Healthy Children, Strong Families 2: Randomized Healthy Lifestyle Intervention for American Indian Families

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American Indian families suffer from significant health disparities.
Early childhood is critical for healthy weight

Obesity = most rapidly increasing pediatric health issue

Obesity tracks into adulthood

Critical time for development of diet and activity behaviors
Healthy Children, Strong Families (HCSF)

Community-engaged approach to improve young child health through home/family-based program (obesity prevention toolkit)

Based on Native approach of elders teaching life skills, instilling values of healthy eating and physical activity to the next generation
HCSF1

Four targets of the **obesity prevention toolkit**:

Successfully pilot tested in 4 communities in Wisconsin

Observed improvements in health behaviors, well-received by families
HCSF2

- Expanded nationally
- Added **stress** and **sleep** targets
- Active control group focused on **child safety**
- Social support mechanisms (Facebook, text messaging)
450 Adult/Child pairs recruited
Baseline Testing

Wellness Journey
(Intervention, n=225 families)
Mailed HCSF toolkit + social support

Year 1-
Primary Analyses

Safety Journey
(Control, n=225 families)
Mailed safety toolkit

Year 2-
Secondary Analyses

Wellness Journey
Mailed HCSF toolkit + social support
HEALTHY CHILDREN, STRONG FAMILIES
Six Targets to Reach a Healthy Life Balance

As part of the Healthy Children Strong Families program, you and your children will learn about six targets to help bring your lives into a healthy balance. These six lifestyle targets are based on traditional values of healthy eating, lots of activity, stress management and good sleep habits with the goal of preventing future disease. A key part of making changes is tracking your progress—both through goal setting and in pictures! Throughout the year, grab your camera and snap photos of your family being active and enjoying time together! These photos will come in handy at the end of the program...wait and see!

1) Be more active
2) Reduce screen time
3) Eat more fruits and vegetables
4) Drink less soda and sugary beverages, eat less candy and other “junk” foods
5) Manage Stress
6) Improve Sleep
**Breathe. Just Breathe.**

Ever had one of those crazy stressful days when you feel like your shoulders are up near your ears and you almost feel like you have to breathe in just to breathe out? Try this breathing technique the next time you’re at the end of your rope. Yes, you may feel silly doing this, but so do I when I’m about to experience another great tension release! Try it.

1. Put your right thumb against your right nostril and breathe slowly through your left nostril. (If you’re comfortable, use your left thumb to press against your left nostril and breathe through the right nostril.) 
2. Imagine you’re breathing in a flower, the air entering your nose or mouth and filling your lungs. Remember to exhale slowly through your right nostril.
3. Keep your right nostril open, inhale, then close it and open the left nostril, and exhale slowly through the right nostril.

That’s it. This technique starts with these three steps, and you can go up to five. Their position where I’m feeling stressed out.

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**PRORITIZE HEALTHY EATING**

Don’t let your kids’ diets be thrown out the window just because they’re feeling stressed out. Here are a few tips to keep them healthy:

1. **Eat a healthy breakfast.** Breakfast is the most important meal of the day. It helps your body function properly and gives you the energy you need to get through the day.
2. **Make healthy snack choices.** Instead of reaching for sugary or processed snacks, opt for fruits, vegetables, and whole grains. They’ll give you the energy you need to stay focused and alert.
3. **Drink plenty of water.** Staying hydrated is important for your overall health, so make sure your child is drinking enough water throughout the day.
4. **Limit screen time.** Too much screen time can be detrimental to a child’s health. Encourage them to take breaks and engage in activities that promote physical activity.

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**Lesson:** Breathe. Just Breathe.

**Supporting Materials:**

- [Image of breathing technique](image1.png)
- [Image of healthy snacks](image2.png)
- [Image of water bottle](image3.png)
- [Image of screen time guidelines](image4.png)

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**Books:**

- *Eating the Alphabet: Fruits & Vegetables from A to Z* by Lois Ehlert
- *Little Brown and Go to Bed* by Dr. Seuss
- *Through The Eyes of The Eagle* by Georgia Perez
- *The Berenstain Bears and Too Much Junk Food* by Jan Berenstain

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**Lessons:**

- Breathe. Just Breathe.
- PRORITIZE HEALTHY EATING

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**Lessons Supporting Materials Books**
450 adult/child pairs =

Year 1 dropout = 16%
Results: Baseline weight status

**CHILD WEIGHT STATUS**
- Healthy Weight: 54%
- Overweight: 19%
- Obese: 27%

**ADULT WEIGHT STATUS**
- Obese: 60%
- Overweight: 22%
- Healthy Weight: 18%
At baseline, 6 patterns were determined for adults that explained 82.5% of the model variance.

1. fast food
2. healthy food
3. sweets
4. animal protein
5. cereal and milk
6. other
For children, 4 patterns were determined that explained 56% of the model variance.

1. non-healthy foods
2. healthy foods
3. sugary beverages
4. healthy beverages

Results: Baseline diet
For Wellness Families after Year 1...

Diet patterns significantly improved (adult and child, p<0.05)

More reported moderate/vigorous physical activity (adult, p<0.05)

Trend for reduced screen time (children, p=0.06)

Readiness to change health behaviors significantly improved (adult, p<0.05)
Results: Child weight status
Extremely high levels of food insecurity

- Higher for urban families
- Associated with less healthy diet
- May have some impact on intervention response
Challenges

- Geographic distribution of sites
- Family-level challenges
- Cell/internet service interruption

Successes

- Local administration of study
- High recruitment and retention
- Encouraging behavior change
- High participant satisfaction
- Family resiliency
- Positive community-level changes
Thank You!

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