female											
<1	459	5.2	1,181	8.2	6,174	11.4	6,175	5.3	3,909	4.7	11.1
1	610	11.3	1,620	9.8	2,113	14.7	2,118	6.7	2,093	3.7	15.6
2-5	1,086	17.8	3,110	22.2	3,990	11.1	3,998	6.6	3,977	3.2	12.0
6-9	338	21.3	516	32.0	965	5.6	966	3.4	851	2.8	9.3
10-12	223	13.9	347	16.4	583	10.5	586	6.7	7	14.3	0.0
13-17	503	14.5	1,027	27.8	1,354	8.3	1,389	4.5	-	-	-
Total	3,219	14.4	7,801	18.6	15,179	11.1	15,232	5.7	10,837	3.8	12.2

Nutrition Indices by State, April-June 1978  
Persons Less than 18 Years of Age

State	<u>Hemoglobin</u>		<u>Hematocrit</u>		<u>Height-for-Age</u>		<u>Weight-for-Age</u>		<u>Weight-for-Height</u>		
	No. Exam.	% Low	No. Exam.	% Low	No. Exam.	% Low	No. Exam.	% Low	No. Exam.	% Low	% High
Alabama	-	-	123	16.3	364	11.5	366	5.2	180	6.7	7.2
Arizona	1,468	4.9	2,309	15.2	4,548	13.3	4,525	9.9	2,952	6.2	10.6
California (Los Angeles County)	-	-	17	23.5	17	0.0	17	5.9	14	21.4	7.1
Colorado	2	0.0	198	17.7	370	13.8	371	10.2	272	9.9	7.4
Florida	544	25.6	704	29.7	2,501	10.2	2,518	6.5	1,803	6.9	19.6
Illinois	393	15.8	587	16.4	783	18.8	784	7.1	774	5.4	16.1
Kentucky	126	10.3	325	12.0	487	11.3	492	7.1	315	2.9	12.1
Louisiana	2,467	16.1	676	16.3	3,783	11.4	3,786	7.1	2,779	4.9	9.8
Minnesota	353	10.5	448	10.7	771	8.8	784	7.4	506	4.3	9.5
Montana	6	0.0	301	14.6	583	11.8	589	6.3	474	2.7	10.1
New Jersey	-	-	51	37.3	82	26.8	82	9.8	64	6.3	17.2
Ohio	751	7.6	1,743	14.1	3,860	9.8	3,886	6.8	2,924	4.1	9.2
Oregon	172	9.3	1,465	14.0	2,427	11.4	2,428	5.7	2,117	2.6	9.6
Tennessee	194	7.2	6,112	19.5	8,794	11.6	8,826	5.8	6,853	3.5	11.5
Washington	192	9.9	1,242	19.5	1,796	12.4	1,801	7.1	1,476	4.1	12.3
Total	6,668	12.4	16,301	17.5	31,166	11.7	31,255	7.0	23,503	4.5	11.4

Nutrition Indices by Sex and Ethnic Group, April-June 1978  
Persons Less than 18 Years of Age

Sex and Ethnic Group	<u>Hemoglobin</u>		<u>Hematocrit</u>		<u>Height for Age</u>		<u>Weight for Age</u>		<u>Weight for Height</u>		
	No.	%	No.	%	No.	%	No.	%	No.	%	%
	Exam.	Low	Exam.	Low	Exam.	Low	Exam.	Low	Exam.	Low	High
Male											
Black	1,275	19.5	1,810	22.3	4,061	12.5	4,071	6.9	3,084	5.5	10.7
White	1,387	7.7	5,087	15.2	8,962	11.8	8,972	7.2	7,307	4.4	10.2
Sp. American	466	6.9	795	16.7	1,536	13.0	1,538	8.8	1,158	4.8	15.8
Am. Indian	42	0.0	303	20.8	767	13.8	766	11.0	527	8.3	11.4
Oriental	14	7.1	28	14.3	42	26.2	43	14.0	39	7.7	10.3
Other	3	0.0	30	20.0	64	14.1	64	7.8	50	4.0	12.0
Unknown	15	0.0	20	5.0	50	6.0	50	4.0	47	6.4	4.3
Total	3,202	12.1	8,073	17.1	15,482	12.2	15,504	7.4	12,212	4.9	10.9
Female											
Black	1,458	20.6	1,906	22.4	4,335	10.4	4,359	5.6	3,046	4.4	12.7
White	1,424	7.1	5,019	16.0	8,742	11.1	8,785	6.9	6,550	3.6	10.2
Sp. American	508	6.1	836	17.6	1,592	12.4	1,594	6.3	1,028	3.9	17.8
Am. Indian	41	9.8	373	24.4	818	12.2	816	6.0	499	5.8	19.8
Oriental	13	0.0	38	5.3	65	21.5	65	16.9	52	3.8	3.8
Other	13	0.0	39	12.8	83	16.9	83	13.3	72	4.2	13.9
Unknown	9	0.0	17	5.9	49	6.1	49	4.1	44	0.0	15.9
Total	3,466	12.6	8,228	18.0	15,684	11.2	15,751	6.5	11,291	4.0	12.0



Table 6

Nutrition Indices by Sex and Age, April-June 1978  
Persons Less than 18 Years of Age

Sex and Age Group	Hemoglobin		Hematocrit		Height for Age		Weight for Age		Weight for Height		
	No.	%	No.	%	No.	%	No.	%	No.	%	%
	Exam.	Low	Exam.	Low	Exam.	Low	Exam.	Low	Exam.	Low	High
Male											
<1	510	6.9	1,164	9.3	5,872	13.0	5,862	7.3	4,116	5.9	10.0
1	604	10.4	1,602	8.7	2,096	14.8	2,109	10.4	2,075	7.0	12.8
2-5	1,188	14.6	3,496	20.7	4,621	11.7	4,642	7.0	4,609	3.3	10.5
6-9	364	13.7	743	33.5	1,123	8.6	1,121	5.9	1,095	4.3	9.8
10-12	233	14.6	387	21.2	850	9.2	851	5.6	317	4.4	19.6
13-17	303	10.9	681	11.5	920	11.1	919	7.3	-	-	-
Total	3,202	12.1	8,073	17.1	15,482	12.2	15,504	7.4	12,212	4.9	10.9
Female											
<1	504	6.3	1,104	9.6	5,641	11.7	5,663	6.5	3,693	4.7	10.6
1	636	9.9	1,631	7.5	2,134	13.6	2,151	7.7	2,112	4.3	15.0
2-5	1,150	14.5	3,397	20.5	4,496	11.4	4,505	6.8	4,477	3.0	12.0
6-9	368	17.4	720	33.8	1,124	6.6	1,123	5.2	1,000	4.8	11.0
10-12	217	13.8	404	23.0	824	9.0	824	7.0	9	0.0	11.1
13-17	591	13.7	972	22.1	1,465	9.5	1,485	4.2	-	-	-
Total	3,466	12.6	8,228	18.0	15,684	11.2	15,751	6.5	11,291	4.0	12.0