The Dinner Table:
A computer game to reduce childhood obesity

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Research Theme: Game design

Influencing behavior

The game was designed to modify children's behavior: by encouraging them to eat healthier and exercise more, their general well-being would improve, and hopefully rates of obesity among young children who play the game would drop.

There are a number of techniques which were employed to bring about these behavioral changes:
• Making the child feel responsible for the vegetables on his plate makes him accept them. This is accomplished by getting him involved in the process: growing vegetables or choosing them from the store, and helping to cook them.
• Making vegetables helpful and sparse, and junk-foods dangerous and easily available, creates an artificial demand for the former.
• Having the child evangelize healthy eating to a third party means he convinces himself at the same time.
• If systems in a game match those in real life closely enough, then skills and strategies which the child learns in the game tend to be emulated outside of it.
• Simulations can be more appealing than their real-life counterparts, if they are easier to "win" or provide some kind of fantasy.

Additionally, in order to take advantage of the above techniques, the game must be enjoyable to play, so that children continue being exposed to them.

Results

• An improved understanding of nutrition, from the game's realistic nutrient and stat systems.

Knowledge of nutrition
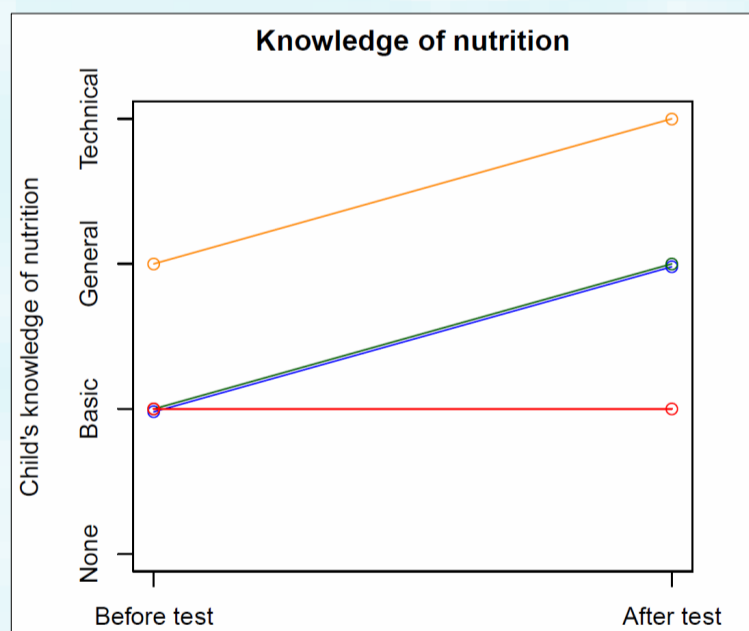
• A substantially increased interest in both gardening and cooking

• Players didn't seem to progress very far, due to some difficult parts and insufficient guidance from the game. Unfortunately, this limited their exposure to some of the important later-game features, such as evangelism.

Recipes found
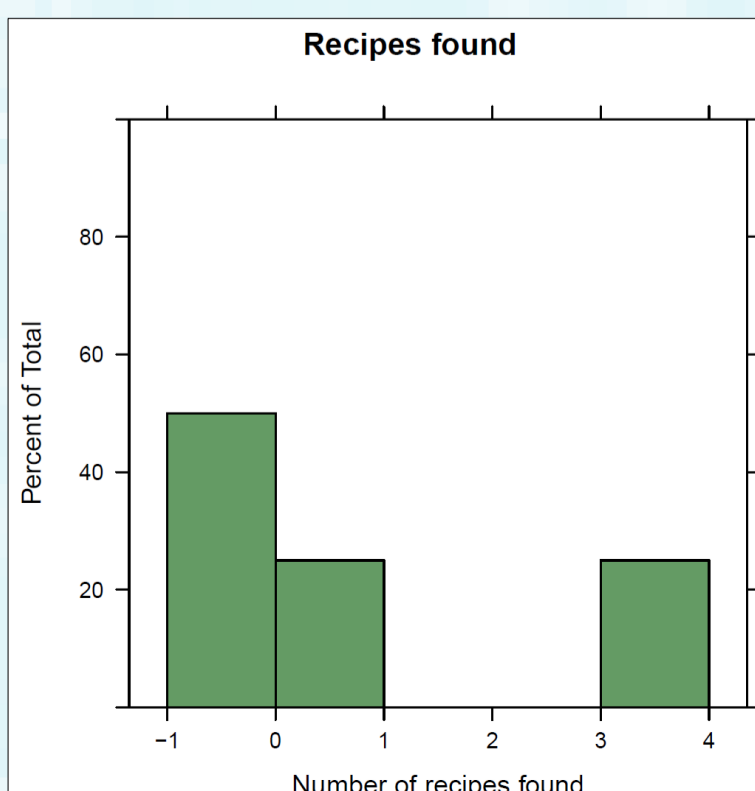
The Design

The Dinner Table draws on each of the above techniques, creating a compelling and realistic fantasy in which the player, an adult character, feeds and grows his family.

The player can visit a store to buy groceries and vegetable seeds. He has a vegetable garden where he plants the seeds and tends to the crops, watering them, waiting for them to grow, and picking them when they're ready. These vegetables, and the groceries from the store, give the player plenty of ingredients from which to prepare daily meals.

Beet
READY TO HARVEST!
(1 remaining)
Water:
Age: 7 days old

The game includes a kitchen, where the player combines ingredients into creative meals, discovering unique recipes, and being careful to balance the meal's nutrients.

Occasionally, one of the player's fussy "children" will complain about one of the ingredients, requiring the player to reassure him and convince him to eat it. The family then shares the meal, before the next day begins.

Through all of this, the player must manage the nutrients in the food his family eats, and his stats, which affect his effectiveness in the game. When he has succeeded sufficiently, he is rewarded with a new family member, making the game more difficult but bringing him one step closer to winning.

Energy:
Muscle:
Inventory:
Digestion:
Health:
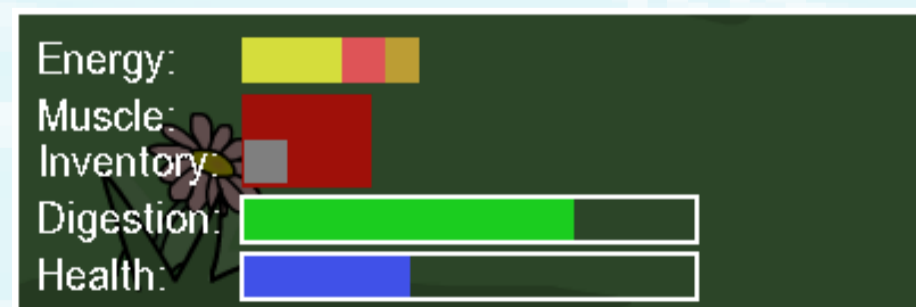
The future

I plan to continue improving and testing the game, shaping it into a tool which might one day seriously combat the issue of childhood obesity.