

# **Weber State University Bachelor of Integrated Studies**

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## **Girls on the Run - An Analysis of the Virtuous Wellness Cycle**

**Description:** During the Spring of 2018, I volunteered as a running coach for a program called Girls on the Run at Whittier Elementary. The program is open to all girls in the third to the fifth grade. As a volunteer, I taught lessons, organized games, helped each girl set running goals, and tracked running laps completed by each girl. Throughout this literature review, the major themes of self-esteem, self-efficacy, social health, and physical health will be analyzed in more detail. Theories will be presented to demonstrate how these major themes relate to the Girls on the Run program. Throughout the course of the program, I collected data through a pre-program survey, a post-program survey, individual interviews, direct observations, and program activity sheets completed by the girls. All students are referred to as S1, S2, etc.

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## Girls on the Run - An Analysis of the Virtuous Wellness Cycle

“Actually, I can” is this year’s Girls on the Run theme. They are three very important words that every young girl needs to believe in. Before girls reach adolescence, they feel less confident with their physical appearance and capabilities. Social constructs tend to give young girls mixed messages about the choices they should make. The development of self-concept is long believed to develop early in childhood when children are capable of comparing themselves to others (Berk & Meyers, 2016). As young girls age, their self-worth becomes less and they tend to be at a higher risk for depression, anxiety, and eating disorders. To prevent lifelong challenges, girls need to have positive influences starting at a very young age. The Girls on the Run program was created for this purpose.

### **Project Overview**

#### **Girls on the Run**

The Girls on the Run program intends to empower young girls by teaching them to navigate through difficult life choices and to overcome many stereotypes. Girls on the Run was established in 1996 in Charlotte, North Carolina by Molly Barker. The mission statement for Girls on the Run claims to “*inspire girls to be joyful, healthy and confident*” (Girls on the Run, n.d.). More than a million girls have participated in the program nationwide. Over 350 races are planned each year, making it the largest coordinated event in the country (Girls on the Run, n.d.).

#### **Whittier Elementary School, Salt Lake City**

The Girls on the Run program at Whittier Elementary is open to all girls in the third through fifth grades. Whittier Elementary is a Title-1 school with approximately 79% of the students qualifying for free or reduced lunch. The school is richly diverse with more than 60% of the students from minority ethnic groups (Salt Lake City School District, 2018). Due to the

diverse and low-income make up, many of these girls are at risk for lifelong health problems. As a result, the Girls on the Run membership fee of \$235.00 is waived for many participating girls.

### **Pre-Program Survey Data**

A pre-program survey was created to help analyze the health, motivation, and fears of each girl (Appendix 1). Twenty-two girls participated in the program: ten third-graders, six fourth-graders, and six fifth-graders. The two most common reasons given for joining Girls on the Run were “I like running and want to run a 5k” and “I want to make new friends.” The most important skill they want to learn is how to improve their running capabilities.

On a scale from 1 to 5 (1=always, 2=frequently, 3=sometimes, 4=rarely, 5=never), twenty-two girls were asked a series of questions relating to their physical health, self-efficacy, self-esteem, and social health. Table 1 references the average scores for each theme, by grade. In general, all girls ranked their social health high. Third grade girls ranked their self-esteem and self-efficacy health higher than the fifth-grade girls. Fifth grade girls ranked their physical health higher than third grade girls.

<b>Table 1</b>	<i>Grade</i>			
<i>Theme</i>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	Average Score
Physical Health	2.07	2.22	1.89	2.03
Self-Efficacy	1.74	2.22	2.39	2.02
Self-Esteem	2.08	1.72	2.56	2.06
Social Health	1.25	1.59	1.11	1.31

### **Virtuous Cycle Theory**

Multiple studies have shown that Girls on the Run is an effective tool for improving emotional and social health in preadolescent girls (Girls on the Run, n.d.). The twelve-week curriculum focuses on teaching life skills through the concepts of connection, contribution,

caring, confidence, competence, and character (The Six C's). The first three C's relate to the constructs of social health. The last three C's relate to the concepts of self-esteem and self-efficacy. To simplify the analysis of the program the following three major themes will be analyzed: self-esteem, self-efficacy, and social health. Physical health is a major component of Girls on the Run, although fitness improvement is not a primary goal.

There is an overwhelming amount of evidence showing that physical activity improves a child's emotional well-being. When children engage in competitive sports, soccer for example, they are taught a particular set of skills like passing the ball in order to achieve the result of scoring a goal. Working together as a team to score a goal builds a child's self-esteem, increases self-efficacy, and improves their social health. While physical health and nutrition are very important to the Girls on the Run program, neither learning to run better nor learning to eat more healthily are primary objectives. The curriculum focuses on lessons about self-esteem, self-efficacy, and social health. Because Girls on the Run does not focus on either physical health or nutrition, an interesting question arises. Does focusing on improving a child's emotional well-being improve their capability to run a race and select healthy foods?

Smedegaard, Christiansen, Lund-Cramer, Bredahl, and Skovgaard (2016) argue that creating a positive experience with physical activity leads to a "virtuous cycle." Health is not linear, and many factors feed into the never-ending cycle of wellness (Smedegaard et al., 2016). If their theory is true then improving any component within the cycle can help to improve the other components. For example, improvements in self-esteem lead to improved self-efficacy which feeds social health. Improvements in self-esteem, self-efficacy, and social health all lead to increased physical activity. Physical activity leads to better nutritional awareness and healthier

eating behaviors. Good nutrition feeds emotional health. The virtuous cycle would then have come full circle.

## **Self-Esteem**

### **The Development of Self-Esteem**

Cognitive development changes, that occur around the age of eight or third-grade, impact the development of self-concept and, therefore, self-esteem. Berk and Meyers (2016) explain that children about this age develop perspective-thinking or the ability to infer what others are thinking and to distinguish the thoughts of others from their own. Simultaneously, children develop recursive thought which enables them to more accurately interrupt messages and expectations. The cognitive capacity of recursive thought and perspective-thinking enables a child to use the feedback from others to define their perfect-self. Their perfect-self consists of characteristics and behaviors that the child idealizes. When there is a discrepancy between their perfect-self and their real-self, then poor self-esteem is developed (Berk & Meyers, 2016).

The development of self-esteem is more-easily observed when children attend school. School-aged children are often compared to each other via academic and physical performance measures (Berk & Meyers, 2016). Girls on the Run participants confirmed this theory by means of reflecting negative self-talk statements. When discussing negative self-talk, many of the girls noted that they were “not as good or as smart as” another student. This is more evident among the fifth-grade girls. The fifth-grade girls gave an average score of 3.17 when asked if they like to be called on in class. They felt that they lacked the knowledge to answer questions.

Berk and Meyers (2016) further explain that children develop a hierarchical structure to help them rank personal competencies against others. For example, general self-esteem includes academic competence, social relationships, physical appearance, and athletic capabilities. Each

category can be further broken down into smaller units such as the number of friends, their math skills, or how their hair looks. How they personally score each construct of general self-esteem determines their overall self-esteem level. Interestingly, most children believe that physical appearance is more important than the other constructs of general self-esteem. Therefore, discrepancies in physical characteristics between the perfect-self and the real-self have a greater impact on self-esteem; specifically, body-esteem, than discrepancies in the other characteristics (Berk & Meyers, 2016). Consistent with Berk's findings, many participating girls showed signs of body dissatisfaction. Despite the eighty-degree weather, several girls refused to take off their jackets while running laps. Social learning theorists believe that the development of body-esteem can be explained through the concept of modeling (Shriver et al., 2012).

### **Influencing Self-Esteem**

Modeling can be a powerful force that drives the development of body-esteem. Children learn how to behave by observing and imitating behaviors (Berger, 2014). Reinforcers, positive and negative, are used to encourage or discourage behaviors (Berger, 2014). Research has demonstrated a strong correlation between observing women in the media and how a girl ranks their body-esteem (Shriver et al., 2012). Regardless of their actual body image, Shriver et al. (2012) explains that girls as young as third-grade have a problem with body satisfaction. The pre-program survey data confirms this theory. The third-grader girls scored an average of 2.44 regarding body satisfaction.

There is good news though. The negative outcomes of social modeling through mass media can be altered. Shewmaker (2015) argues that caregivers can provide children with important skills to reduce their susceptibility to negative gender-stereotyping. When parents and teachers build a connection with these children and teach them assets such as connection,

contribution, caring, confidence, competence, and character, (The Six C's) they positively influence a child's view on body image and general self-esteem. Shewmaker (2015) further explains that programs with a focus on building positive relationships and promoting goal accomplishment protect children from negative media stigmas (Shewmaker, 2015).

Girls on the Run has the potential of improving general self-esteem through lessons focused on The Six C's. Lesson four, for example, teaches the young girls about identifying negative self-talk and changing it into a positive statement. During the lesson, the girls were asked to write down negative self-talk statements that they said about themselves. Each girl was then asked to share their negative self-talk statement with the team. Another girl was given a buzzer and asked to hit the buzzer when she heard the negative statement. After the negative statement was shared, the girl with the buzzer changed the negative statement into a positive one. As noted earlier, self-esteem progressively worsens as a girl ages. All of the fifth-grade girls were unwilling to participate, but most of the third-grade girls were willing to share. Examples of negative self-talk statements shared are "I'm dumb" and "I'll never get it right." The positive statements shared in response were "You are very smart" and "You can do anything if you try hard enough." After about ten minutes of sharing negative self-talk statements, one fifth-grade girl was observed writing down her own statement. Although she was still unwilling to share, the social environment of sharing positive statements helped her take the first step in overcoming her challenges with negative self-esteem. While running a lap with two girls, one began to say "I'm tired. I can't make it." The second girl said "Buzz, that's a negative self-talk statement. You **can** do it." Both girls ran the entire lap without stopping or walking.



## Post-Survey Analysis - Self-Esteem

The Girls on the Run program has indeed helped to improve self-esteem. The post-survey analysis shows improvements with self-esteem at every grade level with the greatest improvements in the fifth-grade girls (Table 2). The improvements with the fifth-grade girls were most noted within these two questions: “I feel good about myself” and “I am happy with how my body looks.” On average, the scores for the first question improved by 0.67 points and the second by 0.50 points. Additionally, the fourth-grade girls made significant improvements when asked about how they feel about their body (0.33 points) however their average score for self-esteem dropped when asked about how confident they are with being called on in class. The opposite was true for the third-grade girls. Their scores improved by 0.38 points when asked about confidence and decreased when they were asked about their body image. Improvements with body-esteem among the fifth-grade girls demonstrates that there is a possibility that self-esteem can be positively changed.

<b>Table 2</b>	<i>Grade</i>			
<i>Theme</i>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	Average Score
(Presurvey)				
Self-Esteem	2.08	1.72	2.56	2.06
(Postsurvey)				
Self-Esteem	1.96	1.67	2.00	1.90
Difference	0.12	0.05	0.56	0.16

## Self-Efficacy

### The Development of Self-Efficacy

Greenberg (2013), claims that self-efficacy is an individual’s perceived capability of achieving a desired behavior. Self-efficacy influences the decisions people make, their

commitment to completing a task, how much effort they give, expectations of the outcome, perceptions, and resiliency. High levels of efficacy equate to having more control, persistence, and commitment (Greenberg, 2013). The pre-program survey shows that many girls believe they can achieve anything if they try hard enough (average score of 1.32), while at the same time they have difficulty controlling their emotions (average score of 2.36).

The basic building blocks for the development of self-efficacy are emotional regulation and control. Greenberg (2013) further explains that the mastery of emotional regulation teaches children problem-focused coping strategies and how to take control over situations and outcomes. Control can be described in two ways: internal or external locus of control. Children with an internal locus of control believe that they have a great deal of power over events in their life. The opposite is true for those with an external locus of control (Greenberg, 2013).

The mastery of emotional regulation and having a sense of control leads to the development of self-efficacy. Bandura (1994) argues that the most effective way to learn self-efficacy is through accomplishment. It is important to note that success cannot come quickly or easily for self-efficacy to develop. When successes occur easily then children develop a high level of discouragement upon failing. The process of succeeding after facing challenges and setbacks determines the level of self-efficacy in children (Bandura, 1994). Hence, emotional regulation and sense of control are important elements in managing challenges and setbacks. If a child neither learned to manage their emotions nor believes they have control then they will not have the capability to believe they can succeed. Many girls experienced a variety of setbacks with achieving their running goals. Girls complained of fatigue and muscle soreness during running sessions. S1, for example, broke her wrist at home, so she was unable to run laps for a

couple of weeks. However, she continued walking and maintained a positive attitude at practice. By lesson five, S1 was running again, and completed two laps more than her running goal.

Girls on the Run teaches how to regulate emotions and manage control. When faced with challenging or emotional situations, the girls are taught to identify their uncomfortable emotion and then “Stop, Breathe, Think, Respond, and Review.” To practice this strategy, the girls were given different scenarios that might inflict a high-emotional response (such as taking a test at school). The most commonly-identified emotion in this scenario was nervousness. The girls had to say “stop” and then take a deep slow breath. Afterwards, they were asked to think about the different ways in which they could react to being nervous and to select one action for follow through. The most common action was to try to relax oneself. Some girls suggested listening to music and others said to talk with a friend. The last step of the strategy allows for the girls to evaluate the success of their action. If it was not successful, then they had to select another action.

One fourth-grade girls found it difficult to master emotional regulation and control. When she was asked to practice the technique, S2 cried and refused to participate. While attempting to use this technique to help calm her down, S2 covered her face with her hands, turned her back to me, and said “I can’t do it.” After many attempts to change her emotional state, it was decided that she would take a break to calm down, and she would not participate in the activity.

### **Influencing Self-Efficacy**

Bandura (1994) argues that self-efficacy is also developed vicariously through social modeling. Social models share knowledge and teach the observers the skills needed to overcome challenges. Therefore, promoting an environment where children can observe the success of other children of similar age and skill is best for their development of self-efficacy (Bandura,

1994). At the end of each Girls on the Run lesson, two or three girls were given Energy Awards for their accomplishments during the practice. Several girls were recognized for meeting or surpassing their running goals. S3 was recognized for being the first girl to run three miles. Afterwards, many of the girls were observed asking her questions like “how did you do it?” S4 set a running goal of two miles and successfully completed two and one quarter mile. She noted on her running goal sheet “I did 26 laps for believing in myself.” Acknowledging individual successes to the entire group is key to improving self-efficacy.

### Post-Survey Analysis - Self-Efficacy

The post-survey analysis shows improvements with self-efficacy among the fifth-grade girls only (Table 3). On average, the score for self-efficacy declined. The greatest decline in score (-0.83) was among the fourth-grade girls when asked “I believe I can do anything if I try hard enough.” One theory for decline is that several girls made unrealistic running lap goals. For example, S5 set the following running goals of 104, 150, and 50 laps but only completed 10, 20, and 15 laps. Despite the decline in scores, the Girls on the Run program did have a positive influence on self-efficacy. Every girl finished the practice 5K race within the allotted time. S6 noted that in the prior year, she did not finish her 5K race because she ran out of time.

Additionally, the girls were taught to think beyond basic emotions such as anger or happiness. It is possible that becoming self-aware makes a person more self-critical of their own behaviors.

Table 3	Grade			
	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	Average Score
(Presurvey)				
Self-Efficacy	1.74	2.22	2.39	2.02
(Postsurvey)				
Self-Efficacy	1.92	2.56	2.00	2.07
Difference	-0.18	-0.34	0.39	-0.05

## **Social Health**

### **The Development of Social Health**

Castano (2013) believes that even though a person might be physically healthy, their health can still decline when they do not have relationships. People have a need to be loved and supported by other people. Sadly, fewer people are engaging in face-to-face relationships than in past generations despite the increase in opportunities to connect socially with others (Castano, 2013). For example, cell phones caused many girls not to interact socially during lessons and, therefore, had to be taken away.

Bronfenbrenner's ecological systems theory explains that the development of children occurs through a series of interacting systems (Bronfenbrenner & Ceci, 1994). These systems include a variety of social constructs such as family, friends, religion, laws, and customs. The bi-directional interaction of these constructs between each system influences behaviors. For example, a friend-to-child relationship can influence behaviors in both the child and the friend (Bronfenbrenner & Ceci, 1994). Friend-to-child interactions were noticed during lessons, particularly regarding behavioral problems. During one lesson, in particular, a girl had crawled under the desk during a lesson. A few minutes into the lesson, another girl crawled under the desk to join her friend who was already there. This was both a case of girls avoiding social interactions and a case of two socially-shy girls finding consolation in each other.

The social environment of school-aged girls is highly regarded and yet the most vulnerable. Another survey result showed that having a friend at school received the highest marks of all the questions with a score of 1.10. One of the most common reasons for joining the program was to make new friends. Also, many girls noted that they wanted to learn how to be kind, cooperative, and friendly. The girls also noted many fears associated with their social

health. They feared being laughed at, being singled out, and even feared being around so many unfamiliar people that didn't know them. Building meaningful relationships can help remedy these fears. Greenberg (2013) suggests that relationships create a protective barrier from stress. The Girls on the Run program helps create meaningful relationships. The girls could interact with each other in a safe and judgment-free environment at every practice. Many activities required the girls to work with a partner or in groups of four or five. In lesson one for example, the girls participated in a yarn toss game. While sitting in a circle, the girls took turns tossing a ball of yarn around to each other. By the end, every girl had a piece of the yarn and a web-like shape had formed. The girls were reminded that even though they might not know each other, they are all connected in some way. Afterwards, they discussed different ways in which they might be connected such as through common favorite foods, shared birthday months and so on.

### **Influencing Social Health**

There are multiple ways in which the systems can interact to help build meaningful relationships. Duerden and Witt (2010) theorized that relationships can be built through structured youth programs. The bi-directional relationship between the child and a program mentor can have profound impacts on development. Building a relationship through emotional closeness and sustained contact leads to higher-levels of self-esteem and self-efficacy. Children become happier, are more socially mature, and can manage emotions better. Self-esteem and self-efficacy are elevated. Reciprocally, the constructs of their microsystem are improved and become more beneficial (Duerden & Witt, 2010).

During the lesson on learning how to build new friendships, S7 became emotionally overwhelmed and physically withdrawn from the team. She explained that many other girls do not like her and it's difficult for her to make new friends. The discussion led to a conversation

about anxiety and how it affects the decisions people make in their lives. While anxiety is something that everyone feels, that anxiety can prevent us from doing many things in our lives. The importance of learning to overcome her anxiety and the benefit of taking small risks was also discussed. It was decided that after she was calm, she would talk with someone new for a portion of a lap. During the running session, S7 was observed walking and talking with someone new.

Peer pressure generally has a negative stigma; however, many scientists believe that peer pressure can have a positive impact on the health and development of children. When admired individuals inspire positive change, the power of positive peer pressure can be seen (Baruah & Boruah, 2016). Confidence and positivity can be shared amongst peers and, reciprocally, individuals within the group become more confident and positive (Baruah & Boruah, 2016). Of all the Girls on the Run lessons, the one associated with social health was the most difficult emotionally. The girls were randomly assigned running partners. Each girl was given questions to ask their new running partner in hopes to learn something new about them. After every lap, the girls were asked to switch running partners. Many girls were hesitant to participate. Positive peer pressure had a great impact on the behavior of many girls who felt anxiety when leaving their group of friends. The fifth-grade girls helped organize new partners. These girls had better emotional regulation and became more accepting of others passing in-and-out of their group. They publicly announced when a team member needed a new partner and asked others for help. Approximately ten minutes after the running session began, uncomfortable emotions had dissolved. At the end of the lesson, the girls participated in a partner game. The girls were not assigned a specific partner during this game nor were they asked to change partners.

Interestingly, the girls, on their own accord, randomly switched partners multiple times throughout the game.

### Post-Survey Analysis - Social Health

The importance and vulnerability of social health had the potential of dramatic change, however, the post-survey analysis shows no significant changes in social health (Table 4). The fifth-grade girls ranked their social health the same as before. The fifth-grade girls were very confident with the stability of their friendships and did not feel threatened by others. The third-grade girls noted improvements on their score (0.25 points) when asked “I have a friend at school.” However, they noted that they do not help others when they feel sad which made their average score decline by -0.08 points. During the program, many new friendships were created among the fourth-grade girls. Interestingly, when asked why they continued with the Girls on the Run program, most fourth-grade girls noted that they made new friends.

Table 4	Grade			
Theme	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	Average Score
(Presurvey)				
Social Health	1.25	1.59	1.11	1.31
(Postsurvey)				
Social Health	1.33	1.44	1.11	1.31
Difference	-0.08	0.15	0.00	0.00

### Physical Health

#### Physical Activity

Force, agility, balance, and flexibility steadily improve with age (Brown, 2017). Counterintuitively, the third-grade girls were more motivated and generally completed more laps than the fifth-grade girls. However, when motivated, the fifth-grade girls would run faster and



longer than the third-grade girls. The running environment was fun and positive. During running sessions, the girls were given lap counters such as stickers or hair ties to help with motivation. Along the course, running-only sections were created to encourage the girls to challenge themselves and to improve their physical performance.

High levels of self-esteem and self-efficacy, along with a positive social environment, are strong psychological ergogenic aids to improve physical performance (Williams, Rawson, & Branch, 2017). Psychological ergogenic aids are designed to remove any mental barriers that might limit physical performance (Williams et al., 2017). For example, studies have shown that when children believe they can perform a physical task, and have the right social support, then they are more likely to succeed (Forthofer et al., 2017). Fitness training also helps reinforce positive self-esteem and self-efficacy by helping people to overcome challenges and to become successful (Greenberg, 2013). The girls created individual running goals at the beginning of each lesson. Girls who met their running goals wrote comments such as “I did it!” and “I’m beating my goal!” On average, 14 out of 22 girls met or passed their weekly running goal consistently. Nineteen of the twenty-two girls noted on their pre-program survey that running always makes them feel good. Every girl progressively completed more running laps with each session.

### **Nutrition Recommendations**

Healthy nutritional habits improve emotional and social health. Research has shown that when children are properly nourished they concentrate better, are more creative, perform better on tests, make more friends, have higher self-esteem, and are more cooperative (Brown, 2017). Whole, fresh-foods like fruits, vegetables, whole-grains, and low-fat proteins support the physical and mental changes unique to childhood. General Dietary Reference Intakes for girls ages nine to thirteen years old are outlined in Table 5.

**Table 5**

<u>Energy</u>	<u>Carbs</u>	<u>Protein</u>	<u>Fat</u>	<u>Calcium</u>	<u>Fiber</u>	<u>Water</u>
1,400 - 2,200 calories*	45% - 65% of total calories	.95 grams per kilogram of body weight	25% - 35% of total calories**	1,300 milligrams	26 grams	5 - 7 cups*

**Physical Activity:** at least 60 minutes every day

\* Depending on age, physical activity levels, and pubertal development.

\*\* Special emphasis on omega-6 and omega-3 fatty acids

Source: Brown, J. (2017). Nutrition 2420: nutrition through the life cycle. Cengage Learning

Proper nutrition before, during, and after sports is particularly important. The eating recommendations to improve athletic performance can be viewed on appendix 3. Appendix 3, a nutritional flyer, was created to supplement the lack of nutritional education within the Girls on the Run program. Knowing how to eat a balanced diet was a major concern for the fifth-grade girls. S8 noted that she always has too many holiday treats and doesn't know what to do with them. This concern led to a conversation about budgeting food intake, creating a varied diet, and the types of foods to eat to improve physical performance. During the next lesson, S8 noted that she is eating more vegetables with her dinner. She is also not eating as many treats in a day.

### **Final Analysis**

Smedegaard et al. (2016) argue that health is not linear and many factors feed into the never-ending cycle of wellness. Therefore, improvements made to individual components within the virtuous cycle should make a positive impact on other components within the cycle. Even though the Girls on the Run program does not focus on improving physical health, the final survey analysis shows that the virtuous cycle theory is true and significant changes were made in physical health (Table 6). The fourth-grade girls noted a positive change in their milk habits with

an improved score of 0.50 points when asked if they drink milk daily. Additionally, more fifth-grade girls noted that they eat vegetables or fruits with their dinner daily with an improved score of 0.67 points. The most common reason for staying with the program was because the girls enjoyed running. S9 noted that she learned that running can make her feel happy. The third-grade girls noted an improved score of 0.19 points when asked if running makes them feel good.

<b>Table 6</b>	<i>Grade</i>			
<i>Theme</i>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	Average Score
(Presurvey)				
Physical Health	2.07	2.22	1.89	2.06
(Postsurvey)				
Physical Health	1.92	2.11	1.67	1.90
Difference	0.15	0.11	0.22	0.16

In addition to the data analyzed, many positive changes were observed in the girls that can't be easily shown through a survey. Bi-directional social interactions positively impacted the lessons and the girl's behavior. Honest and nonjudgmental communication created trust that enabled many girls to share intimate details about their lives. Additionally, positive bi-directional social interactions encouraged participation and sharing during lessons. Without this trust and social interactions, the Girls on the Run program would not have been successful. The social constructs of the Girls on the Run program are the keys to improving the virtuous cycle in young girls. The Girls on the Run theme for this year was perfect. "Actually, I can"...because I have been taught that I can do it even though I'm tired. "Actually, I can"...because I have seen others succeed and I believe in myself. "Actually, I can"...because my friends support me and give me the strength to keep on going. "Actually, I can"...

## Appendix 1

In the following section consider how you feel about each item. **Circle** the answer that best describes you or how you have felt during this past week.

	<b>Always</b>	<b>Frequently</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>
I feel good about myself	1	2	3	4	5
I am happy with how my body looks	1	2	3	4	5
I like being called on in class	1	2	3	4	5
I believe I can do anything if I try hard enough	1	2	3	4	5
I can stay calm during upsetting situations	1	2	3	4	5
I believe that I have control over my emotions	1	2	3	4	5
I enjoy spending time with family and friends	1	2	3	4	5
I have a friend at school	1	2	3	4	5
I help people when they are feeling sad	1	2	3	4	5
I eat fruit or vegetables with dinner every day	1	2	3	4	5
Running makes me feel good	1	2	3	4	5
I drink milk every day	1	2	3	4	5

**Why did you join Girls on the Run?** (Circle all answers that apply)

I have friends  
in the club

I had so much  
fun doing the  
program last  
year

I want to learn  
something new

I like running and  
want to run a 5K

I want to make  
new friends

Other: \_\_\_\_\_

**What do you hope to learn from this program?**

**What is your greatest fear about being part of this program?**

## Appendix 2

In the following section consider how you feel about each item. **Circle** the answer that best describes you or how you have felt during this past week.

	<b>Always</b>	<b>Frequently</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>
I feel good about myself	1	2	3	4	5
I am happy with how my body looks	1	2	3	4	5
I like being called on in class	1	2	3	4	5
I believe I can do anything if I try hard enough	1	2	3	4	5
I can stay calm during upsetting situations	1	2	3	4	5
I believe that I have control over my emotions	1	2	3	4	5
I enjoy spending time with family and friends	1	2	3	4	5
I have a friend at school	1	2	3	4	5
I help people when they are feeling sad	1	2	3	4	5
I eat fruit or vegetables with dinner every day	1	2	3	4	5
Running makes me feel good	1	2	3	4	5
I drink milk every day	1	2	3	4	5

**Why did you stay Girls on the Run?** (Circle all answers that apply)

My friends  
wanted me to  
stay

I had fun every  
day

I enjoyed learning  
something new

I enjoyed running

I made new friends

Other: \_\_\_\_\_

**What did you learn from this program?**

**What fear did you overcome during this program?**

## Appendix 3

### Individual Me

Diets can vary greatly depending on age, activity level, growth, and body changes. Girls 9 - 13 years old should eat 1,400 - 2,200 calories each day. Parents should offer healthy food choices and let the child decide how much to eat. Meals should be a combination of vegetables, fruits, whole-grains, lean proteins, and low-fat milk.

### What does a balanced diet look like?

#### 1,600 Calories

1 1/2 Cups Fruit  
2 Cups Veggies  
5 oz Grains  
5 oz Protein  
3 Cups Dairy  
5 tsp Oils  
130 Discretionary

#### 2,000 Calories

2 Cups Fruit  
2 1/2 Cups Veggies  
6 oz Grains  
5.5 oz Protein  
3 Cups Dairy  
6 tsp Oils  
267 Discretionary

*It's important to consume a diet with the right balance of food for optimal health*

Carbs 45% - 65% of Total Calories  
Protein 10% - 35% of Total Calories  
Fat 25% - 35% of Total Calories

*(MyPlate Food Intake Patterns)*

Learn more about dietary  
recommendations for your child

Choose My Plate

[www.choosemyplate.gov](http://www.choosemyplate.gov)

American Academy of Pediatrics

[www.aap.org](http://www.aap.org)

Healthy Children

[www.healthychildren.org](http://www.healthychildren.org)



## Nutrition for Better Sport Performance

By Cheryl Saunders

## Benefits of Eating a Healthy Diet

When children are well-nourished they:

- Have more energy for sports
- Recover faster from sore muscles
- Have better concentration
- Have a higher self-esteem
- Are more creative
- Make more friends



### Carbohydrates

Carbohydrates (carbs) are the best type of foods for energy. Sources of carbs include breads, pastas, fruits, and vegetables.

### Proteins

Proteins help with muscle recovery and growth. Sources of proteins include low-fat dairy, chicken, fish, and eggs.

## Diet Planning for Sports

Eating the right types of foods at the right time can improve performance, prevent dehydration, and improve recovery time.

### WATER

Summer temperatures can really impact the body. Children are more-easily distracted and don't notice the signs of dehydration. Dehydration may cause fatigue and muscle cramping.

**Drink 3-8 ounces of water for every 20 minutes of activity.**

**Drinking 1-2 glasses of water an hour before running will help prevent dehydration.**

### EATING BEFORE A RACE

Carbs are for energy. Muscles become weak when the body doesn't have enough carbs.

**0.9 grams of carbs per pound of body weight should be consumed about 2 hours before.**  
(60 pounds = 54 grams 90 pounds = 81 grams)

#### 60 Pound Person Sample Pre-Race Meal

3/4 Cup Whole-Grain Cereal  
1/2 Banana  
1/2 Cup of 100% Fruit Juice

#### 90 Pound Person Sample Pre-Race Meal

2 Pancakes (4" diameter)  
1 Tbsp Syrup  
1 Small Banana  
3/4 Cup of 100% Fruit Juice

### EATING AFTER A RACE

The combination of carbs and protein help improve recovery time and reduce muscle fatigue.

**0.75 grams of carbs and 0.25 grams per pound of body weight should be consumed within 2 hours**  
**60 pounds = 45 g carbs & 15 g protein 90 pounds = 68 g carbs & 23 g protein**

#### 60 Pound Person Sample Post-Race Meal

3/4 Cup Low-fat Milk  
1/2 Turkey Sandwich with lettuce and tomatoes  
1 Cup of Raspberries

#### 90 Pound Person Sample Post-Race Meal

1 Cup Spaghetti  
2 Meatballs  
1/2 Cup of 100% Fruit Juice

**It's important to avoid foods that are high in fat and caffeine before running.**

**Fat digests slowly making the body work too hard. Caffeine promotes dehydration.**

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