

Creating Healthy Communities by Design

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**Boston CPPW
BTD Complete
Streets**

**Roxbury, Melnea
Cass Blvd.
August 24th 2011**



**Boston
Complete
Streets**

A few simple points:

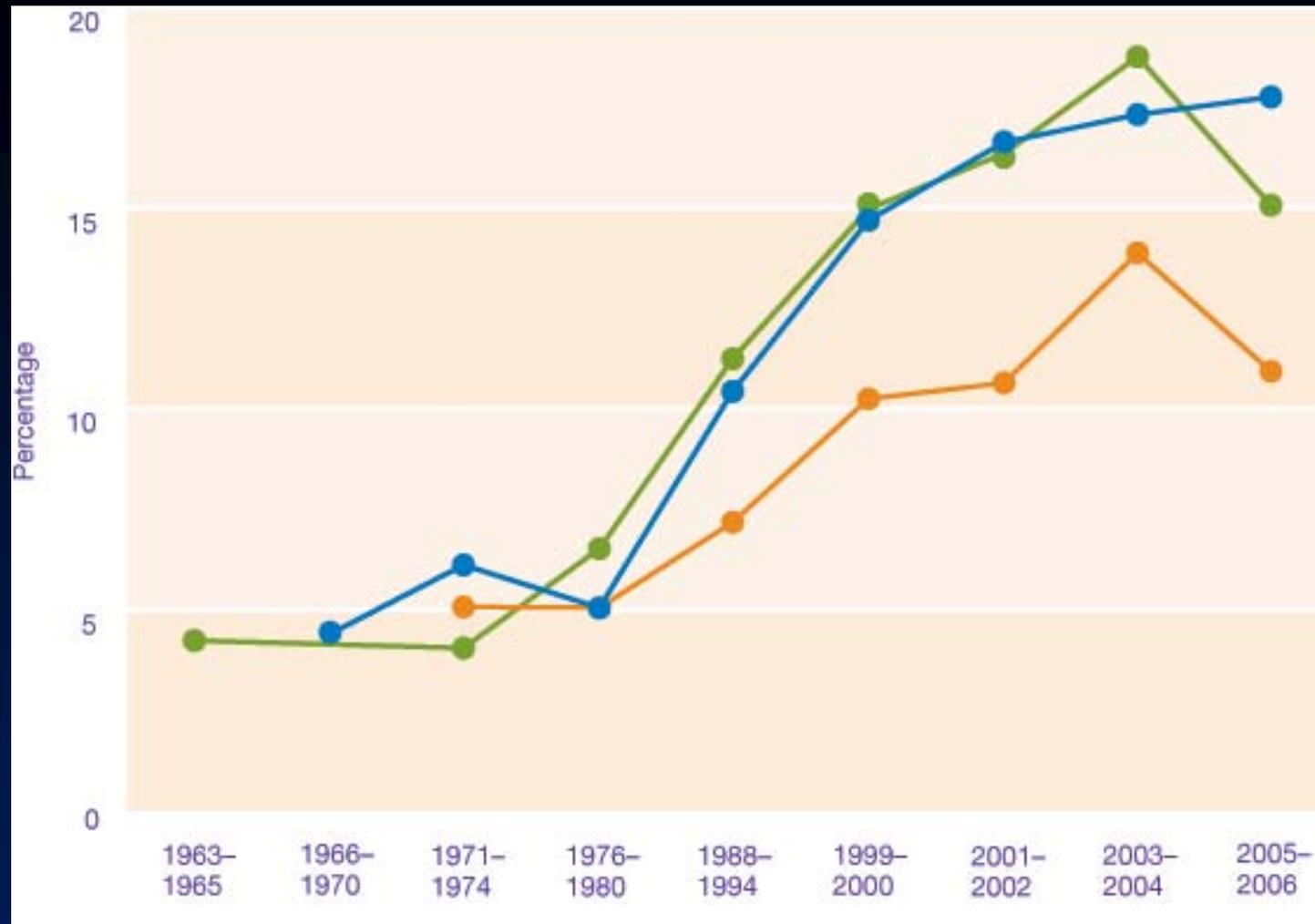
- **Some perspective** on the real issue.
- **The Bad News.** The problem in three numbers.
- **The Good News.** A plan for *community* health.
- **The Hard News.** It's about vision, leadership, & community courage to support change!



Accommodating all users of the streets.

Trends in Childhood Obesity & Overweight

- 2–5 Years of Age
- 6–11 Years of Age
- 12–19 Years of Age



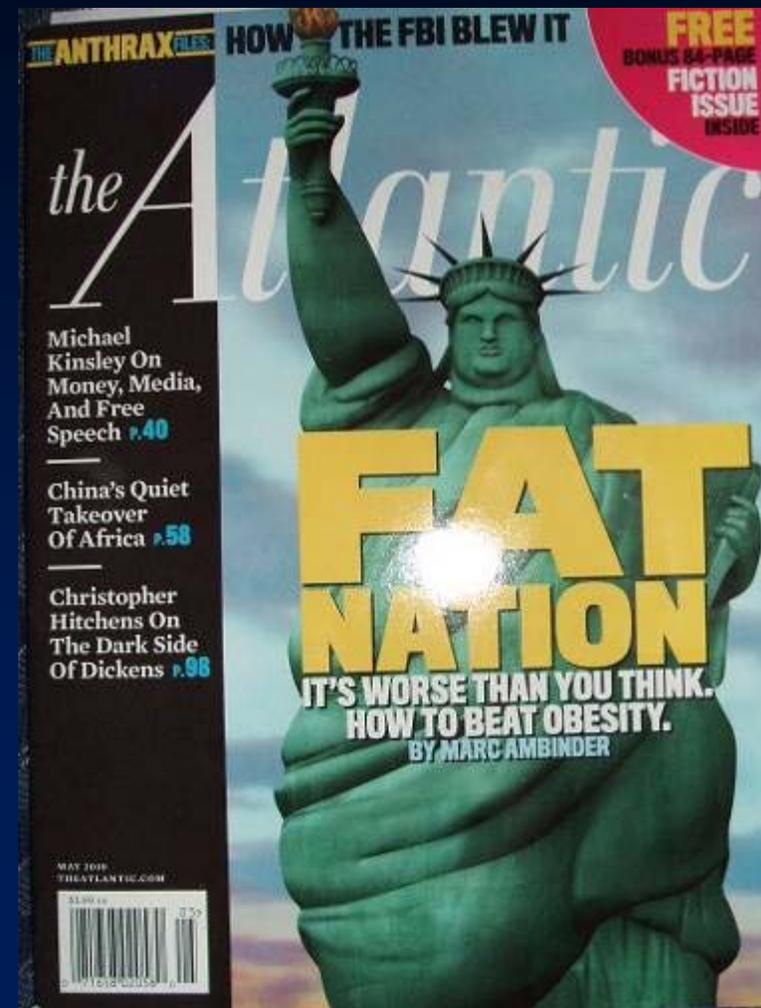
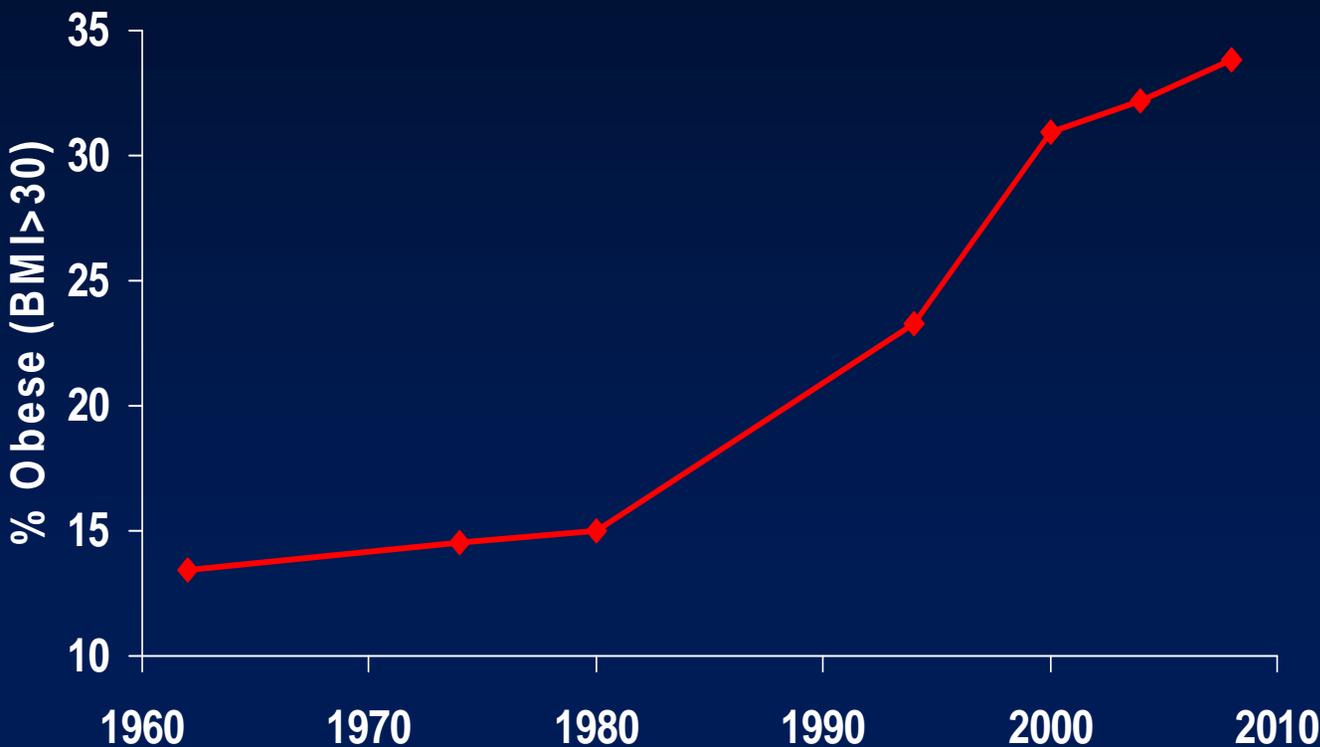
CDC, National Center for Health Statistics. *National Health Examination Surveys (NHANES) II (ages 6–11) and III (ages 12–17), and NHANES I, II and III, and 1999–2006.*

www.rwjf.org/files/publications/annual/2008/year-in-review/

The rant: America's looming chronic disease apocalypse . . .

US "Obesity Epidemic"

Ogden et. al. (*JAMA* 288, 14; Oct. 2002)



A suggestion:

Change our thinking. It's *not just* an obesity epidemic. It's an epidemic of **physical inactivity and poor nutrition.***

*** Two of the three biggest drivers of skyrocketing healthcare costs.**

The bad news in just three numbers:

30 Minutes of daily physical activity recommended by national guidelines.

25 % of American adults actually meet these recommendations (thru LTPA).

365,000 Estimated annual deaths in America due to physical inactivity & poor nutrition. (2nd only to tobacco.)

Surgeon General's Report 1996 Physical Activity Guidelines 2008

www.health.gov/paguidelines

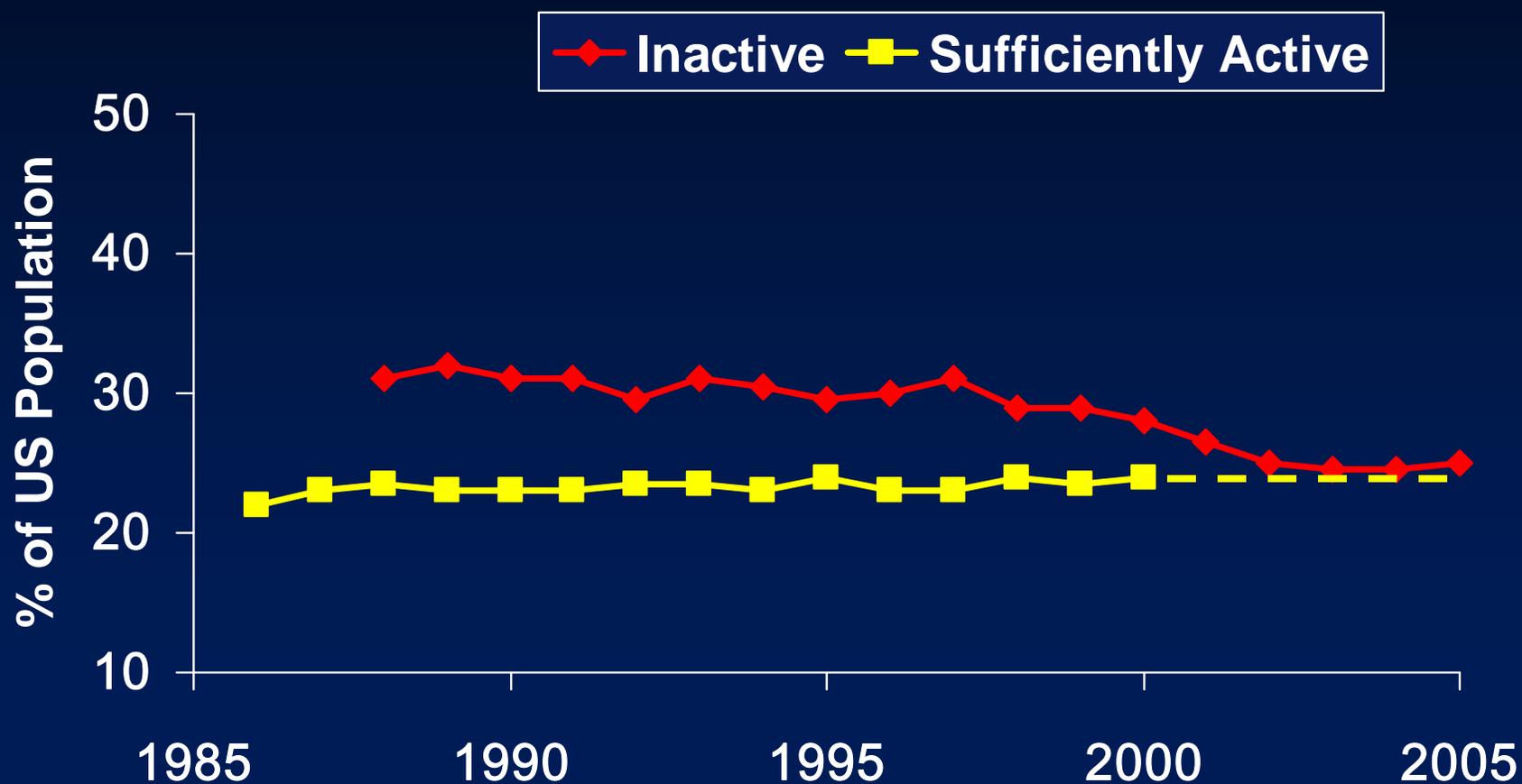
- **150 minutes/week** of moderate **physical activity**; more is better.
- Any activity is better than none.
- Can be **broken up**.
- **300 min/week** for children.
- Reduced risk for CVD, diabetes, osteoporosis, obesity, dementia in old age, clinical depression, a growing list of cancers . . .



Getting some
exercise, or just
getting around
on foot?

Leisure Time Physical Activity in the US

(MMWR: 50(09), 166-9; 54(39), 991-4)

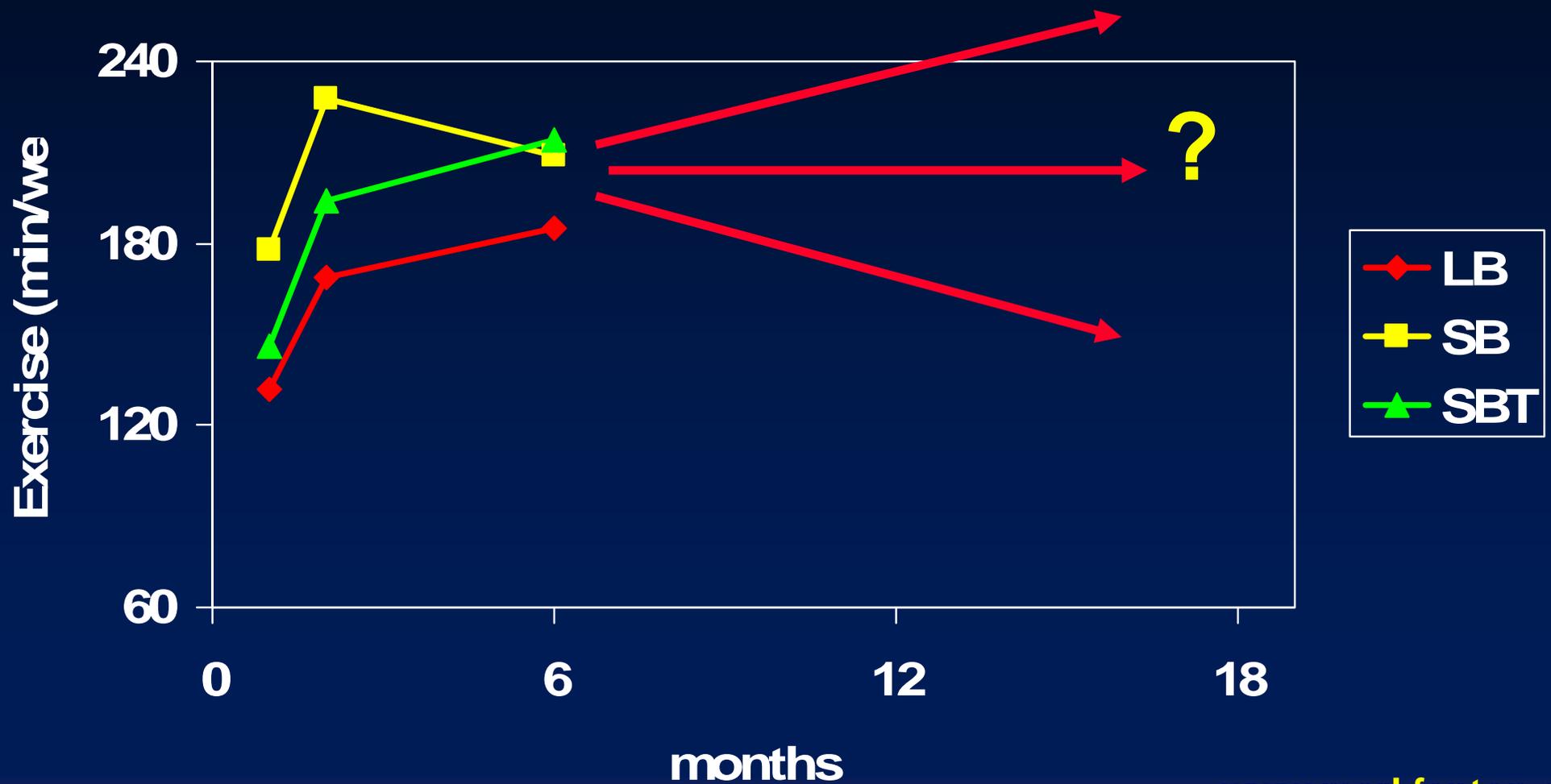


**Why is it so resistant
to change?**

**I believe in large part the
stickiness problem!**

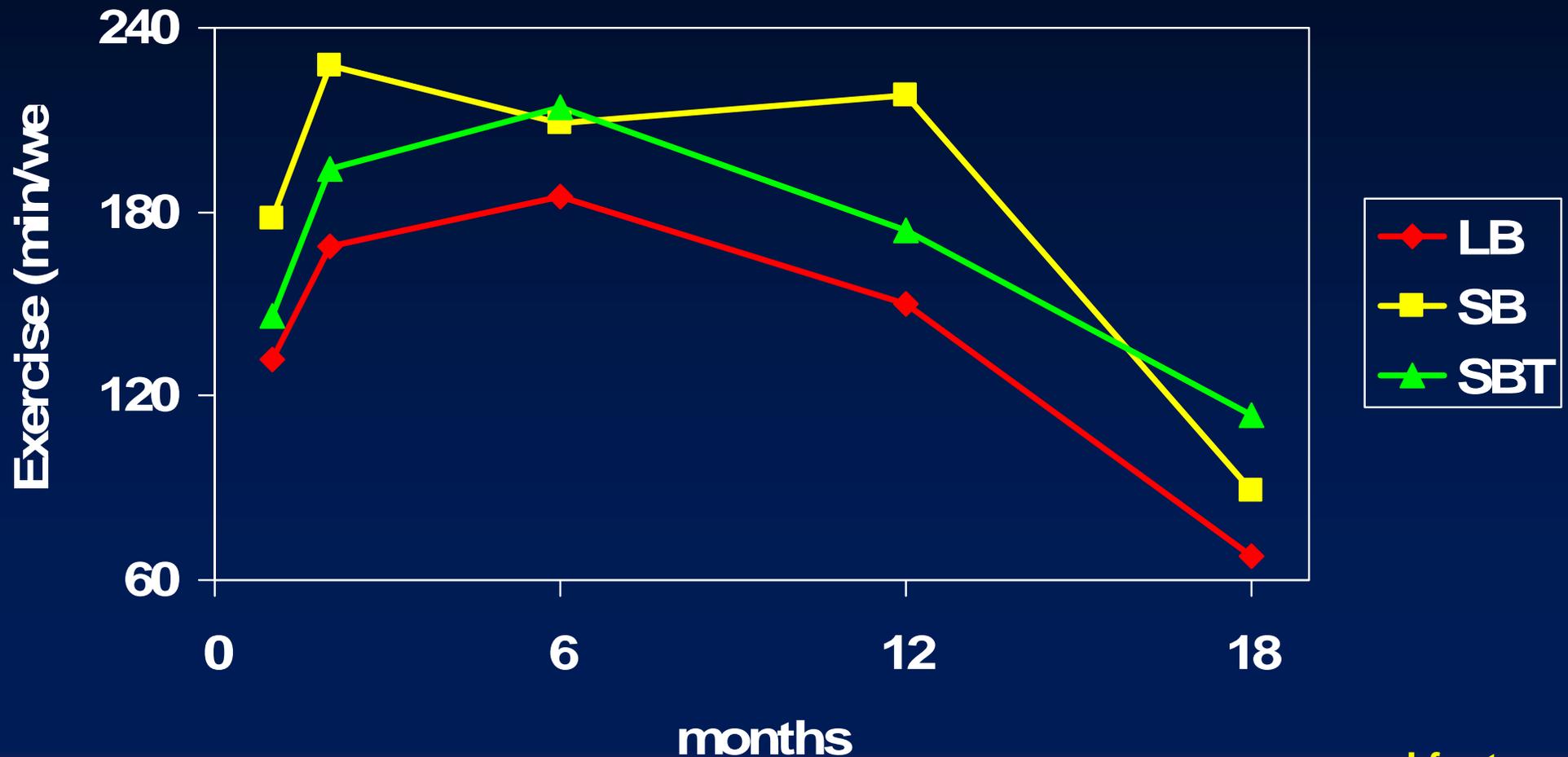
Exercise Participation

Effect of Short Bouts, Home Treadmills
(Jakicic et.al., *J. Amer. Med. Assoc.*, 282, 16)



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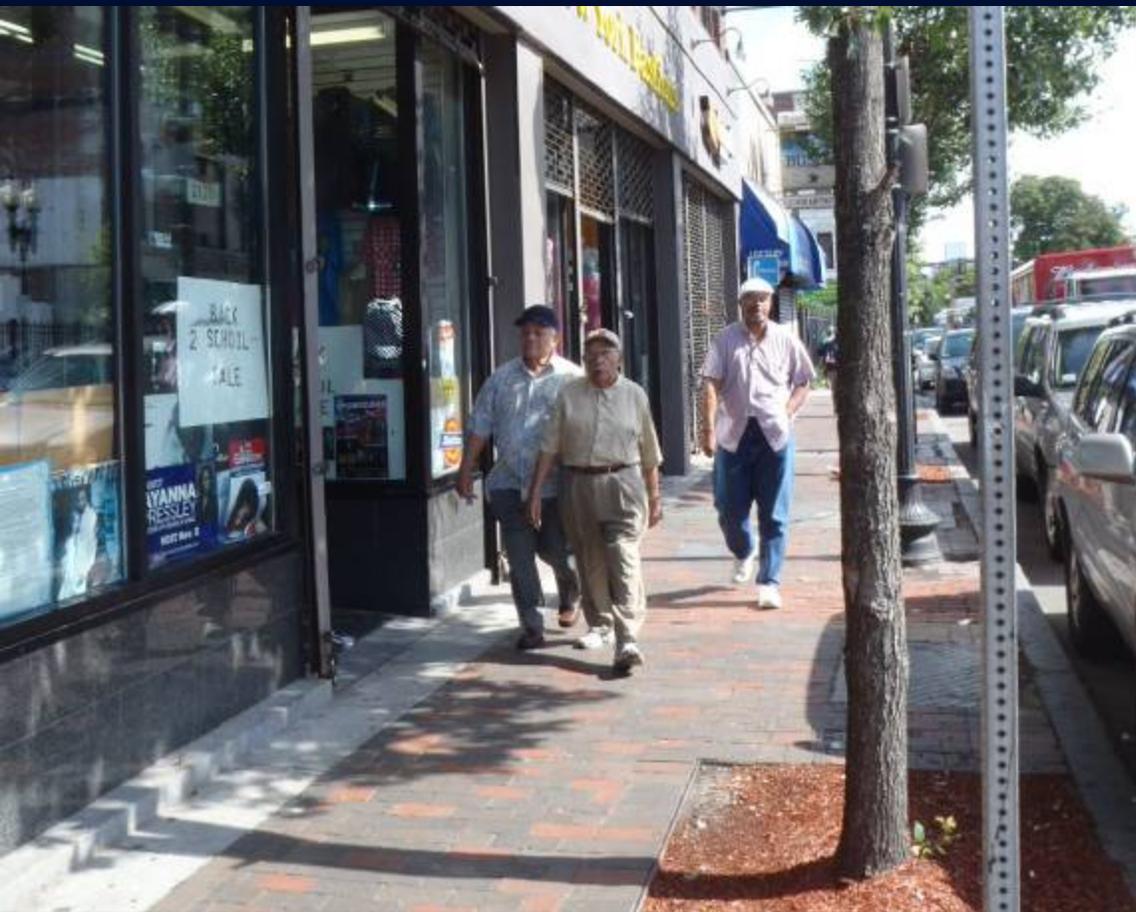


The goal:

Go for lifestyle change, not just “exercise” and “diets.”

We need increases in routine, daily physical activity and healthy nutrition for everyone.

**Necessary and
important,
but not enough. >**



**< We must build
communities
where people are
intrinsically
more active.**

Four elements to look for on a walk:

1. **Destinations** within walk, bike, & transit distance.
2. **Facilities:** Sidewalks, trails, bike lanes, transit.
3. **Designs** are inviting for peds, bikes, transit.
4. **Safety** & access for all ages, incomes, abilities.

www.thecommunityguide.org

CDC Guide to Community Preventive Services



www.markfenton.com

1. Land use.

Varied destinations in proximity.



E.g. post office,
grocery, schools

Compact neighborhoods
& shared open space.



Mixed
use,
multi-
family.

Housing
above,
retail
below.





2. Network encourages active travel with:

SW Corridor
Park



Melnea Cass



- Presence of sidewalks, pathways, bike lanes.
- Shorter blocks, cul-de-sac cut-throughs, more intersections.
- Access to trail, park, greenway; quality, reliable *transit*.





Transit riders are physically active.

Besser, Dannenberg, *Amer. J. Prev. Med.*, 29 (4), Nov. 2005.

Just during the daily walk to transit:

- Half of transit riders walk at least 19 mins.
- 29% get at least 30 mins. of activity.
- Minorities, poor (income <\$15k/yr.), denser urban dwellers more likely to get 30+ mins./day.



3. Site design:



Which setting is more appealing for travel on foot and by bike?

Site design? Research & practice suggest:

- Buildings near the sidewalk, not set back; parking on street or behind.
- Trees, benches, lighting, awnings, “human” scale.
- Details: bike parking, open space, plants, art, materials.

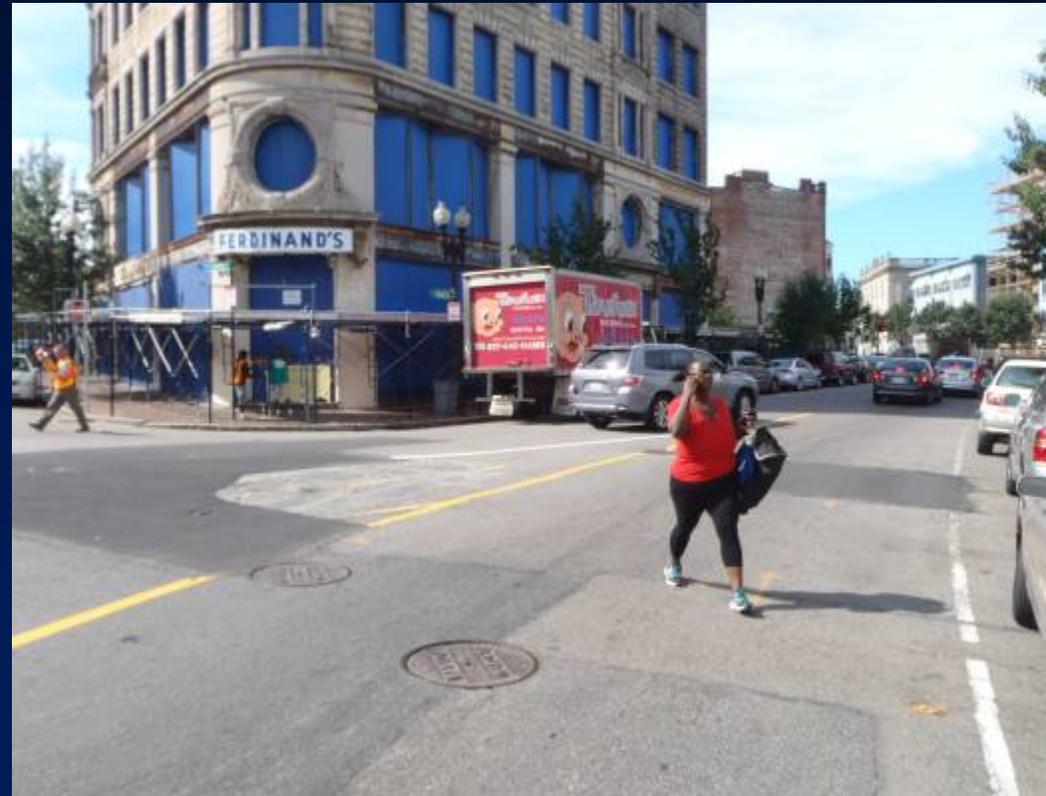




Peabody Square, Dorchester Ave.



What could this intersection become? v



4. Safety.

- Engineering can dramatically improve safety.
- Increasing pedestrian and bike trips *decreases* overall accident & fatality rates.



Median islands



Roundabout (Neenah, WI)



Curb extensions

(Jacobsen P, *Injury Prevention*, 2003; 9:205-209.)

www.markfenton.com



Community design & nutrition?

Community gardens (near schools, parks, senior housing); Community Supported Agriculture.



Regulate fast food, drive-through locations.

Farmer's markets, green grocers, healthy corner stores.



Recap - Five Elements of Healthy Community Design:

- **Mix of destinations** in close proximity (think village centers, not strip malls & boxes).
- Complete, connected **network of facilities** for pedestrians, bicyclists, & transit.
- Sites & destinations **designed to reward** active travelers & healthy eating.
- **Safe & accessible** for users of all ages, incomes, & abilities.
- **Healthy food** is accessible & affordable to all.

www.activelivingresearch.org

www.markfenton.com

The premise of Complete Streets roadway design:



1. Accommodate all user groups (pedestrians, bicyclists, transit users, motor vehicle drivers) of all ages & abilities whenever we touch a road.
2. Roadway design = posted speed.
3. Specific, very limited exemptions.
4. Beyond local-collector-arterial . . .

www.completestreets.org

www.markfenton.com

Consider full benefits before discounting “costly” improvements or policies:

E.g. “Complete street improvements cost too much!”

True benefits:

- Fewer collisions, ↓ emergency response costs.
- More walking, cycling to school, reduced ‘hazard’ bussing, school transport costs.
- Healthier employees, lower insurance costs.
- Better quality of life, social equity, local business health, tax benefits.
- Higher employee and business retention.



Think about potential—what it *could* be—along our walk.

Healthier Streets = Healthier Businesses





Dudley St.



Malnea Cass Blvd.



Five web sites to go to:

1. www.saferoutesinfo.org
2. www.completestreets.org
3. www.activelivingresearch.org
4. www.pedbikeinfo.org
5. www.cdc.gov/transportation

www.markfenton.com



**Olshansky et.al., “A
Potential Decline in
Life Expectancy . . .”
New Eng. J. of Med.,
March 17, 2005**

