

Design with Intent: Building Environments that Shape Healthy Behavior
November 3, 2017

1st Speaker: Brian Elbel, Associate Professor, NYU School of Medicine

- The Role of Policy: what does obesity policy mean?
- Started with the food guide pyramid and MyPlate, mostly education based from doctors and healthcare, rather than policy. New question: how might policy be able to help with the obesity crisis?
- Examples of changing food environment in NYC- calorie labeling, Bloomberg soda tax, advertising efforts related to added sugar in beverages
- Do these obesity policy initiatives work? How do we make them more effective?
- Calorie labeling
 - o Started in NYC, now rolled out nationally, will become hopefully become law
 - o Does this help change behavior? After labeling more people saying they did see calorie information, 11% responded they did use information to make a healthier choice. Unfortunately, by looking at receipts, saw calorie information wasn't really changing purchasing behaviors at fast food restaurants.
- Sixteen ounce soda policy
 - o Not only information, but action.
 - o A lot of pushback. Ruled not constitutional.
 - o What might the impact be if people did purchase smaller size? Would see calorie savings
- Work in public schools
 - o Water jets in cafeterias- 3-fold increase in observed water taking, small decrease in taking milk. Results sustained over next school year.
 - Impact on BMI? Using FITNESSGRAM data, found small but significant decrease in BMI
- Government subsidized supermarkets in "food deserts"
 - o In Morrisania, Bronx- Associated Supermarket
 - o Community individuals knew store existed, but saw no change in purchasing or consumption. Yes, large community size...when looking at smaller radius around new store, did see some impact
- Broader food availability
 - o How can you eat healthier if the options in your neighborhood are limited? Or you are bombarded by the unhealthy foods?
 - o Other cities have tried- L.A.'s "fast food ban"
 - o Other initiatives focus on increasing access rather than limitations
 - o Data on food environment- NYC Restaurant Grading, NYS Dept of Ag and Markets gives data on perishables
- Patterns of childhood obesity and food resources using GIS mapping

- Higher rates in upper Manhattan and South Bronx, similar patterns seen with fast food restaurants and bodegas
- Looked at 2013 demographics of public school kids- mostly black, Hispanic, low socioeconomic status
- Findings: kids are farther from supermarkets than corner stores; poor kids live closer to fast food than non-poor; whether poor or not, blacks and Hispanic kids live closer to fast food and corner stores, but also to supermarkets; average poor kid has 15 bodegas within 5 block radius, more than 18 for Hispanic kids
- If you live more than 0.5 blocks away from fast food, slightly less obesity. For corner stores, effect found if lives more than 1 block away. Less impact relate to restaurants and supermarkets.
- Limitations: only public school kids, lack of data on mobile food carts, sidewalk stands, lack of knowledge on food quality and prices
- Overall: distances to fast food and corner stores were consistently and inversely associated with childhood obesity. Efforts to create healthy food environment close to home could have beneficial impact on child's weight status.
- Overall: policies are emerging, but none of them alone will be enough. Still need core work on what is driving increase in obesity and evaluations of policy.

2nd Speaker: Anja Mikic, Associate, Standard Development, International WELL Building Institute

- Well building standard
 - Health is a state of complete physical, mental and social well-being and not merely the absence of disease. Majority of what effects health is our physical and social environment – we spend over 90% of our time indoors.
 - Second wave of sustainability – designing environments that support/enhance our health
 - Well – performance based measurement for buildings. Currently 600 projects going on.
 - Grounded in research – industry, public health, applied and laboratory research.
 - Comprehensive approach –
 - Air quality – smoking ban
 - Water
 - Nourishment
 - Light – access to daylight, circadian light,
 - Fitness – staircase access
 - Comfort –thermal and acoustic comfort
 - Mind – mental health, community
 - Well is holistic – performance, design, policy
- Nourishment and well – 15 features and 8 preconditions and 7 optimizations

- Access to healthy foods
 - Fruits and veggies - intent to promote consumption of F and V by making F and V more easily accessible to occupants. Required to provide at least 2 varieties of fruits and 2 of vegetables. Fruit and veggie promotion is also required
 - Processed foods – limiting refined ingredients (limit sugar (30G))
Trans fat ban.
 - Food allergies – food allergy labeling
 - Hand washing – hand washing supplies, contamination reduction and sink dimensions
 - Food contamination – minimize exposure to food borne illness
 - Artificial ingredients –help occupants avoid artificial colors and sweeteners and preservatives in food through labeling
 - Nutritional info – help occupants make informed choices – provide detailed nutritional info
 - Food advertising – advertising and environmental cues and nutritional messaging to support healthy food choices
- Optimization – not required
 - Safe food prep materials
 - Serving Sizes – meal sizes and dishware (limits on plate, bowl and cup sizes)
 - Special diets - food alternatives – vegan, gluten free
 - Responsible food production
 - Food Storage – availability of cold storage to encourage food from home.
 - Food production – gardening space and planting support
 - Mindful eating – encourage mindful eating i.e. eating spaces, break area furnishings
- 2 NYC examples of certified spaces –
 - Cookfox architects near Columbus circle. They are also LEED certified. Have hydroponic towers, CSA distribution, bees
 - Structure Tone – nice eating area, subsidized healthier foods so not more costly for employees. Has transformed company culture
- The movement (how to get involved)
 - Standards are free on their website.
 - Build Well app
 - Well AP credential
 - Monthly webcasts and workshops
 - Make the case – equip yourself with the latest research to make the case for designing healthy eating environments everywhere.
 - Join an Advisory group – they will be starting early 2018. Application is available on their website.

Yianice Hernandez, Director, Healthy Living by Design, NYC DOHMH

- Health and the built environment: from infectious disease in the 19th century to chronic diseases in 20th century
- Started in 2006, Active Design Guidelines released in 2010 ->Our solution- Design Strategies that Influence Health: active transportation, active recreation, active buildings, green space, healthy food access
- Evidence based, based on emerging research and best practices. Developed as a “manual” for urban designers and planners.
- A comprehensive approach: open spaces, active transportation, inviting pedestrian realm, gardening, buildings promoting physical activity, access to healthy food and drink, mixed use zoning
- Published toolkits: sidewalk experience, affordable housing, schools, etc.
- Promoting Safety
 - o In context of active transportation
 - o Similar challenges apply in Amsterdam
 - o Interconnected bikeways, graphically delineated bike lanes, bike storage/parking (bike parking now required via zoning laws for residential buildings)
- Increasing healthy food access
 - o NYC FRESH- zoning and tax incentives for providing fresh food options in underserved areas
- Universal access
 - o From youth to senior populations
 - o Seniors lack places to rest when walking- opportunities for plazas, “bringing the living room outdoors”
 - o Spaces added seating variety, trees, lighting, signage, entries on spaces, orientation- now required for any designated public space
- Active design in schools
 - o Active recreation, healthy foods and beverages, green spaces and nature, getting to and from school
 - o Funding through CDC to implement strategies for \$4000 per school/childcare center.
- Public Art to promote neighborhood walkability and reimagine pedestrian infrastructure with local residents and artists
 - o Bronx Steps 2 Health
- Interagency collaboration
 - o OneNYC Drinking Fountain Taskforce- public plazas, parks, public facilities, schools. Very high priority areas: Bronx, Central Brooklyn, Flushing, Staten Island
 - o Working with NYC EPA, DOC, Health, Mayor’s Office, Planning, DOT, DOE, Parks
 - o Cross-sector partnerships: public agencies, community partners, private sector

- Value of Evidence-Based strategies: data driven decision making, research and evaluation