

Children's Health and the Built Environment

Prepared for It's Time Summit by

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Disclaimer

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US Dept of State Geographer
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30°28'12.56" N 97°36'11.09" W elev 1060 ft

Eye alt 5996.14 mi

Our Environment

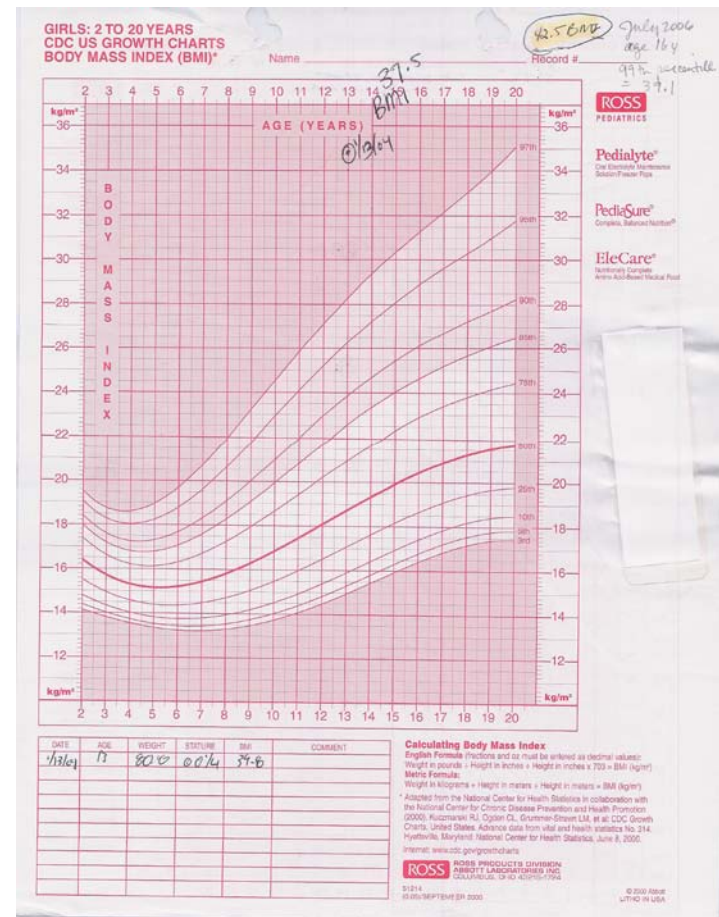
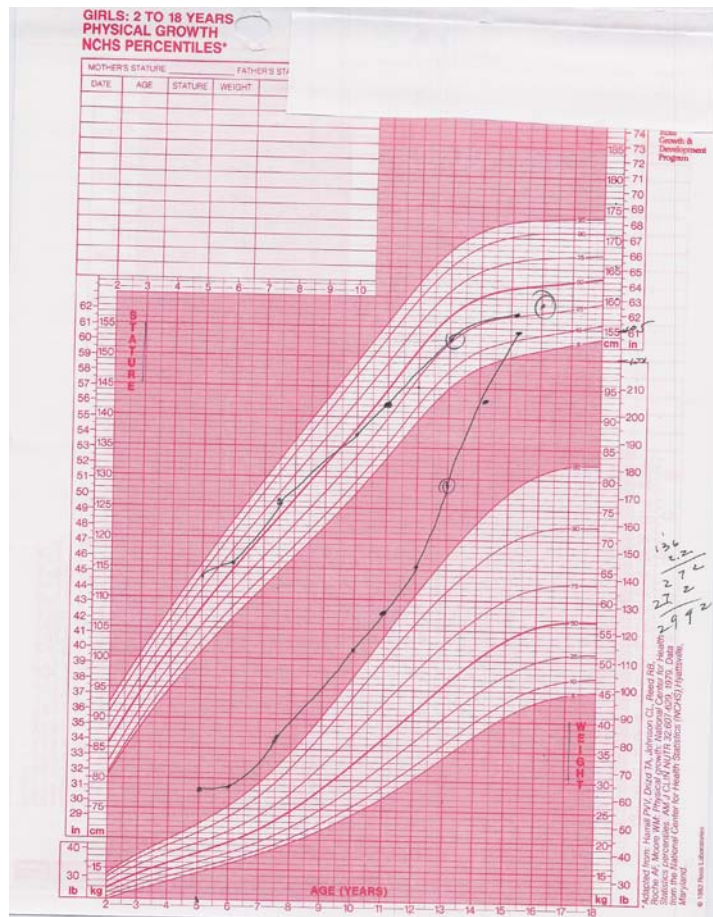


“There’s a person living inside of there!”

The built environment affects our behavior



Case



What causes obesity?

A disturbance of energy balance in the body.

What influences energy balance?

Behavior

What influences behavior?



k0210553 www.fotosearch.com

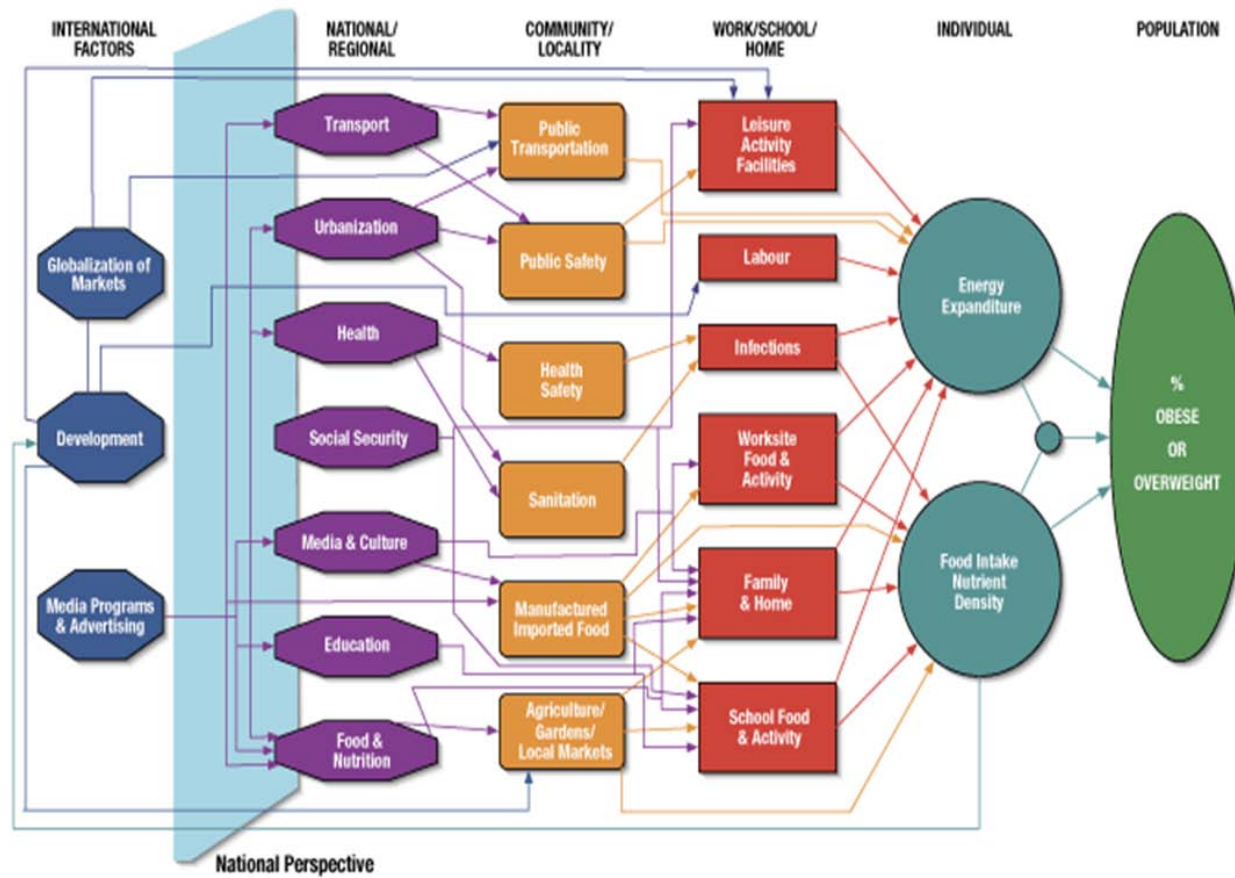
- Motive
- Opportunity

It is so simple...



...why is it so difficult?

Because it's complicated



ENVIRONMENT

Physical

Natural and

Built Environment

- Mixed land use
- Density
- Street connectivity
- Aesthetics
- Public transportation
- Sidewalks
- Bike paths
- Physical Activity Facility
- Playgrounds
- Parks
- Public open spaces
- Pedestrian Safety
- Crime rate

Social

Social Networks

- Family
 - Friends
 - Colleagues
 - Neighbors
- Socioeconomic status
- Income
 - Education
 - Occupation
- Cultural climate
- Economic climate
- Political Climate
- Marketing

Individual

Biological factors

- Age
- Gender
- Genetics

Cognitive factors

- Knowledge = Education
- Attitudes
- Beliefs
- Motivation
- Perceived barriers
- Self control
- Influence



PERSON

Nutrition
Behavior

Energy
Balance

Physical
Activity

BMI

Built environment affects our behavior

Walking school bus



Notice the sidewalks



The built environment affects our behavior

“More Space to Play”

Tyler Morning Telegraph headline March 29, 2011

Children's Park Plans Expansion To Meet Usage Demands

Private endeavor thru local foundation



The built environment affects our behavior



Light rail in Phoenix

<http://www.valleymetro.org/notes/topic/ridelrebn>

The built environment affects our behavior



Lanningham-Foster, L, et al, Changing the School Environment to Increase Physical Activity in Children Obesity (2008) 16, 1849–1853



Imagery Date: 2/8/2010 1995 32°17'44.37" N 95°15'52.33" W elev 595 ft

Eye alt 2094 ft



J's New- Way, 1
5101 Troup Hwy
Tyler, Tx 75707

04/23/2011 1:44:59 PM
Register: 1 Trans #: 3504 Op ID: 1
Your cashier: Ali

Oak Farms Milk 2%	\$1.59	99
Tax	\$2.49	101
NonTax	\$3.29	99

Subtotal =	\$7.37	
Tax =	\$0.21	

Total =	\$7.58	
Change Due =	\$-12.42	
Cash	\$20.00	

\$3.32

Walmart 
Save money. Live better.

Walmart
MANAGER STEVEN TUCKER
(903) 534 - 1333

ST# 1044	OP# 00000051	TE# 09	TR# 00876
SP PUDDING	002700041110	F	1.00 N
CHKN NOODL	003760018630	F	1.98 0
2 MILK	004127100129	F	1.28 0
SUBTOTAL			4.26
TOTAL			4.26
AMEX TEND			4.26

ACCOUNT # 1002
APPROVAL # 547040
CHANGE DUE 0.00

ITEMS SOLD 3

TC# 4736 5250 5338 5489 1583

St. Paul Children's Foundation

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Imagery Date: 2/8/2010

32°20'40.22" N 95°17'02.46" W elev 541 ft

Eye alt 7130 ft

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- Influence



PERSON

Nutrition
Behavior

Energy
Balance

Physical
Activity

BMI

3812 B



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Imagery Date: 2/8/2010

32°18'15.06" N 95°17'56.88" W elev 497 ft

Eye alt 2618 ft

What's Different?

Hint: 2 things

Broadway and Loop 323 – Tyler, Texas



19th and Camelback – Phoenix, Arizona



“Tyler 21 Comprehensive Plan:
Building Our Future Together 2007 to 2030”

Broadway (Hwy 69) and Loop 323



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- Motivation
- Perceived barriers
- Behavioral control

PERSON

Nutrition
Behavior

Energy
Balance

Physical
Activity

kcal

kcal

BMI

Body Mass Index-for-Age

Length-for-Age

Weight-for-Age

Weight-for-Length

Head Circumference-for-Age

Stature-for-Age

Weight-for-Age (Infants)

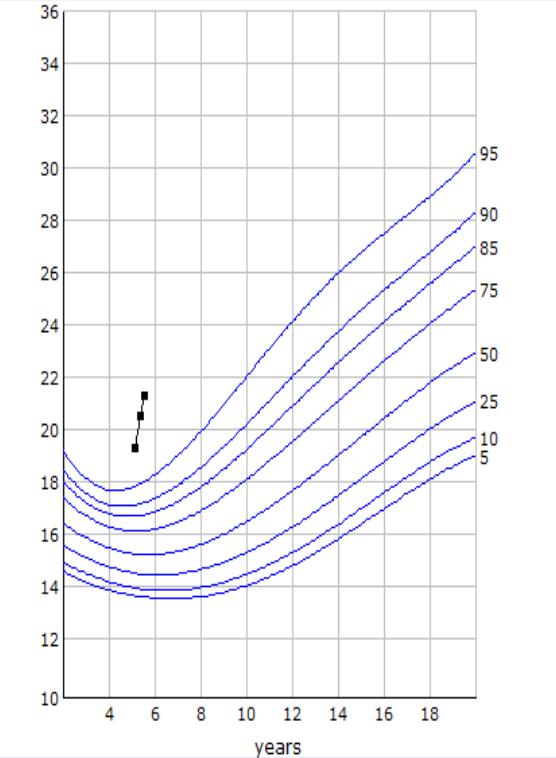
Weight-for-Stature

5/95

3/97

English

Metric



The built environment affects our behavior

<http://youtu.be/2lXh2n0aPyw>



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