Obesity in Alaska Native Adults and Children

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Healthy Lifestyles Clinic
More than 1 in 3 adults are considered to be overweight.
More than 2 in 3 adults are considered to be overweight or have obesity.
More than 1 in 3 adults are considered to have obesity.
About 1 in 13 adults are considered to have extreme obesity.
About 1 in 6 children and adolescents ages 2 to 19 are considered to have obesity.

National Health and Nutrition Examination Survey (NHANES), 2013–2014²,³,⁴,⁵
Health Outcomes

- Overweight and obesity are risk factors for many health problems such as type 2 diabetes, high blood pressure, joint problems, and gallstones, among other conditions.
  - Respiratory
    - Sleep apnea, snoring, asthma, Pickwickian sy.
  - Orthopedic
    - Blount disease, slipped capital femoral epiphysis
  - Gastrointestinal
    - Gallbladder disease, steatohepatitis
  - Cardiovascular
    - Dyslipidemias, hypertension
  - Endocrinologic
    - Insulin resistance, impaired glucose tolerance, type 2 diabetes, polycystic ovarian syndrome, menstrual irregularity
Body Mass Index (BMI)

- Guideline for weight compared to height in each age group from 2–20 years old
- Although it is not a precise measure of body fat or health risk, BMI is the initial screen to serve as the starting point for classification of health risk
- To Calculate Body Mass Index
  - \( \{ \text{Wt (kg)} / [\text{Ht (cm)} \times \text{Ht (cm)}] \} \times 10,000 \)
  - \( \{ \text{Wt (lb)} / [\text{Ht (in)} \times \text{Ht (in)}] \} \times 703 \)
  - Online BMI calculator: [nccd.cdc.gov/dnpabmi/Calculator.aspx](nccd.cdc.gov/dnpabmi/Calculator.aspx)
  - Your trusty electronic medical record
Percentage of adults (18+) who were obese (BMI >= 30.0), all Alaskans, Alaska Natives, and U.S., 1991-2020

Percentage of Alaskan three-year-olds by weight category, 2012–2014

- **Underwgt (< 5th):** 6% non-Native, 4% non-Native
- **Normal (5th–85th):** 59% non-Native, 36% non-Native
- **At Risk (>85th):** 14% non-Native, 21% non-Native
- **Overwgt (≥ 95th):** 21% non-Native
2015 Alaska Native obesity rates by BRFSS Region

- >=35%
- 30% - <35%
- 25% - <30%
- 20% - <25%
- <20%
Barriers to a healthy diet
Barriers to a healthy lifestyle
Obesity is due to many factors

- Obesity is a result of a combination of factors:
  - Genetics
  - Metabolic
  - Behavioral
  - Environmental
  - Cultural
  - Socioeconomic
Percentage of *mothers* who believe their child is slightly overweight or overweight

- Child >85th percentile:
  - AIAN: 60.0%
  - non-Native: 35.0%

- Mother believes child overweight:
  - AIAN: 6.3%
  - non-Native: 3.7%
Percentage of mothers whose *health care provider* told them their child was overweight in last 12 months

Alaska CUBS 2012–2014
Nutrition
Registered dietitians provide nutrition counseling for:

- Treatment and prevention of disease
- Weight management
- Meal planning
- Healthy foods for all ages

Learn to manage:
- Diabetes, gestational diabetes
- High cholesterol, high blood pressure
- Irritable bowel
- Food allergies
- Breast feeding support
SCF Learning Circles

Learning circles are opportunities for people to connect and build relationships through a variety of wellness activities.

- Cultural activities
- Emotional support
- Healthy families, healthy relationships
- Chronic conditions
- Men’s activities
- Nutrition and fitness
- Parenting
- Pregnancy
- Recovery and addictions
- Vocational and life skills
<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Highlights</th>
</tr>
</thead>
</table>
| Diabetes Support Group Luncheon  
  Oct. 2  
  Noon – 1:30 p.m.  
  Mt. Marathon Building  
  Denali Room  
  Power of Hope Cancer Education and Social Group  
  Oct. 30  
  Noon – 1:30 p.m.  
  Mt. Marathon Building  
  Denali Room | Lose to Win  
  11:30 a.m. – 1 p.m.  
  Mt. Marathon Building  
  Denali Room  
  Quit Tobacco  
  1 – 3 p.m.  
  Anchorage Native Primary Care Center (ANPCC)  
  4320 Diplomacy Drive  
  Suite 2300 | Pretty in Pink  
  Noon – 1:30 p.m.  
  ANPCC Lobby | Rest and Refresh  
  Noon – 1 p.m.  
  Mt. Marathon Building  
  Spur Studio  
  Healthy Heart Bingo  
  1 – 3 p.m.  
  ANPCC, Suite 2300 | Toddler Time  
  10 – 10:50 a.m.  
  Mt. Marathon Building  
  Susitna Studio | *Breast Cancer Awareness Month events every Wednesday.  
  *Healthy Heart Bingo: come win a prize every Thursday! |

*Pre-registration is required before participation. Call (907) 729-2689 to register. Activities are open to Southcentral Foundation employees, family members, customer-owners, and Alaska Native Tribal Health Consortium employees.
<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tai Chi Open Practice</td>
<td>Indoor Cycling</td>
<td>Tai Chi Open Practice</td>
<td>Indoor Cycling</td>
<td>Tai Chi Open Practice</td>
</tr>
<tr>
<td>10–10:50 a.m.</td>
<td>6:45–7:30 a.m.</td>
<td>9–9:50 a.m.</td>
<td>6:45–7:30 a.m.</td>
<td>9–9:50 a.m.</td>
</tr>
<tr>
<td>Indoor Cycling</td>
<td>*Healthy Back Strong Core</td>
<td>*Tai Chi</td>
<td>Functional Strength/Balance</td>
<td>ZUMBA®</td>
</tr>
<tr>
<td>noon–12:50 p.m.</td>
<td>9–9:45 a.m.</td>
<td>10–10:50 a.m.</td>
<td>10–10:50 a.m.</td>
<td>11–11:50 a.m.</td>
</tr>
<tr>
<td>TRX Strength</td>
<td>Functional Strength/Balance</td>
<td>Boot Camp</td>
<td>Yoga</td>
<td>Boot Camp</td>
</tr>
<tr>
<td>noon–12:50 p.m.</td>
<td>10–10:50 a.m.</td>
<td>noon–12:50 p.m.</td>
<td>11–11:50 a.m.</td>
<td>noon–12:50 p.m.</td>
</tr>
<tr>
<td>*Pilates/Core</td>
<td>Yoga</td>
<td>*Pilates/Core</td>
<td>Yoga</td>
<td>*Self Myofascial Release</td>
</tr>
<tr>
<td>noon–12:50 p.m.</td>
<td>11–11:50 a.m.</td>
<td>noon–12:50 p.m.</td>
<td>11–11:50 a.m.</td>
<td>4–4:50 p.m.</td>
</tr>
<tr>
<td>Integrated Training)</td>
<td>noon–12:50 p.m.</td>
<td>12:10–1 p.m.</td>
<td>noon–12:50 p.m.</td>
<td></td>
</tr>
<tr>
<td>5–5:50 p.m.</td>
<td>Indoor Cycling</td>
<td>(Canceled Oct. 11)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*October 9 is a holiday,</td>
<td>*TRX® Strength</td>
<td>TRX® Strength</td>
<td></td>
<td></td>
</tr>
<tr>
<td>no classes will be offered that day.</td>
<td>12:10–12:50 p.m.</td>
<td>1–1:50 p.m.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>ZUMBA®</td>
<td>Boot Camp</td>
<td>ZUMBA®</td>
<td></td>
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<tr>
<td></td>
<td>5–6 p.m.</td>
<td>5–5:50 p.m.</td>
<td>5–6 p.m.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Gentle Yoga</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5–5:50 p.m.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
AAP EC Recommendations (2007)

Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Summary Report

Sarah E. Barlow, MD, MPH and the Expert Committee

Division of Pediatric Gastroenterology, Nutrition, and Hepatology, Department of Pediatrics, Baylor College of Medicine, Texas Children's Hospital, Houston, Texas

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SCF Prevention

- Obesity prevention should be a public health focus
- Primary vs. Secondary vs. Tertiary prevention
  - Primary prevention—prevention of disease before it occurs and reducing its incidence
    - SCF Peds clinic: BHC and Dietician
  - Secondary prevention—early disease detection to provide opportunities to prevent disease progression and symptoms
    - TEN SESSIONS With SCF Peds clinic: BHC and Dietician
  - Tertiary prevention—reduce impact of an already established disease by restoring function and reducing complications
SCF
Healthy Lifestyles Clinic

1. Identification
   Calculate and plot BMI at every well child visit

2. Assessment
   - Medical Risk
     - Child history & exam
     - Child growth
     - Parental obesity
     - Family history
   - Behavior Risk
     - Sedentary time
     - Eating
     - Physical activity
   - Attitudes
     - Family and patient concern and motivation

3. Prevention
   - Target behavior
     - Identify problem behaviors
     - If no problem behaviors, praise current practice
     - Review any risks (e.g., DM)
     - Use patient-directed techniques to encourage behavior change (see algorithm table)

   - Intervention for Treatment
     (Advance through stages based on age and BMI)
     - Stage 1 Prevention Plus
       - Primary care office
     - Stage 2 Structured Weight Management
       - Primary care office with support
     - Stage 3 Comprehensive Multidisciplinary Intervention
       - Pediatric weight management center
     - Stage 4 Tertiary Care Intervention (select patients)
       - Tertiary care center

FIGURE 1
Universal assessment of obesity risk and steps to prevention and treatment. DM indicates diabetes mellitus.
What is the next step?

• AN obesity prevention should be a public health focus

• Research on AN obesity and overweight barriers

• Research on AN treatment and prevention
Mindful eating
Enrollment per IDeA State Pediatric Clinical Trials Network Site

CLINIC 8–10 Child–Parent Pairs Newsletter

CLINIC 8–10 Child–Parent Pairs iAmHealthy

Minimum of 12 Sites
Questions/Comments?

“The root of all health is in the brain. The trunk of it is in emotion. The branches and leaves are the body. The flower of health blooms when all parts work together.” – Kurdish saying
Percent of Alaskan three-year-olds who had at least *one cup* yesterday

<table>
<thead>
<tr>
<th>Drink</th>
<th>AN</th>
<th>Non-Native</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>91</td>
<td>95</td>
</tr>
<tr>
<td>Milk</td>
<td>90</td>
<td>95</td>
</tr>
<tr>
<td>Juice</td>
<td>66</td>
<td>60</td>
</tr>
<tr>
<td>Sugar Drinks</td>
<td>29</td>
<td>63</td>
</tr>
</tbody>
</table>

*AN*: Alaska Native
*Non-Native*: Non-Native