

Case Study

Fitwits: Games for Health

Fitwits is a system of products and services that enable families to participate in a discussion about health, instead of feeling like the recipients of a lesson or the target of a health intervention. The Fitwits program is designed to encourage hands-on learning, allowing families the opportunity to interact with each other, ask questions, negotiate, invent, and play. Our team advocates for improved health communications and resources in all facets of families' lives.

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86,000

Games printed

Countless

Calories burned

750

Nitwit tickets

Courageous

Parent champions

Most famous

Elvis Pretzley



The Fitwits In 60-Minutes classroom curriculum is a health promotion and education program designed to inform fifth graders about obesity and its adverse effects. The students learn the basics about obesity and recommended nutrition, as well as exercise and portion concepts.

Opportunity

A great need exists for improved health. The Fitwits Program recognizes that families living in lower socio-economic environments are at a higher risk for combating obesity related complications later in life (Drewnowski & Specter, 2004). Many underserved youth do not have access to programs and services that address early preventative obesity and nutrition education (IOM, 2001). Rising obesity rates are a public health problem that consumes an ever increasing portion of health care

spending. Fitwits was born out of the feeling that different approaches toward obesity prevention are needed—both in public policy and in health policy—which take a more encompassing outlook towards the notion of family empowerment. We saw an opportunity to design accessible health education and messaging across multiple community locations (e.g., schools, family health clinics, and family support centers) to families (e.g., parents, guardians, and children).

Approach

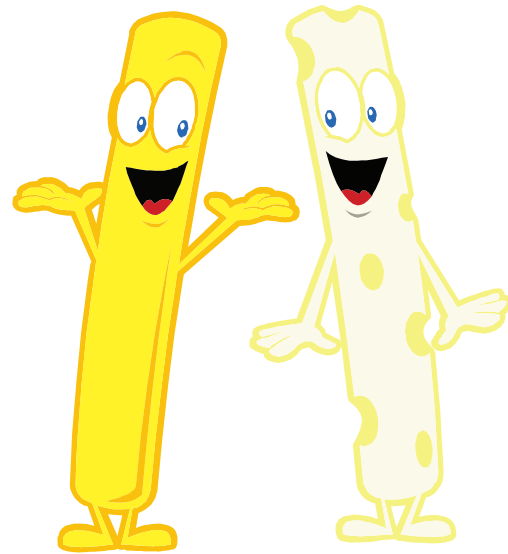
Fitwits—a system of games and educational services that give children and their families the opportunity to adopt and maintain healthier lifestyles—advocates for improved health education and resources in all facets of an individual’s life. At the heart of the brand are cartoon characters called the Fitwits and their negative counterpart, the Nitwits. The novelty of Fitwits is making teaching and learning about health fun. It is designed to motivate families to eat and live well by making the child a partner in her health through active learning. Through a set of digital and analog delivery tools, the solution provides parents, teachers, and doctors with greater visibility into the health-impacting decisions a child makes so they can positively motivate change. Fitwits rewards three important actions—leadership, exercise, and eating right. Everyone is encouraged to participate in children’s improved health, and everyone gets much-needed context to make informed decisions every day.

Methods

The evolution and success of Fitwits are attributed to our community of diverse codesigners, including doctors, teachers, kids and care-givers. Our intentionally designed elicitation tools



MONTY AND JACK



Monty and Jack are the hottest dancers on the block. They won the national hip hop dance contest and perform in cities all over the world when they are not in school!

Nine-year-old Rashawn invented the first Fitwits characters. Three weeks after our nutritionist explained to kids the importance of food portions, Rashawn could recall the information in the form of a story.

participatory design sessions with stakeholders focused on understanding changes individuals could make and connecting them to what was possible.

Our process for engagement borrows heavily from Community-Based Research—an approach that happens in community settings and directly involves people living in the community in the process of producing practical knowledge that it can apply to their everyday lives. It inspires the community to design new ways of incorporating healthy eating and physical activity into their lives through

a multi-methods communication approach. Community-Action Based Research aims to achieve social justice through social action and change. (Senge, Scharmer, et al.)

Internally, our collaboration with healthcare workers and public health researchers helped embed assessments into many of our design methods, creating a unique, evidence-based approach and a deeper understanding of the community's needs. We worked to create new ways of surveying kids that invited creative opportunities to communicate their knowledge



A simple act like a puppet show hosted by one of the doctor's from The Children's Hospital and Elvis Pretzely on the adverse effects of obesity, followed by kids making and running their puppet show, gave them the confidence to openly talk about how they navigate the vast food landscape.

and needs that are often difficult to express through a conventional survey. Things like replacing 5-page pre-post surveys with a “Fitwits World News Broadcast” hosted during lunch where student reporters presented survey questions asking their peers they knew about healthy food, favorite foods, and how they motivate their friends to get healthy. This type of creative thinking can only happen when all the various disciplines collaborating on the project have mutual respect for each discipline brings to the table.

We have many examples that point to the benefits of our community-engaged interdisciplinary approach, but one, in particular, is the work we did with caregivers throughout two years. Our goal was to bestow best training practices for caregivers to start teaching Fitwits in their context and setting. The codesign sessions were themed around:

- A healthy learning environment
- Nutrition
- Physical education and activity
- Health education
- Family and community involvement
- Health promotion
- Counseling and social services

Some of this learning around these themes were embedded into group activities like visiting a community

garden, cooking together, and some took shape in health-related games. For example, one role-playing game was built around a future scenario demonstrating through gameplay what happens when you get Type 2 diabetes. Participants would pick cards at random. Sometimes, they might get a prop like a pair of glasses that impaired their vision or a walker. This type of experience helped to break down barriers and build new kinds of social relationships and networks.



Using data visualizations helped explain the adverse effects of a Kentucky Fried Chicken family dinner vs. cooking it at home.

Another novel codesign strategy, while designing alongside participants, used relevant data to inspire learning and advocacy. Using data visualizations provided opportunities to teach social responsibility through the basic tenets of information design. For example, visually explaining the adverse effects of a Kentucky Fried Chicken family dinner vs. cooking it at home.



The school principal championed Nitwit-Free Tuesdays. If students and staff were caught drinking soda or eating chips, they were cited a Nitwit ticket. A 4th-grade teacher stopped drinking soda for fear her students would ticket her every day; as a result, she lost 12 pounds.

Once trained, caregivers embraced the title “Parent Champions.” Now, “employed” by Fitwits, Parent Champions gained the confidence to interact with various profit and non-profit institutions, schools, and individuals within their community. They were seen as the disseminators of appropriate health information—essentially, they were the agents of change. Some of the changes they made were establishing no-soda policies at community picnics, designing a Fitwits musical, working with local restaurants to create alternative healthy meal choices, and teaching kids at their local summer camps.

Codesigning Fitwits helped our team reflect upon another vital design consideration—the expectations and emotions people collectively bring to the codesign experience. We made time to get to know, engage, encourage and celebrate each person who was part of

the process. The codesign process is not linear, and, if done authentically, should capture the beauty of a community designing for self-reliance so they can grow and sustain change over time.

Outcome

Our innovative, codesign process has shown to be highly effective in facilitating non-judgmental discussions about sensitive topics between children, families, educators, and physicians. To date, the system has been prototyped and tested in several contexts, including schools, where health educators seek effective programs that reinforce school wellness policies; doctors’ offices, where physicians need well-researched strategies to educate patients and reverse childhood obesity; and restaurants, where management searches for ways to educate their customers on how to make healthy decisions when eating out.



We ran a storewide scavenger hunt searching for the Fitwits family and their not-so-healthy relatives, the Nitwits. The entire grocery store was set up as a game to help families talk to their kids about nutrition, fitness, and portion size while navigating the shopping experience.

We have also collaborated with researchers who have tracked and evaluated the efficacy and impact of our programs. For example, the first evaluation of Fitwits MD tools was with 33 physicians and 93 families to study the impact of using Fitwits MD in an office setting. The results indicated that the intervention reduced barriers identified by physicians in their discussions about obesity prevention with families. One measurable outcome was that the length of time physicians spent with families discussing these issues increased from an average of 3.6 minutes to 7 minutes. The second

study examining the Fitwits MD tools looked at the physician's need for tools that promote an effective conversation with preadolescents of any BMI status and improve office-based physician training and self-efficacy. The study indicated that training and experience using Fitwits tools substantially prepared physicians to discuss obesity topics with preadolescents.

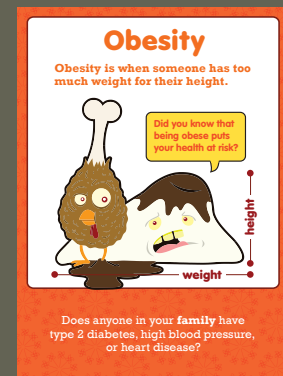
Fitwits In 60-Minutes classroom evaluation took place in fifth-grade classrooms with 189 students from five Pittsburgh schools. Fitwits In 60-Minutes is designed to inform fifth

graders about obesity and its adverse effects and to enhance self-management skills for students and their families. It takes place during a normal class period and combines didactics, with hands-on learning and game play. Results across our three multiple-choice surveys (pre-post, post 1 at 4 weeks) confirm a favorable gradient in knowledge acquisition and retention.

The Fitwits Zones study measured participants' progress throughout a 6-week summer game co-created by the participants for their community. We collected physiological, self-reported, and behavioral measures throughout the game. The physiological assessment was conducted by a physician and included height, weight, body mass index, blood pressure, and waist measurement. Participants went from sedentary to low-active at the end of the six weeks. They also exhibited a decrease in blood pressure and reduced waist sizes.

And last, the Fitwits program worked with Eat'n Park, a regional restaurant chain, to create a five-week promotional game to help families start conversations about nutrition and correct portion sizes while enjoying their meal. The partnership implemented Fitwits into 73 Eat'n Park Restaurants across Pennsylvania, Ohio, and West Virginia,

potentially reaching 85,000 families. During the Fitwits promotion, a 5.8% increase in healthy meal options sold off the kid's menu.



A physician using the Fitwits MD flashcards during a well-child visit to help start difficult conversations of body weight and preventable obesity-related diseases with a young patient and his mother.

Project Partners

Eat'n Park
Giant Eagle
University of Pittsburgh
Medical Centers
Hosanna House,
Wilkinsburg, PA
Kingsley Center, Lamar, PA
Pittsburgh Public Schools
Propel Charter Schools
Summer Youth Camps
Select YMCA's
Childrens' Hospital
Heart Healthy Kids Camp,
Northside
Allegheny Center Alliance
Church
Jerome Bettis Children's
Asthma Camp
Deshea Townsend Football
Camp

Sto-Rox High School
Summer Braddock Youth
Project
Healthy Family Home
Training Camp
Allentown Academy Summer
Camp
Families
Children of all ages