Pathways
1993 - 2001

- Primary prevention of obesity
- American Indian children
- Phase One: Feasibility
  - 3 years
- Phase Two: Full-scale
  - 5 years
Why Pathways?

Increased prevalence of:

- Obesity
- Heart disease
- Diabetes

Lifestyle changes:

- Decreased physical activity
- Increased calories and high-fat foods
Phase Two
Participating Nations

White Mountain Apache Tribe (Ndee’), AZ
San Carlos Apache Tribe (Dee’), AZ
Gila River Indian Community (Akimel O’odham), AZ
Tohono O’odham Nation (Tohono O’odham), AZ
Navajo Nation (Dine), NM, AZ, UT
Rosebud Sioux Tribe (Sicangu Lakota), SD
Oglala Sioux Tribe (Oglala Lakota), SD
Universities
Johns Hopkins University
University of Arizona
University of Minnesota
University of New Mexico
University of North Carolina

Sponsor
National Heart, Lung, and Blood Institute
National Institutes of Health
Approvals

- Tribal councils and review boards
- University review boards
- School boards
- Parental written permission
- Child written / verbal consent
Purpose: Phase One

To assess the feasibility of promoting healthful eating and physical activity behaviors in schoolchildren.
Considerations

- Values and beliefs
- Dietary requirements
- Privacy and confidentiality
- Existing programs
- Site differences
- Research experience
American Indian Involvement

- Local advisory groups
- Research project staff
- Committee representation
- Seven Nations Committee
- Formative assessment
Phase One
Specific Aims

- Cultural sensitivity
- Acceptance
- Ease and completeness
- Safety
- Applicability
- Statistical issues
Purpose: Phase Two

To implement and evaluate a culturally appropriate school-based intervention to prevent obesity
Phase Two / Full-Scale

Time Line

1997 1998 1999 2000

Jan May Sep Jan May Sep Jan May Sep Jan May Sep

2/97-5/97 baseline measures
4/97-5/97 randomize schools
9/97 complete baseline measures

10/97-5/98 3’rd grade intervention
4/98-5/98 interim measures
9/98-5/99 4’th grade intervention
4/99-5/99 interim measures

5’th grade intervention 9/99-5/00
endpoint measures 1/00-5/00
report results 8/00-7/01
<table>
<thead>
<tr>
<th>Schedule of Measurements</th>
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<tbody>
<tr>
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<tr>
<td>% Body Fat</td>
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<tr>
<td>Height, weight</td>
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<td>Diet</td>
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<td>Menu analysis</td>
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<td>Physical activity</td>
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<td>Questionnaire</td>
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<td>Process evaluation</td>
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### Schedule of Measurements

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<tr>
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<th>Baseline Spring/Fall ‘97</th>
<th>Interim Spring ‘98-’99</th>
<th>Follow-up Spring ‘00</th>
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Intervention Components

- Health promotion curriculum, grades 3-5
- Family involvement
- School meal program
- Physical activity programs
Intervention Foundation

- Social Learning Theory
- Health behaviors
- Cultural concepts
Cultural Concepts

Learning:
- through observation and practice
- from storytelling
- metaphorically
- holistic
- by trial and error
- through play
- cooperatively
- through reflection
Classroom Curriculum

- 3rd, 4th, 5th grades
- Teacher’s guide
- Teacher training
- Student activity book
- Family packs
- 8-12 weeks
- 2 lessons/week
Family Involvement

- Kick-off event
- Family activity and snack packs
- Workshops
- Year-end events
School Meals

- Nutrient guidelines
- Behavioral guidelines
- Job aides
- Training
- Kitchen visits
Physical Activity

- American Indian games
- Exercise breaks
- PE curriculum
- Free play recess
Impact

- First multi-site collaborative intervention study among American Indians
- One of first childhood obesity prevention studies
- Improve American Indian health
- Advance science and health program planning
- Model program throughout Indian country
Vision

Healthier children
becoming
healthier adults