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Senior Honors Project

"Health Behaviors of School-Age Children"

May 2, 2005

My Senior Project has been in the making for the past four years. My experiences as a volunteer at Green Magnet Elementary in Knoxville have contributed to my interest in healthcare for children, and they have led me to pursue a career in medicine. My project, entitled "Health Behaviors of School-Age Children", is designed to assess children's' health behaviors in grades two through four. This valuable information can then be used by volunteers and clinic coordinators to create educational material to help children learn and practice good health behaviors. Before detailing my research project, it is important to discuss the background of my interest in children's health, as well as the elementary school Green Magnet. My project is really the culmination of my work as a service learner, volunteer, and co-founder of the organization, Clinic Vols.

Background

Green Magnet is a unique institution called a full service school. A full service school is designed to meet all the basic needs of a child. It is a school that has broadened its mission for each child. Through all of the services provided to the children, the school seeks to give a youth stability and structure that is not present in their home life. The school also wants increase grades and test scores, increase attendance, and decrease suspensions. The defining feature of a full service school is prevention. The full service schools target "at-risk youth" who may not have stable home lives and are likely to give up on school. It is not just a learning institution, but also a place where a child can grow successfully in a positive, healthy environment. One of the key features of a full service school is the physical health services that are provided. A full service school has a clinic staffed with volunteers or a regular school nurse and is stocked with enough supplies. The health clinics may also be visited by dentists and doctors, who volunteer their time

and services. Many of the children are unable to see a dentist or physician regularly, so this opportunity is very beneficial when provided at school. Illnesses, such as asthma and diabetes, are high in full service schools like Green Magnet. A child's physical health is crucial for them to be able to succeed in school. According to Abraham Maslow's Hierarchy of Needs, a child cannot reach a concept he calls "self-actualization", which is the motivation to fulfill one's potential, without the basic needs being met. These basic needs include food, shelter, clothing, and, of course, health. This crucial basic need is met at a full service school, such as Green Magnet.

Through a course called, "Service Learning" with Dr. Robert Kronick, a pioneer in full service schools, I became interested in the socioeconomic situation of children in Knoxville, and the consequent effects on their educational well-being. I became particularly interested in the health of the children at Green. The health of elementary age children is crucial in their learning process. Simply put, when a child is sick, they cannot learn. Many of the children were coming in with the same problems: asthma, lice, eczema, vomiting, and fatigue are just a few of these. Though my experiences as a volunteer, I learned that many of the children's parents would not get their prescriptions for their kids. Also, we encountered problems with getting parents to take their children to the doctor for basic services. One case in particular is a child who came in with ring worm. Knox County school policy states that children with contagious rashes cannot be in the regular classroom without a written doctor's note saying that they are taking medication for the rash. This child's parent was informed of the policy, but consistently brought her child to school without a doctor's note. So, day after day, the child sat in the clinic all day, isolated from his friends and unable to learn the day's lessons. It is

instances like this that confirmed my belief in the importance of proper health care for children in a learning environment. How can a child learn when they are distraught over a tooth ache, or because they did not eat breakfast?

My interest in children's health led me to take on the role of clinic chair at Green Magnet my sophomore year. We had only a few volunteers at each of the full service schools in Knoxville. The clinic chairs at Beaumont and Inskip Elementary met with me and the other co-chair at Green, Michele Gourley, to brainstorm about a way to unite all the inner city school clinics with the UT student community. We decided to create a student group called Clinic Vols to help staff all three of our clinics. We started out recruiting pre-health, nursing, and pharmacy students, who also had an interest in children's health. The response was overwhelming, and we quickly recruited enough volunteers to staff all three clinics. Our volunteers are required to take a three hour Red Cross class, which certifies them in basic first aid skills, including rescue breathing and help for a conscious chocking victim. After certification, our volunteers are well-informed of Knox County school policies, and they are prepared to handle any of the situations, such as vomiting, lice, ringworm, and cuts/scrapes, that arise when working with elementary kids.

Since our beginning in 2003, Clinic Vols has become a huge organization on campus, with over one hundred members. It has become a great group for students interested in helping children and taking on the role of a volunteer nurse. The organization's reputation has grown, and we were recently just named Phi Eta Sigma Honor Society's Outstanding Organization 2005. It has been amazing to watch this club develop from the hopeful idea of a few students into a strong group of dedicated

volunteers. My experience as a volunteer at Green Magnet and Clinic Vol's success has inspired the idea behind to my senior project. I recognized that the volunteers and I strive to heal the children at Green, but there is also a strong desire to teach the children better health habits. By learning good health behaviors at an early age, kids will have overall better health in the future. Children learn from their environment and from the actions of their families and peers. By providing children with a "health-conscious" surrounding, they will effectively absorb the important information. I believe the best way for them to absorb this information is through discussions with adults, fun books, and interactive educational posters. My survey will provide a way for volunteers, teachers, and parents to recognize which behaviors are lacking in children grades two through four. Using this information, they can develop strategic ways of teaching the kids proper health behaviors

Since I spend most of my time in Green Magnet clinic, I see how the health needs of the children are being met. Although the clinic is staffed everyday by volunteers, the trained school nurse can only come once a week. The clinic is adequately stocked with medical supplies supplied by the Red Cross and activities for the children to entertain themselves while waiting on their parents. It is still a challenge to instill good health behaviors in the kids, because many of them come from a lower socioeconomic background. There are a large percentage of students on free or reduced lunch, and it is often a struggle to get support from the parents. Oftentimes, parents are unable to fulfill prescriptions for their kids, or they fail to take them for regular checkups. The survey I have developed will be a great tool for volunteers and school officials to pinpoint behaviors that are absent, and develop programs to teach kids about good habits.

Survey

My health survey for school-age children is based on a previous health survey called "Health Attitude and Behavior Checklist" (Vickers, R.R., Jr., Conway, T.L., & Hervig, L.K. (1990). Demonstration of replicable dimensions of health behaviors. Preventive Medicine, 19, 377-401 (Document A). My survey consists of a list of health behaviors, such as "I wash my hands after using the restroom." The students are asked to rate the health behavior based in whether not the behavior is not at all like them, somewhat like them, or very much like them. The rating system for the behaviors advances as the survey progresses from second to fourth grade. Also, the number of questions and difficulty of the question wording increases from second to fourth grade. The survey questions address four basic domains: Food, Germ/Disease Prevention, Safety Rules/Knowledge, and Body. I will be evaluating each of these domains, how they change as children progress, and which domains are stronger in each year. I will also be looking at specifically which health behaviors are lacking, and I will brainstorm about ways to help children grasp these concepts. Educational material, such as books and posters, could be used to demonstrate these specific behaviors in the clinic.

The most difficult part of my project was figuring out how to legitimize my survey. After listening to one of the representatives from Research Compliance in the honors seminar, I realized I needed to go through a long process to get my survey approved by UT. After speaking with my mentor, Dr. Deborah Welsh, who has done extensive research on adolescent relationships, she informed me that Knox County would no longer approve amateur undergraduate research projects. To make matters worse, I realized that getting parental approval from the parents at Green was going to be next to

impossible, given the circumstances of many of the parents and the apathetic behavior I had witnesses in the past. Dr. Welsh spoke with a woman named Barbara in the Research Compliance Office, and I received the word that I did not have to fill out a Form B. I was required to get approval from the principle, and my work is not allowed to be published. Instead of starting a new project all together, I decided to go ahead with my survey after I had gotten the principle, teachers, and students approval.

I recognized that the original health survey would have to be modified to apply to school children. For example, many of the children will not recognize words like "hypertension", "food additives", or "ect." Also, many of the situations did not apply to kids, such as question 39 on Document A, *I drive after drinking.* Each teacher was given enough surveys for their class, and with each survey was a set of instructions for the teachers and a letter. The instructions directed them on how their students should answer the survey, which was either by circling faces or numbers corresponding to how they felt. The letter (Document J) to the teachers simply informed them of my Senior Project, its purposes and benefits. I also informed the teachers that they and their students were in no way obligated to take the survey, and I asked them to tell their students that they did <u>not</u> have to complete the survey if they did not want to. If they did complete the survey, the teachers' name would be put in a drawing for a teachers' basket of goodies and school supplies.

For the Second Grade Survey (Document B), I met with Green Magnet second grade teacher, Mr. Toth, and he helped me modify my survey even further so that it would applicable for second graders. Instead of using numbers as a rating system, I decided to make it more elementary by using smiley faces. I used three faces for the

second grade survey, each corresponding to No, Sometimes, and Yes.



I halved the number of questions, and I used Mr.Toth's suggestions to make the questions easier for the students to understand. I threw out questions such as *I eat a balanced diet,* simply because a second grader would not understand the full meaning of a balanced diet. I replaced these harder questions with easier ones, such as *I eat fruits and vegetables.*

Using the Second Grade Survey as a template, I created the Third Grade Survey (Document C). I made it slightly more complicated by using four faces instead of three, corresponding to No, Sometimes, Most of the Time, and Yes.



This gave the third grade students the ability to express their feelings a little more clearly. I also added a few more questions, but I kept the overall language of the questions the same.

The Fourth Grade Survey (Document D) was more complicated. The language of the questions was more advanced, and the number of questions was increased from twenty-nine in the third grade survey to thirty-five. The rating system for how the children responded to each health behavior was changed from faces to numbers one through five, with one corresponding to Not at all like me, three corresponding to Somewhat like me, and five corresponding to Very much like me.

1 2 3 4 5

In order to make it clearer for the fourth graders, three faces were placed at the top of each page to further explain the numbering system. Questions were added that began to investigate some of the dangerous adolescent behaviors. Adolescence is said to begin around the ages of eleven and twelve, which is the average age of fourth and fifth graders. I included questions such as #24 *I do not drink alcohol* and #16 *I have never tried smoking cigarettes* to discover whether or not these kids were engaging in these risky behaviors.

The domains included in all the surveys covered four main areas: Food, Germ/Disease Prevention, Safety Rules/Knowledge, and Body. I have listed all the survey questions along with the domain it is included in (Documents E, F, G). The Food (F) domain includes questions such as *I eat fruits and vegetables* and *I eat breakfast every morning.* This domain is intended to discover the children's eating habits, and their tendencies to eat healthy food and avoid too much junk food. The Germ/Disease Prevention (GDP) domain includes questions such as *I see a dentist for regular checkups, I wash my hands after using the restroom,* and *I get shots to prevent illness.* This domain is intended to asses the children's health tendencies to avoid germ spread and to get regular checkups with their doctor and dentist. The Safety Rules/Knowledge (SR) domain includes questions such as *I wear a seat belt when in a car, I wear a helmet when riding my bike,* and *I don't know when to cross the street.* These questions reveal the students knowledge of safety rules for activities that children engage in each day, such as riding their bikes or walking to school. The last category, the Body (B) domain includes a wide range of questions, such as *I wear a winter coat, hat, and gloves, I go to church regularly,* and *I have never tried smoking cigarettes.* These questions determine whether

or not the students are generally taking care of their bodies and doing things to improve their overall mental and physical state.

Results

The "Health Behavior Survey" was administered to the second, third, and fourth grade teachers. There were 44 second graders surveyed, 36 third graders surveyed, and 41 fourth graders surveyed. The results of all three surveys can be viewed in Documents H, I, and J. The results are listed by the number who answered that particular face or number followed by the percentage of students who answered by grade. I will be analyzing each grade and the domains in each grade. There is a lot of information contained in the surveys, and I will only be able to touch on a few examples for each grade.

I looked at the second grade results by splitting them into boys and girls to see if there were any gender differences (Document H). There were 20 girls and 24 boys surveyed. The second graders were given three choices of answers, indicated by three faces. The sad face indicated that the behavior was not at all like them, the straight face indicated the behavior was somewhat like them, and the happy face indicated it was very much like them. For the most part both boys and girls answered that all the health habits were "Yes", very much like me or somewhat like me. Several questions illustrating instances when both boys and girls answered "not like me" or "somewhat like me" were questions *#3 I know where the first aid kit is located in my house, #12 I avoid neighborhood areas that I know are dangerous, #15 I don't eat a lot of sugary foods like candy, sweets, cookies,* and *#25 I avoid eating to much unhealthy food.* In looking at the differences between boys and girls, it was really interesting to see how the answers varied. Looking at *#5 I see a doctor for regular checkups,* 67% of boys answered "Yes"

compared to 45% of girls. Forty percent of girls said they sometimes saw the doctor for regular checkups compared to 17% of boys. For question *#6 I go to church,* 90% of girls said "Yes" compared to 71% of boys. Question #7 *I wash my hands after using the bathroom*, 100% of girls said yes compared to 67% of boys. Question *#13 I tell my parent's when I break something in my home,* 30% of girls said they would not tell their parents, in contrast to 13% percent of boys. Boys were also less likely to wear a helmet while riding their bike and less likely to take vitamins regularly. The results reveal that the boys were more likely to engage in "risky" behaviors, while girls were more likely to see a physician regularly and not inform their parents when they broke something. Overall, second graders were less like to have healthy Food Domain habits, and more likely to have good Safety Rules/Knowledge. Both boys and girls practiced adequate health behaviors in the Germ/Disease Prevention domain.

In the third grade, 36 students were surveyed (Document I). Students were given four choices of faces to circle, corresponding to four different feelings about particular health behaviors. Thirty-nine percent of students did not know where the first aid kit was located. In question *#15 I don't eat a lot of sugary foods like candy, sweets, cookies,* a quarter of the kids said "No," and 33% said it was "somewhat like them." Over half the students (53%) said they did not wear a helmet while riding a bike. For question *#25 I avoid eating to much unhealthy food,* 33% said they this was "not at all like them." There were an equal number of students who did and did not take vitamins regularly. The domain analysis showed that similar to the second grade results, the Food Domain behaviors were not as strong, as seen in questions 15, 25, and 9. Several of the specific Safety Rules/Knowledge behaviors were not practiced as frequently. Also, a few of the

Body Domain questions had mixed results. For example, question *#1 I get enough sleep each night,* 58% said this was "very much like them," 25% said this behavior was practiced "most of the time," and 14% said this behavior was "somewhat like me." The results show that 3rd graders need to have better eating habits and recognize that eating to much junk food is unhealthy. Also, third graders may not be completely aware of healthy ways to take care of their bodies, such as getting enough sleep each night or taking vitamins.

In the fourth grade, 41 students were surveyed (Document J). The children were given five numbers to choose, with five being to most like them and one being the least like them. The results were very similar to the second and third grade results. In question *#17 I never use appliances that have frayed wires or look damaged,* 39% ranked the behavior as 1. More than half of the students (56%) did not wear a helmet while riding their bike. The answers were mixed for question *#18 I stay away from places where I might be exposed to germs,* with 27% answering five, 20% answering four, 20% answering three, and 2% answering one. Question *#21 I limit my intake of sugary foods like candy, sweets, cookies*, 32% said this was a 5, and 29% ranked this behavior as a 1. Only 39% of first graders discuss health with friends, parents, and relatives, and 34% of students use dental floss regularly. Thirty-two percent of students gave question #1 *I eat a balanced diet* a 5, and the majority ranked this a 3 or 4. Very similar to the second and third grade students, the Food Domain seemed to be the weakest. The Germ/Disease Prevention domain was even less strong than the second or third graders indicating possibly that students may be practicing healthy germ prevention habits less as they get older. Surprisingly, the Safety Rules/Knowledge domain was also not as strong as the

younger children. For example, only 59% of fourth graders say wearing their seat belt is "very much like them" compared to 72% of third graders and about 84% of second graders. Seventy-three percent of fourth graders said looking both ways before they crossed the street was "very much like them" compared to 89% of third graders, and an average of 96% of second graders. One exception is the question about the frequency of getting shots to prevent illness. The fourth graders reported this was "very much like them" 71% of the time, compared to lower numbers in third and second graders. It appears that students tend to become more lackadaisical about healthy behaviors as they get older.

Discussion

The overall results of my survey are very beneficial for students, teachers, parents, and especially clinic volunteers. Several behaviors that I noticed were lacking in all three grades included students not getting enough sleep, not wearing their helmets for bike riding, and not taking vitamins regularly. The Food Domain was weak in all three grades, including eating too many sweets and junk food, and third and fourth graders failing to regularly eat breakfast. Because they are just children, who naturally love to eat junk food and candy, these habits are understandable and most likely to not develop into any sort of problem, especially with regular teeth brushing, which all three grades seem to be regularly engaging in. Interestingly, I found that the Germ/Disease Prevention domain decreased with each increase in grade. This could be a result of two things: either the older students are being more honest and clear about their health behaviors in this area, or as students get older, they tend to slack off on their germ/disease prevention habits. Either way, the results of the surveys can be used to help students become more

familiar with healthy practices. Similarly, the Safety Rules/Knowledge Domain became weaker with an increase in grade/age. This could also be the result of older students become more relaxed with their safe practices while walking, riding their bike, or traveling in a car.

I believe that the best way to approach the problems in children's health behaviors is to discuss it with them, remind them of safe practices, and reinforce it through books, posters, and other educational information. Included in my report is a booklet, which I obtained from a dentist office. It is a Crest activity book designed to help children learn about their teeth and teach them of the proper ways to care for their teeth and gums. More specifically, it tackles flossing, which was a behavior that I identified as lacking in many of the students. This kind of book would be a great tool to have in the clinic. Volunteers from Clinic Vols could offer this book to students while their waiting in the clinic. They could discuss with them some of the benefits of taking care of their teeth, and they could also remind them that the way to keep clean, healthy teeth, while still enjoying sweets and junk food. In addressing some of the other health behaviors that were not as strong, I came up with an idea for a poster that could be displayed in the clinic. The poster could display a young boy or girl throughout his day. The first picture would show him waking up after a full 8 hours of sleep and eating a healthy breakfast, a behavior that less than half of fourth graders engaged in daily. Next, the picture can show the boy/girl getting on their bike to go to school, and he puts on a helmet, a behavior that was seriously lacking in all three grades. The final picture could show him taking vitamins before dinner, and then going to bed at a reasonable hour. Displayed in the clinic, kids can look at a poster like this, and volunteers could even point it out to them and talk about what the child in

the posters is doing. Constant reinforcement of healthy behaviors will remind students of the right way to take care of their bodies. Volunteers could also practice positive reinforcement, by complimenting students when they continue their good health practices, such as hand washing after using the restroom.

Although my survey will have clear benefits for the kids at Green, there are problems with the survey that I think are important to recognize in any research project. First, kids may not answer honestly, because they think somehow that they will get in trouble. Second, students, especially second graders, may not have understood the questions completely. Third, the kids may not have taken the survey seriously or carefully. Oftentimes, questions were skipped or answers were circled twice. This could have skewed the results. Fourth, one of the teachers pointed out that some of the questions were negatively worded. For example, *I don't know when to cross the street.* I noticed that the answers to some of the negatively worded questions were odd, and I think that the questions confused the students. Finally, human error was a factor that could have skewed the results. My survey and research tactics were very basic, and I counted the results by hand. Clearly, I made several errors, which could have thrown the data off.

Conclusion

My senior honors project, "Health Behaviors of School-Age Children," was a valuable learning experience for me. It gave me my first taste of conducting my own research project, and I learned about the work that goes into conducting a survey. My hope is that the results of my survey will be used by the Clinic Vols clinic chairs at Green Magnet and the other full service schools to improve health behaviors of the children.

Through the use of activity books, such as the Crest dental book, and posters in the clinic, Green Magnet students will remain well informed of safe health behaviors and hopefully put them into practice. My senior project is also intended to encourage Clinic Vols volunteers to continually promote proper health habits and to frequently discuss them with students and parents. Full service schools are intended to provide health services for students, and volunteers are a part of this system. With the results of my survey, they can identify specific behaviors in each grade that are present or absent. Using the results as a tool and a guide, they can encourage habits that are already being practiced by most students, such as eating fruits and vegetables, and they can discuss habits that are not as frequent, such as wearing a helmet while riding their bike.

Children's health and well-being is extremely important to me, and I have spent my college years working at Green to help heal the children and make them feel better. It is a passion of mine, and my experiences have prompted me to attend medical school next year at the University of Tennessee, College of Medicine in Memphis. I hope that my research project does not stop here. My goal is that it will encourage other Clinic Vols leaders, who are interested in children's health, to conduct surveys of their own, and possibly to extend the survey to students beyond Green Magnet. The experience I have had this year in creating my survey was done with the help of my mentor, Dr. Deborah Welsh, research psychology professor, Dr. Rachel Piferi, Green Magnet principle, Dr. Bragg, and Green Magnet teacher, Mr. Toth. I greatly appreciate their input and guidance in my health behaviors survey project.

Document A

Health Attitude and Behavior Checklist

Vickers, R.R., Jr., Conway, T.L., & Hervig, L.K. (1990). Demonstration of replicable dimensions of health behaviors. Preventive Medicine, 19, 377-401.

Please circle the number that indicates the degree to which each statement applies to you:

	Not at all like me				Very much like me
1. I eat a balanced diet.	1	2	3	4	5
2. I get enough sleep.	1	2	3	4	5
3. I keep emergency numbers near the phone.	1	2	3	4	5
4. I choose my spare time activities to help me relax.	1	2	3	4	5
5. I take chances when crossing the street.	1	2	3	4	5
6. I have a first aid kit in my home.	1	2	3	4	5
7. I destroy old or unused medicines.	1	2	3	4	5
8. I see a doctor for regular checkups.	1	2	3	4	5
9. I pray or live by principles of religions.	1	2	3	4	5
10. I avoid getting chilled.	1	2	3	4	5
11. I watch my weight.	1	2	3	4	5
12. I carefully obey traffic rules so I won't have accidents.	1	2	3	4	5
13. I watch for possible signs of major health problems (e.g. cancer, hypertension).	1	2	3	4	5
14. I exercise to stay healthy.	1	2	3	4	5

15. I cross the street against the stop light.	1	2	3	4	5
	Not at all like me				Very much like me
16. I avoid high crime areas.	1	2	3	4	5
17. I don't smoke.	1	2	3	4	5
18. I don't take chemical substances which might injure my health (food additives, drugs, stimulants).	1	2	3	4	5
19. I check the condition of electrical appliances, the car, etc. to avoid accidents.	1	2	3	4	5
20. I stay away from places where I might be exposed to germs.	1	2	3	4	5
21. I fix broken things around my home right away.	1	2	3	4	5
22. I see a dentist for regular checkups.	1	2	3	4	5
23. I limit my intake of foods like coffee sugar, fats, etc.	1	2	3	4	5
24. I avoid over the counter medicines.	1	2	3	4	5
25. I take vitamins.	1	2	3	4	5
26. I do not drink alcohol.	1	2	3	4	5
27. I wear a seat belt when in a car.	1	2	3	4	5
28. I cross busy streets in the middle of blocks.	1	2	3	4	5
29. I avoid areas with high pollution.	1	2	3	4	5

	Not at all like me				Very much like me
30. I discuss health with friends, neighbors and relatives.	1	2	3	4	5
31. I gather information on things that affect my health by watching television and reading books, newspapers, or magazine articles.	1	2	3	4	5
32. I use dental floss regularly.	1	2	3	4	5
33. I speed while driving.	1	2	3	4	5
34. I brush my teeth regularly.	1	2	3	4	5
35. I take health food supplements (e.g. protein additives, wheat germ, bran, lecithin).	1	2	3	4	5
36. I learn first aid techniques.	1	2	3	4	5
37. I get shots to prevent illness.	1	2	3	4	5
38. I take more chances doing things that the average person.	1	2	3	4	5
39. I drive after drinking.	1	2	3	4	5
40. I engage in activities or hobbies where accidents are possible (e.g. motorcycle riding, skiing, using power tools, sky diving).	1	2	3	4	5

Health Behaviors Survey

Document B

Grade: 2

Age: _____

Circle one: Boy Girl

	No	Sometimes	Yes
1. I get enough sleep each night.			
2. I don't know when to cross the street.			
3. I know where the first aid kit is located in my house			
4. I know the number to call in an emergency.			
5. I see a doctor for regular checkups.			
6. I go to church.			
7. I wash my hands after using the bathroom.			
8. I carefully obey traffic rules when riding my bike or walking.			

	No	Sometimes	Yes
9. I eat breakfast every morning.			
10. I exercise through playing sports or other activities.			
11. I eat fruits and vegetables.			
12. I avoid neighborhood areas that I know are dangerous.			
13. I tell my parent's when I break something in my home.			
14. I see a dentist for regular checkups.			
15. I don't eat a lot of sugary foods like candy, sweets, cookies.			
16. I wear a helmet when riding my bike.			
17. I take vitamins regularly.			

	No	Sometimes	Yes
18. I wear a seat belt when in a car.			
19. I look both ways before crossing busy streets.			
20. I use dental floss regularly.			
21. I never take medicine without my parents/guardians/teachers permission.			
22. I brush my teeth regularly.			
23. I wash my hands before eating or touching food.			
24. I get shots to prevent illness.			
25. I avoid eating to much unhealthy food.			

Health Behaviors Survey

Document C

Grade: 3

Age: _____

Circle one: Boy Girl

	No	Sometimes	Most of the time	Yes
1. I get enough sleep each night.				
2. I don't know when to cross the street.				
3. I know where the first aid kit is located in my house				
4. I know the number to call in an emergency.				
5. I see a doctor for regular checkups.				
6. I go to church.				
7. I wash my hands after using the bathroom.				

	No	Sometimes	Most of the time	Yes
8. I carefully obey traffic rules when riding my bike or walking.				
9. I eat breakfast every morning.				
10. I exercise through playing sports or other activities.				
11. I eat fruits and vegetables.				
12. I avoid neighborhood areas that I know are dangerous.				
13. I tell my parent's when I break something in my home.				
14. I see a dentist for regular checkups.				
15. I don't eat a lot of sugary foods like candy, sweets, cookies.				

	No	Sometimes	Most of the time	Yes
16. I wear a helmet when riding my bike.				
17. I take vitamins regularly.				
18. I wear a seat belt when in a car.				
19. I look both ways before crossing busy streets.				
20. I use dental floss regularly.				
21. I never take medicine without my parents/guardians/teachers permission.				
22. I brush my teeth regularly.				
23. I wash my hands before eating or touching food.				

24. I get shots to prevent illness.



25. I avoid eating to much unhealthy food.

No Sometimes Most of the time Yes



26. I know how to contact my guardians or parents in case of an emergency.



27. I wear a winter coat, hat, and gloves.



28. I have never tried smoking cigarettes.



29. I learn first aid techniques.



Document D

Grade: 4

Age: _____

Circle one: Boy Girl

	Not at all like me 		Somewhat like me 		Very much like me 
1. I eat a balanced diet.	1	2	3	4	5
2. I get enough sleep each night.	1	2	3	4	5
3. I know how to contact my guardians or parents in case of an emergency.	1	2	3	4	5
4. I take chances when crossing the street.	1	2	3	4	5
5. I know where the first aid kit is located in my home	1	2	3	4	5
6. I know the number to call in case of an emergency.	1	2	3	4	5
7. I see a doctor for regular checkups.	1	2	3	4	5
8. I go to church regularly.	1	2	3	4	5
9. I wear a winter coat, hat, and gloves.	1	2	3	4	5
10. I wash my hands after using the restroom.	1	2	3	4	5

	Not at all like me		Somewhat like me		Very much like me
					
11. I carefully obey traffic rules when	1	2	3	4	5
12. I eat breakfast every morning.	1	2	3	4	5
13. I exercise through playing sports or other physical activities.	1	2	3	4	5
14. I eat fruits and vegetables.	1	2	3	4	5
15. I avoid neighborhood areas that I know are dangerous.	1	2	3	4	5
16. I have never tried smoking cigarettes.	1	2	3	4	5
17. I never use appliances that have frayed wires or look damaged.	1	2	3	4	5
18. I stay away from places where I might be exposed to germs.	1	2	3	4	5
19. I tell my parent's when I break something in my home.	1	2	3	4	5
20. I see a dentist for regular checkups.	1	2	3	4	5
21. I limit my intake of sugary foods like candy, sweets, cookies.	1	2	3	4	5
22. I wear a helmet when riding my bike.	1	2	3	4	5

Health Behaviors Survey

	Not at all like me 		Somewhat like me 		Very much like me 
23. I take vitamins regularly.	1	2	3	4	5
24. I do not drink alcohol.	1	2	3	4	5
25. I wear a seat belt when in a car.	1	2	3	4	5
26. I look both ways before crossing busy streets.	1	2	3	4	5
27. I discuss health with friends, parents, and relatives.	1	2	3	4	5
29. I use dental floss regularly.	1	2	3	4	5
30. I never take medicine without my parents/guardians/teachers permission.	1	2	3	4	5
31. I brush my teeth regularly.	1	2	3	4	5
32. I wash my hands before eating or touching food.	1	2	3	4	5
33. I learn first aid techniques.	1	2	3	4	5
34. I get shots to prevent illness.	1	2	3	4	5
35. I avoid eating too much junk food.	1	2	3	4	5

2ND Grade Questions

Food, Germ/Disease Prevention, Safety Rules/Knowledge, and Body

1. *I get enough sleep each night.* *B*
2. *I don't know when to cross the street.* *SR*
3. *I know where the first aid kit is located in my house.* *SR*
4. *I know the number to call in an emergency.* *SR*
5. *I see a doctor for regular checkups.* *GDP*
6. *I go to church.* *B*
7. *I wash my hands after using the bathroom.* *GDP*
8. *I carefully obey traffic rules when riding my bike or walking.* *SR*
9. *I eat breakfast every morning.* *F*
10. *I exercise through playing sports or other activities.* *B*
11. *I eat fruits and vegetables.* *F*
12. *I avoid neighborhood areas that I know are dangerous.* *SR*
13. *I tell my parent's when I break something in my home.* *SR*
14. *I see a dentist for regular checkups.* *GDP*
15. *I don't eat a lot of sugary foods like candy, sweets, cookies.* *F*
16. *I wear a helmet when riding my bike.* *SR*
17. *I take vitamins regularly.* *B*
18. *I wear a seat belt when in a car.* *SR*
19. *I look both ways before crossing busy streets.* *SR*
20. *I use dental floss regularly.* *GDP*
21. *I never take medicine without my parents/guardians/teachers permission.* *SR*
22. *I brush my teeth regularly.* *GDP*
23. *I wash my hands before eating or touching food.* *GDP*
24. *I get shots to prevent illness.* *GDP*
25. *I avoid eating to much unhealthy food.* *F*

3rd Grade Results

Food, Germ/Disease Prevention, Safety Rules/Knowledge, and Body

1. *I get enough sleep each night.* *B*
2. *I don't know when to cross the street.* *SR*
3. *I know where the first aid kit is located in my house.* *SR*
4. *I know the number to call in an emergency.* *SR*
5. *I see a doctor for regular checkups.* *GDP*
6. *I go to church.* *B*
7. *I wash my hands after using t he bathroom.* *GDP*
8. *I carefully obey traffic rules when riding my bike or walking.* *SR*
9. *I eat breakfast every morning.* *F*
10. *I exercise through playing sports r other activities.* *B*
11. *I eat fruits and vegetables.* *F*
12. *I avoid neighborhood areas that know are dangerous.* *SR*
13. *I tell my parent's when I break something in my home.* *SR*
14. *I see a dentist for regular checkups.* *GDP*
15. *I don't eat a lot of sugary foods like candy, sweets, cookies.* *F*
16. *I wear a helmet when riding my bike.* *SR*
17. *I take vitamins regularly.* *B*
18. *I wear a seat belt when in a car.* *SR*
19. *I look both ways before crossing busy streets.* *SR*
20. *I use dental floss regularly.* *GDP*
21. *I never take medicine without my parents/guardians/teachers permission.* *SR*
22. *I brush my teeth regularly.* *GDP*
23. *I wash my hands before eating or touching food.* *GDP*
24. *I get shots to prevent illness.* *GDP*
25. *I avoid eating to much unhealthy food.* *F*
26. *I know how to contact my guardians or parents in case of an emergency.* *SR*
27. *I wear a winter coat, hat, and gloves.* *B*
28. *I have never tried smoking cigarettes.* *B*
29. *I learn first aid techniques.* *SR*

Document G

4th Grade Questions
Food, Germ/Disease Prevention, Safety Rules/Knowledge, and Body

1. *I eat a balanced diet.* *F*
2. *I get enough sleep each night.* *B*
3. *I know how to contact my guardians or parents in case of an emergency.* *SR*
4. *I take chances when crossing the street.* *SR*
5. *I know where the first aid kit is located in my home* *SR*
6. *I know the number to call in case of an emergency.* *SR*
7. *I see a doctor for regular checkups.* *GDP*
8. *I go to church regularly.* *B*
9. *I wear a winter coat, hat, and gloves.* *B*
10. *I wash my hands after using the restroom.* *GDP*
11. *I carefully obey traffic rules when crossing the street.* *SR*
12. *I eat breakfast every morning.* *F*
13. *I exercise through playing sports or other physical activities.* *B*
14. *I eat fruits and vegetables.* *F*
15. *I avoid neighborhood areas that I know are dangerous.* *SR*
16. *I have never tried smoking cigarettes.* *B*
17. *I never use appliances that have frayed wires or look damaged.* *SR*
18. *I stay away from places where I might be exposed to germs.* *GDP*
19. *I tell my parent's when I break something in my home.* *SR*
20. *I see a dentist for regular checkups.* *GDP*
21. *I limit my intake of sugary foods like candy, sweets, cookies.* *F*
22. *I wear a helmet when riding my bike.* *SR*
23. *I take vitamins regularly.* *B*
24. *I do not drink alcohol.* *B*
25. *I wear a seat belt when in a ca.* *SR.*
26. *I look both ways before crossing busy streets.* *SR*
27. *I discuss health with friends, parents, and relatives.* *B*
28. *I use dental floss regularly.* *GDP*
29. *I never take medicine without my parents/guardians/teachers permission.* *SR*
30. *I brush my teeth regularly.* *GDP*
31. *I wash my hands before eating or touching food.* *GDP*
32. *I learn first aid techniques.* *SR*
33. *I get shots to prevent illness.* *GDP*
34. *I avoid eating too much junk food.* *F*

2nd Grade Results
Document H

Question	Girls						Boys					
		%		%		%		%		%		%
1. I get enough sleep each night.	2	10%	5	25%	13	65%	1	4%	8	33%	13	54%
2. I don't know when to cross the street.	1	5%	0	0%	18	90%	0	0%	0	0%	24	100%
3. I know where the first aid kit is located in my house	6	30%	2	10%	12	60%	9	38%	0	0%	13	54%
4. I know the number to call in an emergency.	0	0%	0	0%	20	100%	0	0%	1	4%	23	96%
5. I see a doctor for regular checkups.	3	15%	8	40%	9	45%	2	8%	4	17%	16	67%
6. I go to church.	1	5%	1	5%	18	90%	2	8%	5	21%	17	71%
7. I wash my hands after using the bathroom	0	0%	0	0%	19	100%	2	8%	6	25%	16	67%
8. I carefully obey traffic rules when riding my bike or walking.	0	0%	3	15%	17	85%	4	17%	2	8%	17	71%
9. I eat breakfast every morning.	0	0%	6	30%	14	70%	0	0%	7	29%	17	71%
10. I exercise through playing sports or other activities.	3	15%	3	15%	12	60%	1	4%	4	17%	19	79%
11. I eat fruits and vegetables.	1	5%	4	20%	14	70%	3	13%	6	25%	14	58%
12. I avoid neighborhood areas that I know are dangerous.	7	35%	0	0%	13	65%	6	25%	4	17%	13	54%
13. I tell my parent's when I break something in my home.	6	30%	3	15%	11	55%	3	13%	3	13%	18	75%
14. I see a dentist for regular checkups.	1	5%	3	15%	16	80%	4	17%	3	13%	17	71%
15. I don't eat a lot of sugary foods like candy, sweets, cookies.	8	40%	2	10%	10	50%	6	25%	8	33%	10	42%
16. I wear a helmet when riding my bike.	4	20%	4	20%	12	60%	14	58%	2	8%	8	33%
17. I take vitamins regularly.	4	20%	4	20%	12	60%	10	42%	3	13%	10	42%
18. I wear a seat belt when in a car.	0	0%	3	15%	17	85%	1	4%	3	13%	20	83%
19. I look both ways before crossing busy streets.	0	0%	0	0%	20	100%	0	0%	2	8%	22	92%
20. I use dental floss regularly.	5	25%	2	10%	13	65%	4	17%	4	17%	15	63%
21. I never take medicine without my parents/guardians/teachers permission.	7	35%	2	10%	10	50%	3	13%	0	0%	21	88%
22. I brush my teeth regularly.	0	0%	1	5%	19	95%	0	0%	4	17%	20	83%
23. I wash my hands before eating or touching food.	0	0%	0	0%	20	100%	0	0%	4	17%	20	83%
24. I get shots to prevent illness.	5	25%	3	15%	12	60%	4	17%	4	17%	16	67%
25. I avoid eating to much unhealthy food	8	40%	1	5%	10	50%	8	33%	5	21%	11	46%

3rd Grade Results
Document I

Question		%		%		%		%
1. I get enough sleep each night.	1	3%	5	14%	9	25%	21	58%
2. I don't know when to cross the street.	3	8%	0	0%	2	6%	31	86%
3. I know where the first aid kit is located in my house	14	39%	1	3%	2	6%	19	53%
4. I know the number to call in an emergency.	2	6%	0	0%	1	3%	33	92%
5. I see a doctor for regular checkups.	3	8%	4	11%	3	8%	25	69%
6. I go to church.	3	8%	5	14%	6	17%	22	61%
7. I wash my hands after using the bathroom.	1	3%	0	0%	4	11%	31	86%
8. I carefully obey traffic rules when rding my bike or walking.	2	6%	1	3%	2	6%	31	86%
9. I eat breakfast every morning.	4	11%	6	17%	5	14%	21	58%
10. I exercise through playing sports or other activities.	5	14%	1	3%	1	3%	29	81%
11. I eat fruits and vegetables.	3	8%	5	14%	3	8%	25	69%
12. I avoid neighborhood areas that know are dangerous.	4	11%	2	6%	1	3%	29	81%
13. I tell my parent's when I break something in my home.	3	8%	4	11%	7	19%	22	61%
14. I see a dentist for regular checkups.	4	11%	2	6%	2	6%	28	78%
15. I don't eat a lot of sugary foods like candy, sweets, cookies.	9	25%	12	33%	2	6%	13	36%
16. I wear a helmet when riding my bike.	19	53%	1	3%	5	14%	11	31%
17. I take vitamins regularly.	13	36%	4	11%	3	8%	16	40%
18. I wear a seat belt when in a car.	1	3%	6	17%	3	8%	26	72%
19. I look both ways before crossing busy streets.	1	3%	2	6%	1	3%	32	89%
20. I use dental floss regularly.	9	25%	3	8%	7	19%	17	47%
21. I never take medicine without my parents/guardians/teachers permission.	3	8%	1	3%	2	6%	30	83%
22. I brush my teeth regularly.	3	8%	3	8%	6	17%	24	67%
23. I wash my hands before eating or touching food.	3	8%	2	6%	3	8%	28	78%
24. I get shots to prevent illness.	9	25%	4	11%	2	6%	21	58%
25. I avoid eating to much unhealthy food.	12	33%	4	11%	7	19%	13	36%
26. I know how to contact my guardians or parents in case of an emergency.	3	8%	1	3%	2	6%	30	83%
27. I wear a winter coat, hat, and gloves.	3	8%	3	8%	6	17%	24	67%
28. I have never tried smoking cigarettes.	25	69%	0	0%	0	0%	11	31%

4th Grade Results
Document J

Question	5	5 - %	4	4 - %	3	3 - %	2	2 - %	1	1 - %
1. I eat a balanced diet.	13	32%	10	22%	9	24%	4	10%	6	6%
2. I get enough sleep each night.	31	51%	4	10%	10	24%	1	2%	4	10%
3. I know how to contact my guardians or parents in case of an emergency.	33	80%	5	12%	1	2%	0	0%	2	5%
4. I take chances when crossing the street.	19	46%	3	7%	6	6%	5	12%	8	20%
5. I know where the first aid kit is located in my home	30	73%	2	5%	3	7%	2	5%	5	12%
6. I know the number to call in case of an emergency.	36	88%	2	5%	0	0%	0	0%	3	7%
7. I see a doctor for regular checkups.	26	63%	3	7%	8	20%	3	7%	1	2%
8. I go to church regularly.	21	51%	11	27%	7	17%	1	2%	1	2%
9. I wear a winter coat, hat, and gloves.	19	46%	9	22%	7	17%	2	5%	4	10%
10. I wash my hands after using the restroom.	33	80%	4	10%	3	7%	2	5%	0	0%
11. I carefully obey traffic rules when crossing the street.	31	51%	4	10%	4	10%	0	0%	2	5%
12. I eat breakfast every morning.	20	49%	4	10%	4	10%	1	2%	2	5%
13. I exercise through playing sports or other physical activities.	27	66%	9	22%	0	0%	2	5%	2	5%
14. I eat fruits and vegetables.	28	68%	8	20%	2	5%	1	2%	1	2%
15. I avoid neighborhood areas that I know are dangerous.	29	71%	4	10%	2	5%	1	2%	5	12%
16. I have never tried smoking cigarettes.	27	66%	0	0%	1	2%	0	0%	13	32%
17. I never use appliances that have frayed wires or look damaged.	23	56%	0	0%	1	2%	1	2%	16	39%
18. I stay away from places where I might be exposed to germs.	11	27%	8	20%	8	20%	2	5%	12	29%
19. I tell my parent's when I break something in my home.	23	56%	8	20%	5	12%	1	2%	3	7%
20. I see a dentist for regular checkups.	25	61%	4	10%	7	17%	2	5%	2	5%
21. I limit my intake of sugary foods like candy, sweets, cookies.	13	32%	4	10%	8	20%	3	7%	12	29%
22. I wear a helmet when riding my bike.	12	29%	2	5%	3	7%	1	2%	23	56%
23. I take vitamins regularly.	15	37%	4	10%	7	17%	2	5%	2	5%

4th Grade Results
Document J

24. I do not drink alcohol.	23	56%	1	2%	0	0%	0	0%	17	41%
25. I wear a seat belt when in a car.	24	59%	5	12%	7	17%	2	5%	2	5%
26. I look both ways before crossing busy streets.	30	73%	2	5%	4	10%	2	5%	1	2%
27. I discuss health with friends, parents, and relatives.	16	39%	9	22%	10	24%	1	2%	5	12%
28. I use dental floss regularly.	14	34%	12	29%	8	29%	3	7%	4	10%
29. I never take medicine without my parents/guardians/teachers permission.	32	78%	3	7%	1	2%	1	2%	0	0%
30. I brush my teeth regularly.	30	73%	6	15%	3	7%	1	2%	0	0%
31. I wash my hands before eating or touching food.	32	78%	6	15%	2	5%	1	2%	0	0%
32. I learn first aid techniques.	16	39%	8	20%	11	27%	2	5%	4	10%
33. I get shots to prevent illness.	29	71%	7	17%	4	10%	0	0%	1	2%
34. I avoid eating too much junk food.	14	34%	8	20%	11	27%	1	2%	7	17%

Document K

Dear Green Elementary School Teachers:

My name is Monica Lynch, and I am a senior at the University of Tennessee. As a member of the University Honors Program, I am working on my Senior Thesis Project, which is called "Health Behaviors of School-Age Children." For the past four years, I have been in charge of the health clinic here at Green, and as a volunteer nurse I have enjoyed helping the kids feel better every day. My interest in children's health has led me to pursue a career in medicine to learn more about pediatrics. My senior project consists of a survey, which will be given to 2nd, 3rd, and 4th grade children to asses their health behaviors. The survey assesses four domains of healthy behaviors: Food, Germ/Disease Prevention, Safety Rules/Knowledge, and Body. The purpose of my project is to determine what health behaviors increase with age, and what age/grade corresponds to which health domains. After gathering the results, I plan on making my own educational short stories and posters for the Green Magnet clinic, which will be geared towards safe and healthy habits. The survey results will not be published and will only be used for the purposes of my project.

Today I am asking for your help. Along with this letter are copies of my survey for every student in your class, each geared towards your students' year in school. I would greatly appreciate it if you could hand this out to your students during class free time, and facilitate the completion of the survey. Please make it clear to your students that they do not have to participate if they do not want to. After your students complete the surveys, please turn them into the manila envelope on the door of the school clinic labeled "Monica Lynch's Senior Project" before **April 27th, 2005.** All teachers who participate will have their name entered in a drawing for a Teacher's Supply Basket with lots of great school supplies and more!

Thank you so much for your help in making my senior thesis project a success, and please feel free to contact me if you have any questions!

Monica Lynch
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(901) 830-6971