Emerging Opportunities for Registered Dietitian Nutritionists to Help Raise a Healthier Generation of Native American Youth

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Senior Public Health & Science Policy Advisor
The NIH’s Contributions to Advancing Health

- Identifies factors influencing health and health disparities in the US population
- Evaluates promising strategies for prevention and treatment in real-world settings and diverse populations
- Harnesses technology and tools to advance prevention and treatment
- Seeks expert input on research gaps
- Trains the next generation of scientists
- Fosters collaborations to maximize translation and dissemination
The NIDDK Office of Nutrition Research (ONR)

- Established on August 1, 2015
- Replaces the NIH Division of Nutrition Research Coordination (DNRC)
- Guided by assessment of DNRC
- Assist in leading a trans-NIH group that will strategically plan new initiatives for NIH nutrition research
- Close alignment with NIDDK
- Hired new ONR Director, Dr. Christopher Lynch
National Institutes of Health (NIH)

As the nation’s medical research agency, the National Institutes of Health (NIH) contributes to advancing Native health by:

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Similar to our Federal Partners in Let’s Move! in Indian Country, the following webpage highlights selected funding announcements that were identified as relevant to Native health research and childhood obesity research, along with NIH supported research and resources that have potential to advance efforts striving to raise the next generation of healthy Native children and adolescents.

Resources & Links:

- Selected NIH supported Native American health and childhood obesity research [PDF, 464 KB]
- Selected NIH supported Native American health and childhood obesity resources [PDF, 588 KB]
- Selected NIH training opportunities for American Indian and Alaska Native students and researchers [PDF, 40 KB]
- Selected NIH collaborative health promotion and disease prevention activities [PDF, 45 KB]

http://lmic.ihs.gov/federalpartners/fedpartnersnih/
Selected NIH Supported Research

- Native youth
  - Interventions
  - Nutrition-related chronic disease reduction research
- Native adult nutrition-related chronic disease research
- Family & community obesity prevention projects
- Food environment studies with tribal communities
AIHE Lessons Learned

Community Input

http://americanindianhealthyeating.unc.edu/
Tools for Healthy Tribes

- Incorporates community insights
- Integrates Native traditions
- Describes community change
- Explains rationale and tips
- Provides local resources
- Connects with community and economic development

http://americanindianhealthyeating.unc.edu
- Provided direct support
- Fostered self-determined plans of action
- Increased civic engagement
- Offered tailored capacity building consultation and workshops
- Facilitated cross-community collaborations
- Enhanced statewide recognition

http://americanindianhealthyeating.unc.edu
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Commentary Purpose

Increase awareness of emerging opportunities for registered dietitian nutritionists (RDNs) to help raise a healthier generation of American Indian and Alaska Native children and adolescents (Native youth, for short). RDNs working for, with or near tribal communities or as educators, preceptors or mentors who develop the next generation of RDNs have tremendous potential to shape the public health landscape to advance Native health.

Opportunities Highlighted

- Integrating nutrition into comprehensive approaches
- Fostering emerging tribally-led healthy eating strategies
  - Improving access to locally grown, affordable foods and beverages
  - Strengthening tribal institutional and commercial food service nutrition standards
  - Breastfeeding promotion
- Building the evidence and capacity to advance Native health
- Engaging and empowering Native youth

*J Acad Nutr Diet.* 2016;116(2):219-225
Concluding Points

- Chronic disease does not have to be the fate of this generation
- New opportunities exist for RDNs to help address nutrition-related health disparities among American Indian and Alaska Native individuals, families and communities
- Particularly promising are emerging opportunities for RDNs working for, with or near tribal communities to partner with tribal leaders including Native youth on catalyzing and sustaining tribally-led approaches to foster healthy eating among tribal communities

*J Acad Nutr Diet. 2016;116(2):219-225*
Physical Activity among Native Youth: A Systematic Review of the Methodology and Current Evidence of Interventions and Community-Wide Initiatives

Sheila Fleischhacker, PhD, JD; NIH
Erica Roberts, MHS; Maryland
Ricky Camplain, MSPH; UNC
Kelly Evenson, PhD; UNC
Joel Gittelsohn, PhD, MSc; Johns Hopkins
Mentored Research & Career Guidance

**Dr. Erica Blue Roberts, MHS**  
Lumbee Tribe of North Carolina  
While a PhD Candidate in Behavioral and Community Health  
University of Maryland

**Ricky Camplain, MSPH**  
Comanche  
PhD Student in Epidemiology  
University of North Carolina
To address research gaps and help inform tribally-led community changes that promote physical activity, this review examined the methodology and current evidence of physical activity interventions and community-wide initiatives among American Indian and Alaska Native children and adolescents (Native youth)
Methods

- Consulted with NIH librarian
- Conducted keyword guided search in PubMed (Medline), Web of Science, and Scopus
- Focused on peer-reviewed articles that reported on physical activity among Native youth, families and communities
- Conducted updated search on June 19, 2015
- Filtered search with inclusion/exclusion criteria
- Extracted standardized information from each included article
- Conducted inter-rater reliability

*J Racial Ethnic Health Disparities. 2015;Nov:1-17*
Articles reviewed (N = 673)

Articles meeting study criteria (N = 85)

Interventions (N = 19, 72 articles)

Initiatives (N = 11, 13 articles)
# Targeted Settings (N=19)

<table>
<thead>
<tr>
<th>Targeted Settings</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childcare-based</td>
<td>1 (5)</td>
</tr>
<tr>
<td>Family-based</td>
<td>6 (32)</td>
</tr>
<tr>
<td>School-based</td>
<td>8 (42)</td>
</tr>
<tr>
<td>Summer Day Camp</td>
<td>1 (5)</td>
</tr>
<tr>
<td>Supervised Classes</td>
<td>2 (11)</td>
</tr>
<tr>
<td>Workshop</td>
<td>1 (5)</td>
</tr>
</tbody>
</table>
### Intervention Strategies (N=19)

<table>
<thead>
<tr>
<th>Strategies</th>
<th>N   (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational</td>
<td>19 (100)</td>
</tr>
<tr>
<td>Enhanced Opportunities to Be Active</td>
<td>12 (63)</td>
</tr>
<tr>
<td>Family or Household Component</td>
<td>12 (63)</td>
</tr>
<tr>
<td>Integrated Other Sectors</td>
<td>4 (21)</td>
</tr>
<tr>
<td>Media-based</td>
<td>4 (21)</td>
</tr>
<tr>
<td>Training-the-Trainer</td>
<td>16 (84)</td>
</tr>
</tbody>
</table>

*J Racial Ethnic Health Disparities. 2015;Nov:1-17*
## Outcomes (N=19)

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Activity Related Knowledge and Attitudes</td>
<td>4 (21)</td>
</tr>
<tr>
<td>Weight or Height-Related</td>
<td>8 (42)</td>
</tr>
<tr>
<td>Environmental, Policy, and Systems Approaches</td>
<td>5 (26)</td>
</tr>
</tbody>
</table>

*J Racial Ethnic Health Disparities. 2015;Nov:1-17*
Community-Wide Initiatives
Preliminary Results

- All noted use of a theoretical framework
- All but one used tribal participatory or partnership building approach
- All focused primarily on formative stages of partnership development
- 6 (54%) provided insights on promising areas such as improving environmental access to recreational areas and facilities and instituting school and worksite activity policies

J Racial Ethnic Health Disparities. 2015;Nov:1-17
Conclusions

- Few noted positive changes in knowledge and attitude relating to physical activity
- None reported statistically significant improvements on weight-related outcomes
- Some interventions and community-wide initiatives discussed implementing environmental, policy, and system changes relating to promoting physical activity
  - But generally only shared anecdotal information
Conclusions

- Using community-based participatory research or tribally-driven research models
  - Could strengthen tribal-research partnerships; and
  - Improve the cultural and contextual sensitivity of the intervention or community-wide initiative

- More research is needed to better understand what to focus on to promote physical activity among Native youth

- Future research could also focus on the unique authority and opportunity of tribal leaders and other key stakeholders to use environmental, policy, and systems approaches to raise a healthier generation of American Indian and Alaska Native children

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http://lmic.ihs.gov/federalpartners/fedpartnersnih/
Native American Research Centers for Health (NARCH)

- Partnership between IHS & National Institute of General Medical Sciences
- Supports American Indian/Alaska Native tribes or tribally-based organizations and institutions that conduct academic-level biomedical, behavioral and health services research
- Provides opportunities for conducting research, research training and faculty development

http://www.ihs.gov/research/index.cfm?module=narch
Training Opportunities

- NIDDK Office of Minority Research and Health Coordination Diversity Summer Research Training Program for Undergraduate Students
- NIDDK Undergraduate STEP-UP Program
- NIDDK High School STEP-UP Program
- NIGMS Native American Students NIH Week-Long Summer Visit
- NIMHD Translational Health Disparities Two-Week Intensive Course
- The Partnership for Native American Cancer Prevention
- NIH Institutional Review Board Internship Program
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