Building a Culture of Health for Our Nation's Children

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Learning Objectives

1. Describe the parent training intervention and identify at least 2 social learning strategies used in parent training sessions.
2. Report on the results from the parent training evaluation.

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My *research colleagues*

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Heidi Fischer, MPH
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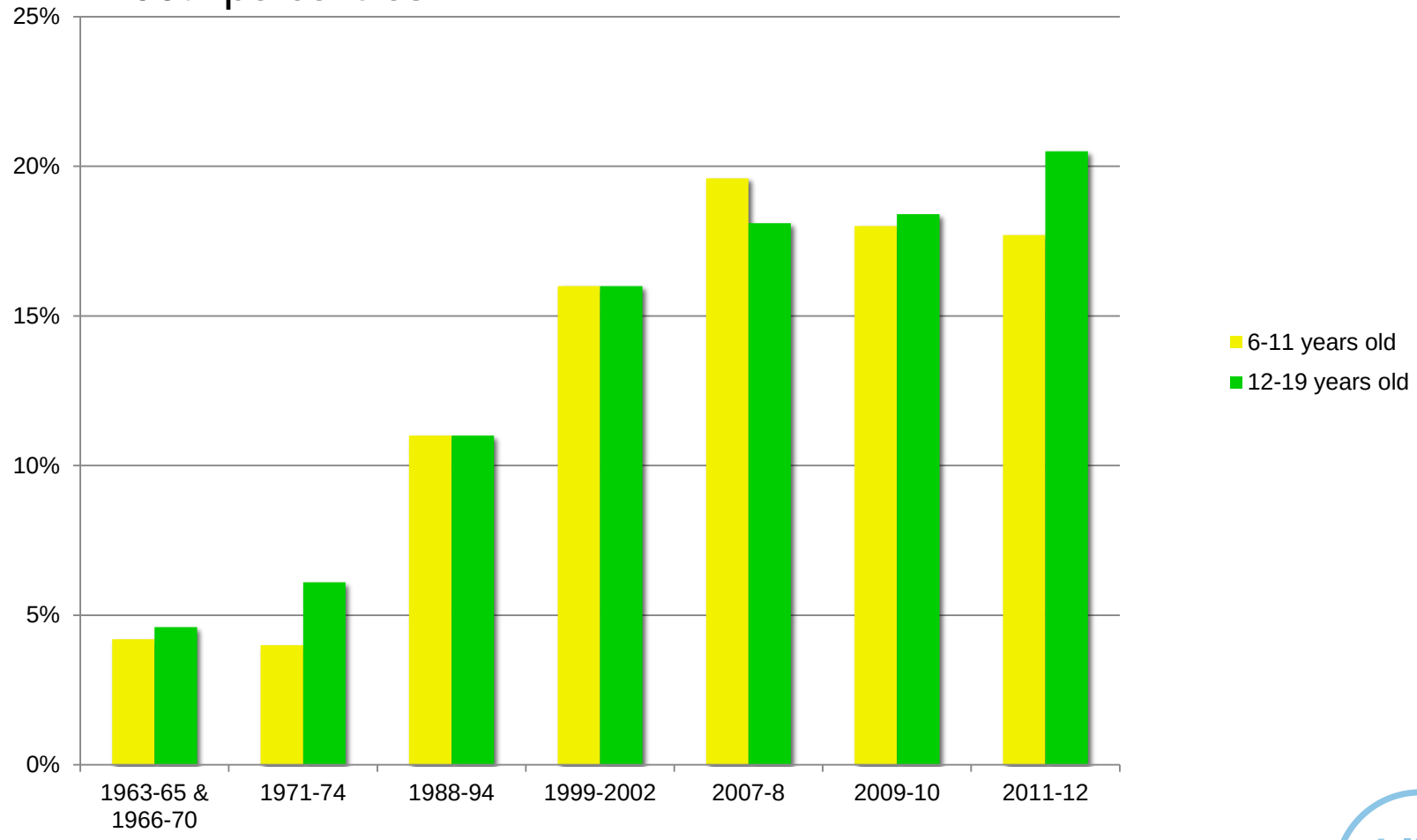
Obese* Children in the U.S.

*BMI ≥95th percentiles



(Ogden et al, ***JAMA***, 2010; Ogden et al, ***JAMA***, 2012; Ogden et al, ***JAMA***, 2014)

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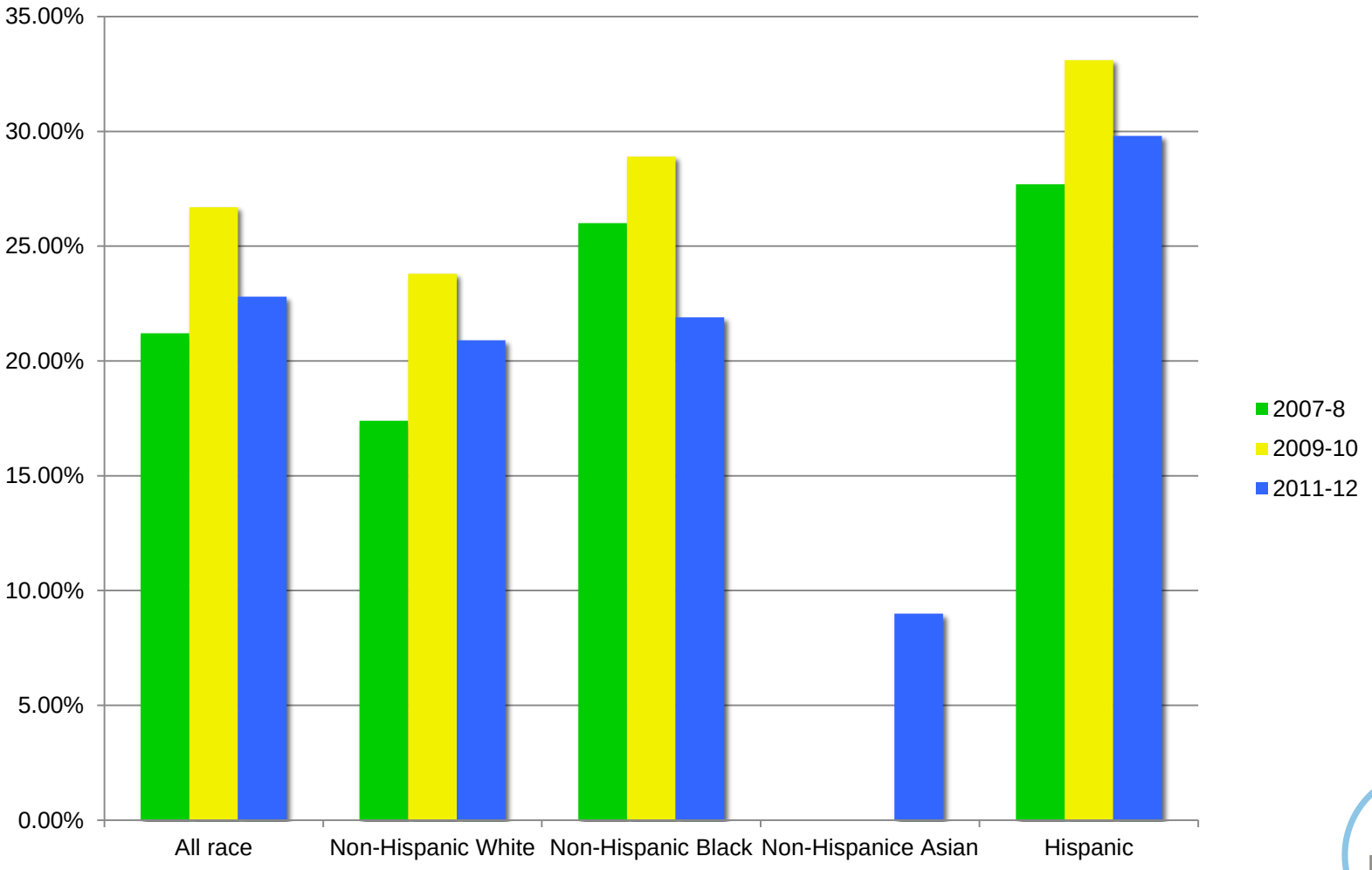
Obese &Overweight* Children 2-5 years old in the U.S. by Race

*BMI ≥85th percentiles



(Ogden et al, ***JAMA***, 2010; Ogden et al, ***JAMA***, 2012; Ogden et al, ***JAMA***, 2014)

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Why Intervene Early?

2-5 year olds are overweight and obese:

African American
21.9%

Mexican American
29.8%

Caucasian
20.9%

(Ogden et al, ***JAMA***, 2014)

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Why Intervene Early & Focus on Parents?

- Parents have a profound influence on the eating and physical activity habits of preschool-age children.
- Parents play a key role in molding their children's physical activity and eating behaviors.

(IOM, 2011)

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IOM Report: Early Childhood Obesity Prevention Policies

- Recommends policies that alter the environment and nutrition of a 0-5 year olds to promote healthy weight.
- Recommendations focus on assessment, healthy eating (including breastfeeding), marketing, screen time, physical activity and sleep.

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Why Focus on Latino Children?

- Latino children have a high risk for developing morbidities associated with overweight.
- Latino children are disproportionately represented among those who are overweight.

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UCLA Pediatric Overweight Prevention through Parent Training
The Purpose

To examine the effects of a multi-component Parent Training Program on the prevention of overweight and obesity among Latino children ages 2-5 years old.

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The Goal

Reduce BMI percentiles in the intervention groups over a 1-year period, reversing the upward trend in weight.

Increase fruit & vegetable consumption, decrease fat consumption, & reduce low-nutrient food & liquid intake.

Increase physical activity and reduce sedentary activity.

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Development of Parent Training Classes

- Merged
  - Evidence Based Parent Training based on Social Learning
  - Evidence Based Nutrition and Physical Activity Interventions
- Classes reviewed by WIC Nutritionist, Latina Mother, Dietician, Pediatrician, Social Worker, and Psychologist and pilot tested with follow up questions with the participants and then revised for study.
- Study funded by Joseph Drown Foundation, Simms Mann Family Foundation and administered through the Venice Family Clinic and UCLA.

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The Research Plan

Recruitment of Study Participants and Baseline data collected

Attend parent classes at clinic **once a week for 7 weeks for** 1½ hours and **2 booster classes** once a month

Do not attend the parent classes this year, but continues to get usual care at the clinic

4 months after first appointment collect data

12 months after first appointment collect data

Participation in the study is over

Participation in the study is over. Families now have the opportunity to come to the parent classes if they wish

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Parenting Component

Class Structure (1.5 hours):

- **Homework Review** (30 minutes)
  - Successes
  - Challenges
- **Skills Learning** (didactic and demonstrations) (30 minutes)
- **Practice** (modeling and role playing) (30 minutes)

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Parenting Component

Covered the following topics:

- Praise
- Routines
- Commands
- Ignore
- Setting limits
- Time out

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Routines

Schedule In	Assigning Times	Most Common Mistakes	In Practice
• Nap time • TV time • Meals & Snacks • Exercise/ Playtime	• Move backward • Plan for children's speed	• Get up too late • Put children to bed too late	

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Routines: Evidence Based

- Children in childcare were protected from obesity compared to those children cared for by parents or relatives.
- 40% lower prevalence of obesity among children exposed to 3 house-hold routines (of regularly eating the evening meal as a family, obtaining adequate nighttime sleep, and having limited screen-viewing time) compared to those not exposed.

(Maher et al, ***Pediatrics***, 2008; Anderson et al, ***Pediatrics,*** 2010)

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Objectives of Nutrition and Physical Fitness

1. To increase caregiver's knowledge about Dietary Guidelines.
2. To teach families strategies to increase physical activity opportunities into their daily lives and to reduce screen time.
3. To teach families how to practice behavior modification strategies such as self-monitoring.

Objectives of Nutrition and Physical Fitness

4. To teach parents food strategies to increase vegetable and fruit food preferences for their children.
5. To teach parents not to use food as rewards or punishments.
6. To teach families how to increase accessibility and availability of healthy foods.
7. To identify barriers to healthy life styles and review strategies to minimize them.

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Basic Healthy Lifestyle Eating & Activity Habits: Evidence Based

- Involve the whole family in lifestyle changes.
- Cultural sensitivity.

Strong Evidence

- Minimize Sugar-sweetened beverages with a goal of 0.
- Increase meals prepared at home.
- Education and modification of portion sizes.
- Reduction of inactive time to < 2 hours/day and if less than 2 years old to 0 time.
- Increasing active time for children and families to >=1 hour each day.

Basic Healthy Lifestyle Eating & Activity Habits: Evidence Based

- Involve the whole family in lifestyle changes.
- Cultural sensitivity.

Weaker Evidence*

- Increasing to 5 fruit & vegetable servings or more per day.
- Reduction of 100% fruit juices.
- Consume a healthy breakfast.
- Reduce foods that are high in energy density.
- Meal frequency and snacking.

* *May be important for some individuals.*

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Major Theme: Keep it Simple

Reading Food Labels:

- **5 Ingredients to Avoid (5 Ingredientes para Evitar)**
  - Sugar
  - High Fructose Corn Syrup
  - Enriched Flour/White Flour
  - Hydrogenated Oils (ex: partially hydrogenated soybean oil)
  - Saturated fat & Trans fat

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Portions

Examples of portion sizes

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Education and Support: 5 - 2 - 1- 0 Blastoff!

5	5 or more fruit and vegetable servings per day.
2	No more than 2 hours of screen time per day for 2 year olds and over and 0 time for under 2.
1	1 year or more of breastfeeding with appropriate foods introduced at around 6 months.
0	0 sweetened beverages.
Blastoff	Move, be active, and have fun!

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At Least 5 Servings of Fruits & Vegetables Per Day

- Offer healthy choices at school, home, and team sporting events
- Model healthy eating behaviors
- Practice eating family meals

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Healthy Snacks

- Provided at each of the Parent Training Sessions.
- Parents are given the snack during the classes.
- Children are given the snack at the end of the 1½ hour class.

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Progress to Date

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Baseline Population

Sample Characteristics and Comparison of Parent Training (PT) and Wait List (WL) Conditions for Families of Children with Baseline BMI ≥50 Percentile

	Group		
Variable	**PT M (SD) *n*=61**	**WL M (SD) *n=60***	***p***
Maternal Age (yrs)	31.7 (5.2)	31.5 (6.1)	.65
Maternal Education (yrs)	9.0 (3.7)	9.1 (3.9)	.87
Maternal BMI:			
% Under Weight	1.5	0	
% Normal Weight	23.0	30.0	
% Overweight	39.3	30.0	
% Obese	36.1	40.0	.49
Child % Male	44.3	43.3	.87
Child BMI:			
% Normal Weight	44.3	61.7	
% Overweight	26.2	16.7	
% Obese	28.5	21.7	.16

(Slusser et al, ***Journal of Pediatric Obesity***, 2012)

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Results

(Slusser et al, ***Journal of Pediatric Obesity***, 2012)

Parent and Child Characteristics		
Variable	**Group**	
	PT (61)	**WL (60)**
Health Insurance Medical/Healthy Families	54	53
Childcare No Childcare	57	53
WIC WIC Participation	56	57
Child Birthplace Mexico or Central America United States	5 56	5 55
Mother Birthplace Mexico	50	47
Father Birthplace Mexico	46	40
Marital Status Married	45	42
Child Birthweight Normal Birthweight	47	54

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Results

Comparison Parent Training (PT) to Wait List Control (WL) Z-score Changes from T1=Baseline to T3=12 Months after Baseline				
	Parent Training		**Wait List**	
***n*=121**	***n*=61** **M (SE)**	**P**	***n*=60** **M (SE)**	**P**
Z Score Difference (T3-T1)	-0.20 (0.08)	.01	0.04 (0.09)	.64
Difference Between PT and WL Changes after 1 year				
			M (SE) -.24 (.11)	P .04

(Slusser et al, ***Journal of Pediatric Obesity***, 2012)

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Results

Preliminary 4-month post Intervention results for parent training group ($p<0.05$)

- Fruits in the children's home: increased
- Vegetables in the children's home: increased
- Parents increased their monitoring of their child's weight/food intake
- Parents felt more comfortable sticking to healthy choices
- Parents felt more confident in their ability to stick to an exercise routine

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Results

Preliminary 12-month post Intervention results for parent training group ($p<0.05$)

- Children's Food Preferences increased for healthier foods
- Fruits continued to be more available in the home
- Parent's fruit consumption increased
- Fast food restaurant meals decreased in frequency
- Parents increased their monitoring of their child's weight/food intake
- Parents felt more confident in their ability to stick to an exercise routine

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Limitations

- Differential drop out for normal versus overweight children in parent training group (accounted for this in the statistics).
- Bigger drop out in classes held at the clinic versus childcare/preschool sites.
- Recruitment challenged when randomizing study to a wait list control group (community did not like being split up).

Limitations

To address limitations: suggest classes take place in preschools and family centers and they focus on overweight or obese children

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Next Steps Taken after the study

- Developing a trainers module in collaboration with the LA County Department of Health to be available for free.
- LA DPH in collaboration with UCLA will train the trainers at 20 different childcare sites in Los Angeles to deliver the curriuculum.
- Continued delivering the curriculum to parents whose children attend the Headstart program in Santa Monica in partnership with FQHC Venice Family Clinic.
- Analyzed pilot data from classes delivered by promotoras rather than a social worker.

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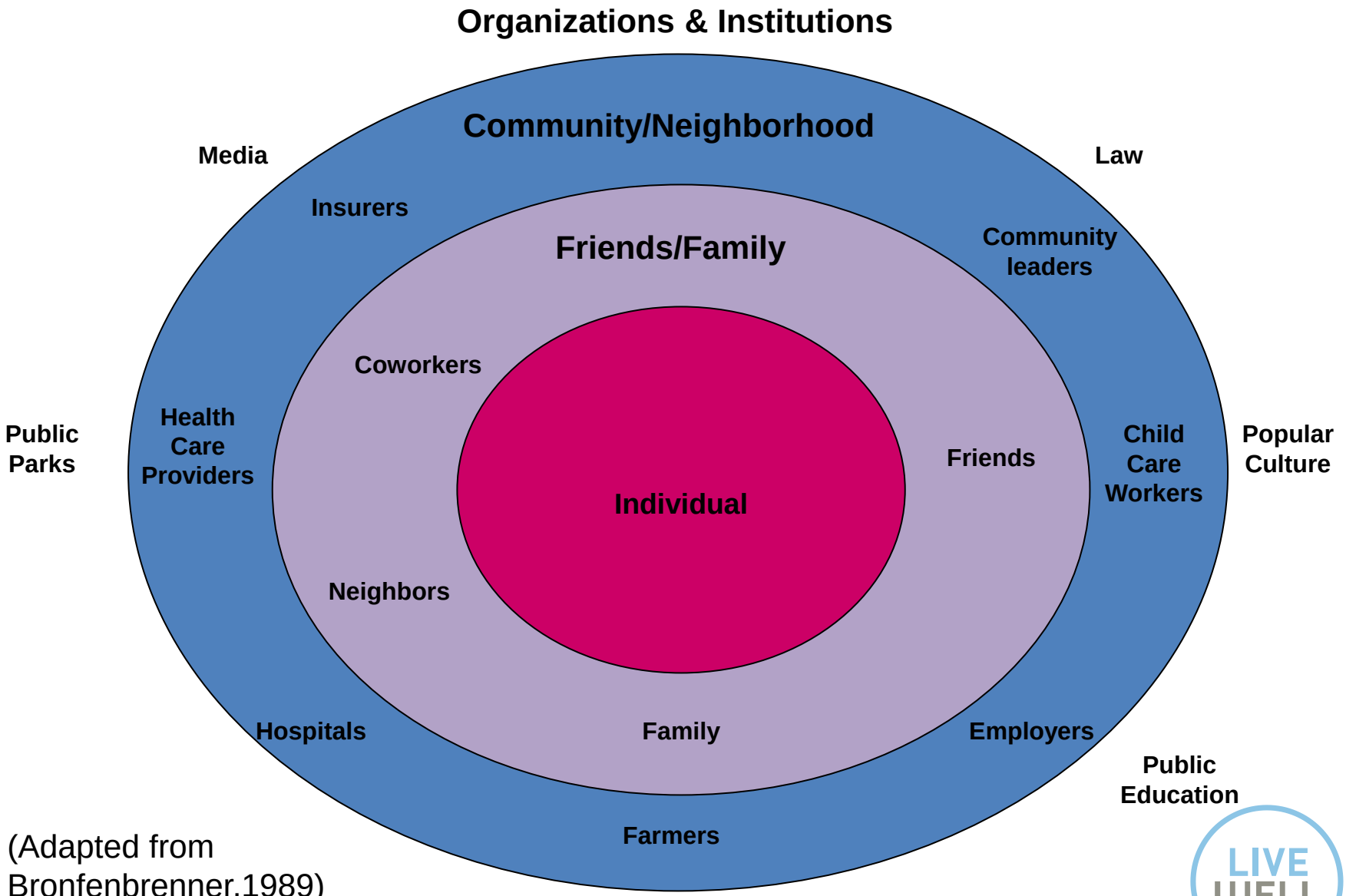

(Adapted from Bronfenbrenner,1989)

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UCLA Fit For Life Program

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Pediatric Update

A Resource for Physicians

Spring 2008 Volume 14 Number 2

Inside

- Less Invasive Surgeries Increasingly Performed in Children
- New Vaccines Must Be Given Universally to Benefit Public Health
- UCLA Expands Drug Clinical Trials Involving Children

UCLA Program Helps Overweight Children

As more and more American children gobble fast-food lunches, spend limited time exercising in school, consume high-calorie snacks and sit at home for hours staring at a TV, computer or video box instead of playing outside, the problem of weight gain in children increases. And with that additional weight comes, in addition to a host of psychosocial problems, an alarming rise in some health conditions once thought of as diseases of adulthood. Doctors, for example, increasingly are diagnosing adult-onset, or type 2, diabetes in overweight youngsters, along with high blood pressure and elevated cholesterol.

Testifying before a congressional committee several years ago, then-U.S. Surgeon General Richard Carmona stated that the rates of overweight children and adolescents have increased at a worrisome rate in the past 20 years, and he called the situation "a growing epidemic in our country."

Excessive weight among children is now characterized as the most serious and prevalent nutritional disorder in the United States. An estimated 11 million children and adolescents nationwide are overweight, and some 13 million more are at risk for becoming overweight. According to UCLA Assistant Clinical Professor of Pediatrics Wendy Slusser, M.D., an expert in childhood nutrition, with weight problems youngsters have a 70-percent risk of becoming overweight adults with increased risk factors for such weight-related health problems as heart disease, hypertension, osteoarthritis, gallstones, kidney stones,

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Haiku by Samuel Bruce
3rd Grader May 2002

Fruit comes from flowers.

Fruit is very good to eat.

I like to eat fruit.