

Optimizing our keiki's health Reducing risk related to unhealthy lifestyles in Hawaii: Turning education to action

May Okihiro, MD MS
Assistant Professor, University of Hawaii John A.
Burns School of Medicine, Department of
Pediatrics

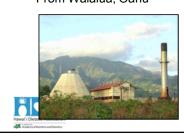
Vaianae Coast Comprehensive Health Center

Objectives

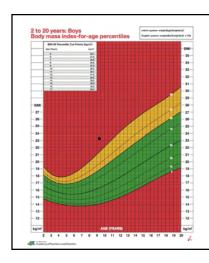
- By the end of the presentation, the participant will be able to:
 - Describe the disparities in childhood obesity prevalence in Hawaii.
 - Describe the rationale behind the Hawaii 5210 Initiative
 - List some of the activities taking place at the clinical and community levels to promote healthy eating and active living among Hawaii's families.

Kanoa

- · 10 years old
- Part-Hawaiian, Chinese, Filipino
- From Waialua, Oahu







- Height: 4 feet 2 inches
- Weight 100 lbs
- BMI is 24
- BMI % for age is 98% = obese

HMSA **oundatio**



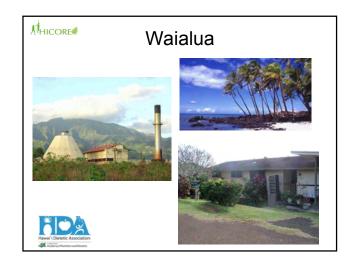
So what?

¹Age BMI ≥ 95% (Girls)	Probability of obesity at 35
	yrs
3-5 years	20-39.9%
6-11 years	40-59.9%
12-20 years	60%



 Higher BMI in childhood --> greater likelihood of obesity later in life

¹Guo et al, Am J Clin Nutr 2002



Kanoa

- · 10 years old
- Part-Hawaiian, Chinese, Filipino
- · From Waialua, Oahu
- · Grandfather died of diabetes at age 60
- Mother had diabetes during pregnancy
- · Mother breastfed but only for 2 weeks

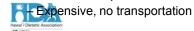




HICORE

Kanoa

- · Lives with mother, 2 sisters, grandmother and aunty
- 3 bedroom house
- · Mother works in Honolulu at Hawaiian Tel
- · Kanoa attends Waialua Elementary School
- Not doing well in reading below average
- · Sometimes does not complete homework - Stays in for recess
- · Interested in sports



HICORE

Screen Time



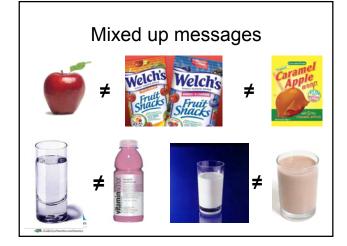
- Number of hours per week kids, ages 6-19 years, spend watching TV 28
- Minutes per week most parents talk with their children = 38
- Children spend more time watching television than in any other activity except sleep
- Average high school graduate spent 15,000-18,000 hours watching TV but only 12,000 hours in school
- Number of 30-second TV commercials seen in a year by an average child: 20,000



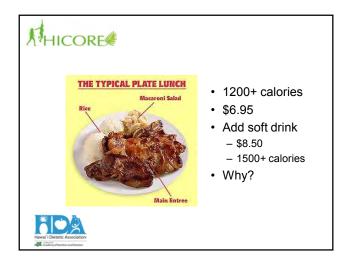
Influence of media

- Child targeted advertisement budget now exceed \$15 billion (2007)
- Goal: emotional connections → establish brand loyalty
- Children ≤ 8 years have difficulty distinguishing between programming and advertisements
 - even if they do recognize an advertisement, they do not understand the intent of advertising to persuad.

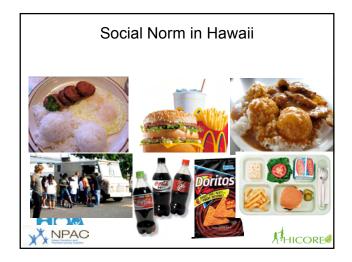






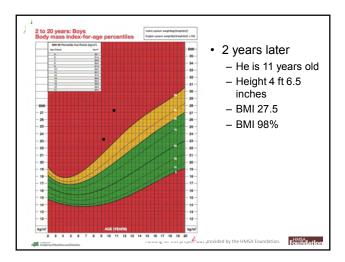






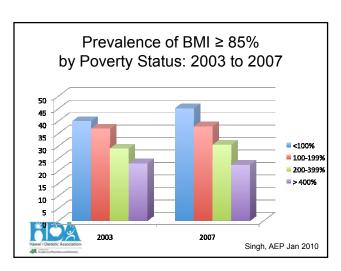


4









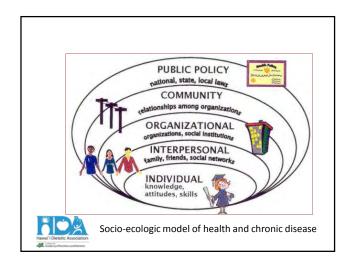
Current State of Hawaii's Children Health

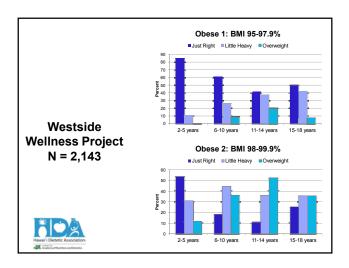
- Unclear no regular BMI surveillance screening
- BMI collected at school entry but data is not analyzed systematically
- Pobutsky et a. Hawaii Medical Journal, Oct 2006
 - Form 14 data at school entry (2002-2003)
 - -N=10,199
 - 28.5% of Hawaii's children at school entry are overweight or obese

HICORE

	% Obese	% OW	% OW/OB
State (N=10,199)	14.4	14.1	28.5
Aiea (N=247)	8.1	17.8	25.9
Castle (N-370)	15.4	13.5	28.9
Farrington (N=483)	15.5	17.2	32.7
Kahuku (N=188)	19.7	16.0	35.7
Kaiser (N=119)	7.6	10.1	17.6
Kalani (N=249	7.6	10.1	20.5
Leilehua (N=553)	13.4	15.9	29.3
Nanakuli (N=148)	17.6	10.8	28.4
Waialua (N=59)	22.0	17.0	39.0
Waianae (N-302)	15.9	14.2	30.1
Waipahu (N=483)	19.9	12.6	32.5

Hawaii (N=1310)	15.1	15.2	30.3
Central Hilo (N=215)	16.3	14.0	30.3
Hilo (N=241)	17.0	14.5	31.5
Honokaa (N=200)	16.5	18.0	34.5
Kau (N-41)	14.6	17.1	31.7
North Kona (N=221)	15.4	13.1	28.5
South Kona (N=120)	8.3	14.2	22.5
Kauai (N=488)	12.5	16.4	28.9
Central Kauai (N=233)	9.0	14.2	23.2
West Kauai (N=141)	14.9	22.0	36.9
Maui County (N=1167)	17.9	13.8	31.7
Baldwin (N=203)	17.2	17.7	34.9
Hana (N=17)	35.3	11.8	47.1
Kekaulike (N=275)	15.6	12.7	28.3
Lahainaluna (N=124)	27.4	17.7	45.1
Lanai (N=30)	20.0	26.7	46.7
Molokai (N=67)	17.9	13.4	31,3





Addressing the Child or Youth and the Family

- The world has changed obesity is one symptom
- · Recognize what is important:
 - To the Parent:
 - · Family history, Long term health
 - Control
 - To the child
 - · Being cool and like everyone else
 - Having choice. Being positive

Consider avoiding the Ohhh words

The child and family

- · Emphasize family goals
- Emphasize family and healthy living vs. weight/BMI
- Increase confidence and self-efficacy
- Strategize how to make goals work (ie: Parenting)
 - Parents Control what you can control
 - Parents decide what is served and when it is served



Strategies (ie: parenting)

- · Give parents permission to set limits
 - Encourage consistency
 - Recognize difficulty new behavior for parents
 - Choose limits that they can stick to
 - Ex: To cook only 1 main dish vs. 2 or 3
- Give parents permission to say NO or to do the tasks they think are best
 - Ex: Not buying juice
 - Ex: Not buying the candy at the check out



HICORE

Strategies - Parenting

- · Celebrate success
- Life long process
- Anticipate difficulties and that you want to see them back NO MATTER what



Reducing Childhood Obesity Through Policy Change:

A Framework for Action

- · Addressing socioeconomic factors
 - Poverty, education
- Changes to the social and physical environment so that default choices are healthy ones
- Clinical interventions
- Education and counseling



Frieden, Dietz, Collins – Health Affairs, March 2010

Framework for Action Social and Environmental Changes

- Increasing Physical Activity: Policies that make physical activity easier, safer and more attractive
 - Increasing active transportation and recreation
 - Community design (sidewalks, bike paths)
 - -Reducing sedentary behavior





Social and Environmental Changes Food Policies

- · Altering relative food prices
 - Sugar-sweetened beverage tax
 - Incentives to local farms to grow fruit and vegetables
 - Coupons so fruits and veggies are relatively less expensive
- Shifting our exposure to food
 - Ensuring the supplies of fresh drinking water
 - Expand availability of fresh and healthy foods
 - Remove unhealthy food from schools, health care facilities
- Improving the image of healthy food while making unhealthy food less attractive

Restrict food advertising targeted at children

Hamari Director Association

att Comments Voluntary ad restrictions, banning ads, counter-advertising



Target Behaviors Sweetened Beverages

- Soft drinks account for 1/2 of all added sugar intake in US diets
- Study of 4th and 5th graders sweetened beverages accounted for 51% of average daily intake of beverages consumed
- SSB are the single largest contributor to calorie intake in the

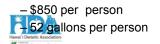






Sugar Sweetened Beverages

- 1 of every 4 drinks consumed in American are carbonated beverages
- In 2004, Americans spent \$66 billion on carbonated beverages (and billions more in noncarbonated soft drinks)





SSB Tax

- Studies demonstrate that changes in the relative prices of foods and beverages lead to changes in how much people consume
- Several studies estimate at a 10% increase in SSB price (about 1 cent/ounce) could reduce consumption by 8-11%
 - ✓ consumption by 8,000 calories/person/year
 → 2.3

 lbs of weight gain/year
 - This would be likely the single most effective measure to reduce the obesity epidemic





Hawaii Dept. of Education Wellness Guidelines

- Required by P.L. 108-265 (2004) as a condition of participating in the National School lunch program.
- · BOE Health, Wellness, and Safety Policy 1110-6 (2006)
- DOE Wellness Guidelines (2007)



Components of the Wellness Guidelines

- · School-level committee or council
- Nutrition standards
- · Nutrition and health education
- Physical activity
- Professional Development
- Monitoring

ee DOE Wellness Toolkit Online For More Info:http://doe.k12.hi.us/foodservice/toolkit/index.htm

10

Criteria for Snack Foods (per serving)

 Calories 200 calories Total Fat < 8 grams Saturated Fat < 2 grams</pre> Trans Fat **ZERO** Sodium < 200 mg Sugar < 8 grams</pre> Dietary Fiber

(recommended)

2 grams

Criteria for Beverages

All Students

- •Water
- •Nonfat and low-fat (1%) milk in 8-oz. portion
- •100 percent fruit juice in 4-oz. portion
- Caffeine-free

High School Students After School Only

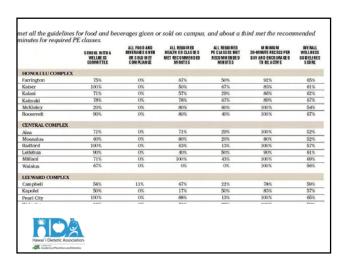
- ·Caffeine-free, non-fortified beverages with less than 5 calories per portion
- ·Sports drinks for athletes participating in more than one hour of physical activity

Timeline

- DOE released guidelines electronically in September 2007.
- Full implementation by school year 2011.



41





- 5 fruits, roots and veggies
- 2 hours or less of screen time
- 1 hour or more of physical activity
- 0 No sugary beverages every day





Healthy Breakfast Consumption

- Kids who eat breakfast
 - Have healthier weight
 - Improved school attendance
 - Have more focus and energy
 - Do better on standardized tests
 - Have improved classroom behavior



2012 HDA Conference Presentation 5 of 8

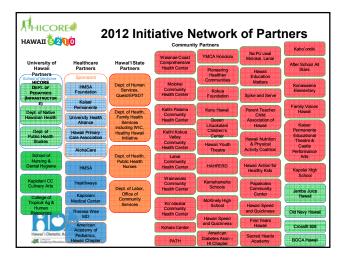
11

Adequate Sleep

- Adults and children who don't get enough sleeps have higher risk of obesity, chronic disease, poor focus and attention.
- Children who get adequate sleep are more likely to do better academically

Sleep Needs
14 to 15 hours
11 to 13 hours
10 to 11 hours
8.5 to 9.5 hours
7 to 9 hours









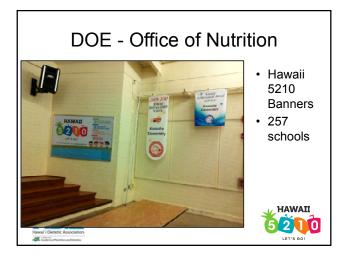


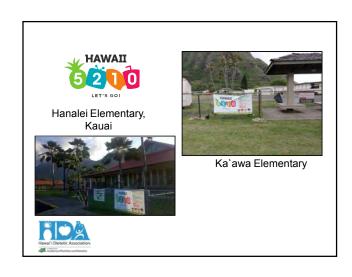


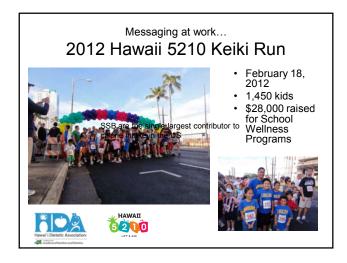






















Hawaii 5210 Go! Kits

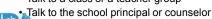
- Resource toolkit to assist healthcare providers and other community members to link with schools and parents
- Focus
 - DOE Wellness Guidelines that we can impact
 - Initial focus Breakfast, sleep
 - Subsequent other 5210 behaviors

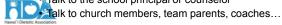




We Need YOU!

- You have more power to influence that you think
- Maximize your positive influence in the clinic and community
- Helping to influence policy and systems
 - It takes less time than you think
 - Sign a petition
 - Email a form letter
 - Talk to a class or a teacher group





2012 HDA Conference Presentation 5 of 8

HAWAII

5210

Thank you!

- Acknowledgement: Our funders
 HMSA, Kaiser Permanente, UHA
- www.hicore.org
- Hawaii5210.org
- Contact
 - okihirom@hawaii.edu



