Changing Behavior Effectively

Creating Programs & Interventions that Work

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What We Are Doing....
## Existing State

- Activities are mainly event-driven; not sustainable
- Activities are mainly individually-based
- Lack of awareness of evidence-based/best-practice strategies
Brochures, Health Fairs, Etc.

- Great for changing knowledge
- Not as effective at changing attitudes, etc.
Individual Change

Working One-on-One:

- Resource intense
- Individuals tend to revert back to old behaviors
- Does not address the environment where the individual lives, works, plays
Individual Change

- 4.1 Million Wisconsin Adults
  - 2.46 million are Obese or Overweight

- 1.4 Million Kids
  - 350,000 are at risk for overweight or are overweight

- That is roughly 20,000 that each of us would need to work with/help!!!
Where We Need To Go....
Presentation Outline

- **Changing Behavior**
  - Behavior Change Theories
- **Group Activity**
- **Overview of Program Planning**
- **Example from the Field**
  - Footprints to Health Intervention
- **Getting Started**
Changing Behavior

Creating Change at Multiple Levels
Obesity Prevention Focus Areas
CDC’s Big 6

- Physical Activity
- Fruits and Vegetables
- Sweetened Beverages
- Television Time
- Breastfeeding
- Portion Size
“It is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change”

-Institute of Medicine
Behavior Change Triad

Policy

Environment  Behavior
Behavioral Level

- Individuals
- Involves:
  - Knowledge
  - Attitudes/Beliefs
  - Skills
- Tends to be resource intense
Environmental Level

- **Group or Population**
  - Involves change where people, work, live, play, & worship
    - Neighborhood
    - School
    - Worksite
    - Church
    - Community (Grocery Store/Restaurant)
  - Greater reach; less resource intense
Policy Change Strategies

- Group or Population
- Rules that guide the activities of government or quasi-governmental organizations, and that provide authority for the allocation of resources

- Formal (legislated) or informal policy

- Greatest reach; less resource intense
Social Ecological Model

PUBLIC POLICY
National, state, local laws

COMMUNITY
Relationships among organizations

ORGANIZATIONAL
Organizations, social institutions

INTERPERSONAL
Family, friends, social networks

INDIVIDUAL
Attitudes, Knowledge, Skills
Levels of SEM

- **Behavior**
  - Individual
  - Interpersonal

- **Environment**
  - Organizational
  - Community

- **Policy**
Group Activity

Health Outcome: Increased fruit & vegetable consumption in adults

Target Audience: Working Adults

Scenario:
Adults do not have time to prepare meals/snacks with F & V; lack food preparation and cooking skills.

Settings: Worksite, Community, Home
- Help Employers create a healthy eating policy for foods served at meetings & conferences
- Health insurance carrier has an incentive for owning a CSA share

- Work with CSAs to create a drop-off point at the worksite
- Work with restaurants near the worksite to have more fruit & vegetable entrees; allow substitutions
- Teach employees how to plan meals ahead; provide F & V recipes and tips for selecting & preparing
Group Activity

Health Outcome: Increased physical activity in adults

Target Audience: Working Parents

Scenario: Parents/adults are not able to set aside time to be active. Only time to be active may be during their work day.

Settings: Worksite, Community, Healthcare
Help Employers create a healthy worksite that encourages physical activity on break times
- Set up or contract to provide worksite educational programs

**Policy**

**Worksite-Physical Activity**

**Environment**

**Behavior**

- Purchase bike racks to encourage biking to work
- Install shower and/or locker room facilities to encourage active commuting

- Map routes and mileage from the worksite to encourage walking
- Provide walking campaigns to encourage group participation
- Physicians prescribe exercise
Group Activity

Health Outcome: Decreased Sweetened Beverages consumed by adolescents

Target Audience: Middle School Students

Scenario: The principal observes that students are consuming several ounces of regular soda/day; vending sales generate a profit

Setting: School
- Policy supporting use of competitive pricing in school vending/a la carte sales; less nutritious foods to be priced higher

- Healthier alternative beverages are available in vending machines (including staff lounge) and on a la carte line

- Taste testing of healthier beverages in school cafeteria; peer-led activity
Other Theoretical Models

- Social Cognitive Theory
- Social Learning Theory
- Health Belief Model
- Proceed/Precede Model
Disclaimer:

- You are about to receive a large volume of information.
- Keep in mind that the Program Planning Process can be simplified given the extent of your resources.
- This overview of the Program Planning Process is meant to provide you with a framework for creating effective overweight and obesity prevention programs in the future.
- Please note that more in-depth trainings on this process will be offered in the future.
- Please ask questions whenever they arise.
Overview of Program Planning

A step-by-step approach
Program Planning Steps

- Step 1: Select Health Outcome(s)
- Step 2: Select Health Behaviors
- Step 3: Select Target Audience(s)
- Step 4: Select/Complete Formative Assessment
Program Planning Steps

- Step 5: Select/Write SMART Objectives
- Step 6: Select Intervention Strategies
- Step 7: Create/Identify Evaluation Method
- Step 8: Implement & Evaluate
"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."
Step 1: Select Health Outcome(s)

- Begin by defining your health outcome, what you want to see happen as a result of your program/intervention.

Examples of Health Outcomes:
- Increased # of Students at a Healthy Weight
- Increased # of Employees at a Healthy Weight
- Decreased Body Mass Index

Let’s give ‘em some Pedometers Not Yet!
Step 2: Select Health Behaviors

- Select specific behaviors that will help accomplish/achieve your health outcome

Examples of Health Behaviors:
- Increase fruit and vegetable consumption of students
- Increase physical activity levels of employees

Tidbits: Health behaviors are shorter-term changes than health outcomes; utilize CDC’s Big 6 here

Let’s hold a Health Fair!

No, Not Yet!
Step 3: Select Target Audience

- Determine who you want to address
  - Select a primary audience
    - Who do you want to change?
      - Can be broad (i.e. breastfeeding mothers)
      - Can be more specific (i.e. breastfeeding mothers who are young)

Examples of Target Audiences:
- Parents of young children
- Employees
- Tweens (9-12 years olds)
- Healthcare patients

Let’s make up some brochures!

Still Not Yet!
Step 3: Selecting Target Audience

- Select a secondary audience (optional)
  - This audience influences the primary audience (i.e. children influence parents)
  - May need to complete Step 4 before determining a secondary audience

Tidbits:
- Selecting an audience helps you effectively tailor your components and strategies later on
- Keep in mind that you may reach others with your program beyond this audience
- Need an audience to evaluate/track
Step 4: Formative Assessment

- “Getting to Know” Your Audience
- Review Existing Evidence/Data
  - County Needs Assessment Data
  - Behavioral Risk Factor Surveillance System
  - Youth Risk Behavior Surveillance System
  - School/Worksite Assessment Data

Tidbit: Completing this step will help you tailor your program components to what your audience needs are...
Step 4: Formative Assessment

- Gather Data Directly from the Audience
  - Formative Assessment Techniques:
    - Intercept Interviews (low resource)
    - Key Informant Interviews (low resource)
    - RAP Assessments (low resource)
    - Environmental Scan (low resource)
    - Existing Data Sources (low resource)
    - Community Forums (medium resource)
    - Focus Groups (medium resource)
    - GIS Mapping (medium resource)
    - Pre-Survey (high resource)
    - Pilot Testing (high resource)
Step 4: Formative Assessment

- After collecting information on your target audience:
  - Look for and inventory common barriers, issues, themes
  - Use the inventory to determine your program’s goals/objectives in Step 5

- Example of Inventory:
  - Common Barriers to Eating Fruits & Vegetables:
    - Not enough time
    - Too expensive
    - Don’t know how to prepare/select
Step 5: Writing SMART Objectives

- Set **S**pecific, **M**easurable, **A**chievable, **R**ealistic, **T**imeframe oriented objectives
- Select objectives that help accomplish your Health Behavior(s)
- Objectives will help you define:
  - What you hope to accomplish
  - What your expected outcomes are
  - What data you must collect
  - How long it will take

Tidbit: More effective programs & interventions have both nutrition & physical activity objectives
Step 5: Setting SMART Objectives

- To Begin, Consider:
  - Formative Assessment Results (Step 4)
  - Known Science or Evidence
  - Evaluation Measures (Step 7)

- When writing, Consider:
  - Combination of Process & Outcome Objectives
    - Process: the amount of change expected needed to impact the outcome
    - Outcome: the amount of change expected to impact a health problem or issue
Step 5: Setting SMART Objectives

- Examples of SMART Objectives

  By March 2006, a baseline nutrition environment assessment will be completed in 4 locally-owned restaurants (process)

  By March 2007, at least 1 of the 4 locally-owned restaurants will have made at least two environmental changes (outcome)
Step 6: Using Evidence-Based Strategies

- Think about Strategies by:

**Behavior Change Areas:**
- Individual/Behavior
- Environment
- Policy
Step 6: Using Evidence-Based Strategies

- Think about Strategies by:

**Prevention Area:**
- Fruit & Vegetable Consumption
- Sweetened Beverage Consumption
- Portion Size/Portion Control
- Breastfeeding
- TV or Screen Time
- Physical Activity
Step 6: Using Evidence-Based Strategies

- Consider Site of Strategy:
  - Worksite
  - Home
  - Community
  - School/Childcare
  - Healthcare

- Consider Evaluation Measures--Again
Step 6: Using Evidence-Based Strategies

- Select strategies that help accomplish your objectives.

- Whenever possible, select evidence-based or best-practice strategies.
  - What Works in Schools
  - What Works in Worksite.

Tidbit: More effective programs & interventions have both nutrition & physical activity strategies.
Step 7: Evaluation

- Evaluation helps answer questions about effectiveness by documenting and measuring the implementation and success in achieving intended outcomes.
- Consider existing baseline data sources.

- Consider evaluation techniques:
  - Pre/Post Survey
  - Retrospective Survey
  - Observation
  - Assessments (i.e. NEMS)
Step 7: Evaluation

- Review health outcome(s), health behavior(s), objectives, & strategies to determine necessary measures

- Select evaluation measures for process/outcome objectives
Step 8: Implement & Evaluate

- Consider piloting a small part or the entire program

- Once your program is being implemented:
  - Continually check-in with your target audience
  - Document, evaluate, and revise as necessary
Example from the Field

Footprints to Health: Franklin Neighborhood Initiative
The Perfect Prescription?

**Effects:** Lose weight, decrease blood pressure, increase good cholesterol, decrease bad cholesterol

*Ambulo – 10 mg*

**Caution - Possible Side Effects:** feel better, sleep better, unexpected euphoria, increased energy, decreased risk of diabetes, decreased risk of cancer, decreased risk of heart disease.

May also lessen your desire to drive everywhere.
The “Modern Way”

Amazon.com: **Look Great** Naked: Slim Down, Shape Up and Tone Your... Amazon.com: **Look Great** Naked: Slim Down, Shape Up and Tone Your Trouble Zones in Just 15 Minutes a Day: Books: Brad Schoenfeld, Carole Semple-Marzetta by... www.amazon.com/exec/obidos/tg/detail/-/0735202303?v=glance - 142k - Cached - Similar pages

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Example From The Field

- Working with the HEAL (Healthy Eating, Active Living Coalition) in Marathon County
- Pilot intervention in summer 2005
- Designed a longer-term intervention for a Wausau neighborhood
- Received an implementation grant from WPF to replicate in other neighborhoods
Step 1: Select Health Outcome(s)

Health Outcome:

- Increase the number of Marathon County residents at a healthy weight
Step 2: Select Health Behaviors

Health Behaviors:

- Increase Fruit & Vegetable Consumption
- Increase Physical Activity

- HEAL chose a nutrition & physical activity health behavior to achieve their health outcome of increasing healthy weights
Step 3: Selecting Target Audience

- Primary Target Audience: Parents of Elementary-Aged Children

- Secondary Target Audience: Elementary-Aged Children

- Used the summer pilot, an extensive literature review, and formative assessment to select audiences
- Children “influence” parents
Step 4: Formative Assessment

- HEAL used 4 main formative assessment techniques:
  - Focus Groups with Parents
  - Intercept Interviews with Parents
  - Environmental Scan of Neighborhood
  - Key Informant Interviews with Community Leaders/School Officials
Step 4: Formative Assessment

○ Formative Assessment Inventory:
  ● Fruit & Vegetable Consumption
    ○ Time, affordability, kids’ dislike are barriers
    ○ Don’t know how to select/prepare
    ○ Need ideas for meals/snacks
    ○ Eat more with meals
  ● Physical Activity
    ○ Time, weather, cost to access facilities are barriers
    ○ Traffic in neighborhood contributes to decreased walking
Formative Assessment via GIS Mapping
Step 5: Writing SMART Objectives

- Objectives at every level of the Social Ecological Model
  - Individual/Behavior
  - Environment
  - Policy

- Objectives cover the following settings:
  - Worksite
  - Community/Neighborhood
  - School
Step 5: Writing SMART Objectives

- By April 2007, 25% of the 375 parents of elementary-aged children, who are living in the Franklin Neighborhood, will eat one additional healthy family meal per week.

- By April 2007, at least one locally-owned restaurant in the Franklin Neighborhood will have made two or more environmental changes to promote fruit and vegetable purchases.
Step 5: Writing SMART Objectives

- By April 2007, the Franklin Neighborhood will have instituted at least 2 of the recommended changes to make the neighborhood environment more conducive to physical activity.

- By April 2007, the hours that school and community facilities are available for use for physical activity will have increased by 10%.
Step 6: Using Evidence-Based Strategies

- Increase the number of healthy family meals eaten at home per week

- Strategies Used:
  - Teaching family meal planning skills
  - Teaching fruit & vegetable preparation/selection skills
  - Providing family meal ideas
  - Providing kid-friendly fruit & vegetable recipes
Example From The Field
Step 6: Using Evidence-Based Strategies

- Increase access to fruits and vegetables via restaurants in the neighborhood

- Strategies Used:
  - Competitive pricing; more nutritious foods priced less
  - Point of decision prompts
  - Offer fruit and vegetable side dishes or substitutions
Step 6: Using Evidence-Based Strategies

- Increase access to facilities where neighborhood residents can be active

- Strategies Used:
  - Allow after school and evening access to recreational facilities (i.e. school building, YMCA, etc.)
  - Sliding-fee scales for recreational facilities
Step 7: Evaluation

Outcomes--Evaluation Plan:

- Pre/Post Parent Survey
- Pre/Post Environmental Assessments
  - NEMS
  - Walkability Checklist
  - Bikeability Checklist
Step 7: Evaluation

Process--Evaluation Plan:

- Number of recipes mailed to parents
- Number of Family Meal Planning Training attendees
- Number of neighborhood meetings held to discuss traffic issue/environment
Step 8: Implement & Evaluate

- Intervention is in the field now
  - Tested media messages on family meals & being active as a family
  - Family Meal Planning Trainings piloted; need to be held in conjunction with school-related events to get parents from Franklin Neighborhood to attend
We “Packaged” the Initiative to Have More Impact!

- It’s not a single activity or a series of unrelated activities
- Varied and multiple exposure and “dose”
- The sum of the parts will hopefully be enough for real behavior change
- The ultimate question is: Will it ....... Stick!

SPLATT !!!!
It’s A Multi-Faceted Problem...

**Food Trends**
- ↑ 100% Eating out
- ↑ 400% Fast food
- ↑ 150% Soft drinks

**Personal Trends**
- ↓ Time for adults with kids
- ↑ Average TV/“screen time” = 7.5 hours/day

**Physical Activity Trends**
- ↑ 50% trips by car
- ↓ 87% of kids walking to school
- ↓ Physical Education time
- ↓ Jobs are more sedentary

**Environmental Trends**
- ↑ Spread out communities, which ↑ trips by car
- ↓ Number of “connections”, which discourages walk & bike trips
- ↓ inactivity in WI winters

Level or ↓ Physical Activity + Increase in Food Consumption = ↑ Body Weight

Genetics

Evolution
... So Simple Solutions Won’t Work

REAL LIFE ADVENTURES

I GAVE UP TRYING TO BUILD ABS. SO I HAD THEM TATTOOED ON.

WISE/ALDRICH

If at first you don’t succeed, try something else.
…It Needs a Multi-Faceted Solution

**Intervention & Levels of Change**

<table>
<thead>
<tr>
<th>Level</th>
<th>Physical Activity</th>
<th>Fruits &amp; Veggies</th>
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<tbody>
<tr>
<td>Individual</td>
<td>Destination Map</td>
<td>Recipes/Tips</td>
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<td></td>
<td>Tips</td>
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<tr>
<td>Interpersonal</td>
<td>Activity Resource Guide</td>
<td>Family Meal Tips/Training</td>
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<td>Walk to School</td>
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<tr>
<td>School/Organization</td>
<td>Safe Routes to School</td>
<td>Assessments at School/Business</td>
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<td>Access to Facilities</td>
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<tr>
<td>Community/Environment</td>
<td>Activity Resource Guide</td>
<td>Farmers Market</td>
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<td>Access to Facilities</td>
<td>Restaurants/Stores – Assess &amp; Modify</td>
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<td>Walking Challenge</td>
<td>Media Campaign</td>
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<td>Social/Policy</td>
<td>Traffic Calming</td>
<td>Healthy Eating Policy</td>
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<td>Access to Facilities</td>
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Consider ........

Waking Hours in Various Settings
(16 total hours possible)

- In Transit: 1
- Community: 3
- Family/Home: 5
- Healthcare: 10 seconds
- Work or School: 8

Consider ........
Tips on Getting Started

- Do Not Become Overwhelmed:
  - Utilize the KISS Principle (Keep It Simple Stupid)
  - Select 1 Health Behavior
  - Select 1 Objective
  - Select 1 Strategy
  - Keep the evaluation simple (process)
Tips on Getting Started

- **Complete One Step at a Time:**
  - Recognize that this planning process can take a lot of time

- **With Limited Resources/Time:**
  - Remember for every step you complete, you are working towards creating an effective program
  - *It is okay* to start with one or two steps! When resources or time become available, work on additional steps
  - “Package” your strategies where possible
Where to Start—Resources

○ Moving to the Future:
  ● On-line technical assistance resource for designing effective community programming to promote healthy eating & physical activity
  ● Contains formative assessment, objective writing, and evaluation tools
  ● http://movingtothefuture.org/
Where to Start--Resources

- Nutrition & Physical Activity Program
  - Can provide technical assistance with Program/Intervention Planning

- What Works Documents that outline evidence-based strategies
  - What Works in Worksites
  - What Works in Schools

- Other Existing Resources
  - Worksite Wellness Toolkit
  - Got Dirt? Garden Toolkit
Where to Start--Resources

○ Future Coalition Trainings:
  ● Coalition Training plan will offer more in-depth training on each step of the Program Planning Process
  ● Training to begin in February 2007
  ● Led by the WI PAN Families & Communities Committee
Today’s Environment

A refrigerator with a built-in TV.

What’s Next?
Can we engineer our way into eliminating all physical activity completely?
A brisk walk in the park keeps Merry B in shape between dog shows. His owner, Columbus resident Cathy Stumbo, got up early to give her 3-year-old Doberman his regular workout. They typically log 13 miles in Berliner Park.
“People change their behavior to reflect their environments. If you want healthier people, create healthier environments”

-Tom Golaszewski, EdD
Questions?
Contact Information

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Group Activity - Answers