The background of the slide features a textured, light-colored paper-like surface. In the upper right, there is a faint, stylized illustration of a mountain range. On the right side, a willow tree with long, drooping branches and small, dark, round leaves is depicted. The overall aesthetic is soft and natural.

*Breastfeeding Support
to Reduce Risk of Obesity*

Charlton Wilson, MD

Marie Russell, MD

Sue Murphy, MPH, RD, CDE, IBCLC

Melinda Aguirre, CLE

Objectives

Participants will be able to:

- ❖ Identify research that associates early infant feeding choice with risk of obesity later in life.
- ❖ Describe resources/programs within Indian Health Services that support breastfeeding.

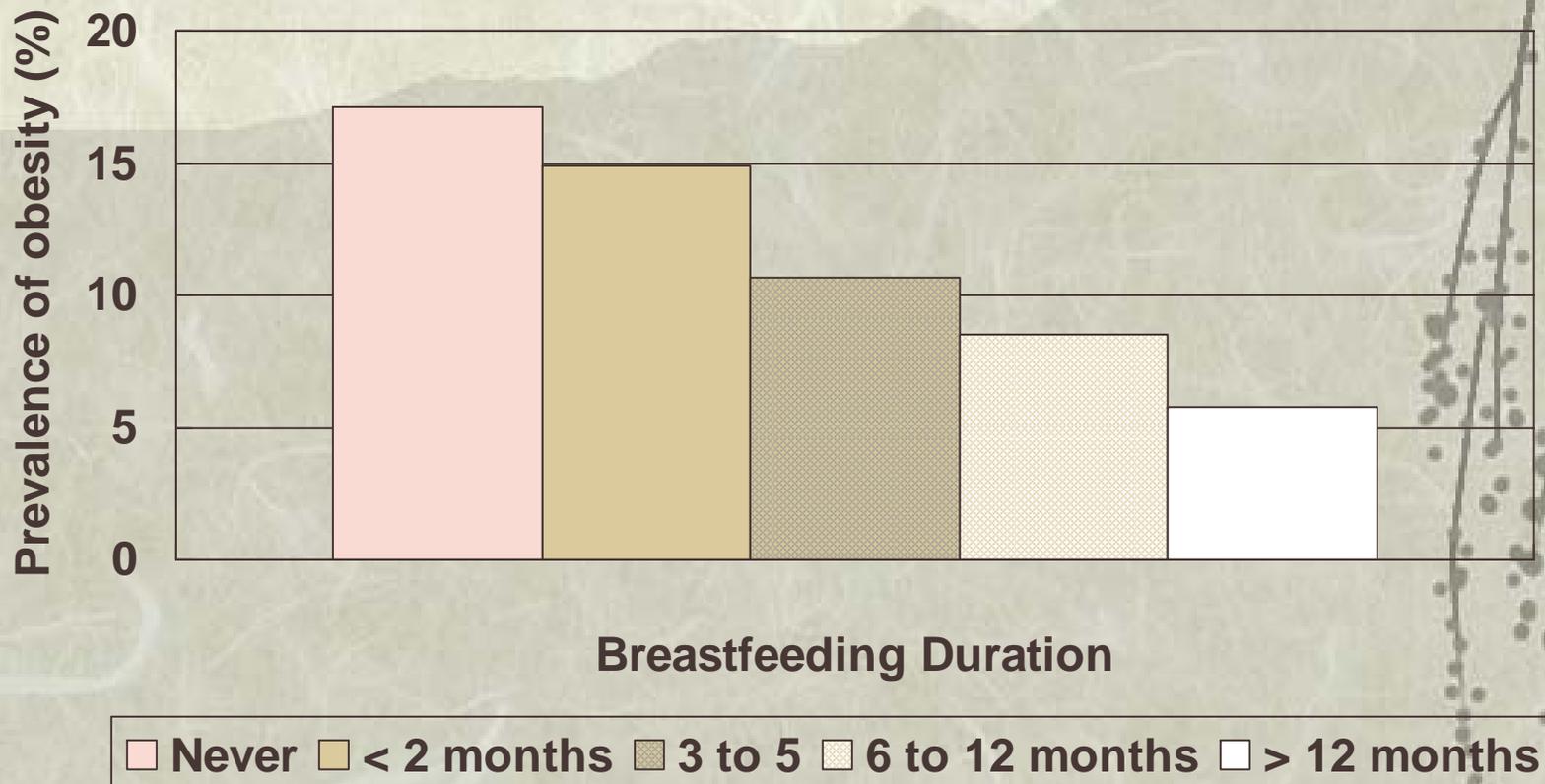
*Helping children to
grow up healthy is
everyone's goal*



Research
suggests that
supporting
breastfeeding
could help
make the
difference

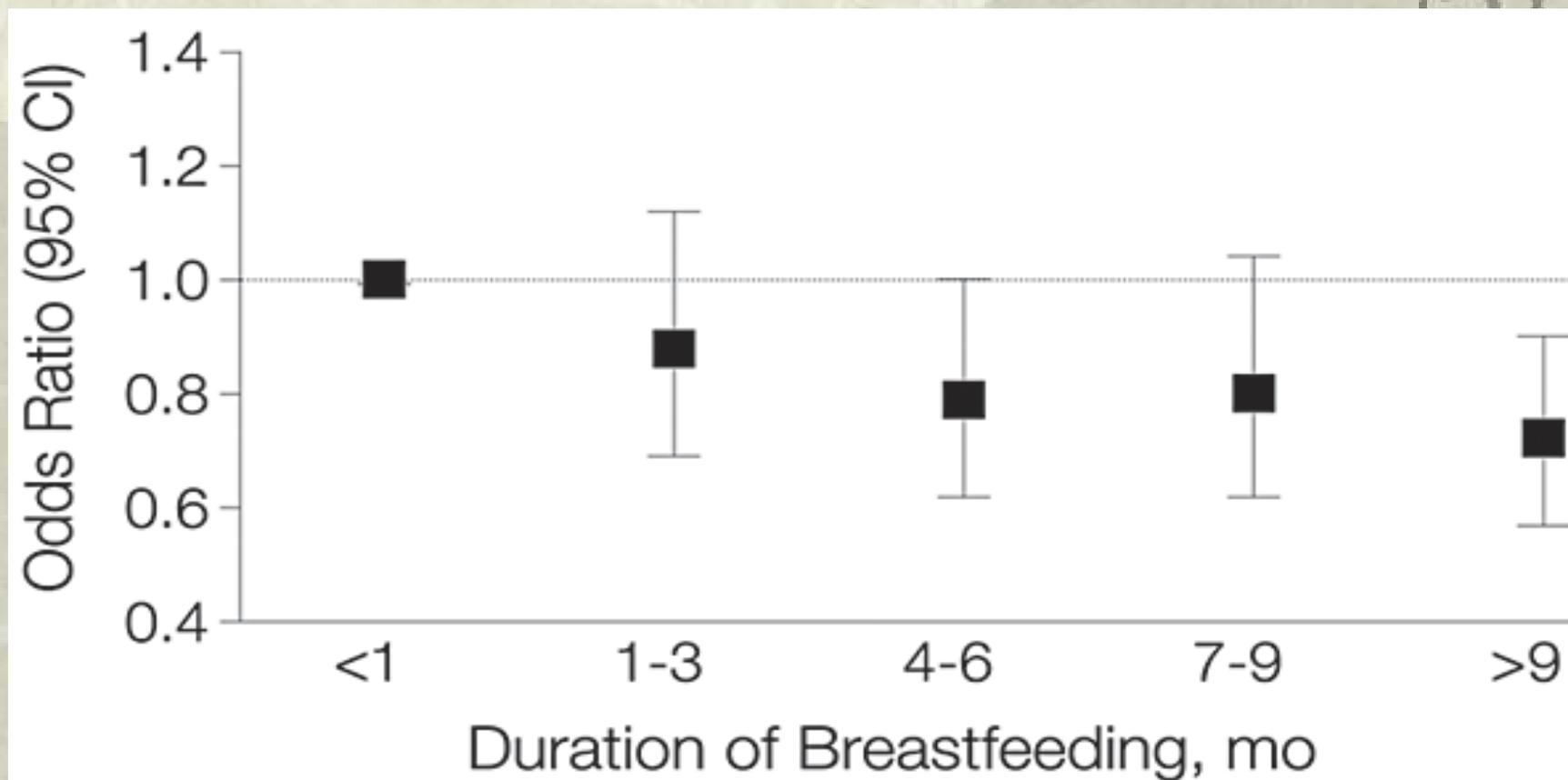
Photo courtesy of R Duncan, Navajo WIC program

Prevalence of obesity among German school children by duration of breastfeeding



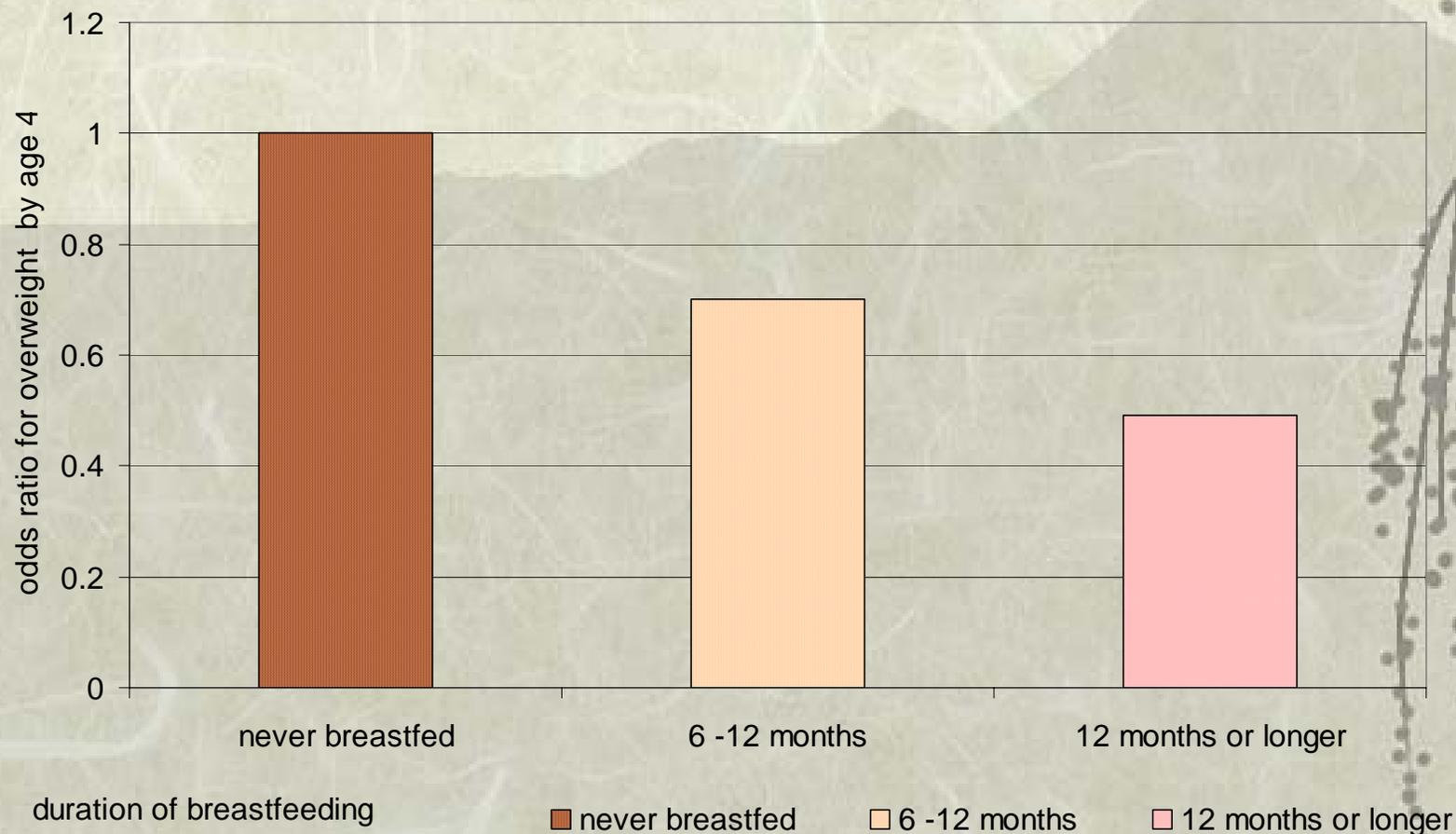
Von Kries, et al, BMJ, 1999

Adjusted odds ratios for overweight in adolescents in the USA by duration of breastfeeding in infancy

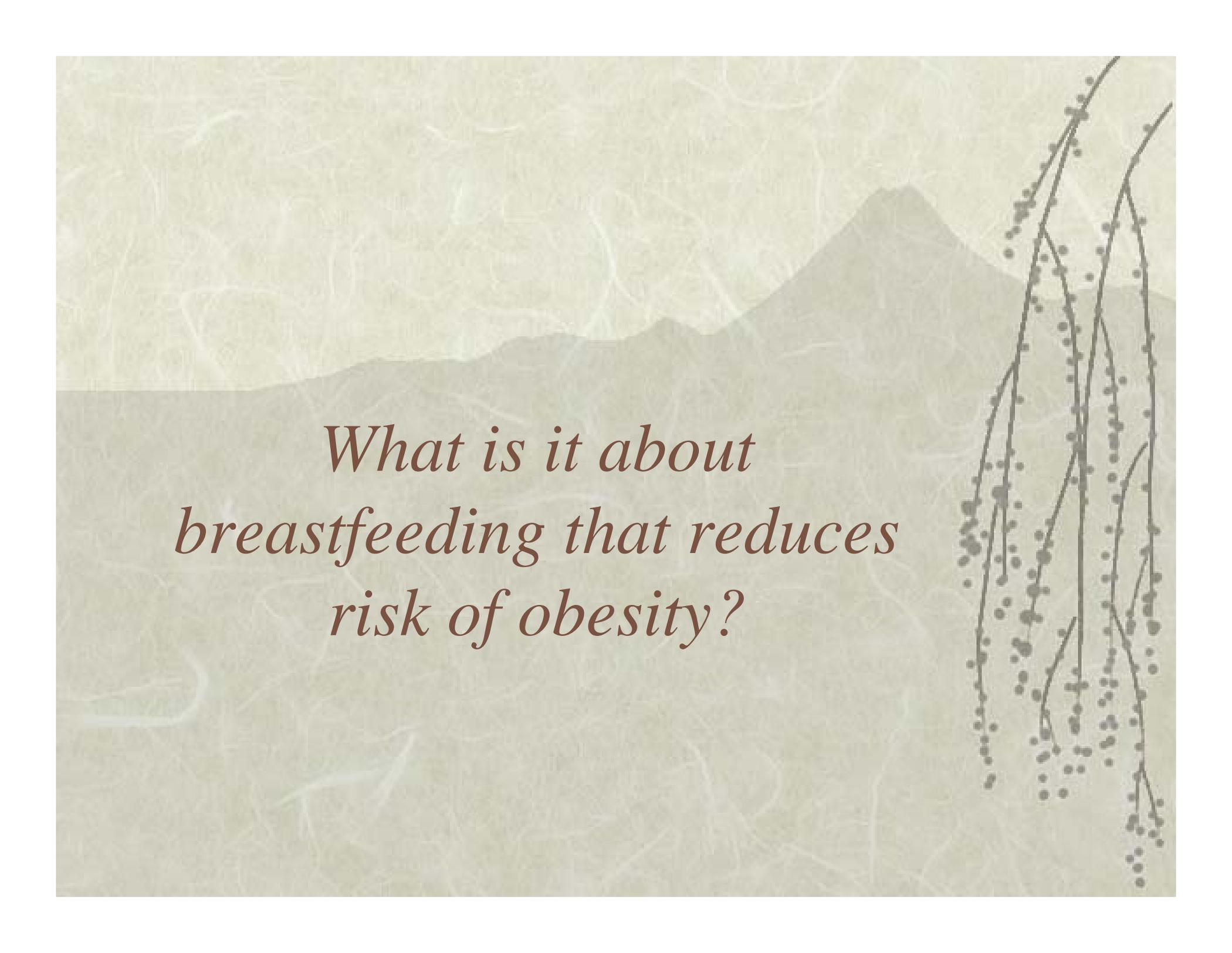


Gilman, et al, JAMA, 2001

Overweight risk by feeding choice and breastfeeding duration



Grummer-Strawn LM et al, Pediatrics, Feb 2004



*What is it about
breastfeeding that reduces
risk of obesity?*

Breast milk is different

Hormones unique to breast milk:

- Insulin
- Insulin like growth factors
- Leptin
- Adiponectin
- Resistin
- Ghrelin

Formula fed babies have different levels of these hormones.

The subtle differences in hormonal levels could impact life long growth patterns – an early programming effect.

Breastfed babies may learn to eat differently

- ❖ Breastfeeding intake maybe managed more by infant



- ❖ Bottle-feeding intake maybe managed more by feeder



Learning to self manage energy intake and identify satiety very early in life may be what contributes to reduced BMIs later for those breastfed.

Potential confounders

- ❖ Maternal/paternal obesity
- ❖ Tobacco exposure – in utero/household
- ❖ Birth weight/ gestational age
- ❖ Introduction of solids
- ❖ Family food/lifestyle choices
- ❖ Physical activity
- ❖ Breastfeeding associated with
healthier lifestyle, greater physical activity?

For more information, please see:

Arenz S et al, Breastfeeding and childhood obesity - a systematic review.
Int J Obes Relat Metab Disord. 28(10):1247-56, Oct 2004.

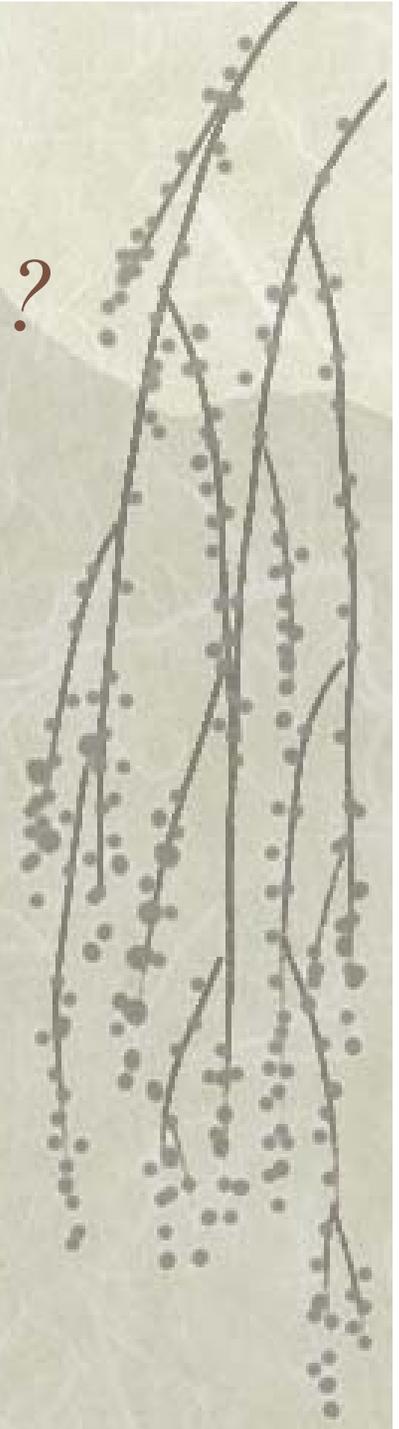
Owen CG et al, The effect of breastfeeding on mean body mass index throughout life: a quantitative review of published and unpublished observational evidence, Am J Clin Nutr , 82:6:1298-1307, Dec 2005.

Grummer-Strawn LM et al, Does Breastfeeding Protect Against Pediatric Overweight? Analysis of Longitudinal Data from the Centers for Disease Control and Prevention Pediatric Nutrition Surveillance System, Pediatrics 113 (2):81-86, Feb 2004.

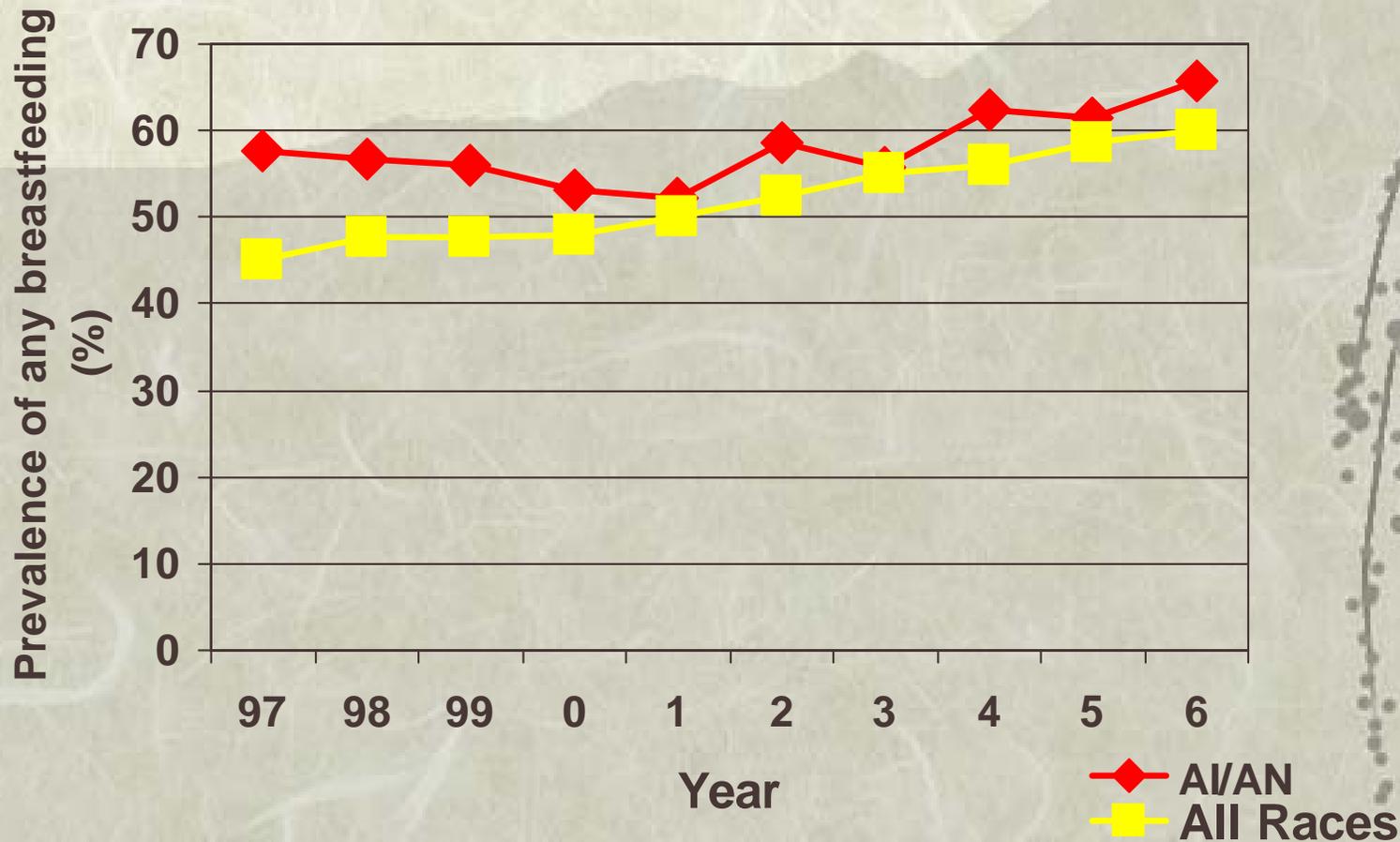
Ip S, et al, Breastfeeding and maternal and infant health outcomes in developed countries. Evid Rep Technol Assess (Full Rep),(153):1-186, April 2007.

Also available at Agency for Healthcare Research and Quality, US DHSS Publication No. 07-E007 Report – 2007.

*What is the current state of
Breastfeeding in Indian country?*

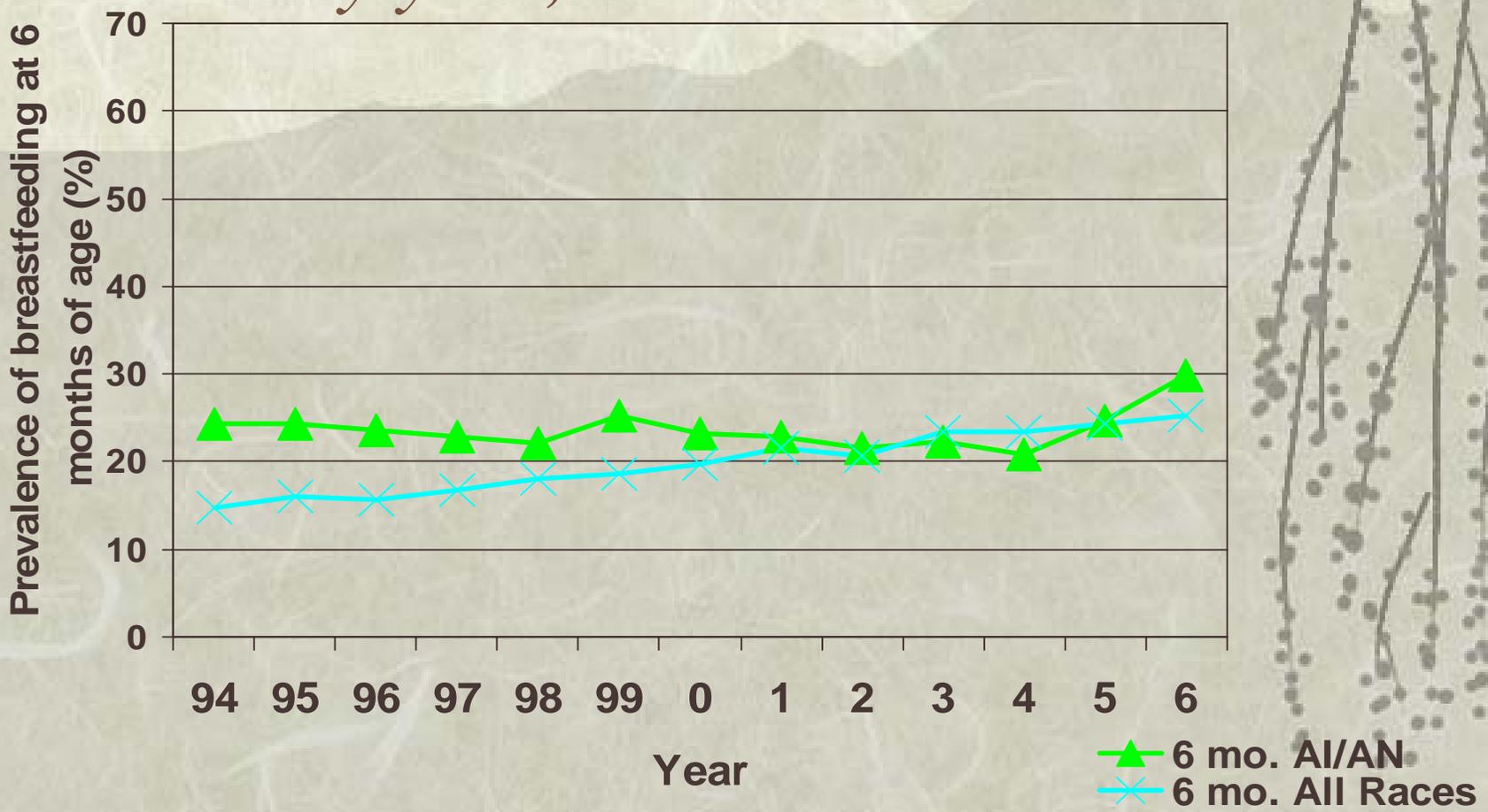


Trends of the prevalence of any breastfeeding by ethnicity by year, CDC's PedNSS



PedNSS includes data from 5 American Indian WIC programs

Trends of the prevalence of breastfeeding for 6 months by ethnicity by year, CDC's PedNSS



PedNSS includes data from 5 American Indian WIC programs

U.S. Preventive Services Task Force (AHRQ, 2003)

- ❖ Recommends structured breastfeeding education and behavioral counseling programs to promote breastfeeding. B recommendation.
- ❖ Found insufficient evidence to recommend for or against the following interventions to promote breastfeeding: brief education and counseling by primary care providers; peer counseling used alone and initiated in the clinical setting; and written materials, used alone or in combination with other interventions. I recommendation.

In a few words:

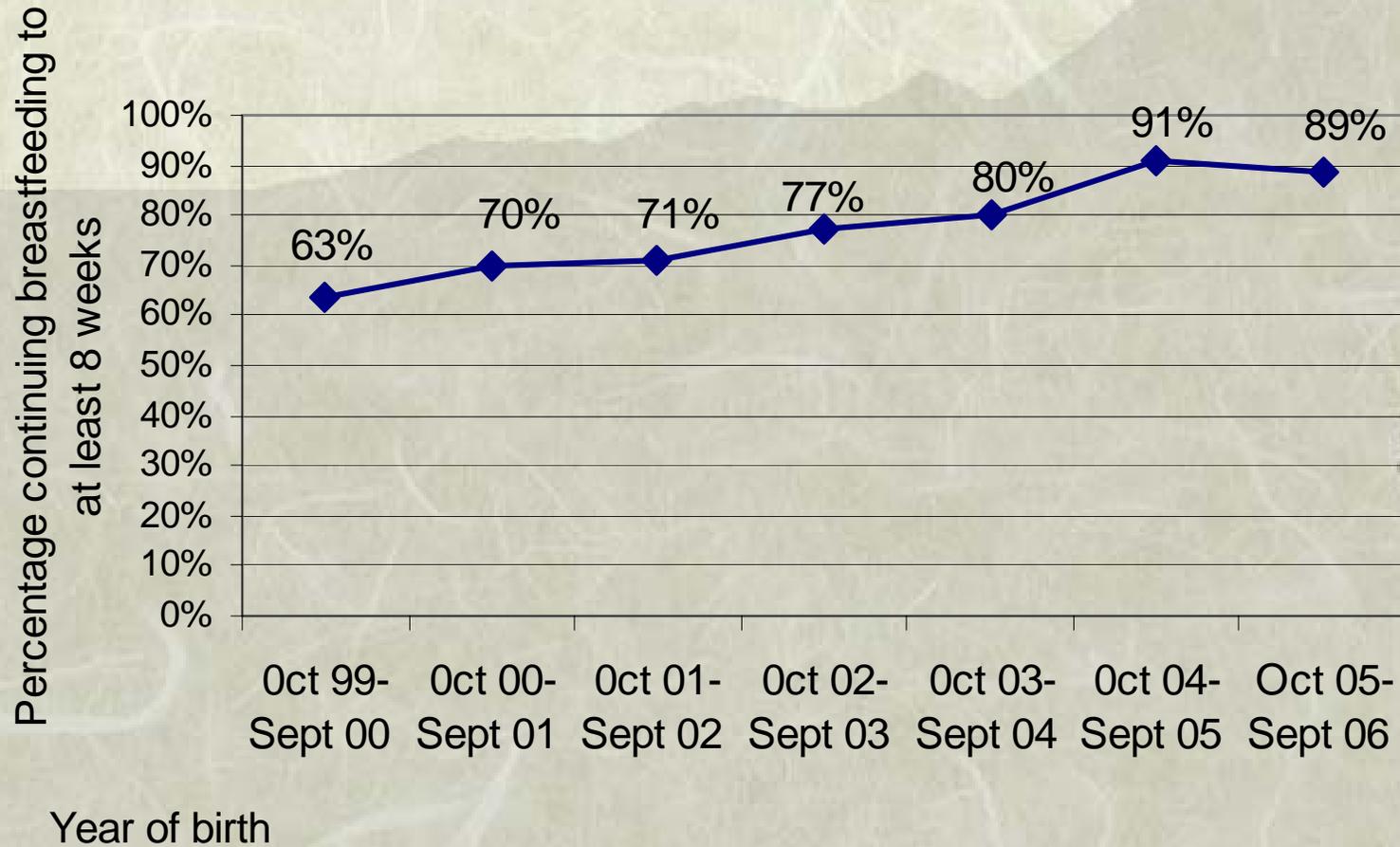
Structured efforts are more likely to increase breastfeeding than casual encounters.

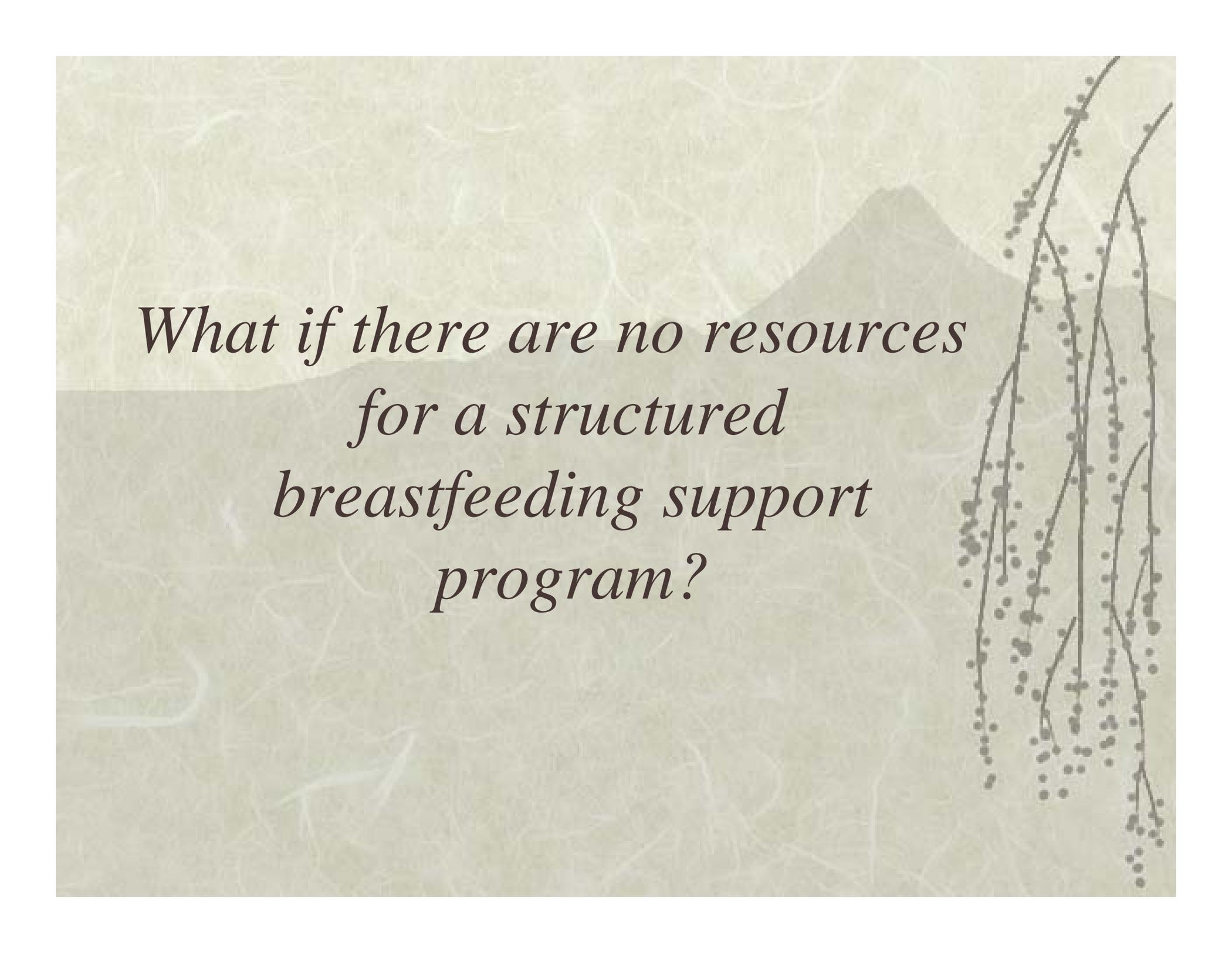
PIMC Breastfeeding Support Program

- ❖ SDPI to fund full-time lactation educator staff
- ❖ Toll-free “help-line”
- ❖ Patient care - in and out patient, community
- ❖ Education - Staff, family, community, patient
- ❖ Policies for patient care and employee breastfeeding
- ❖ Electric pump loaner program
- ❖ Collaborate with WIC, I.H.S clinics, other governmental agencies



Maintaining breastfeeding to at least 8 weeks 1999-2006





*What if there are no resources
for a structured
breastfeeding support
program?*

The background features a textured, light-colored paper surface. A dark silhouette of a mountain peak is visible in the upper right quadrant. On the right side, there is a detailed illustration of a willow branch with small, dark, round buds or leaves hanging from it.

It can still happen

*There are low cost ways to
support breastfeeding*

Free Education Materials



W. Daychild

Close to the Heart video/dvd/posters
call 1-877-868-9473

Easy Guide to Breastfeeding for AI/AN Families
available at:

1-800-994-9662 or www.4woman.gov
I.H.S. Breastfeeding web page.

I.H.S. MCH Breastfeeding Web page

<http://www.ihs.gov/MedicalPrograms/MCH/M/bf.cfm>

- ❖ Breastfeeding Home - with latest news
 - ❖ Benefits for Babies, Moms, Families & Communities
 - ❖ Going Back to School & Work
 - ❖ Medications & Recreational Drugs
 - ❖ Diabetes & Obesity Relationship to Breastfeeding
 - ❖ Family Support
 - ❖ Frequently Asked Questions
 - ❖ Breastfeeding Listserv
 - ❖ Breastfeeding Links
 - ❖ Staff Resources

Downloadable, printable materials for staff and families
Links, phone numbers, contacts
On-line free ordering/shipping for Easy Guide to Breastfeeding

I.H.S Lactation Worksite Policy *the first national government policy*

Supporting Employee Breastfeeding is
Good Business

A low cost benefit
for I.H.S employees,
their families,
and the workplace.



*There are new, integrated,
easier ways
to track progress*

- ❖ Patient and Family Education Codes
- ❖ Infant Feeding Choice Information fields for RPMS



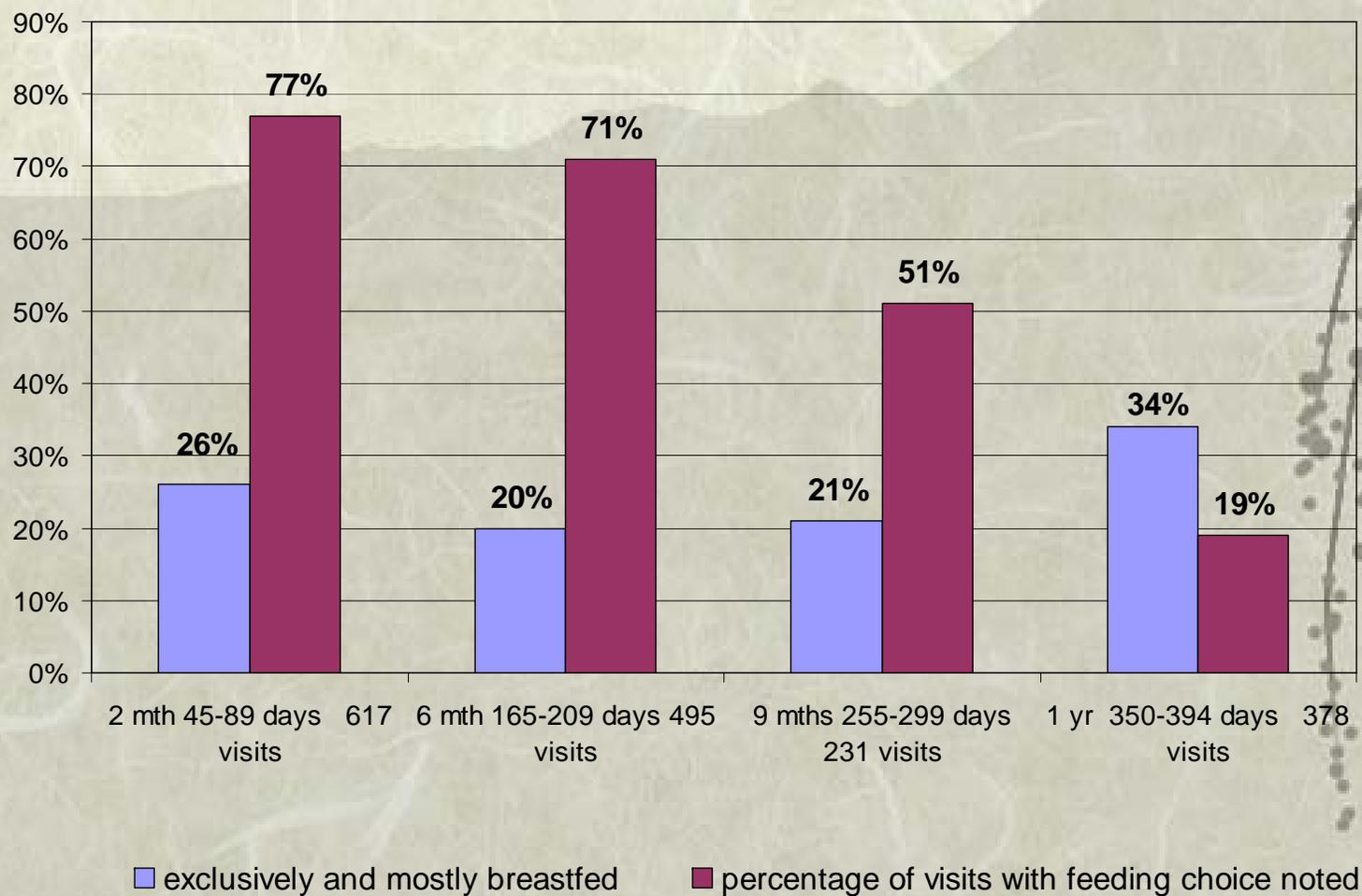
Infant Feeding Tool

Feeding choice definitions are in blue

	Exclusively breastfed Supplemented less than 3 times/week
	Mostly breastfed Supplemented more than 2 times per week
	$\frac{1}{2}$ and $\frac{1}{2}$ - half of feedings are breast milk, half are formula
	Mostly formula
	Exclusively formula fed

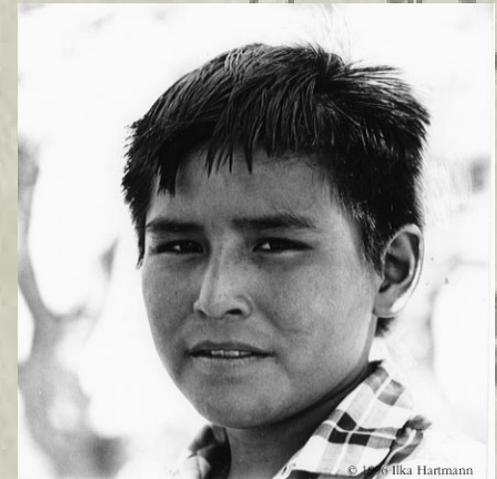
Phoenix Indian Medical Center

2006-2007





Mother's milk is a first step towards less obesity and healthier futures.



Photos courtesy of R Duncan, Navajo WIC program

For more information, please call or email
1-877-868-9473, suzan.murphy@ihs.gov