Fighting the Epidemic No One is Talking About

- Mecklenburg County Health Forum

Charlotte NC
May 2007

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Three Simple Points:

- **The Bad News.** Three numbers everyone should know.
- **The Good News.** A prescription for community health.
- **The Hard News.** Guess whose job it is to make it happen?

South Park Mall

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The bad news in just three numbers:

30  Minutes of daily physical activity recommended by Surgeon General.

25  % of American adults who meet the S.G. recommendation (thru LTPA).

365,000  Estimated annual deaths in America due to physical inactivity & poor nutrition. (2\textsuperscript{nd} only to tobacco.)
My admittedly unique perspective . . .

• 30 minutes of moderately vigorous physical activity.
• Most (all) days of the week.
• Can be broken up.
• Reduced risk for CVD, diabetes, osteoporosis, obesity, dementia, clinical depression, a growing list of cancers.
First sign of the chronic disease apocalypse?

US “Obesity Epidemic”
Ogden et. al. (JAMA 288, 14; Oct. 2002)

% Obese (BMI>30)

Diabetes Prevention Program (DPP)

Compared three treatments for nationwide cohort (3,000+) at risk for developing diabetes (elevated fasting glucose).

1. Control: Standard exercise and nutrition counseling; placebo.
2. Standard plus drug treatment: Metformin
3. Intensive lifestyle change: Nutritional training, **150 min./week physical activity**.
Diabetes Risk Reduction
(Diabetes Prevention Program; NEJM, April 2002)

% Reduction of Risk

0% 20% 40% 60% 80% 100%

- Metformin: 0.31
- Lifestyle: 0.58

Risk Reduction Relative to Control Group (standard intervention)
My rant:

It’s not just an epidemic of obesity, it’s an epidemic of physical inactivity & poor nutrition.
Why is the news so bad?

I think it must be the stickiness problem.
Exercise Participation
Effect of Short Bouts, Home Treadmills
(Jakicic et.al., JAMA 282, 16)

Exercise (min/week)

months

0 6 12 18

LB SB SBT

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Exercise Participation
Effect of Short Bouts, Home Treadmills
(Jakicic et.al., JAMA 282, 16)
Self-help vs. Commercial Weight Loss Programs
(Heshka et.al., JAMA 289, 14; April 9, 2003)
Physical Activity in the US
(MMWR 50 (09); 166-9; Mar. 9, 2001)

% of US Population

Inactive
Sufficiently Active

ENVIRONMENT: Oil drilling in Alaska Nat’l Wildlife Refuge.

ECONOMY (inside): GM profits plummet . . .

HEALTH: “Obesity threatens life expectancy.”
Necessary and important, but not enough.

We must build communities where people are intrinsically more active.

Plaza-Midwood area
The ideal “trip” decision hierarchy:

*Nearly 25% of trips are less than or equal to one mile. (1995, NPTS)
The good news: A prescription in four “easy” pieces.

- Land use mix.
- Network of bike & pedestrian facilities.
- Site design and details.
- Safety.
Land use. Schools, anchors in town.

Smaller lot sizes . . .

. . . & shared open space.

Mixed use, multi-family.

A growing network.
Are you ready to break the cycle of single-use segregated development?
Retail on the first floor; offices, housing on upper floors.

2000’s (Phillips Place) 1900’s

But consider tools to keep affordable stock.

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Network of facilities:

- Presence of sidewalks, paths.
- Shorter blocks, more intersections.
- Access to trail, park, greenway, *transit.*
Transit riders are physically active.

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 due to transit trips.
Settings for comfortable drivers and pedestrians?
Bicycle network options:

Sacramento, CA
Site design:

Where would you prefer to shop on foot?
Site design? Research suggests:

- Pedestrian friendly architecture is near the street, not set back.
- Trees, benches, water, aesthetics, lighting, scale.
- Details: bike parking, open space, plantings, mat’ls . . .
Plaza-Midwood area CVS
Safety.

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

(Jacobsen et.al., Transportation Safety)
Traffic calming: Horizontal vs. Vertical

Vertical:
Speed bumps, humps, and tables.

Horizontal:
Change in direction, narrow lanes, tighten turns.
WT Harris Blvd. at Grande Promenade Mall – the Mitchell Solution
But what about more rural areas?

Suburbanization of America
US population shift, 1950-1996
(after Bowling Alone, R. Putnam, 2000)

1. Suburbia is now steadily consuming the landscape . . .
2. Rural areas are where we can affect the shape of development *before it’s done!*
All of the “health” benefits.

Environmental:
• Reduced traffic; air, water, & noise pollution.

Economic:
• Residents shop locally; more stable tax base.
• Healthy employees, low turnover, happy employers.
• Healthy housing values (NAHB & NAR surveys).

Safety:
• Kids, elderly mobility.
• Crime deterrent.
Which generates more tax revenue?

A thriving downtown . . .

. . . or struggling malls?
So how to get there?
The Hard News: You must use all three P’s!

- **Programs:** Build awareness, support, skills, & plans.
- **Projects:** Improve the built environment for walking, cycling.
- **Policies:** Rewrite the rules so the changes stick!
Programs:

- Activity promotion programs. E.g. 10,000 steps a day; www.americaonthemove.com
- Media, community workshops, & activism training.
- Safe Routes to School www.saferoutesinfo.org
- Active-commute incentives; E.g., tax free transit pass, health benefit discount.
Projects:

- Street improvements.
- Median islands, mini-circles,
- Trails, traffic calming,
- Signals, signs.
Not all projects are costly:

Bike lanes & on-street parking; lane narrowing.

Road paint, cones, curbs, plantings, . . .

Bike parking, lockers, showers; informal paths, countdown timers.
Institutionalize a county-wide Adopt-a-Trail & Adopt-an-Island Campaign!

Friends-of-the-trail: Help build, maintain, clean, patrol, program.

Service groups, scout troops, neighborhood associations, schools, senior centers.

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School siting, district lines, bus policies.

Policies:

DPW standards: painting, lanes & widths, crossings . . .

Zoning: Mixed use, accessory dwellings, open space conservation.

Site standards: Setbacks, parking, access.

TAP!
... but apparently the sidewalk is okay.
Create joint Planning & Health review of all development.

E.g., Lincoln-Lancaster County, NE, Joint Committee on Land Use & Health (County Health & Planning Boards)

Physical activity impacts:
- Grid network of streets.
- Sidewalks in and out.
- Homes front the street.
- Open space, trail access?
Consider a Complete Streets Policy:

All roadways to be designed for all users (pedestrians, cyclists, transit riders, & drivers) of all ages & abilities.

www.completestreets.org
Standardize off-site mitigation & impact fees.

Always include full transportation analysis including bike, pedestrian, & transit impacts and costs.
A safer form of downtown parking:
The active living agenda is relevant to many boards & agencies!

- Schools
- Planning & Zoning
- Parks, Recreation
- Historical Society
- Public Health & Safety
- Chamber of Commerce
- Economic Development
- Neighborhood Associations
- Environment, conservation

Policy information:

- www.lgc.org
- www.vtpi.org

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Balance Your P’s . . .

**Challenge**
- Easiest
- Hardest

**Impact?**
- Least
- Most

- Preparation
- Promotion
- Programs
- Projects
- Policies

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This guy is a new model of success!