Kids Get Fit! Program Grant Proposal

Submitted: March 11, 2015

Written By:

Sarah Marver

Jean Liu

Katharine Chew

Dear Selection Committee,

We, Sarah Marver, Jean Liu, and Katharine Chew, are the founders of our 5-year intervention plan - *Kids Get Fit!* Program. Upon statistical data analysis of and interaction with this community, we believe our program will strongly help the community of Whoville, targeting children age 6-13 of the migrant farm workers. We chose to serve children ages 6-13, in order to follow all the participants and their progress for the next 5 years of school (until 18 years of age). If this intervention is successful, we can expand to include children ages 6-18 as we will cease monitoring progress. The primary nutrition problems to be addressed are lack of nutrition education, the availability of nutritionally dense food, and exercise. Our primary health objectives include decreasing BMI and increasing physical activity. Our primary behavioral objectives are to increase consumption of healthier foods, increase knowledge about healthy foods and importance of nutrition, and increase performance and enjoyment of physical activity.

Our overarching goal is to increase the overall health of school-aged children and increase their understanding of nutrition. Specifically, our measurable goals are as followed:

- 1. By 2020, the prevalence of overweight/obesity BMI status among the children of Whoville ages 6-18 years will be reduced by 5%.
- 2. By 2020, there will be a 5% increase the level of physical activity in children ages 6-18 years.
- 3. By 2020, 50% of K-12 public schools will be serving healthy, balanced, nutritionally dense school lunches according to MyPlate and RDA guidelines.
- 4. By 2020, 50% of children ages 6-18 will be able to list 5 healthy snacks they could eat.
- 5. By 2020, 50% of children ages 6-18 years will be able to run a mile/half mile (for children younger than age 12) under 15 minutes.
- 6. By 2020, 50% of children ages 6-18 will have one new vegetable or fruit in their food frequency recall.

To summarize, here are the primary outcomes to be assessed. This data will be taken towards the beginning and end of each school year in order to evaluate the changes over the course of a year of our intervention.

- BMI % change
- Oral knowledge test
 - O Example questions:
 - What is the main vitamin in carrots?
 - Out of 3 snacks, which is a healthier option?
- Physical Activity Test based on progress
 - O timed mile (half-mile for children under 12 years of age)

• Food Frequency Recalls - sent home for parents to fill out

Intervention Outline:

- 1. Take baseline measurements
 - a. BMI
 - i. a paid intern inputs height and weight values to a excel sheet already programmed to calculate BMI, which will automatically saved and logged.
 - b. Timed mile/ half mile for children under age 12 in the school's gym
 - i. During PE, PE teacher will shout out time of children's miles and children will log their time onto computer in PE class after running the mile. Files will be saved and sent to paid program coordinator.
 - c. Ask questions about nutrition: baseline knowledge
 - i. Coordinator and interns would create a very basic nutrition exam that students would take at the beginning of the school year and end of the school year.
 - ii. Questions must be approved by founders.
 - d. Food frequency recall \rightarrow send home, have parents fill it out with/for their children
 - e. For the 5 years of this intervention, we will follow the same children in order to evaluate their progress until age 18.
- 2. Increase awareness of the program
 - a. Bilingual flyers sent to child's home, advertising the nutrition classes and have small nutrition facts/ideas for healthier living
 - i. Once every 2 weeks
 - ii. Paid interns create flyers with nutrition educators, paid bilingual intern translates the flyers
 - iii. Must be approved by founders
 - b. Bilingual monthly newsletters sent to all homes with children, outlining what was taught in the last few classes
 - i. Paid interns create monthly newsletters, paid bilingual intern translates
 - ii. Content includes: overview of taught nutrition material, nutrition fun fact of the month, nutrition myth debunk of the month, calendar schedule of after daily school activities offered for both families and kids
 - iii. Must be approved by founders
- 3. Program implementation during school
 - a. Implement nutrition classes at school
 - i. During school for students (30 minute daily classes)
 - Coordinators would speak to teachers and principal to add 30 minutes of school for program implementation
 - 2. Principal would contact public school district administration to share grant proposal and request for necessary changes

- 3. A primary step one year before full implementation of the program
- ii. Content: range from general nutrition to overall health wellness (e.g. healthy snacks, healthy habits, etc)
 - 1. Topic must be approved by founders
- iii. Taught/led by a college graduate with a B.S. in Nutrition or Health Sciences. Prefer experience working with children and adolescents.
 - 1. Plan and make educational materials and lesson plans
- b. During recess: Recess adult supervisor will organize activities to encourage participation
 - i. Ensure children have proper equipment, including balls and jump ropes.
- 4. Implement after school activity program with healthy snacks
 - a. Snack time will take place in the school cafeteria
 - b. After school activity programs utilizing the school's courtyard and gym.
 - i. Sports teams, capture the flag, dodgeball, jump rope, hula-a-hoop.
 - ii. Paid interns will organize and lead activity.
 - iii. Each location will include about 333 children with 30 paid interns for supervision and activity guidance.
 - c. Kids will be divided into three areas and cycle between the areas.
 - i. The 3 areas will be in the cafeteria for snack time, the courtyard, and the gym.
 - ii. This will allow playtime to be less crowded. ½ of the kids will be in each area for ½ of the time (20 minutes), and then switch locations/activities.
 - iii. The equipment (jump ropes, etc.) will be split between the courtyard and gym.
- 5. Test the intervention's success
 - a. This data is to be collected in the same manner as baseline measurements. All of this data will be input into excel files designed to analyze the changes between measurements. We will create graphs of this data in order to evaluate the progress of our intervention and see what associated with significant or insignificant changes.
 - i. BMI
 - ii. Timed mile/half mile (once a year)
 - iii. Nutrition knowledge tests (once a year)
 - iv. Food frequency recall (once a year)
 - b. We will thoroughly analyze the intervention's success in 2020. Given that our plan will begin in 2017, this will give us three years of data to analyze. We will locate the programs strengths and weaknesses in order to see if there are changes we could make to improve the intervention.
- 6. Implement improvements to intervention
 - Based on the findings of step 5, we will find cost effective ways to implement enough changes in order to substantially increase the success of our intervention. We will focus on wherever there is the least progress.

- b. We will continue the program for the next two years with the new changes and the same general outline.
- 7. Beyond the 5 year intervention:
 - a. If the *Kids Get Fit!* intervention goals are reached, and the program is proved successful and effective, it can become an integrated part of the school program.
 - With enough funding from the government and fundraising, the program can continue without the data analysis. More resources can be allocated to staff to supervise children, expansion of the program, and all children of Whosville ages 6-18 would be able to participate.

Timeline of Budgeting:

One time costs: \$756,530.00 Cost per year: \$448,694.00 per year * 5 = \$2,243,470.00 for 5 years

Total Cost of 5 year plan: \$2,243,470.00 + \$756,530.00 = **\$3 million**

Item	Cost/ Year	Total
Consent Forms	\$122.00 (first year expense only)	\$756,530.00
Recess Equipment	\$1,755.08 (1 time cost)	
T-shirts	\$4,120.00 (1 time cost)	
Discretionary Costs	\$713,244.92 (1 time cost)	
Water Bottles	\$1,670.00 (1 time cost)	
Bottleless Water Dispensers	\$618.00 (1 time cost)	
Stipend for 3 Founders	\$15,000.000 (\$5,000 each)	
Healthy Snacks	\$180,000.00	\$215,414.00
Tests	\$1,822.00	
Flyers	\$32,593.00	
Liability Insurance	\$999.00	
Staff	Cost/Year	

40 Paid Interns	\$64,800.00	\$233,280.00
20 Nutrition Educators	\$54,000.00	
2 Program Coordinators	\$114,000.00	
		\$448,694.00 (not including 1 time costs)

Pricing:

EQUIPMENT⁽⁸⁾

- Jump ropes (\$23.97 for 9)
- Basketballs, dodgeballs, soccer balls, etc. (\$224.97 for 42 assorted balls)
- Hula hoops (\$79.98 for 12)
- Colored cones (\$17.99 for 10)
- Portable basketball hoop (\$1,099.99)
- Shipping: \$165.00
- Total: **\$1,755.08** (including tax)

T-SHIRTS⁽¹⁰⁾

- $1000 \text{ kids} \rightarrow 1000 \text{ t-shirts}$
- Estimated at **\$4,120.00** (\$4.12 each)

REUSABLE WATER BOTTLES ⁽¹¹⁾

- BPA-free flipper water bottle: 1000 at \$1.61 each, including logo= \$1,610
- Set up charge: \$60
- TOTAL: **\$1,670**

BOTTLELESS WATER DISPENSER

- \$309 (no tax and free shipping) x 2 (1 located inside the gym, 1 located in cafeteria)
- TOTAL: **\$618**

AFTER SCHOOL HEALTHY SNACKS

- Apple (or fruit in season) + granola bar for each kid= \$1 *1000 kids= \$1,000/day
- 180 school days/year * 1,000= \$180,000/year

STIPEND FOR FOUNDERS

- \$5,000 each for founder (Jean Liu, Katharine Chew and Sarah Marver)

- \$15,000 total

STAFFING

- 40 Paid Interns
 - Organize physical activities
 - Dispense healthy snack food
 - Create flyers and newsletters
 - Control data: take questionnaires, etc. and input into excel files
 - Work with and support nutrition educator and coordinators when necessary
 - At least four fluent bilingual intern to translate flyers and newsletters
 - Minimum wage of \$9.00/hour
 - \$9/hr x (1 hr/day) x (180 days/ school year) = \$1,620/ school year x 40 interns
 = \$64,800/ school year
- Paid staff
 - 20 Nutrition Educators
 - B.S. in Nutrition or Health Sciences wanted
 - Prefer CDR certificate stage 3 for childhood and adolescence or previous experience working with children and adolescents
 - In charge of writing lesson plans and creating nutrition education activities/topics
 - Teach 30 minute classes, create lesson plans, and create and administer knowledge tests
 - Educator must teach 2 classes with 25 students each.
 - Paid \$10/hour
 - Teach 2 classes per 30 minutes → paid \$15/hour x (1hr/1 day) x (180 days/school year in CA = \$2,700/school year x 20 educators = \$54,000/school year ⁽²⁾
 - Program Coordinator for Data
 - Responsibilities
 - Analyze and keep record of BMI, mile/half mile runs, knowledge tests, and food recalls of children
 - B.S in Health Sciences, Nutrition/Public Health, Community Development, Statistics with background in data analysis, statistics and strong writing skills.
 - Paid \$25/hour
 - 40 hrs/week x (\$25/hr) (52 weeks/1 year) = \$52,000/ year
 - Cost of health care coverage: \$5,000⁽⁷⁾

- Total cost of employer per year: **\$57,000/year**
- Program Coordinators for Activities
 - Responsibilities
 - Coordinate nutrition educators and interns
 - B.S in Health Sciences, Nutrition/Public Health, Community/Human Development with experience in working with a diverse population
 - Paid \$25/ hour
 - 40 hrs/week x (\$25/hr) (52 weeks/1 year) = \$52,000/ year
 - Cost of health care coverage: \$5,000⁽⁷⁾
 - Total cost of employer per year: **\$57,000/year**

LIABILITY⁽⁹⁾

- Background checks
- Insurance against slips and falls
- Protection against actual or alleged wrongful act in connection with management and employees, etc
- Commercial Liability Insurance with Tool Rider (est.)= **\$999.00/year**

DISCRETIONARY COSTS

- Money allocated for changes after evaluation in 2020
- Including hiring more staff, expanding our program, etc.
- Replacing broken/damaged equipment
- Staff bonuses

PRINTING

- Questionnaires/tests
 - 20 questions- 5 pages (double sided printing) per test
 - Administer 2x per year \rightarrow 10 pages per student per year
 - Assume ½ children will not participate
 - 1,680 children/2= 840 children will take the tests
 - 840 kids * 10= 8,400 pages per year to print ⁽¹⁾
 - \$1,821.40 → **\$1,822/year on tests**
- Consent forms permission to participate
 - 1,663 families/households in Whoville ⁽⁴⁾
 - 1,663 sheets= \$121.38→ **\$122** ⁽¹⁾
- Flyers

- 7000 residents
 - Assume 24% are under $18 \rightarrow 1,680$ children are under 18 y.o. ⁽³⁾
 - Assume 1.01 children per family ⁽⁴⁾
 - 1,680/1.01 = 1663.3 families $\rightarrow 1,663$ families/households
 - Send flyers once every 2 weeks (52 weeks/year \rightarrow 26 weeks to send flyers)
 - 26 weeks* 1663 homes= 43,238 flyers/year
- 50 flyers for $37.67 \rightarrow 0.7538$ /flyer ⁽⁶⁾
 - 43,238*0.7538= \$32,592.8 for 1 year of flyers
- \$32,593 per year
 - * 5 years = **\$162,964 for all 5 years**

Sustainability Plan:

Our sustainability plan for after our grant period is over will include two parts. Part one will be within the town of Whoville. We will have the older children (grades 5-12) participate in relay events where they collect money from sponsors. All proceeds will go directly to our organization to continue the intervention. Unfortunately, 42% of Whoville live under the federal poverty level, so these relay events are not expected to raise enough funding to keep all parts of the intervention going. The second part will take place online. We will set up a GoFundMe account and post it around the internet in order to gain financing from people outside Whoville. This is where we plan to raise most of our funds, especially overtime as our project becomes more well-known.

Long Term Follow-Up Plan

Our program coordinator and interns will be in charge of our data. Data will include test that the children complete, measurements, timed-miles/half-miles, and participation in the program, which will be logged into excel files. The excel files will be formatted so that we can track the changes between new inputs of data. The program coordinator for data analysis will supervise the interns and analyze the data to ensure that the program is working toward its objectives and goals. The program coordinator will also be in charge of creating graphs in excel that show the progression of test scores, BMI, and other forms of data. The interns will be responsible for data collection and input. Data analyze and progress will be submitted to the appropriate government entity for evaluation of the progress we have made.

If you have any questions or concerns about the intervention plan, feel free to email any of the founders. Thank you so much for your time and consideration. We look forward to hearing from you.

Sincerely,

Sarah Marver: <u>samarver@ucdavis.edu</u> Katharine Chew: <u>ktchew@ucdavis.edu</u> Jean Liu: <u>jxliu@ucdavis.ed</u>u

Resources:

- 1. DocuCopies.com Black and White Copies | Quality Copies on a Budget. (2015). Retrieved March 8, 2015, from <u>http://www.docucopies.com/order/BLACK-AND-WHITE-COPIES/</u>
- Bush, M., Ryan, M., & Rose, S. (2011, August 1). Number of Instructional Days/Hours in the School Year. Retrieved March 8, 2015, from <u>http://edsource.org/wp-content/uploads/95051.pdf</u>
- 3. Total population by child and adult populations | KIDS COUNT Data Center. (2014, July 1). Retrieved March 8, 2015, from <u>http://datacenter.kidscount.org/data/tables/99-total-population-by-child-and-adult#det</u> ailed/1/any/false/36,868,867,133,38/39,40,41/416,417
- 4. Table ST-F1-2000. Average Number of Children Per Family and Per Family With Children, by State: 2000 Census. (2004, September 15). Retrieved March 9, 2015, from http://www.census.gov/population/socdemo/hh-fam/tabST-F1-2000.pdf
- 5. Print Pelican. (2015, January). Retrieved March 9, 2015, from http://www.printpelican.com/index.cfm
- 6. Flyers. (2015). Retrieved March 12, 2015, from http://us.moo.com/products/flyers.html
- 7. State average premiums for the small group market. (2015). Retrieved March 12, 2015, from

http://healthcoverageguide.org/helpful-tools/charts/state-average-premiums-for-the-s mall-group-market/

- 8. Play Structures. (2015). Retrieved March 12, 2015, from <u>http://www.discountschoolsupply.com/Product/ProductList.aspx?category=646&es=85</u> <u>90610000G&KNC-Google&gclid=CIjc9ta9ocQCFdKGfgod_F8Aqg</u>
- 9. How Much Does Liability Insurance Cost? CostHelper.com. (2014). Retrieved March 12, 2015, from <u>http://smallbusiness.costhelper.com/liability-insurance.html</u>
- 10. Custom Ink. (2015). Retrieved March 12, 2015, from http://www.customink.com/lab?PK=04600<u>http://www.customink.com/lab?PK=04600</u>
- 11. Flipper Water Bottle. (2015) Retrieved March 12, 2015, from http://www.bulletinbottle.com/all-water-bottles/flipper-water-bottle.html
- 12. Clover D7A Hot and Cold Bottleless Water Dispenser, Black. (2015). Retrieved March 12, 2015, from http://ideaforhome.com/45354/524260249-clover-d7a-hot-and-cold-bottleless-water-d

http://ideaforhome.com/45354/524260249-clover-d7a-hot-and-cold-bottleless-water-d