

Calories to Gut, What to Cut: Nutritional and Surgical Approaches to Treating Obesity

“The Nutritional Approach”

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“The Nutritional Approach” Objectives

- Recognize how we can prevent childhood obesity through health eating habits
- Review healthy eating habits and indicate how to convey them to our patients
- Describe tools and access obesity risks and address nutrition plans and education for these patients



“The Nutritional Approach”

Stop Childhood Obesity



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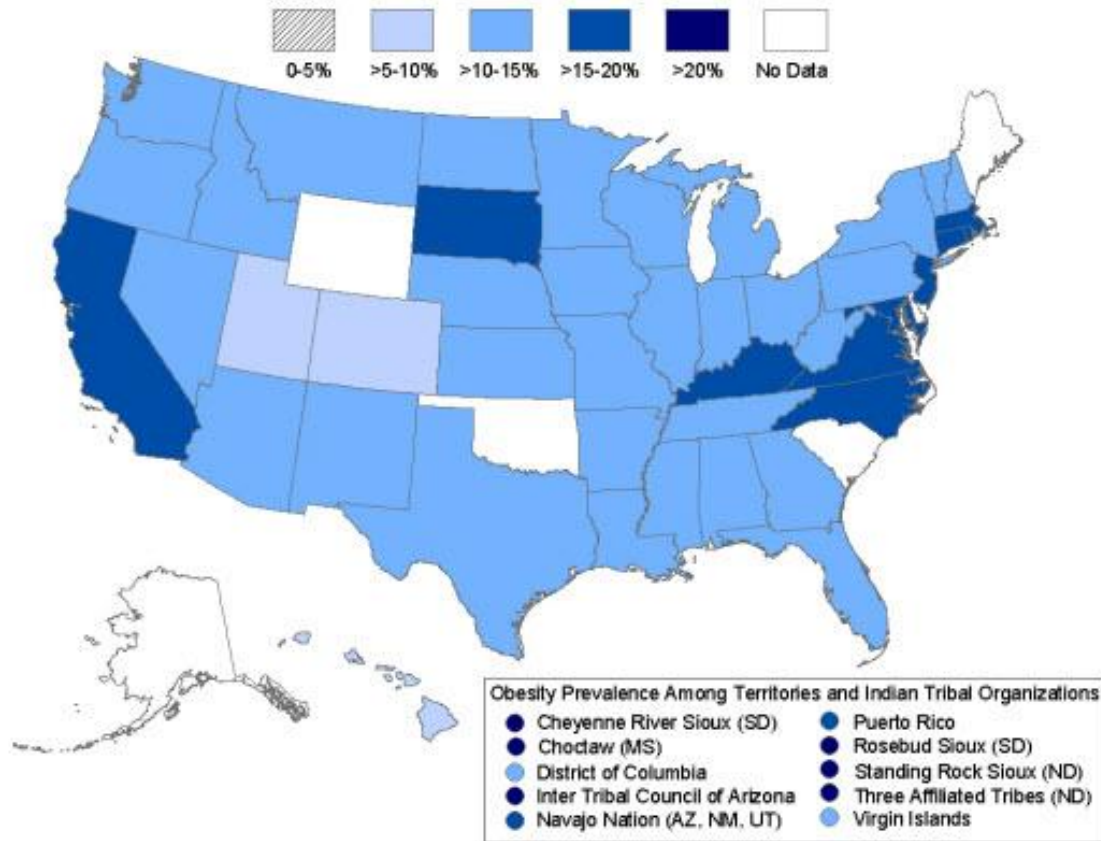
Obesity in the U.S. is the #1 Public Health Challenge

“Obesity Tsunami”

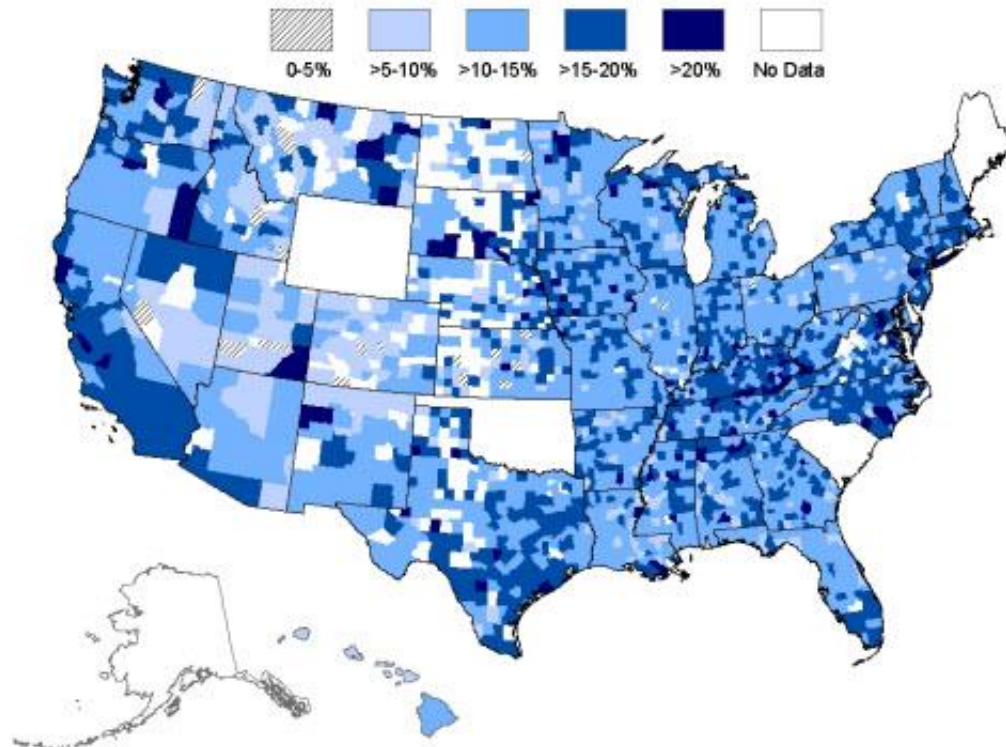
- \$75 billion/year and going -



2011 State Prevalence Among Low-Income Children Aged 2-4 Years



2009 – 2011 County Obesity Prevalence Among Low-Income Children Aged 2-4 Years



The Waves are High

- **Childhood obesity has doubled***
- **Adolescent obesity has tripled***
- **Lifelong health impact, with slow recovery**

*** - CDC, 2010**



Economics and racial-ethnic disparities are significant

**Increase in low income Hispanic,
American Indians and Alaska Natives**



***“CALORIE IMBALANCE”
is the #1 factor***

**Followed by
genetic,
behavioral, and
environmental factors**



WHY the imbalance?

- A.** The average U.S. child today spends 4 hours sitting at a “screen”
- B.** 5% of children eat NO fruits and drink NO juice
- C.** 6% eat NO vegetables
- D.** 11% drink a can, glass, or bottle of soda, 3 or more times per day



“Physical Activity is a thing of the past!”

- A. 14% of the U.S. children participate in less than an hour of any type of physical activity in a day**
- B. 69% participate in NO type of daily PE activities or sports in their schools**
- C. Children over all prefer their computer work and watching TV than physical activity**

-2011 National Youth Risk Behavior Survey



The school environment is a disaster too!

- Only 2% of all schools require daily PE
- 18% of schools have fruits and vegetables available for student purchase
- 77% of schools have soda pop beverages for sale and NO 100% fruit options.



School lunch is on the “recovery”

- **77% offer a choice between two or more different fruits or types of 100% fruit juice**
- **49% do not sell any fried foods**
- **81% offer a salad option or salad bar**



“Childhood Obesity and Research: An ongoing discussion

- **Where we eat**
- **What are we drinking**
- **Types of snacks**
- **Generational stereotypes
“convenience theme”**
- **Portion size**



What We Eat:

The high waters have changed dramatically

- Only 21% of the children are getting enough fruits and vegetables per day
- Nearly 50% of the vegetables children get are fried
- Milk consumption has decrease to an all time low in children
- 30% of children are skipping breakfast



Role of the Media and Marketing!

“Money Talks!”

Can “we” talk like them??



Prevention for the Future!

Intervention is NOW!



Exercise

Exercise is as important as diet!

1 hour/week = 1.8% decrease in BMI



Healthy Weight – it's not a diet, it's a lifestyle!

BMI Percentile Calculator for Child and Teen (English Version)

This calculator provides BMI and the corresponding BMI-for-age percentile on a CDC BMI-for-age growth chart. Use this calculator for children and teens, aged 2 through 19 years old. For adults, 20 years old and older, use the Adult BMI calculator.

Birth Date

Date of Measurement

Sex

Boy ☒ Girl ☒

Height, to the nearest 1/8 inch:

feet inches, fractions of an inch (12 inches= 1 foot; Example: 4 feet, 5 ½ inches)

Weight, to the nearest ¼ (.25) pound:

pounds fractions of a pound (8 ounces= ½ pound; Example: 75 ¾ pounds)

Calculate

<http://apps.nccd.cdc.gov/dnpabmi/>



Predicted probability of childhood obesity from traditional risk factors

Calculator for predicted probability of childhood obesity from traditional risk factors in the NFBC1986

Enter the variables values and get the predicted probability

- Maternal BMI*
- Paternal BMI*
- Number of household members
- Maternal professional category
 - ☐ Unskilled/apprentice/unemployed
 - ☐ Skilled-manual
 - ☐ Skilled-non manual
 - ☐ Professional/entrepreneur
- Gestational smoking
 - ☐ Yes
 - ☐ No
- Birth weight

Predicted probability: %

*BMI= Body Mass Index (Weight in kg/Height*Height in m)

<http://files-good.ibl.fr/childhood-obesity/>



Exercise

Make exercise a family priority

Biking

Daily walks

Weekend trips

“Leave cell phones and tablets at home”



Inventory the total child-family environment

- **Home**
- **Community**
- **School**
- **Childcare Settings**
- **Friends**
- **Retail markets**
- **Faith based institutions**
- **Government agencies**
- **Media**
- **Restaurants/Food & Beverage spots**
- **Entertainment industry**
- **Medical home**



*Parents **MUST** be involved*

- **Limit TV or computer use to no more than 1 or 2 hours a day**
- **Visit childcare facilities and schools to see food served**
- **Limit sugar, fat, and salt**
- **Increase fruits and vegetables (INTRODUCE EARLY)**
- **Serve WATER, not SODA**
- **Exercise daily**



Recent Insights

- **Extreme consumption of high-calorie, sugar-sweetened beverages on a regular basis**
 - **Clear link between consumption and high sugar beverages**
- **Crisis of childhood obesity in U.S. is exacerbated by the high consumption of soda and artificially colored, sweetened beverages and decreased consumption of water, milk and 100% juice**



Efforts of RTW Foundation and AHA

November 2012

Reverse childhood obesity epidemic by 2015

- **Improve quality of snack foods and beverages in schools**
- **Reduce sugary beverages**
- **Protect children from unhealthy food and beverage marketing**



Challenges to the recommendation

- **Costs of healthy foods**
- **Access to parks and safe playgrounds**
- **Increasing the time for PE in schools**



Some practical advice

- **NEVER SKIP BREAKFAST**
- **Make low-sugar cereals more appealing to children and adolescents by adding fresh fruit; do to oatmeal too (2x week)**
- **Stir in granola to yogurt**
- **Mix raisins and wheat germ into low-fat cottage cheese**
- **Read labels**
- **Use whole grains**
- **Fortify recipes – oatmeal is great for this**



Start Early

- New epigenetics research
- Increase plant foods for the entire family
- Shop with the children
- Use farmers' markets
- Involve children with food preparation
- Use fresh or frozen vegetables, NOT canned



Start Early

- Use quinoa
- Popcorn is good
- Use whole grains
- Eat more beans
- Vegetarian on occasion is good
- Fish 2-3 times a week
- Snack on nuts



Tricks of the Trade

- Use hunger as an opportunity
- Add unfamiliar healthy foods to dishes children already like
- Encourage parents to set a good example
- Make eating fun
 - *Meatless Monday*
 - *Tiger Tuesday*
 - *Wishful Wednesday*
 - *Tender Thursday*
 - *Fish Friday*
 - *Selective Saturdays*
 - *Sunny Sundays*



Summary

- Beating the tsunami must be a team activity – “patient-centered medical home”
- Principles of Public Health Preparedness must be practiced
 - Planning
 - Preparedness for any occasion
 - Mitigation for when there are hard choices
 - Response with alternative
 - Recovery for the future



Take-home messages for our practices

1. Know the child, family, and background
2. Stress a “metabolic” makeover
3. M & M approach
4. Make this a family issue
5. Food intake and exercise are equal partners

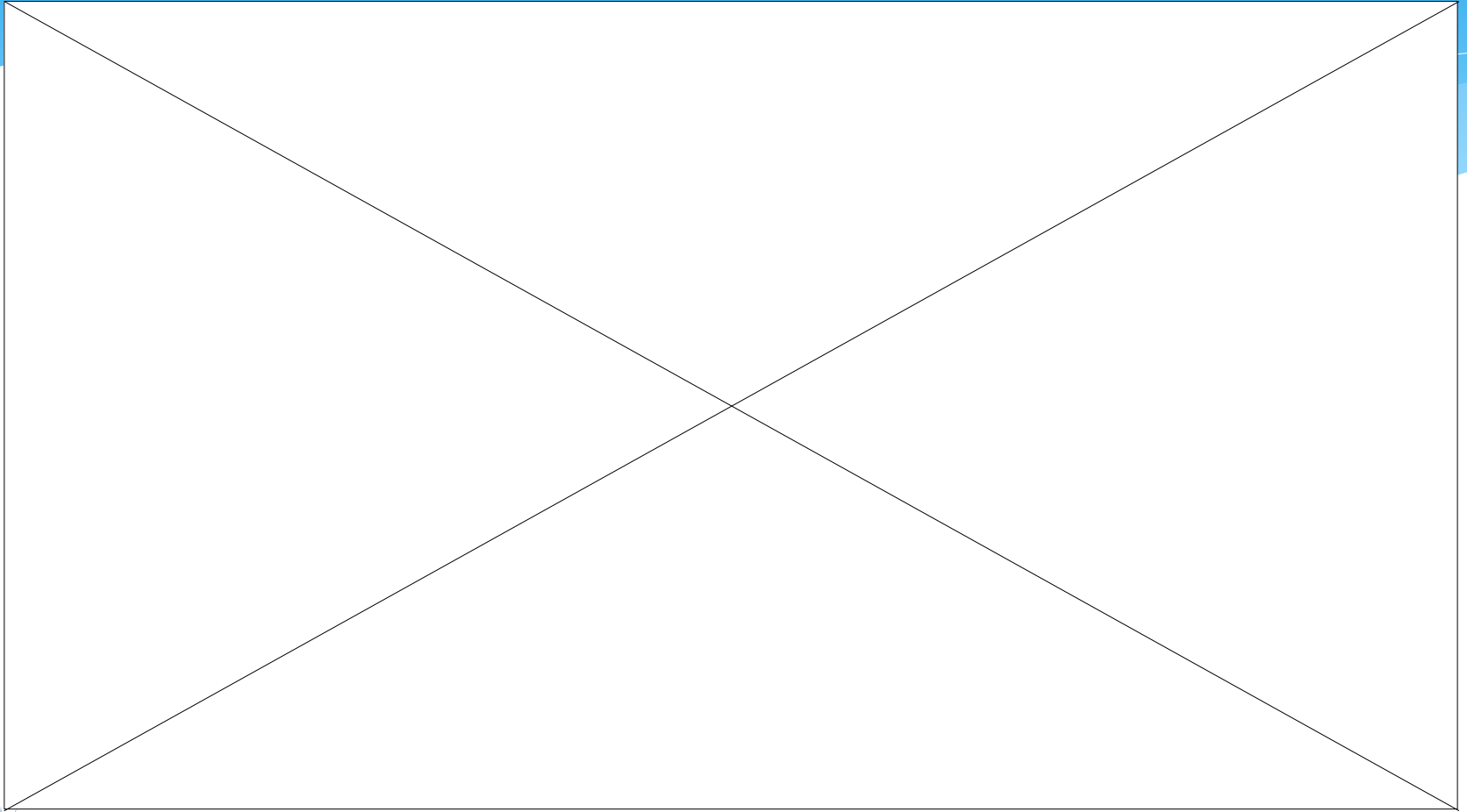


Take-home messages for our practices

6. Think more fruits, vegetables, and water in diet
7. Portion control is “portion control”
8. Stockpile the home with healthier foods
9. INVOLVE parents in the intervention and early prevention



Food for Thought



<http://www.youtube.com/watch?v=6wSlvplOStA>

Closing

The waters of the obesity tsunami for our children are high – they continue to destroy all who come into the path of high calorie, high sugar, high fat, at high salt waves.....Public health practice is needed NOW.

What will be your interprofessional team response?



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Questions/Discussion

