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CHILDREN'S HOSPITAL

CDC-WHO Grow Curves

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Objectives

- Why the WHO charts (0<24mos)
- Compare CDC & WHO charts
- Changes to existing risks & new risks
- Assessing & counseling participants
- When provider's info differs from WIC

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Background

Growth charts follow growth over time

Data used to

determine if
length and weight
are "on-track"



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Why change to new growth charts?

Breastfeeding Friendly

Childhood Obesity

Health Care Providers

USDA requirement



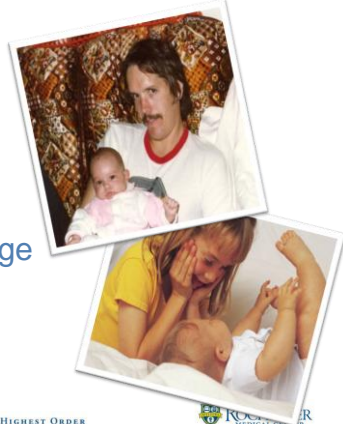
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History of CDC Growth Charts

- Only used in U.S.
- Describe growth of children in U.S.
- WIC currently uses for age 0-5 years



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Problems With CDC Growth Charts

- Inconsistent data
- Didn't consider things affecting growth
- Few breastfed infants



(WIC will still use CDC charts for ages 2-5)

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History of WHO Growth Charts

- International
- Standardized weighing and measuring
- Many measurements of same child
- Ideal environments:
 - exclusive or predominant breastfeeding
 - access to health care and immunizations
 - no smoking
 - no preemies or twins



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History of WHO Growth Charts

Oman

Brazil

U. S.

Norway

India

Ghana



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WHO Growth Charts

Feeding requirements:

Exclusive BF \geq 4 months

Solids at 6 months

Continued BF \geq 12 months

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Reference (CDC)

VS.

Standard (WHO)

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Reference

Describes how things *are*



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Standard



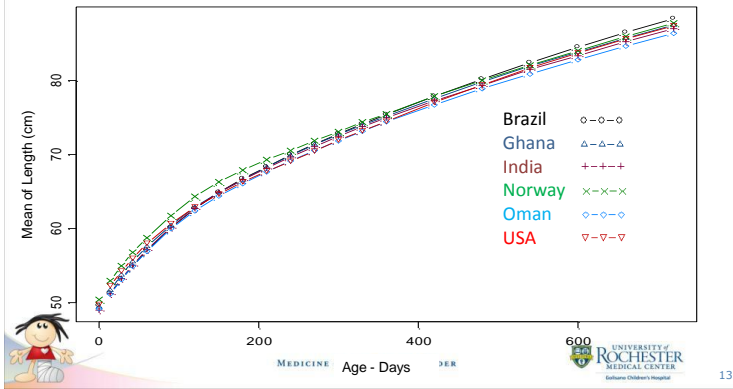
Describes how things *should be*



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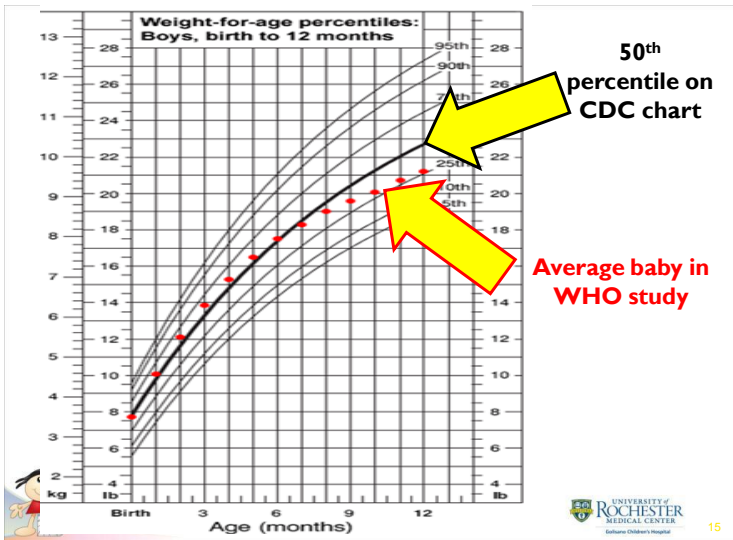
Growth patterns from birth to 24 months from the 6 WHO countries



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Differences Between WHO and CDC Charts

- WHO standards = Optimal growth
- Based on breastfed infants in ideal conditions
- WHO cutoffs at 2nd and 98th percentiles (for 0<24 months)

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Differences Between WHO and CDC Charts

- Fewer infants < 5th percentile on WHO charts
 - Fewer identified as underweight or Failure to Thrive
- More infants > 95th percentile on WHO charts
 - Formula-fed infants tend to gain weight more rapidly



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Recommended

WHO charts
Birth < 24
mos

CDC charts
2 - 19 yrs



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Why CDC for 2+ years?

- 1) Similar Methods
- 2) CDC: 0-19 yrs vs. WHO 0-5yrs
- 3) Length Height



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What would you say?

In your own words **explain** the main **differences** between the CDC charts and the WHO charts, **and why** WIC is changing to the new charts (*for children under 2*)



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Focus on the Positive

- Height catches up to weight
- Portion size
- Feeding Cues
- Healthy behaviors

Talking about a sensitive topic: weight


- Focus on the positive and the whole family
- Choose words carefully
- Use a guide
- Use PCE



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Use PCE to discuss weight

- Explore** – Open the conversation with an open-ended question
- Reflect** – Their thoughts or feelings
- Offer** – Brief important information
- Explore** – What they think about this information




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Motivational Interviewing

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Use Patient-Centered Communication - Motivational Interviewing

A client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence

Based on behavior change theory and clinical research:

- Stages of Change Model, DiClemente & Prochaska, 1998
- Motivational Interviewing, Miller and Rollnick, 1991

The goal is to facilitate fully informed, deeply contemplated, and internally motivated choices, not necessarily to change behavior



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Summary of guidelines for pediatric obesity prevention and management

Summary of guidelines for pediatric obesity prevention and management

Level of care	Patient characteristics	Provider
Primary prevention	Applicable to all pediatric patients	Primary care provider (PCP)
Prevention plus	Mildly affected patients	PCP
Structured weight management	Moderately affected cases or those who have failed to respond to the lower level of care	PCP with additional training



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Treatment Overview

Treatment Goals

- Behavioral Goals and Parenting Skills
- Self Esteem and Self Efficacy
- BMI Velocity, Weight Loss Targets and BMI %ile

A Staged Approach

- Prevention Plus
- Structured Weight Management
- Comprehensive, Multidisciplinary Intervention
- Tertiary Care Intervention



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Treatment Goals - Health Behaviors

Lifelong healthy behaviors such as physical activity will improve health outcomes regardless of weight change

Improving self esteem and self efficacy can also improve health outcomes

Small consistent changes over time can make a big difference!

- Consistent behavioral changes averaging 110 to 165 kcal/day may be sufficient to counterbalance the energy gap which leads to excess weight gain in some children.
- Changes in excess dietary intake (eg, eliminating one sugar-sweetened beverage at 150 kcal/can) may be easier to attain than increases in physical activity levels (1.9 hours walking for an extra 150 kcal).



Pediatrics Vol. 118 No. 6 December 2006 pp. e1721-1733
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How do we counsel families/patients

Good Intentions + Advice-giving +
 Convincing
 =
 Commitment to behavior change (5%)
 and
 Resistance or lack of
 real intention to change (95%)
 SO



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With regards to quitting, at any given time
 the population of smokers are.....

Not Ready

Ready



85-90%

10-15%



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But as practitioners, we often act as if....

Everyone's Ready



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Don't give advice, ask permission 1st



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Pre-contemplation

"Mrs. T, It's great to see you and Tom here today. In looking at Tom's growth chart I noticed that his weight has increased 30 lbs this last year."

"Tom takes after his father, they are all big boned"

"If you look at his point on the BMI chart (explain chart), Tom's BMI is in the part of the curve where he is at risk for health problems, like diabetes and high blood pressure and I see that both his grandmothers have diabetes."

"Well, Tom is really healthy" "But sometimes, I worry about the diabetes in the family"

" Would you be interested in keeping track of some of things in Tom's diet that might increase his risk for diabetes and we could talk about them? "

"Ok"



Contemplation

Mrs. A comes to clinic with Alice who is 6 years old. Alice's BMI is >95%.

"Mrs. A , I see Alice's BMI (explain BMI) is in the part of the graph where I am concerned about her health now and in the future."

"I've been worried about her weight and her grandmother is starting to make comments about it"



ASK—Don't Tell

- **Ask permission**—Would you be willing to spend a few minutes discussing ways to stay healthy and energized?
- **Ask open-ended questions, listen & summarize**—How do you feel about your weight? What have you tried so far to work toward a healthier weight?
- **Share BMI—Optional**—Your current weight puts you at increased risk for developing heart disease & diabetes. Your BMI is at the ____%.
The recommended level for your age is ____%. What do you make of this?
- **Negotiate the agenda**—There are a number of ways to help you achieve a healthy weight like 5-2-1-0. Is there one of these you'd like to discuss further today?
- **Assess readiness**—On a scale of 0-10, how ready are you to consider ____? Why a ____ (#chosen)? Why are you a ____ and not a (backward)/(forward)?
- **Explore ambivalence**—Normalize the behavior.
What are the things you like / dislike about ____?
What are the advantages of keeping things the same /making a change?
- **Summarize**—Let me see if I understand what you have told me so far.
Did I get it all? Did I get it right?
- **Close the encounter**—*Show appreciation. Offer advice, emphasize choice, and express confidence.* Our time is almost up. Thank you for being willing to discuss ____.
I strongly encourage you to _____. The choice is of course entirely yours.
I am confident that if you decide to _____ you can be successful.
- **Confirm next steps**—Follow up appointment / Referral to specialist.



Readiness Ruler

On a scale from 1-10, how concerned are you that your child's weight is in a healthy range?
How ready are you to make a change toward a healthier lifestyle?

Not Ready ----- **→ Ready**

0 1 2 3 4 5 6 7 8 9 10									
Stage of Readiness					Key Questions				
Not Ready 0-3 Raise awareness Elicit change talk Advise & encourage					Would you be interested in knowing more about ways to stay healthy? • How can I help? • What might need to be different for you to consider a change in the future?				
Unsure 4-6 Evaluate ambivalence Elicit change talk Build readiness					• Where does that leave you now? • What do you see as your next step? • What are you thinking/feeling at this point? • Where does _____ fit in your future?				
Ready 7-10 Strengthen commitment Elicit change talk Facilitate action planning					• Why is this important to you now? • What are your ideas for making this work? • What might get in the way? How might you work around the barriers? • How might you reward yourself along the way?				

Provided By The Finger Lakes Obesity Collaborative for Kids
Adapted from the Permanente Medical Group Inc, Northern California Regional Health Education



Decisional balance tool

Thinking About The Costs and Benefits of Change		
What specific behavior change are you considering? <u>bolusing</u>		
	STAY THE SAME	MAKE SOME IMPROVEMENT
BENEFITS	I like: ~More time with my friends ~Don't have to think about my diabetes	I will like: ~Increased freedom ~Knowing that I am taking care of myself ~not waking up at night to go to the bathroom ~not getting in trouble with my parents
COSTS	I don't like: ~Parents nagging me ~Increased urination and fatigue, ~worrying about my health	I won't like: ~Taking time out of my day to do bolusing

Create some ideas and reflections for each of the four boxes above. This will help clarify your thoughts about what you want to do next.



Welch G et al. Diabetes Spectr 2006;19:5-11

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Office-Based Motivational Interviewing to Prevent Childhood Obesity

Nonrandomized clinical trial involving 91 children ages 3-7 years with a BMI 5-94%ile and a parent BMI > 30

15 pediatricians and 5 RD's assigned to...

- Control – standard care
- Minimal Intervention – 10-15 minute MI session with MD, 1 month after well child care visit
- Intensive Intervention – Minimal + 45-50 minute MI session with RD, 6 months after well child care visit

BMI%ile decreased 0.6% (control), - 1.9% (minimal), - 2.6% (intensive)



Arch Pediatr Adolesc Med. 2007;161:495-501

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Key Points of “MI”

Motivation to change is elicited from the client, not imposed from outside forces

Direct persuasion is not an effective change method

Counseling style is generally quiet and elicits information from the client

Readiness to change is not a trait of the client, but a fluctuating result of interpersonal interaction



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Thank you Questions?



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