Breakfast Basics

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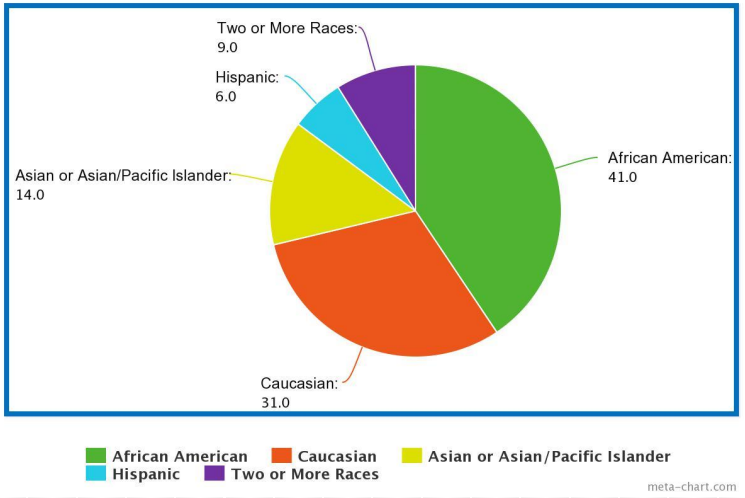
Background-Needs Assessment

- According to survey by Academy of Nutrition and Dietetics 42% of Caucasian children, 59% of African American children, and 42% of Hispanic children will skip breakfast in the morning

- Demographics at Dr. Howard Elementary School in Champaign, IL: 41% African-American, 31% Caucasian, 14% Asian or Asian/Pacific Islander, 6% Hispanic, and 9% two or more races

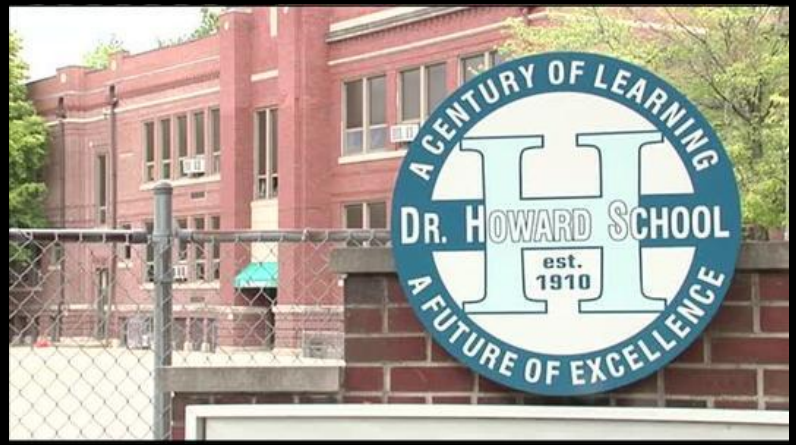


Needs Assessment

- 2010 Family Nutrition and Physical Activity Survey showed that 12% of Caucasian children, 18% of African American children, and 12% of Hispanic children will never or rarely have breakfast

- In Champaign County, of those who participate in the National School Lunch Program (NSLP), only 65% will actually participate in the breakfast program (NSBP)
  - About 9,056 children in Champaign are enrolled in the NSBP, but only 29.9% of them will actually utilize it

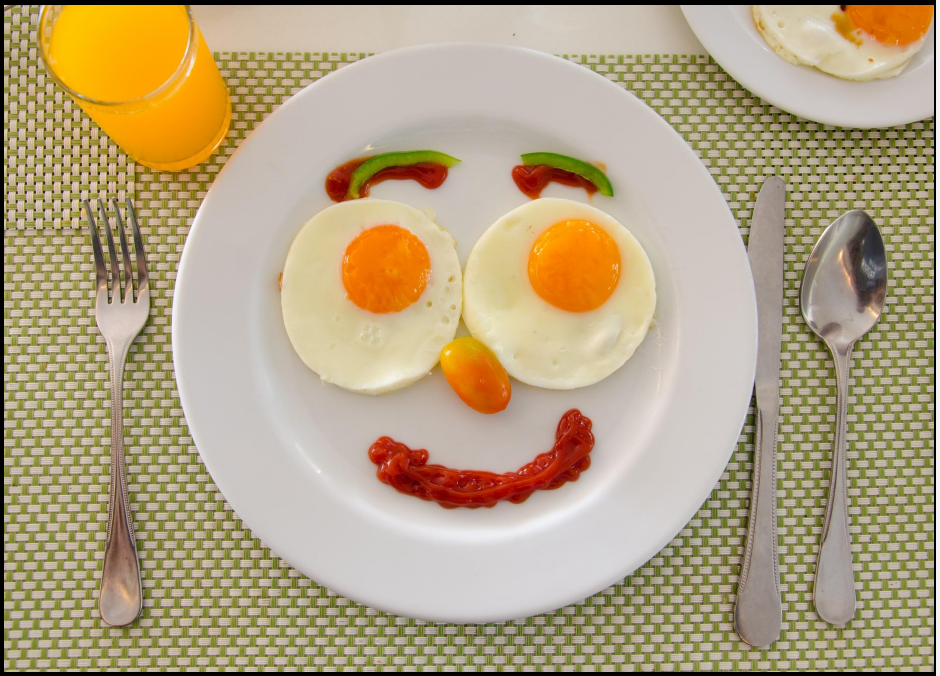
Target Audience



http://video-static.clipsyndicate.com/zStorage/clipsyndicate/229/2014/08/12/22/28/ywmqvtcqrmiwheedjzhi.jpg

- 5th Grade Students at Dr. Howard Elementary in Champaign, IL
- Why?
  - Faculty is motivated and enthusiastic about helping their students live healthy lives
  - 5th graders may be more independent and on their own for breakfast

Length, Time, Location



http://pas-wordpress-media.s3.amazonaws.com/wp-content/uploads/2014/03/Culture-Eats-Strategy-For-Breakfast.jpg

- 8 week program
- 30 minute lessons held once a week
  - At the start of the school day to avoid inconveniencing the teachers and because some lessons include making and eating breakfast
- Lessons held in classroom (and occasionally in cafeteria)

Previous Studies

Study:	Highlights:
Powell, C. A., et al. (1998). Nutrition and education: a randomized trial of the effects of breakfast in rural primary school children. *The American Journal of Clinical Nutrition*. Retrieved from http://ajcn.nutrition.org/content/68/4/873.full.pdf	• Included students grades 2nd-5th • One year study • Eating breakfast resulted in improvements in nutritional status, school attendance, and achievement
Russell, L. V., et al. (1996). Outcomes of a Field Trial to Improve Children's Dietary Patterns and Physical Activity--The Child and Adolescent Trial for Cardiovascular Health (CATCH). 10. Retrieved from http://catchusa.org/documents/CATCH%20Research/Luepker%201996.pdf	• Included 3rd graders • Three year study • Resulted in reduction of school lunch fat content, intensity of physical activity increased, children's eating and physical activity behaviors improved

Previous Studies

Study:	Highlights:
Simons-Morton, B. G., et al. (1991). Promoting Physical Activity and a Healthful Diet among Children: Results of a School-Based Intervention Study. *American Journal of Public Health*, 8. Retreived from http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.81.8.986	• Program focused on improving health of children through classroom health education, physical activity, and lower fat, lower sodium school lunches • Six modules were emphasized in the classroom
Domel, S. B., et al. (1993). Development and Evaluation of a School Intervention to Increase Fruit and Vegetable Consumption among 4th and 5th Grade Students. *Journal of Nutrition Education*, 6. Retrieved from http://ac.els-cdn.com.proxy2.library.illinois.edu/	• Program created for 4th and 5th grades students • Six week, 18-session curriculum • Used interactive methods such as games and roleplaying • Had students keep food diaries to monitor fruit and vegetable intake

Previous Studies

Study:	Highlights:
Liquori, T., et al. (1998). The Cookshop Program: Outcome Evaluation of a Nutrition Education Program Linking Lunchroom Food Experiences with Classroom Cooking Experiences. *Journal of Nutrition Education*, 5. Retrieved from http://ac.els-cdn.com.proxy2.library.illinois.edu/	• Three components: school lunch, classroom, and parent and community • Included cooking sessions and class trips • Promoted children's consumption of whole grains and vegetables and self-efficacy and knowledge about these foods
Bobroff, L. B., et al. (1996). Encouraging Elementary School Children to Eat Breakfast. *Journal of Nutrition Education*, 265. Retrieved from http://ac.els-cdn.com.proxy2.library.illinois.edu/	• Aimed to increase knowledge of importance of breakfast as well as teaching students how to prepare nutritious foods • Students in kindergarten-5th grade • 5 lessons • Resulted in 82% increase in knowledge and 52% more students started eating breakfast at the end of the program

Short Term Goals

- Increase knowledge on why breakfast is important
  - Measured by pre-test and post-test results
- Improve student's ability to plan and prepare a healthy breakfast
  - Evaluated by meal documentation in food logs and activities done during lessons
  - Requires an improvement in self efficacy

http://www.eatright.org/uploadedImages/Programs/Kids_Eat_Right/Public/Images/breakfast_girl_cereal.jpg

Long Term Goals

- Improvements in student's breakfast
  - Quantity and Quality
  - Data can be gathered from food logs
- Improvements on test scores
- Reduced rates of absence and tardiness
  - Data on test scores and attendance can be gathered from teachers

http://www.camelcitydispatch.com/wp-content/uploads/2012/08/test-scores.jpg

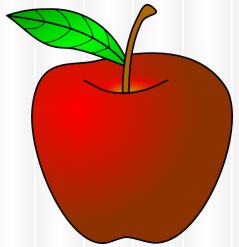
Key Issues/Critiques

- Very specific, small audience
- School data is from 2010
- Outcome uncertain - only eating habits, not exercise
- Some programs with hands-on activities still were not successful
- 8 weeks - not long enough to determine permanent change
  - Follow up will be done
- Students will not be screened
  - Unknown which students need more guidance

Strengths

- Location of program
- "Do, Reflect, Apply" strategy from "Building Better Breakfasts"
  - Students have time to reflect and apply what was learned when completing handout/educational material
- Hands on learning in several lessons
  - Will be able to replicate what they already know how to do
  - Keeps students engaged

Evaluation



- Pre and post-test surveys
  - Goal: increase knowledge of healthy breakfast foods
- 6 month follow up
  - Impact on test scores, eating behaviors since program ended
- Reliable - Cronbach's Alpha
  - Consistent results over time
- Valid
  - Clear questions - students know what is being asked of them
  - Consult dietitian to approve healthy breakfast choices
  - Pilot surveys

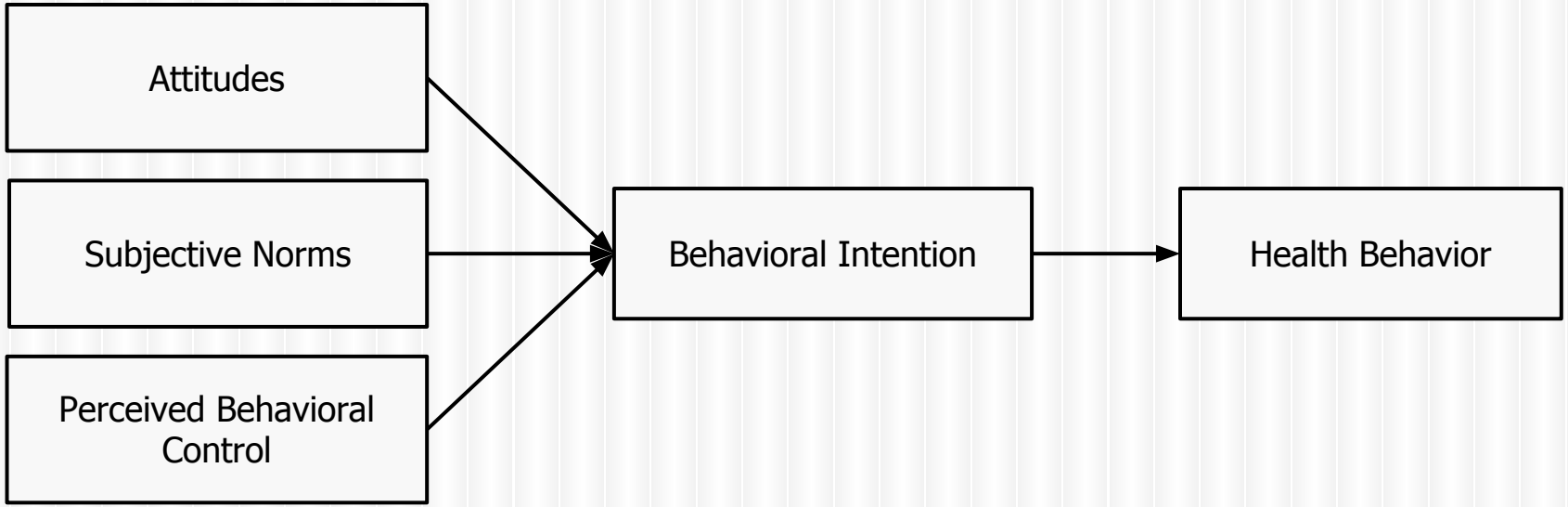
Behavioral Theory

- The **Theory of Planned Behavior** states that a health behavior is the direct result of a behavioral intention
  - three variables make up intentions
    - attitudes toward the specific action
    - subjective norms regarding the action
    - perceived behavioral control
      - similar to self-efficacy

http://blog.generalmills.com/wp-content/uploads/Cheerios-120413-4.jpg

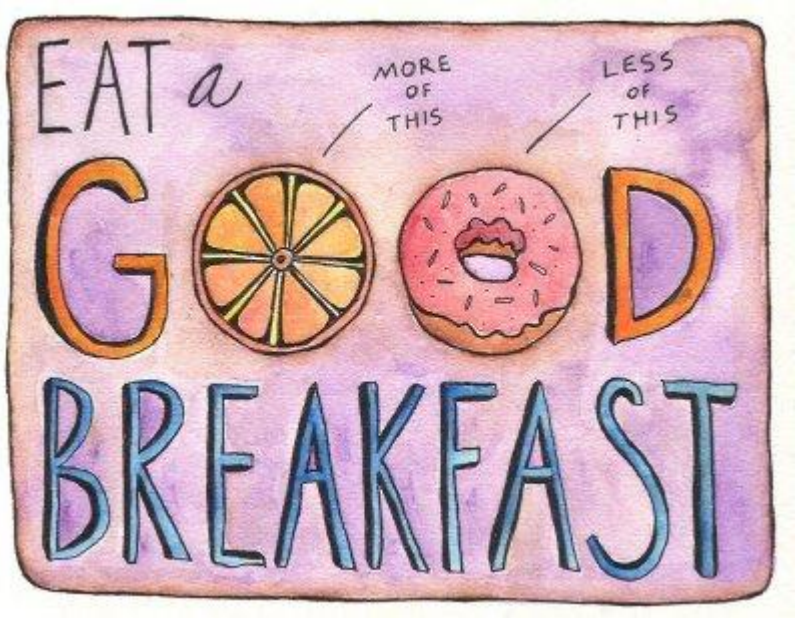
Behavioral Theory

- Theory of Planned Behavior



Lesson Breakdown

- Each week there is a lesson topic, an activity related to the topic, and a handout to reinforce information covered
- These components correspond with one or more variables from TPB
- Additional activities and handouts are included for reinforcement



http://2.bp.blogspot.com/_M-6E-8Ol4Y4/TNSOI23UpdI/AAAAAAAAA-Y/8RWRKYZSV_I/s1600/good+breakfast.jpg

TPB Incorporation Example

Week 5

Topic: Not All Foods are Created Equally-Talk about how certain foods will keep you full longer and give you more energy to get through the day.

Corresponds with Attitudes-This topic teaches students what foods will be most beneficial.

Activity: Have students make a list on the board of breakfast items that some students may eat for breakfast. Afterwards, have students make suggestions or substitutions to how we can make better choices (Example: Rather than a poptart, try instant oatmeal packet) Also talk about how sometimes we are in a rush and need to eat on the go. This can be healthy too!

Corresponds with Subjective Norms-Students will see how their peers would handle certain situations.

Handout: "On the go" Have students come up with two to three examples of breakfasts they can make and take on the go. Maybe they have an early orthodontist appointment or woke up late and are in a rush. Either way, breakfast is still a must!

Corresponds with Perceived Behavioral Control-Shows the students that they have the power and knowledge to plan breakfasts they are capable of making. And Intentions-Shows what the students would eat on the go.

Program Overview

Week 1

Topic: Breakfast Basics

Activity: Pre-test on breakfast basics. Also ask students for reasons why some students don't eat breakfast and make a list on the board or a large piece of paper. After getting about five answers, have students come up with solutions to change behaviors and learn to add in breakfast.

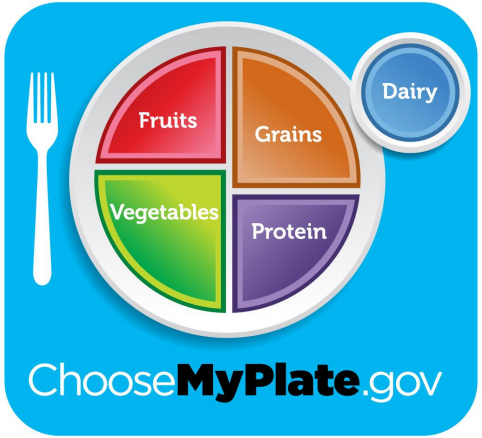
Handout: "Things I need to do to make sure I eat a nutritious breakfast every day!" Also pass out meal log sheets to have students log their breakfasts.

Week 2

Topic: MyPlate

Activity: Come up with different items that fit into the different components of MyPlate.

Handout: "Three easy nutritious breakfasts."



http://www.choosemyplate.gov/images/MyPlateImages/JPG/myplate_blue.jpg

Week 3

Topic: Plating Up Portions

Activity: Bring food models to show the students proper portions. Also bring items to represent portions (cd=pancake, baseball=cup of cereal).

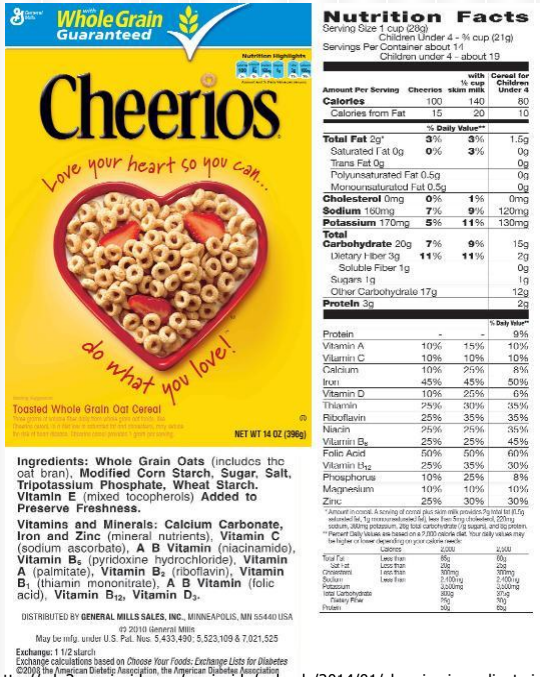
Handout: "How much should I eat?"

Week 4

Topic: Figuring Out Food Labels

Activity: Have a big print out of a nutrition label to use as an example. Bring in several packages of breakfast items and pass one out to each student. Go through the label together and teach students how to determine if an item will help give them the brain power and energy to get through the day!

Handout: "Food label facts"



http://cdn3.gmoinside.org/wp-inside/uploads/2014/01/cheerios-ingredients.jpg

Week 5

Topic: Not All Foods are Created Equally

Activity: Have students make a list on the board of breakfast items that some students may eat for breakfast. Afterwards, have students make suggestions or substitutions to how we can make better choices

Handout: "On the go"

http://1.bp.blogspot.com/-TdO4_Yl0f2c/UPxh0fyEJRI/AAAAAAAAPXU/SbhkkVer5Mk/s1600/IMG_7781.jpg

Week 6

Topic: Behind the Scenes

Activity: Demo on how to make scrambled eggs in the microwave and a quick smoothie.

Handout: Recipe and instructions for both foods provided.

http://cdn.parenting.com/sites/parenting.com/files/styles/slide/public/600_ss8_teddy_bear_toast.jpg?itok=DlKQabTg

Week 7

Topic: Spread the word!

Activity: Bring paper, markers, crayons, glitter paint, etc and let students form small groups to make posters on anything they have learned thus far.

Handout: "Make food fun!"

Week 8

Topic: Give it a try!

Activity: Give post-test and gather feedback from students. Also use this time to go through their meal logs one more time.

Handout: "Breakfast basics!" Basically a brief overview of what was learned in the 8 week program.

http://www.parentearth.com/wordpress/wp-content/uploads/2011/01/Teen-Iron-Chef-and-Cooking-With-Kids.jpg