

Appendix 1 Voice over narration after player chooses “Start”

Welcome! We hope you have fun as we explore how different foods affect our bodies and how they move!

Food is fuel for our bodies (just like gas is fuel for cars), and we want to put really good fuel into our bodies to make them work well.

If you fuel your body with lots of good nutrients, like vitamins and minerals, your body feels better now, and it will also feel better in the future!

If you fuel your body with food that does not have vitamins and minerals that your body needs to grow and move, your body doesn't feel as good and it doesn't move as well! This is also true in the future. Especially after a long time of continuously eating unhealthy foods, your future body can really suffer.

Some examples of healthy foods are vegetables like carrots, broccoli, and green beans, fruits like bananas, blueberries, and apples, and lean meats, whole grains, and dairy products like milk. An easy way to eat healthy is to choose more whole, natural foods - like foods fresh from the garden - and to eat less processed foods.

Some examples of less healthy foods are fast food, red meat, high-fat dairy products, and foods that do not give your body very many vitamins and minerals like desserts and white bread. For example, candy, fruit juice, and ice cream are some unhealthy foods. We don't want to eat too many of these foods or else we won't feel good.

Now is your chance to see this in action! You get to choose different kinds of foods to see how your body might move differently when you fuel it up with different foods!

Please choose a character! You'll be steering a go-kart in this game, but the go-kart will move like your body would, that is, it will move faster and have more control if you fuel up with healthier foods along the way and it will be slower and have less control if you fuel up with less healthy foods along the way! This is just like how your body would move!

Pump your hands up and down to move your go-kart forward. To turn, move your arms in the direction you want to go. As you are moving, try to gather as many healthy foods as possible! Watch out though! There is less healthy food on the road, too, and collecting those foods will slow you down.

Ready? Set. Go!

[Game result – display “score”]

[If child chooses mostly healthy foods]....

You made healthy choices! Your body is feeling good and your future is looking better!

[If child chooses mostly unhealthy foods]...

Uh Oh! All that junk food is making you feel sluggish... And your future is looking a little less healthy.

Now that you've made choices about your food, let's go to the future to see how your body has been affected by the foods you chose in the present!

[Future Mode]

Welcome to the future! Let's play again! Notice how your body moves based on what foods you chose in the past!

[Game Result - display "score"]

[If child chooses mostly healthy foods]....

Good job! You made healthy choices and your body is feeling good!

[If child chooses mostly unhealthy foods]....

Uh Oh! All that junk food is making you feel sluggish.

[If child chose mostly healthy foods in the very first game]....

The first time you played you chose to fuel up with more healthy foods and then you got to feel what that would feel like in the future. Now, let's see how your body would feel in the future if you had fueled up with less healthy food in the past! Remember, even though your body is affected by the foods you ate in the past, making healthy choices will still help you move faster!

[If child chose mostly unhealthy foods in the very first game]....

The first time you played you chose to fuel up with less healthy foods and then you got to feel what that would feel like in the future. Now, let's see how your body would feel in the future if you had fueled up with healthy food!

[Game result - display "score"]

[If child chooses mostly healthy foods]....

You made healthy choices! Your body is feeling good!

[If child chooses mostly unhealthy foods]....

You made less healthy choices.

[Game summary]

Now you've seen how foods can fuel up your body differently; like how choosing different foods changed the way it felt to move around in the game. Choosing healthy foods helped you move more quickly and easily in the present, and in the future.

You might also have noticed how less healthy foods made your character move slowly in the present, and even slower in the future. This is a lot like how our bodies are affected by the foods we eat.

The foods we eat can affect our body today, like when we run or go biking after eating. The foods we eat can also affect our body in the future. Over time, your body will change based on the foods you eat.

It can be fun to try healthy foods like fruits and vegetables and we hope you had fun playing this game. Making healthy choices can help you in many ways and it can also be fun!

Appendix 2 Screenshots from virtual reality experience

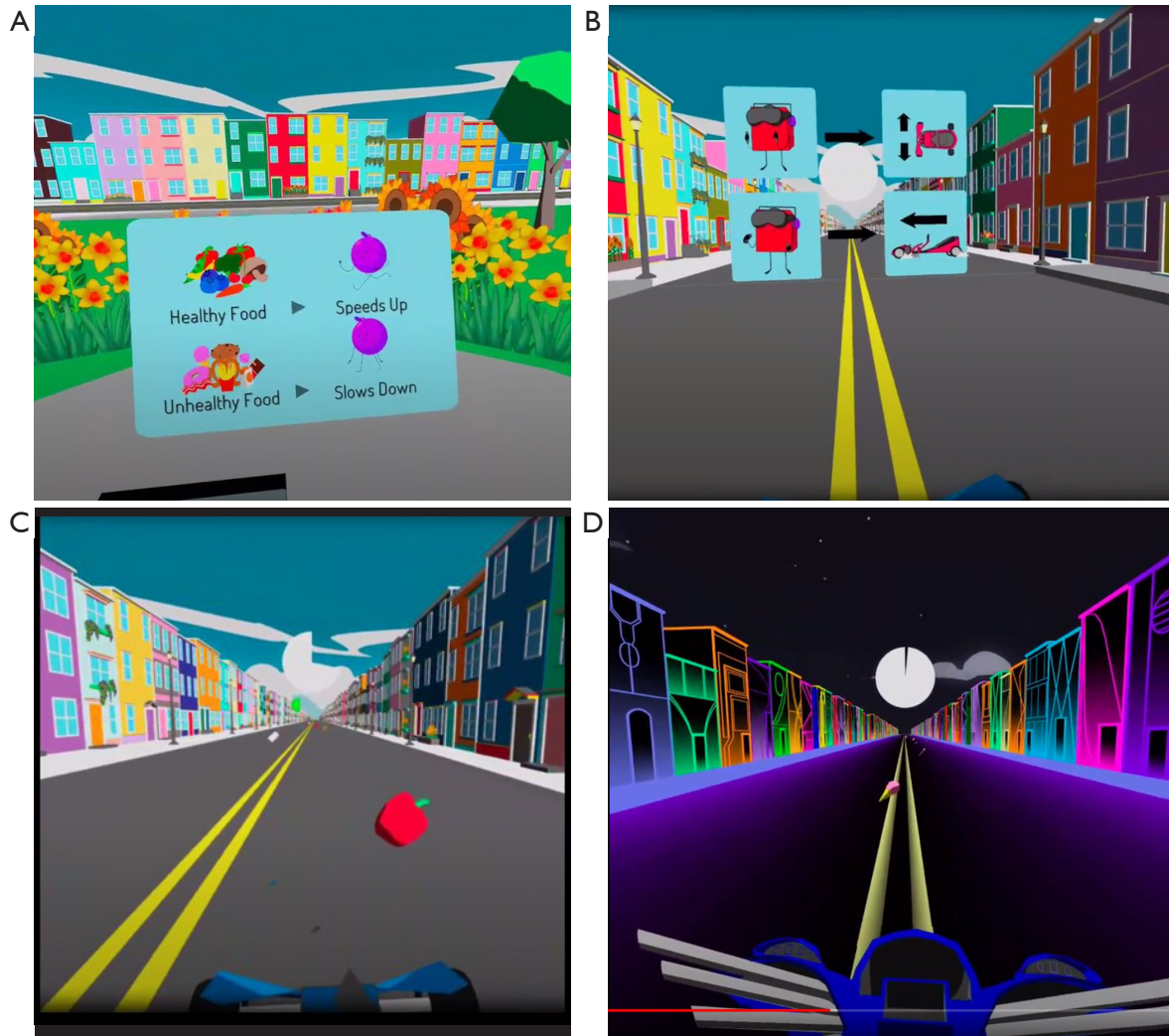


Figure S1 (A) The figure includes fruits and vegetables with an arrow to a character who is running, with text reading “Healthy Food -> Speeds Up”. The picture also includes less healthy foods such as chocolate and candy with an arrow to a character who is slouched over with text reading “Unhealthy Food -> Slows Down.” (B) The figure includes a road with yellow lines down the center and buildings on either side of the road. In the middle of the picture are illustrations of a red stick figure wearing a virtual reality headset showing how to move the go-kart in the virtual environment by moving the handsets. This is displayed during the voice over narration which describes to users how to move the go-kart in the virtual environment. (C) The figure includes the virtual environment during game play. The front of the go-kart is visible at the bottom of the picture, and an apple is in the road. The white circle in the middle of the picture in the virtual sky represents the amount of time users have in the game sequence. (D) The figure includes the game display in the “future” virtual environment. The buildings and the road are neon and set in a dark background. An ice cream cone is on the road. The circle in the sky mimics a clock during game play to represent the amount of time the user has left in the game sequence.