"To Not Have Diabetes" A Child's Definition of Health and Why Breastfeeding Support is Everyone's Responsibility

World Breastfeeding 2021! Let's celebrate!

World Breastfeeding 2021!

Let's celebrate!

Zuni, NM



"To Not Have Diabetes"

A Child's Definition of Health ... & Why Breastfeeding Support is Everyone's Responsibility





Learning Destinations

Introduction

Public Health & Diabetes Prevention Zuni Breastfeeding Coalition/ Community Strategies

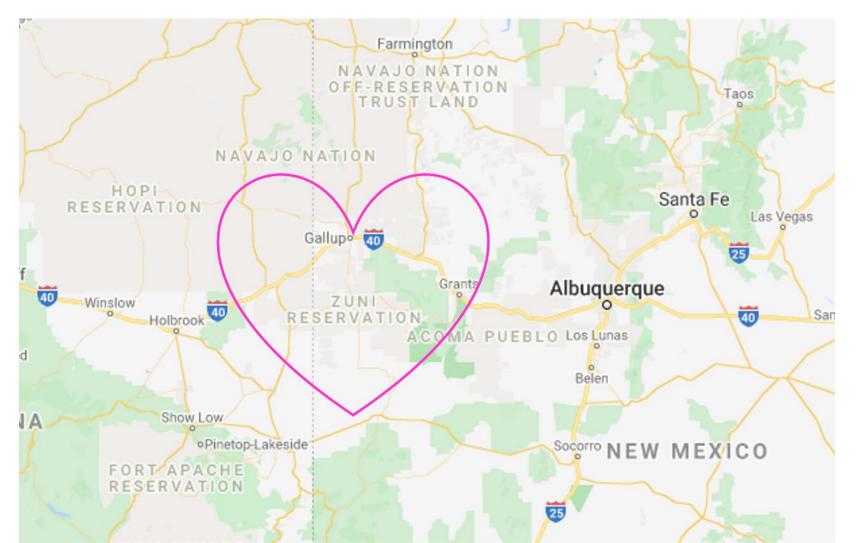
Wrap Up

The Power of Breastfeeding

Zuni Reservation







Breastfeeding Event



Breastfeeding Month Proclamation





Exercise Events



Happy Families



Mother's Love



Dancing at Event



Youth Programs







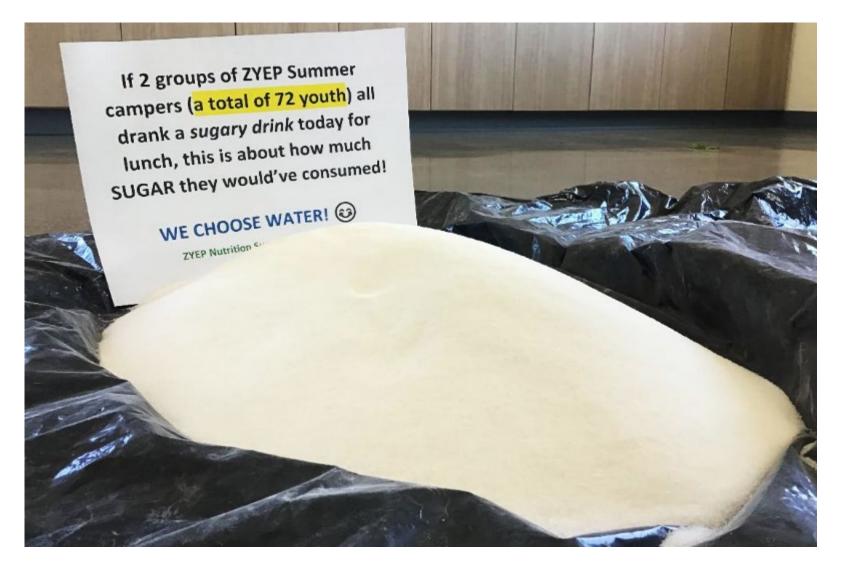
Zuni Youth Enrichment Project Event



How Much Sugar is in Your Drinks?



How Much Sugar is in Your Drinks? (con't)



Fresh Produce



AI/AN Diabetes Rates: A Health Disparity

Appendix Table 3. Age-adjusted prevalence of diagnosed diabetes by detailed race/ethnicity, education level, and sex among adults aged 18 years or older, United States, 2017–2018.

Characteristic	Total Percentage (95% CI)	Men Percentage (95% Cl)	Women Percentage (95% Cl)
Race/ethnicity			
American Indian/Alaska Native	14.7 (14.6-14.7)	14.5 (14.4-14.6)	14.8 (14.7-14.9)
Asian, non-Hispanic, overall	9.2 (8.0-10.5)	10.0 (8.3-12.0)	8.5 (7.0-10.5)
Asian Indian	12.6 (9.3-16.7)	13.9 (10.3-18.6)	11.1 (6.6-18.0)
Chinese	5.6 (3.9-8.1)	5.9 (3.5-9.8)	5.3 (3.2-8.8)
Filipino	10.4 (8.1-13.4)	10.9 (7.6-15.4)	10.0 (6.8-14.6)
Other Asian	9.9 (8.1-12.2)	11.5 (8.5–15.3)	8.7 (6.2-11.9)
Black, non-Hispanic	11.7 (10.8-12.7)	11.4 (10.0-12.9)	12.0 (10.9-13.1)
Hispanic, overall	12.5 (11.5-13.5)	13.7 (12.3-15.2)	11.6 (10.2-13.0)
Central/South American	8.3 (8.0-8.6)	9.2 (8.8-9.6)	7.6 (7.2-8.0)
Cuban	6.5 (4.6-9.2)	7.3 (4.2-12.5)	6.0 (3.6-9.8)
Mexican	14.4 (13.1-15.8)	16.2 (14.2-18.3)	12.8 (11.1-14.8)
Puerto Rican	12.4 (10.1-15.1)	13.0 (9.5-17.6)	11.9 (9.0-15.5)
White, non-Hispanic	7.5 (7.2-7.8)	8.6 (8.1-9.0)	6.6 (6.2-7.0)
Education			
Less than high school	13.3 (12.4–14.2)	13.0 (11.8-14.4)	13.6 (12.3-15.1)
High school	9.7 (9.1–10.4)	11.2 (10.4-12.1)	8.6 (7.9-9.4)
More than high school	7.5 (7.2-7.9)	8.3 (7.8-8.8)	6.8 (6.4-7.3)

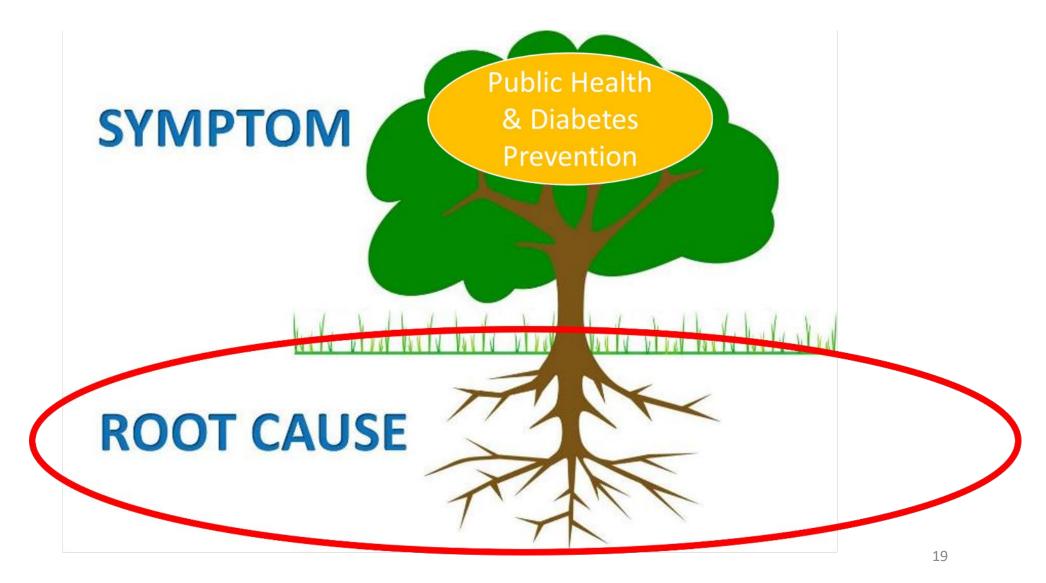
- Centers for Disease Control, National Diabetes Statistics Report 2020
- "What Causes Type 2 Diabetes." Centers for Disease Control and Prevention

Note: CI = confidence interval.

Data sources: 2017–2018 National Health Interview Survey, except American Indian/Alaska Native data, which were from the Indian Health Service National Data Warehouse (2017 data only).



Diabetes Prevention & Achieving Public Health can be COMPLICATED



Gardening



Love & Respect

Nutrition



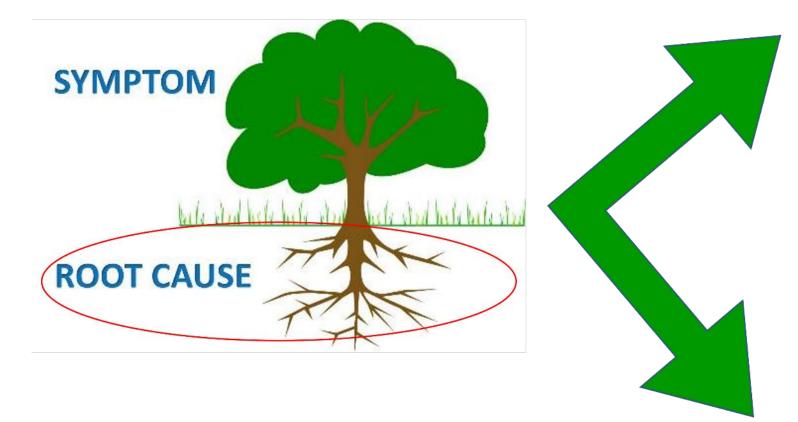
Source of Nutrition



Genetics Partially Determines How We Grow



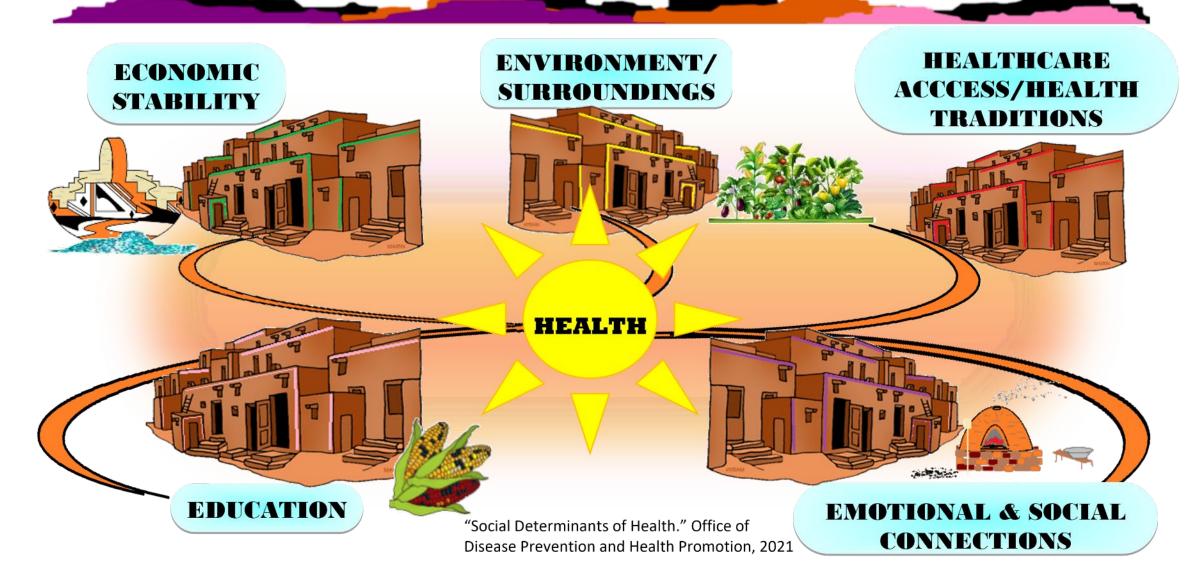
Root Causes of Health Disparities:

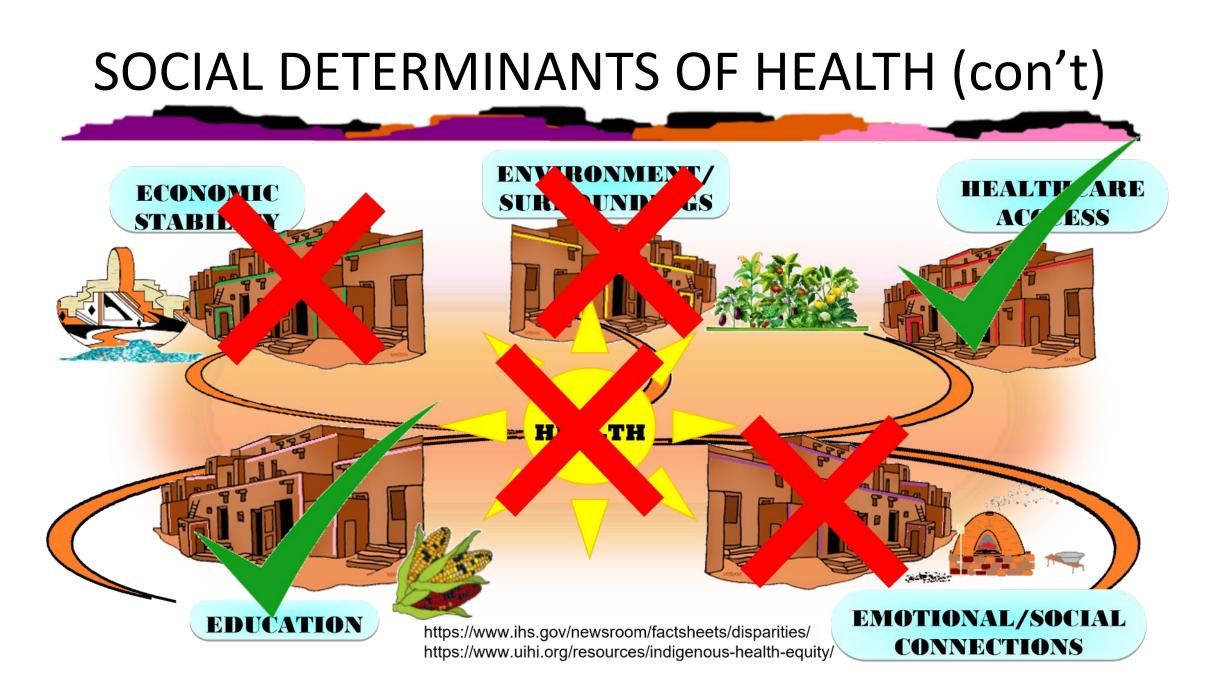


Social Determinants of Health

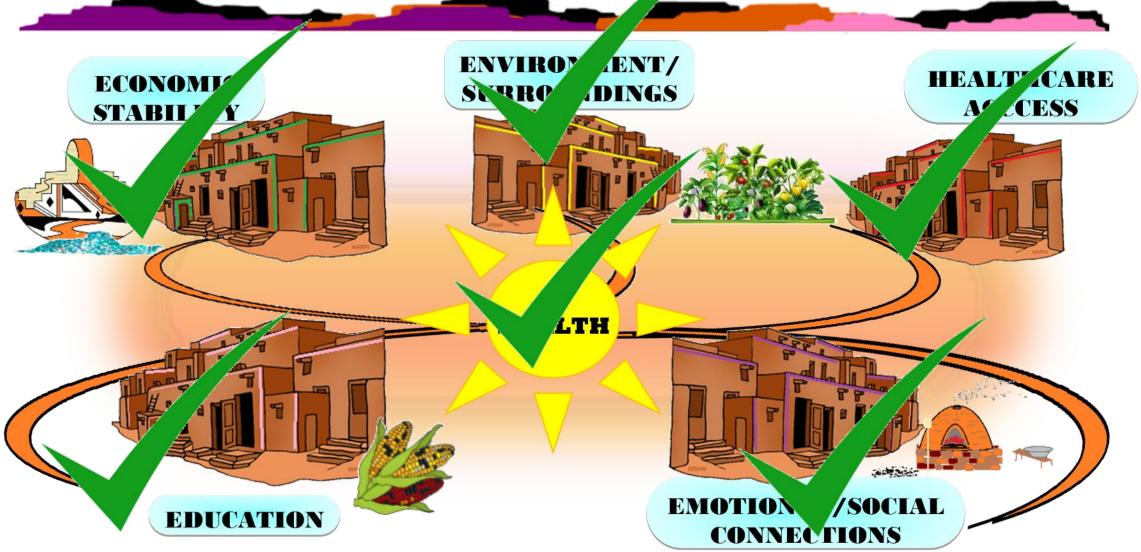
Epigenetics

SOCIAL DETERMINANTS OF HEALTH





SOCIAL DETERMINANTS OF HEALTH (more)



EPIGENETIC FORMATION: Ages 0-3 yrs.

Illustration by Betsy Hayes. Credit: Harvard University. "What is Epigenetics? And How Does it Relate to Child Development?" https://developingchild.harvard .edu/science/deep-dives/geneenvironment-interaction/

Billiar, Cynthia. "Epigenetics and Breastfeeding."

Bullock, Ann. "When Does Diabetes Start – or – 'How Adversity Gets Under the Skin'." Indian Health Services

How Early Experiences Alter Gene Expression and Shape Development

 EXTERNAL EXPERIENCES (e.g., stress, nutrition, toxins) spark signals between neurons

2 NEURAL SIGNALS launch production of gene regulatory proteins inside cell

> segment of a **DNA** strand

NEURON (brain cell)

(3) GENE REGULATORY PROTEINS attract or repel enzymes that add or remove epigenetic markers

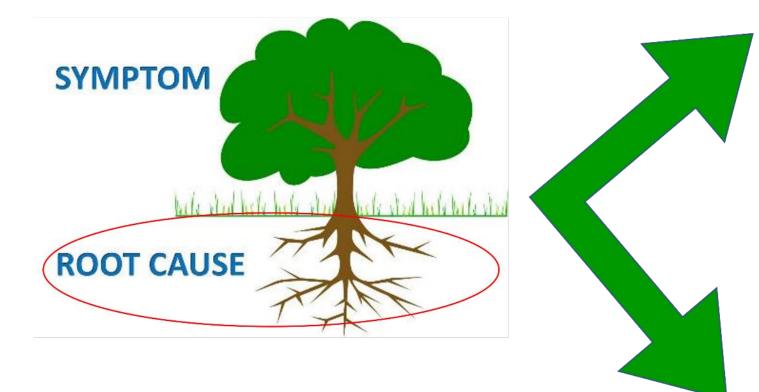
> (4) EPIGENETIC "MARKERS" control where and how much protein is made by a gene, effectively turning a gene "on" or "off," thereby shaping how brains and bodies develop

GENE – a specific

DNA strands encircle histones that determine whether or not the gene is "readable" by the cell

CHROMOSOME – can pass on genes to next generation

Root Causes of Health Disparities

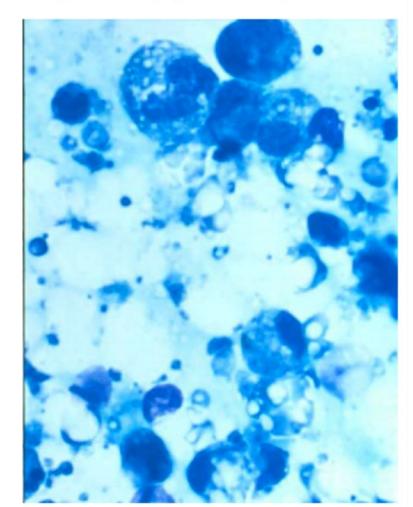


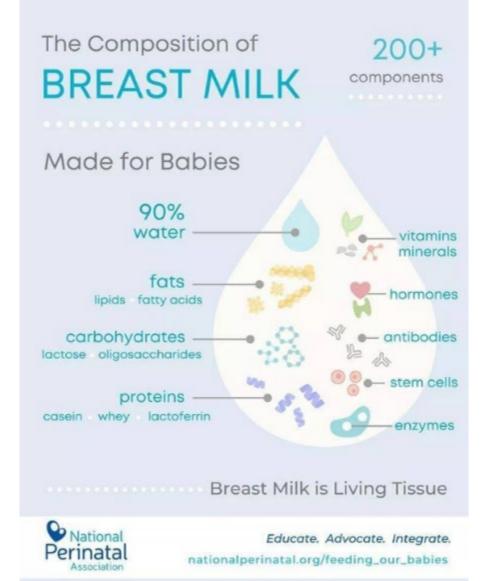
Social Determinants of Health

Epigenetics

Breastmilk Benefits

A drop of breast milk: -White blood cells protect against infection -Fat globules help eyes and brain grow faster





A drop of formula

Formula

hcp.meadjohnson.com/s/product/a4R4J000000PpR5UAK/enfamil-infant

NUME > PRODUCTS > EIHallim IIHall



Enfamil® Infant

Milk-based Infant formula for infants 0-12 months.

Indication

Enfamil Infant is a 20 Cal/fl oz milk-based, iron-fortified, routine formula for full-term infants 0-12 months. Enfamil Infant is clinically demonstrated to foster cognitive development through 5 years of age¹. Enfamil Infant is patterned after mature breast milk* and offers proven clinical outcomes in 3 key areas: brain development, immune health and growth.

Ingredients

Ingredients: Powder: Nonfat milk, lactose, vegetable oil (palm olein, coconut, soy and high oleic sunflower oils), whey protein concentrate and less than 2%: galactooligosaccharides^{*}, polydextrose^{*}, *Mortierella alpina* oil^{*}, *Crypthecodinium cohnii* oil^{*}, calcium carbonate, potassium citrate, ferrous sulfate, potassium chloride, magnesium oxide, sodium chloride, zinc sulfate, cupric sulfate, manganese sulfate, potassium iodide, sodium selenite, soy lecithin, choline chloride, ascorbic acid, niacinamide, calcium pantothenate, vitamin A palmitate, vitamin B₁₂, vitamin D₃, riboflavin, thiamin hydrochloride, vitamin B₆ hydrochloride, folic acid, vitamin K₁, biotin, inositol, vitamin E acetate, nucleotides (cytidine 5'-monophosphate, disodium uridine 5'-monophosphate, adenosine 5'-monophosphate, taurine, L-carnitine.

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The Power of Breastfeeding to Fulfill our Social Determinants of Health

Breastmilk is Free!

ENVIRONMENT/ SURROUNDINGS

ECONOMIC

STABILITY

Breastfeeding can be done anywhere at anytime

HEALTHCARE ACCCESS

Breastmilk contains immunizations and is medicinal



No degree needed; no job needed to buy formula

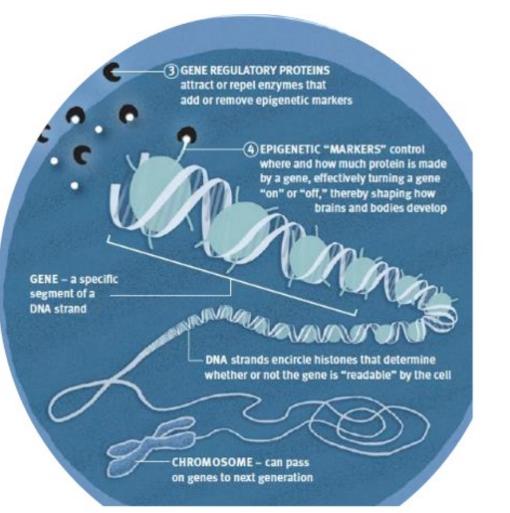
EMOTIONAL/SOCIAL CONNECTIONS Breastfeeding creates connections, gives mom endorphins and bonding



Echo-Hawk, Jasha Lyons. "Why Does Native Chest/Breastfeeding Matter?" New Mexico Breastfeeding

Task Force, 2021

The Power of Breastfeeding to Address and Reshape **Epigenetics**



- Breastmilk itself is a gene switch
- It helps to regulate food intake and the expression of energy regulating peptides
- Many of the components in human milk can change gene expression in the newborn baby via breastfeeding. For example, lactoferrin affects immune disorders, prostaglandin J impacts obesity, Long Chained Polyunsaturated Fatty Acids and cholesterol impacts the risk of nonalcoholic fatty liver disease and cholesterol issues, and oligosaccharides influence Necrotizing Enterocolitis, immune disorders and obesity

Wilson, Laurel. "Epigenetics and Breastfeeding -- The Long-Term Impact of Breastmilk on Health."; erduci, 2014

The Power of Breastfeeding to Protect At-risk Mothers and Infants

Breastfeeding can help lower a mother's risk of:

- High blood pressure
- Type 2 diabetes
- Ovarian cancer
- Breast cancer



Infants who are breastfed have a lower risk of:

- Asthma
- Obesity (risk factor for Type 2 Diabetes)
- Type 1 diabetes
- Severe lower respiratory disease
- Acute otitis media (ear infections)
- Sudden infant death syndrome (SIDS)
- Gastrointestinal infections
 (diarrhea/vomiting)
- Necrotizing enterocolitis (NEC) for preterm infants

"Breastfeeding and the Use of Human Milk." American Academy of Pediatrics, 2012; "Breastfeeding FAQs." Centers for Disease Control and Prevention, 2021

The Power of Breastfeeding



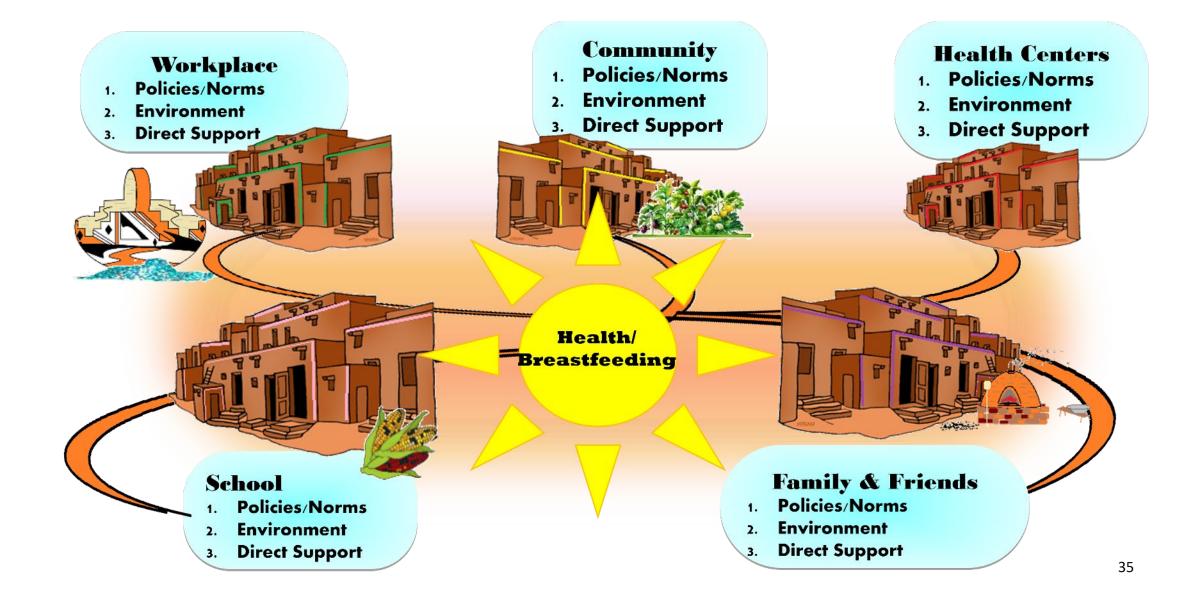


No cost

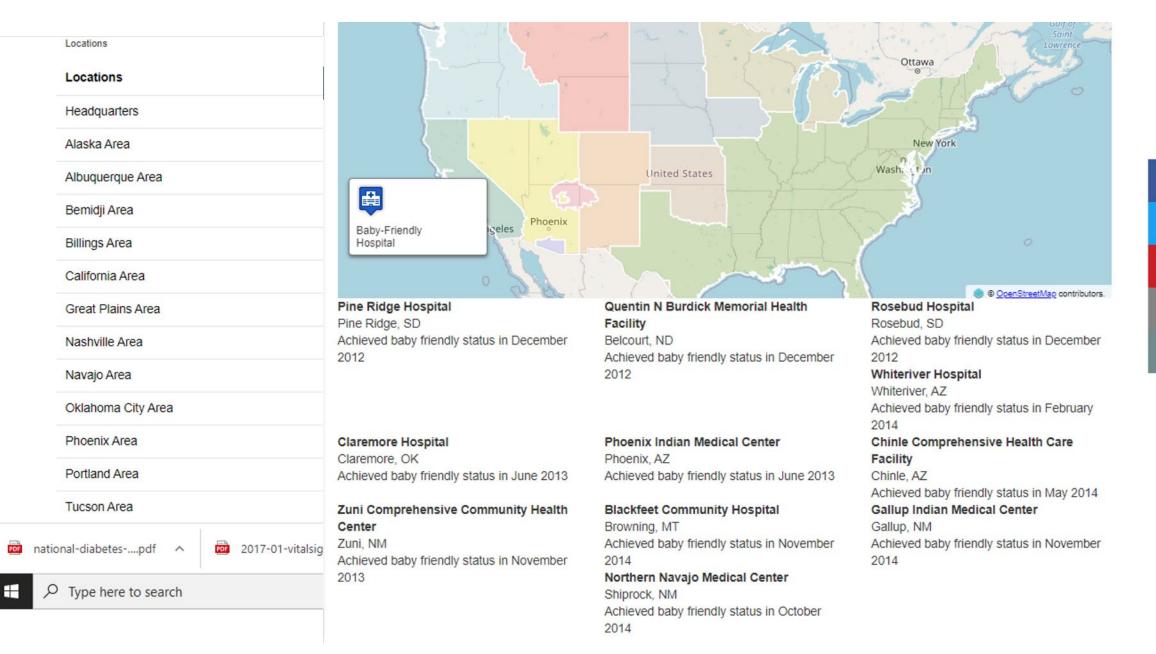
Readily available No need to mix with water or find in a store Contains antibodies

Centers for Disease Control: "Recent reports have shown that breastfeeding people who have received mRNA COVID-19 vaccines have antibodies in their breastmilk, which could help protect their babies. More data are needed to determine what protection these antibodies may provide to the baby"

Health Support Strategies: Culture-centric, Cross-sector, Multi-level



IHS Baby Friendly Initiative/Designation



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WHO Breastfeeding Steps 1-4



WHO Breastfeeding Steps 5-10

"Ten Steps to Successful Breastfeeding." World Health Organization;

"Ten Steps and International Code: The Ten Steps to Successful Breastfeeding." Baby Friendly USA







ROOMING-IN

DISCHARGE

Hospitals Support mothers to breastfeed by_

Vision Statement



"We want to have a community where breastfeeding is the tradition, hospitals and communities are baby friendly, and work places have polices to protect breastfeeding mothers"

Zuni IHS Baby Friendly Designation





Active Members:

- Zuni WIC Program
- Zuni IHS
 - PHN Dept
 - Women's Health Dept
 - OB Dept
- Zuni Recovery Center
- Zuni Detention Center
- First Born Program



Zuni Breastfeeding Coalition is at Zuni Comprehensive Community Health Center.

Published by Jessica Quinlan 🕢 · June 28, 2018 · Zuni, NM · 🕄

June meeting was very productive, fun, interesting and inspiring! Thank you everyone for participating in our meeting. Our bubble agenda was free flowing which allowed our visitors Erin Marshall and Monica Esparza from <u>New Mexico Breastfeeding Task Force</u> adequate time.We look forward to the July meeting.



Policy Projects



3: New Mexico State Laws - Use of Breastpump in the Workplace

BREASTFEEDING AT WORK

The law states - An employer shall provide nursing employees with (1) space for using the breast pump that is (a) clean and private (b) near the employee's workspace (c) not a bathroom (2) flexible break times



IT'S THE LAW- NM Chapter No. 2007-18 www.breastfeedingnewmexico.org

replica of our NM law cards (2007)



The Business Case for Breastfeeding Implementing a LACTATION SUPPORT

Program for ANY worksite









Built Environment Projects

Our breast feeding/baby changing station is officially up for Zuni fair!!





Zuni Breastfeeding Coalition Published by Jessica Quinlan @ · May 5, 2018 · ③

We are here at Zuni Pueblo MainStreet! Come by the Baby Center and/or Mother's Day Picture Tent! Starting today @ 10, stop by, like our page, or check in on FB for a chance to win a Mother's Day giftbasket! Drawings will start @ 10:30!



The Baby Cafe — Breastfeeding Nook Ribbon Cutting Event

A RIBBON CUTTING FOR

The Baby Cafe - Breastfeeding Nook

located in

Zuni Comprehensive Community Health Center's waiting area

> Aug 26, 2021 3 PM

Hosted by the Zuni Breastfeeding Coalition



Education and Direct Support





Zuni Breastfeeding Coalition Published by Olivia Nastacio 🖉 · March 17, 2018 · 🕄

We support baby friendly!

CHOOSING YOUR CHILD'S HEALTHCARE PROVIDER

BREASTFEEDING FRIENDLY

Welcomes breastfeeding for comfort during exams

Hands out support group info and informational resources

Encourages mothers to follow baby's feeding cues, including thru the night

Tracks baby's diapers, growth, mood, and milestones to measure milk intake

Refers patients to IBCLCs and other breastfeeding specialists

Advises supplementation with expressed milk

BREASTFEEDING TOLERANT

Prefers babies use a pacifier during exams

Hands out formula samples

Encourages feeding on a schedule and may advise sleep training

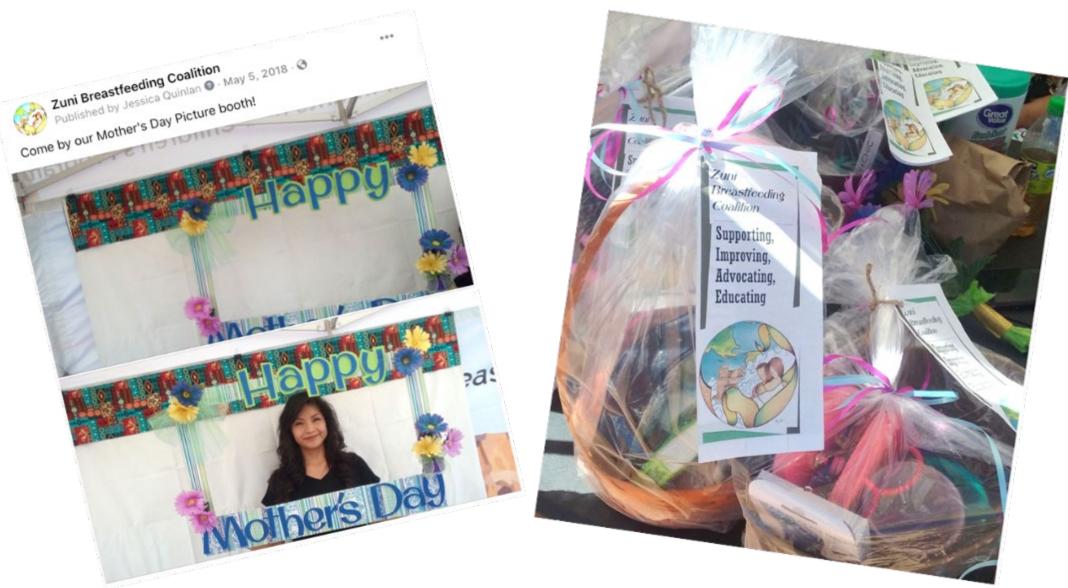
Tracks pump output, breast fullness, and leaking to measure milk intake

Advises bottle-feeding or weaning if challenges arise

Advises supplementation with formula

45

Outreach Events



Social Media Outreach

... Zuni Breastfeeding Coalition Published by Vimeo 🕢 · September 16, 2020 · 🕄 Are you concerned about prenatal care, giving birth, or breastfeeding during COVID? Unsure of what to expect at I.H.S. OB appointments? Zuni IHS & the Zuni Breastfeeding Coalition want you to know that it's safe to schedule prenatal appointments and reach out for medical or WIC program services. Listen in on our conversation to find out more! 🤎 Call Zuni I.H.S. for an appointment @ (505) 782-7434; Zuni WIC @ (505) 782-2929 New Mexico Breastfeeding Task Force PREUNANI VUKINU CUVIV A CONVERSATION WITH THE ZUNI BREASTFEEDING OO AL ITION PSA from Zuni Breastfeeding Coalition Important information for the community of Zuni Pueblo regardin...



Quotes

Dr. Bak/Zuni I.H.S. Staff Member and Breastfeeding Coalition member: "Breastfeeding is a top priority for maternal and infant health. Zuni IHS Baby Friendly Designation's success is supported by the Zuni Breastfeeding Coalition, and our coalition is successful because it is driven by community programs in cross-sector collaboration with I.H.S. staff."





Sebastian Leekya, CCHP, Zuni Detention Center: "Detention strives to promote health and wellness to a population of people who are underserved and often overlooked. Breastfeeding is important for the population because it provides connectedness for the mother and child. The positive connection the mother has to the child may provide a change in behaviors, thoughts, and overall life experiences. In general, breastfeeding in jail provides a sense of hope and opportunity to make a better life for the incarcerated mother and/or father".

Quotes (con't)

Ruby Wolf, Zuni WIC Program Director:

"When I was a mother in the 70's, I was told by Public Health Services to not breastfeed. I was breastfed but when it came to me, they didn't allow me to breastfeed. I took it upon myself as a person that can create change to lead the Zuni WIC Program in our task to teach and support breastfeeding. It is a Zuni tradition, and with the support and interest of our tribal leaders, community members and programs, we have brought breastfeeding back to now having some of the highest rates in the nation".





Lynelle Besselente, Zuni WIC Breastfeeding Peer Counselor: "Breastfeeding is the first medicine you can give your baby that will help them grow and be more healthy. Supporting and encouraging the future is the most important part in the journey to having a successful breastfeeding and pregnancy journey. Continue to listen, encourage, support and promote breastfeeding for a healthier generation to come." 49

Lessons

- Benefits and Barriers of Breastfeeding
- Ways to enhance early breastfeeding education and overcome any early problems
- How to create supportive breastfeeding environments



