



The OB-WIC Partnership for Healthy Outcomes  
in Pregnancy: Nutrition, Weight Gain and  
Breastfeeding



# Learning Objectives

## **To increase obstetric providers':**

- Understanding about the importance of counseling the patient about gestational weight gain (GWG), and the consequences of maternal obesity
- Awareness of IOM guidelines for maternal weight gain during pregnancy and how WIC supports these guidelines
- Knowledge of the WIC Program scope of nutrition and breastfeeding services for women
- Willingness to refer patients to WIC for early enrollment



# Outcomes Associated with Maternal Obesity

Obesity →

- Infertility/SAB
- Fetal anomalies
- Inaccurate imaging
- Gestational diabetes
- Pre-eclampsia
- Preterm labor and Post dates
- SGA and Macrosomia
- Stillbirth
- Cesarean delivery
- Wound complications
- DVT/PE
- Breastfeeding difficulties
- Mood disorders
- Childhood obesity



# Lifestyle Interventions May Improve GWG

Recent European studies demonstrate that it is possible to motivate women to limit gestational weight gain

- Provided obese pregnant women with individualized diet and exercise counseling
- Decreased GWG by 6-7 kg (Claesson et al. 2008, Wolff et al. 2008)

US Studies show some promise

- Lifestyle interventions have resulted in 7 fewer lbs of GWG (Asbee, 2009)



# Evidence of Behavioral Change



WIC's "Healthy Habits campaign motivated participants to choose healthier foods."



# 2009 IOM Weight Gain Guidelines

**TABLE 1: NEW RECOMMENDATIONS FOR TOTAL AND RATE OF WEIGHT GAIN DURING PREGNANCY, BY PREPREGNANCY BMI**

Prepregnancy BMI	BMI <sup>+</sup> (kg/m <sup>2</sup> )	Total Weight Gain (lbs)	Rates of Weight Gain* 2nd and 3rd Trimester (lbs/week)
Underweight	<18.5	28–40	1 (1–1.3)
Normal weight	18.5–24.9	25–35	1 (0.8–1)
Overweight	25.0–29.9	15–25	0.6 (0.5–0.7)
Obese (includes all classes)	≥30.0	11–20	0.5 (0.4–0.6)



# WIC Aligns with ACOG

- Both monitor a prenatal woman's weight gain using the IOM 2009 Guidelines
- Both support ACOG Education Pamphlet AP119 recommendations for [Exercise During Pregnancy](#)
- Both support ACOG Education Pamphlet AP001P recommendations for [Nutrition During Pregnancy](#)



# What is WIC?

WIC is the nation's premier public health nutrition and breastfeeding program.

In San Diego County, there are more than 50 Registered Dietitians and 100 lactation educators on staff to serve WIC participants.

*WIC shares your goal of helping our families learn how to eat well and how to create healthy habits for life!*



# Who is Eligible?

## Income

- Set by the USDA
- 185% of the federal poverty level (a family of 4 can earn over \$40,000/yr. and still qualify)
- Must provide proof of income, but not assets

## Residence

- Must provide proof of state residency
- U.S. citizenship is not required to participate in WIC

## Nutritional Need

- Almost everyone has one

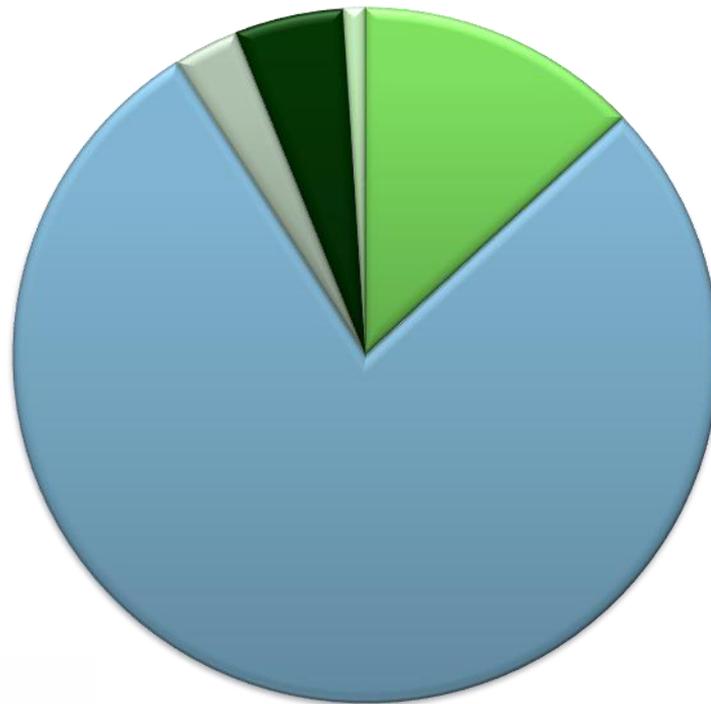


# Who is Eligible?

- Pregnant women
- Breastfeeding women up to **one year** postpartum
- Non-breastfeeding and mostly formula feeding women up to **six months** postpartum (including S/P SAB or TAB)
- Infants and children up to age 5, including **foster children**
- Children up to age 5 living with **single fathers**



# 13% of Women on WIC in San Diego have Private Insurance



- Private Insurance
- Medi-Cal
- Healthy Families
- No Insurance
- Unknown



# Not all WIC Participants have Medi-Cal

You see more women who are eligible for WIC than you know.

A young woman who is working and getting private insurance coverage at her job may have a toddler, a baby on the way, and a husband who is unemployed. This is a typical WIC family.

*These are the mothers who benefit from early enrollment in the WIC Program. Applicants can be screened by phone to determine the likelihood of eligibility!*



# What Does WIC Provide?

- Checks for nutritious foods
- Nutrition education and counseling
- Breastfeeding support and information
- Referrals to community resources



# WIC Food Packages Have Changed

For the first time since WIC began in 1974, the food package was updated in 2009.



# Exclusive Breastfeeding = more choices for mom and baby!



Fully Breastfeeding Mom – up to 12 months



Infant 6-11 months

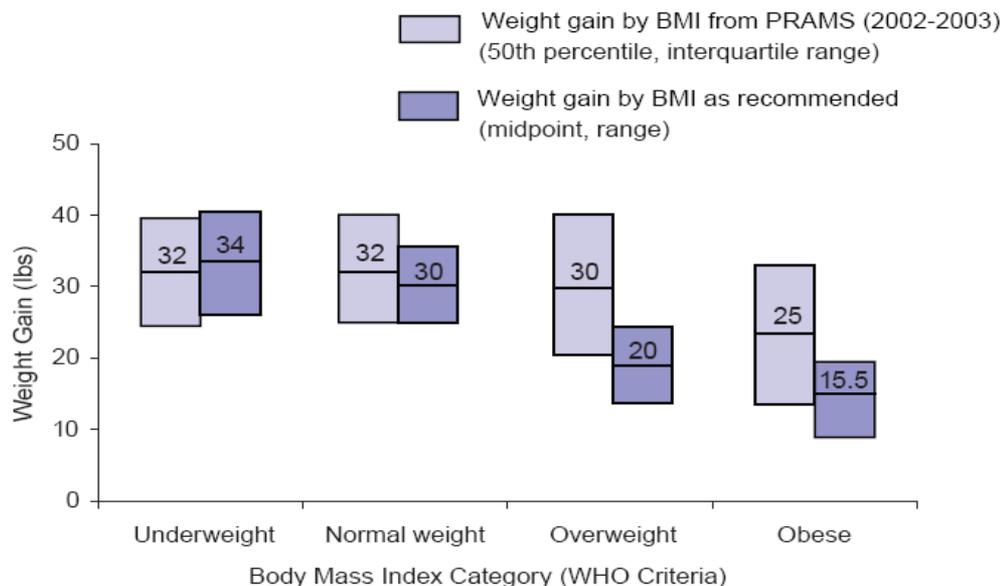


# What questions do you have about WIC Food Packages?



# Gestational Weight Gain Compared to Guidelines

**FIGURE 2: CURRENT TRENDS IN WEIGHT GAIN DURING PREGNANCY COMPARED TO THE RECOMMENDED GUIDELINES**



*Comparison of weight gain by BMI category between data reported in the Pregnancy Risk Assessment Monitoring System (PRAMS), 2002-2003, and weight gain as recommended in the new guidelines. The number in the center represents the midpoint, and the boxes represent the ranges in weight gain for each body mass index (BMI) category.*

# Pregnancy Assessment in the OB Clinic

## ***Consistent Messaging Between OB and WIC is Vital!***

- Measure Height and Weight
- Calculate pregravid BMI
- Set weight gain goal IOM 2009 and explain importance
- Monitor GWG pattern
- Assess Diet and Physical Activity
- Support Nutrition and Physical Activity ([mypyramid.gov](http://mypyramid.gov))
- Refer to WIC for early enrollment
- Recommend exclusive breastfeeding unless contraindicated



# WIC Supports the Obstetric Provider by:

- ✓ Counseling about healthy pregnancy outcomes during **motivational interviews**
- ✓ Developing a **personal health plan** with the woman
- ✓ Recommending that the woman shares her goal with her obstetric provider for **reinforcement**
- ✓ Using the WIC Prenatal or Postpartum Referral Form as a **tool of communication**



# WIC Supports the Obstetric Provider by:

- ✓ Recommending that the postpartum woman finish her prenatal vitamins and minerals
- ✓ Reminding the postpartum woman to make and keep her four--six week check-up
- ✓ Observing for signs of postpartum depression
- ✓ Discussing weight loss tips to return to pregravida or optimal weight
- ✓ Encouraging healthy activity



# Exercise in Pregnancy and the Postpartum Period

- Exercise is healthy & prevents GDM
- $\geq 30$  min/day moderate exercise 5 times per week
- Avoid supine position with exercise
- Avoid trauma, fall risk, and scuba
- If no obstetric or medical contraindications





What questions do  
you have about  
Weight Counseling  
at WIC?



# The simple act of a physician encouraging breastfeeding...

- 73% of **all** women reported having received encouragement to breastfeed from their obstetric provider
- 74.6% of **these** women initiated breastfeeding
- Only 43.2% of women **who were not** encouraged to breastfeed initiated breastfeeding



# ...can make an impact on a woman initiating breastfeeding!

Among <25 year olds, lower educated, lower income (less than \$20,000) women:

- Approx 60% breastfed **if encouraged**
- Approx 30% breastfed **if not encouraged**
- Only 11% of single women breastfed **without encouragement**

**This population would be similar to our WIC population**

(Lu et al. 2001)



# How does this impact WIC?

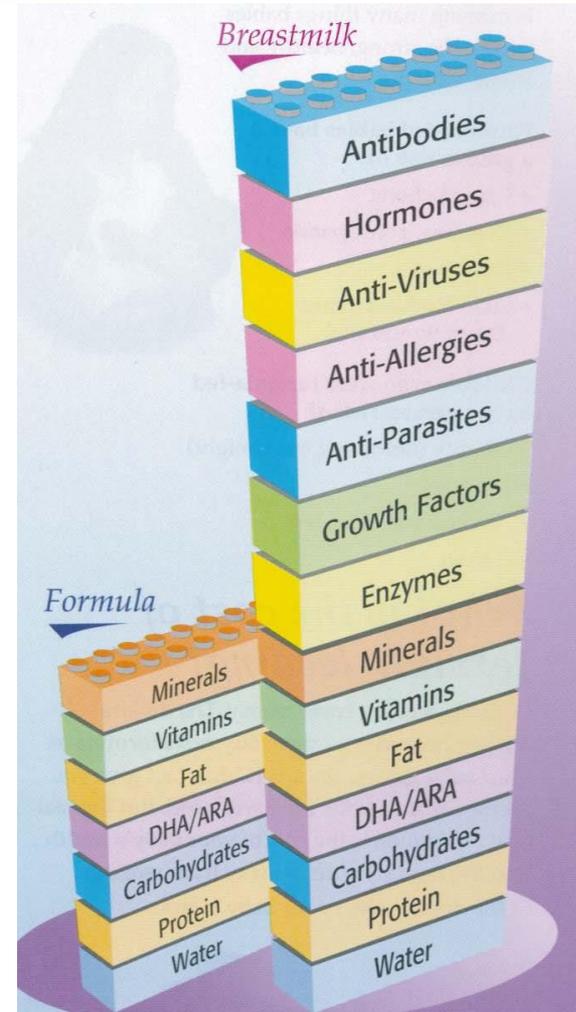
“...we found that provider encouragement exerted a consistent and powerful influence across the board...Provider encouragement, by itself, increased the likelihood of breastfeeding more than threefold among young, low income, and less educated women; nearly fivefold among black women; and nearly 11-fold among single women.”

(Lu et al. 2001)



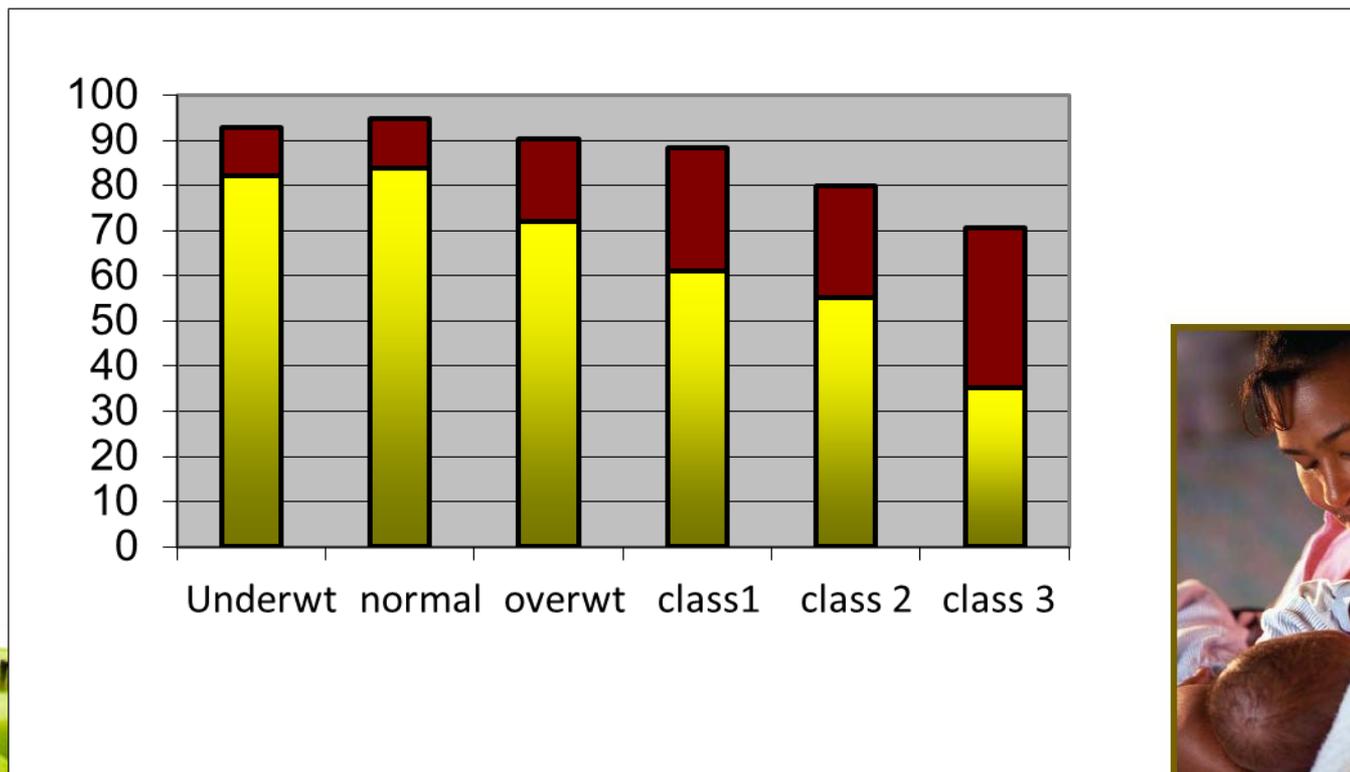
# The Benefits of Breastfeeding

- Fewer ear infections
- Less diarrhea or constipation
- Fewer incidents of pneumonia
- Less risk of SIDS
- Less childhood obesity
- Less allergies and asthma
- Less risk of childhood cancer



# Maternal Obesity Affects Lactation

Pre-pregnancy BMI is associated with breastfeeding discontinuation

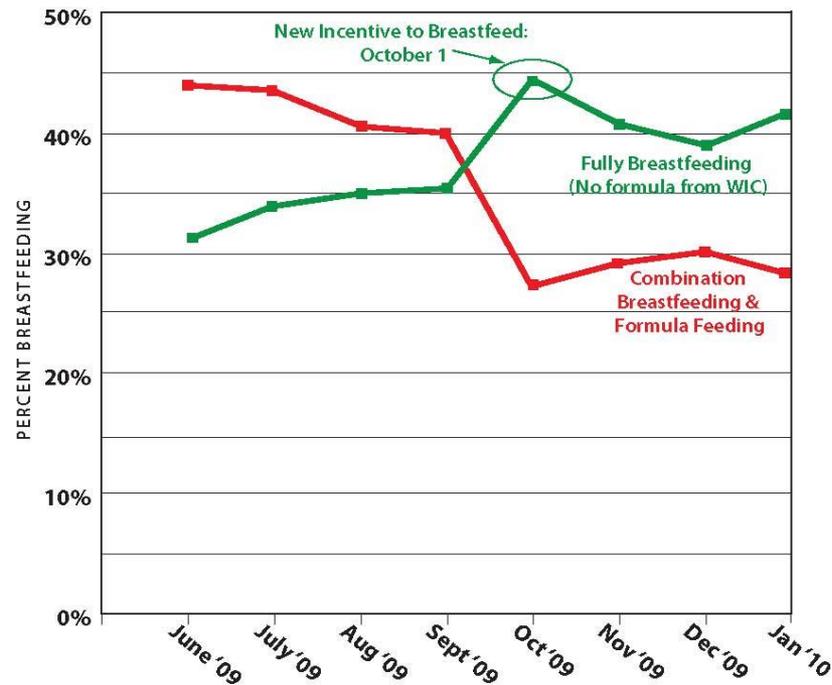


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# 2010 Exclusive Breastfeeding Rates Increased Significantly in WIC Program

## Improved Breastfeeding Rates with New WIC Foods



BREASTFEEDING RATES AT NEWBORN ENROLLMENT INTO WIC

PHFE-WIC data Los Angeles and Orange Counties, California June 2009–January, 2010  
~5000 infants per month



# WIC's Breastfeeding Services

- Breastfeeding [Help Line](#) (business hours)
- Individual [counseling](#) with Certified Lactation Educators (CLEs) and some Lactation Consultants (IBCLCs)
- Breastfeeding [education classes](#) prenatally and postpartum
- Peer Counseling Programs [already](#) in some WIC clinics
- Hospital-grade pump loans, [free](#) manual pumps, [free](#) back to work Medela electric pumps, breast pads, lanolin, DVDs, books



# Obstetric Providers and WIC can Reinforce these Messages:

“Babies should be breastfed within one hour of birth”

“Babies are meant to be exclusively breastfed”

“Babies need to breastfeed a lot in the early weeks”

“Cuddling your baby skin-to-skin is important”

“Avoid all bottles and pacifiers for the first thirty days”

“WIC assists parents to be aware of baby behavior—hunger cues, sleeping patterns, body language”



# Obstetric Providers and WIC can Reinforce these Messages:

“Are you breastfeeding? I want to prescribe compatible medications for you.”

“WIC does not routinely issue formula for babies who are breastfeeding in the first month of life.”

“Only offer formula supplementation if medically necessary.”

“You can return to work without using formula. WIC can help you with a pump.”





What questions do you  
have about WIC's  
Breastfeeding Services?



# Obstetric Providers can Partner with WIC by:

- Completely filling in Hematocrit, Hemoglobin, and the date of delivery on the **postpartum form**
- Reminding **ALL** postpartum women that they may receive food packages from WIC for several months regardless of the pregnancy outcome
- **Calling WIC** to request the most recent version of the WIC Prenatal/Postpartum Referral Form





# WIC Postpartum Referral Form

State of California—Health and Human Services Agency

California Department of Public Health  
California WIC Program

## WIC REFERRAL FOR POSTPARTUM / BREASTFEEDING WOMAN

### Health Care Provider:

Please provide the information requested below for your patient. This information will be used by our program staff to assess your patient's health status and to provide nutritional counseling. An incomplete referral may delay program benefits to your patient. A completed referral does not guarantee WIC Program benefits since program eligibility requirements must be met.

Patient's name (last, first)	Address (street, city, ZIP code)	Telephone number	Birthdate
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WOMAN'S CURRENT (After Delivery)	PREGNANCY OUTCOME																	
Height _____ ins. Weight _____ lbs. Hemoglobin _____ gm/dl. and/or _____ Hematocrit _____ %	<table border="1"> <tr> <td>Full-Term</td> <td>Prelm (37 wks.)</td> <td>Sm. Gest. Age</td> <td>Fetal Loss</td> <td>Stillbirth</td> </tr> <tr> <td>1. <input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>2. <input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Full-Term	Prelm (37 wks.)	Sm. Gest. Age	Fetal Loss	Stillbirth	1. <input type="checkbox"/>	2. <input type="checkbox"/>	Delivery date _____/_____/_____ Sex _____ Sex _____	Birth weight _____ Birth length _____ Birth weight _____ Birth length _____								
Full-Term	Prelm (37 wks.)	Sm. Gest. Age	Fetal Loss	Stillbirth														
1. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
2. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
Measurement date _____/_____/_____ Blood test date _____/_____/_____	Please describe any medical conditions affecting the infant(s): _____																	

<b>PLEASE INDICATE ANY MEDICAL CONDITIONS AFFECTING THIS WOMAN.</b> <input type="checkbox"/> C-Section <input type="checkbox"/> Diabetes <input type="checkbox"/> Hypertension <input type="checkbox"/> Tuberculosis <input type="checkbox"/> _____ _____PPD _____INH <input type="checkbox"/> Other conditions occurring during this pregnancy or delivery (specify): _____ <input type="checkbox"/> Other current or historical medical conditions (specify): _____	<b>PLEASE LIST ANY CURRENT MEDICATIONS/SUPPLEMENTS PRESCRIBED:</b> _____ _____ <b>IMPRESSIONS/COMMENTS:</b> _____ _____
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<b>LOCAL WIC AGENCY</b> _____ _____	Name of physician/health care provider/group/clinic _____ Telephone number: _____ <b>IMPORTANT:</b> Must be signed by health care provider _____ Date _____
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What questions  
do you have about the  
WIC  
Prenatal/Postpartum  
Referral Forms?



# Questions or Comments?

Other ideas for how we can collaborate  
to help moms and babies  
live healthier lives?

[joanne.drinkwater@sdarc.org](mailto:joanne.drinkwater@sdarc.org)



# Where can I refer my patients?

**American Red Cross WIC**  
**800.500.6411**

**North County Health Services WIC**  
**888.477.6333**

**San Ysidro Health Services WIC**  
**619.426.7966**

**Scripps Mercy WIC**  
**619.260.3400**

**SDSU Research Foundation WIC**  
**888.999.6897**

