The Need for Health Education Books for Children in the U.S.

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#### Abstract

The purpose of this Capstone was to first identify current health issues affecting

American children. After a thorough analysis of recent studies and statistics, obesity, asthma,
diabetes, injuries and mental disorders were found to be the most pressing concerns. Secondly,
this research project also aimed at analyzing the availability of health education books for
children as means to disseminate information on these topics and educate children on the various
aspects of each health issue. Conclusions point to the need for continued development and
revision of existing literature and more involvement of the private and public sectors to reverse
current trends. Findings motivated the development of a children's book for young readers (4-8
years old) tackling healthy eating habits.

#### Children and health status

During the early beginning of the 20th century, childhood deaths in this country were mainly due to infectious diseases (Committee on Evaluation of Children's Health and Board on Children, Youth and Families, 2004). In 1900, for example, the top causes of death were pneumonia/influenza, tuberculosis, diarrheal diseases, and diphtheria (Committee on Evaluation of Children's Health and Board on Children, Youth and Families, 2004; Guyer & Wigton, 2005). The spread of theses diseases among youth was largely attributed to overcrowding, poor housing conditions, and inadequate water treatment and waste disposal systems. Outbreaks of yellow fever and malaria were also common (Centers for Disease Control and Prevention, 1999).

Over the years, advancements in sanitation, nutrition, vector control, detection and treatment of infectious diseases, and deliberate public health interventions such as immunizations, positively affected children's health outcomes (McMichael & Beaglehole, 2000). As a result of these advances, the number of children suffering from measles, smallpox, poliomyelitis, and cholera decreased (CDC, 1999; Landrigan et al., 1998), infectious diseases no longer accounted for the most deaths among children (Guyer, Freedman, Strobino, & Sondik, 2000; Minnesota Department of Health, 2011), and the infant mortality rate dropped enormously (Guyer, Freedman, Strobino, & Sondik, 2000). By the end of the 20<sup>th</sup> century, the percentage of child deaths attributable to infectious diseases had declined to 2 percent and the infant mortality rate had decreased by 93 percent (Guyer, Freedman, Strobino, & Sondik, 2000).

Significant health concerns started to emerge at the beginning of the last decade despite increased access to health care and reduction of contaminants such as lead (CDC, 1999, 2000). In 2000 alone, more children died from accidents and injuries than any other cause (National Vital Statistics Report, 2002). For children under 9 years of age, birth defects as well as cancer were

also leading causes of death (National Vital Statistics, 2002). Besides unintentional injury, cancer, suicide, and homicide claimed the most lives of 10 to 19 year olds in 2000 (National Vital Statistics, 2002). In addition, the increasing industrialization, urbanization and mechanization occurring not only in the U.S., but in other countries as well, have been associated with changes in diet and behavior (Edberg, 2010). This new interaction between genetics, behavior and the environment is now reflected on the growing numbers of American children with serious conditions and diseases including obesity, diabetes and asthma (Committee on Evaluation of Children's Health and the Board on Children, Youth and Families Division of Behavioral and Social Sciences and Education, 2004).

Childhood obesity rates in the U.S. are among the highest in the world (Committee on Evaluation of Children's Health and the Board on Children, Youth and Families Division of Behavioral and Social Sciences and Education, 2004) and have been increasing since 1971 (Ogden & Flegal, 2010; Federal Interagency Forum on Child and Family Statistics, 2010). During 1971 to 1974, the prevalence of overweight in children ages 6–11 was 4.0 percent (American Heart Association, 2010). By the end of the 1970s, this number had increased to 6 percent (Ogden & Flegal, 2010). This percentage rose to 11 percent during 1988–1999 (Federal Interagency Forum on Child and Family Statistics, 2010) reaching 15 percent in 2002 (Committee on Evaluation of Children's Health and the Board on Children, Youth and Families Division of Behavioral and Social Sciences and Education, 2004). From 2005 to 2008, the percent of children ages 6-17 who were obese rose again from 17 percent to 19 percent (Federal Interagency Forum on Child and Family Statistics, 2010; American Heart Association, 2010). In 2010, among American children ages 2–19, the following were overweight or obese: a) for non-Hispanic whites, 31.9 percent of males and 29.5 percent of females; b) for non-Hispanic blacks,

30.8 percent of males and 39.2 percent of males; and c) for Mexican Americans, 40.8 percent of males and 35.0 percent of females (American Heart Association, 2010).

The percentage of children who are obese has become a public health challenge (Federal Interagency Forum on Child and Family Statistics, 2010) since overweight and obese children are more likely to suffer from medical conditions such as asthma, diabetes, hypertension, orthopedic problems, and sleep apnea, as well as psycho-social effects like low body-image, stigmatization and ridicule (American Obesity Association, 2002). The current rates of type 2 diabetes among children are of particular concern. Previously considered a chronic disease primarily affecting adults, type 2 diabetes is now on the rise among children (Guyer & Wigton, 2005). It is also well documented that children who are overweight are more likely to become overweight adults (Neely, 2007) thus increasing the risk of developing several chronic diseases including heart disease, some cancers, stroke and depression at a later age (Guyer & Wigton, 2005), and that these conditions can result in a shortened life expectancy (Must, Jacques, Dallal, Bajema, & Dietz, 2002). In fact, according to a report published in the New England Journal of Medicine in March 2005, the current generation of children is predicted to live shorter life spans than their parents because of obesity (Olshansky, Passaro & Hershow, 2005).

Poor eating patterns are a major factor in the high rate of obesity among children in the U.S. (Federal Interagency Forum in Child and Family Statistics, 2010). Recent studies have shown that on average, children's diets are out of balance, with too much added sugar and solid fat, and not enough nutrient-dense foods, especially fruits, vegetables, and whole grains (Guenther, Reedy & Krebs-Smith, 2008). To makes matter worse, American children are constantly being bombarded with commercials promoting fast foods, snack foods and soft drinks (Daniel, 2006) not only at home, but also in schools (Hays, 1998; Hays, 1999). Unfortunately,

these kinds of foods are also still sold and/or offered in schools nationwide (United States Department of Agriculture, 2007). In addition to contributing to the obesity epidemic, increased amounts of sugar in diets also increases the risk of early childhood caries. Despite increased access to preventative care, tooth decay remains the single most chronic disease of childhood (Edelstein, 2005). Different national non-profits, including the Produce for Better Health Foundation, are actively developing nationwide campaigns such as the Fruits and Veggies More Matters TM campaign to encourage consumption of fruits and vegetables and other healthier food items (Produce for Better Health Foundation, 2011). As part of this initiative, a website was developed especially for kids, Fruit and Veggie Color Champions at www.foodchamps.org (Produce for Better Health Foundation, 2011).

In addition to unhealthy eating habits, much of that weight gain among children has been linked to a lack of exercise (Pate, Wang, Dowda, Farrel, & O'Neill, 2006). Studies and recent statistics have shown that the level of physical activity among children has dropped in the last 20 years (Pate et al., 2006). Studies have also shown that in childhood, participation in appropriate physical activity may encourage prevent the development of cardiovascular risk factors in the future and complement treatment of existing cardiovascular risk factors, including hypertension, dyslipidemia, and overweight (Gidding, 2007). Exercise in children can also significantly improve insulin sensitivity independent of weight loss (Gidding, 2007). Thus, physical inactivity among youth represents another significant public health problem because it is now known that low physical fitness during adolescence tends to track into adulthood, and that low-fit adults are at substantially increased risk of chronic disease (Pate et al., 2006). Research has been conducted to determine the cause of this decline. One explanation offered has been the amount of time that children spend on all screen media combined (TV, videos and DVDs, computer time outside of

schoolwork, and video games) (Robinson & Sargent, 2005). In order to create awareness among the youth population on the risks of physical inactivity, the public and private sectors have sponsored several mass interventions in recent years, including the VERB Campaign developed by the Centers for Disease Control and Prevention, the Let's Move Initiative supported by the First Lady Michelle Obama, and Play60 promoted by the NFL and other national partners.

Other health issues, including asthma and mental health disorders, are also rapidly increasing (Kelleher, McInerny, Gardner, Childs & Wasserman, 2000; Satcher, 2001; Committee on Evaluation of Children's Health and Board on Children, Youth and Families Division of Behavioral and Social Sciences and Education, 2004). Asthma has become one of the most common chronic diseases among children in the United States today (Kelly, 2005; Federal Interagency Forum on Child and Family Statistics, 2010). In 2000 alone, 5 million children in the U.S. were affected by asthma (Centers for Control and Disease Prevention, 2000). Recent figures show that the prevalence of asthma in all children increased by 75 percent while the rate in children under age 5 increased by 160 percent over the past two decades (Centers for Disease Control and Prevention, 2000). At present, 9 percent of all American children have current asthma, which includes children with active asthma symptoms and children with well-controlled asthma (Federal Interagency Forum on Child and Family Statistics, 2010).

Mental health problems are the most common, costly, chronic, and disabling conditions confronting American children today (Kelleher, 2005) and conditions, including depression, ADHD and even autism may be increasing (Kelleher, McInerny, Gardner, Childs & Wasserman, 2000; Committee on Evaluation of Children's Health and Board on Children, Youth, and Families Division of Behavioral and Social Sciences and Education, 2004). Most scientists estimate that mental health problems affect 1 out of 5 children of school age in the United States

(Kelleher, 2005) and that 1 in 10 children have significant mental conditions that cause some form of impairment (Satcher, 2001). Depression can adversely affect the development and wellbeing of adolescents, and youth with a Major Depressive Episode (MDE) are at greater risk for suicide and initiation of substance use (Shaffer et al., 1996; Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2007). A Major Depressive Episode is characterized by a depressed mood, loss of interest, change in eating, appetite or weight, hypersomnia or insomnia, slow or agitated motor activity, fatigue, feelings of worthlessness, lack of concentration, and thoughts of suicide, and, if left untreated, can last up to 2 years or more (Major Depressive Episode, 2011). In 2008 alone, 8 percent of adolescents ages 12–17 had at least one MDE during the past year and the percentage of youth with at least one MDE receiving treatment for depression was 38 percent (Federal Interagency Forum on Child and Family Statistics, 2010).

Attention Deficit Hyperactivity Disorder (ADHD) is the most common mental diagnosis in children and is characterized by inattention, hyperactivity and impulsivity (Wolraich, 2005). This disorder stems from an interaction between neurologically based central nervous system characteristics and a child's environment (Wolraich, 2005). Because the major effective treatments for ADHD have similar effects on all children regardless of their diagnosis, the determination about whom to treat has been very dependent on the diagnostic process (Wolraich, 2005). The continuing debate on defining the criteria for ADHD, particularly cut off criteria, has had a direct impact on costs associated with ADHD (Palfrey & Richmond, 2005). Costs for ADHD alone are similar to, or exceed, the costs for treatment of asthma (Kelleher, Childs & Harman, 2001), and when the costs of ADHD are combined with other mental health problems, the total societal costs for treatment and management of mental health conditions exceed any

other chronic problems of childhood (Ringel & Sturn, 2001).

Autism is a severe developmental disorder characterized by impaired social interaction and communication, and by restricted and repetitive behavior (Autism, 2011) that begins at birth or within the first two-and-a-half years of life (Autism Research Institute, 2011). In the 1980s, autism was still considered rare since it was only found in 4 to 5 per 10,000 children (Bryson & Smith, 1998; Yeargin-Allsopp et al., 2003; Autism Research Institute, 2011). However, since the early 1990s, the rate of autism has increased and recent studies put the prevalence at 4 to 6 per 1,000 children (Bryson & Smith, 1998; Yeargin-Allsopp et al., 2003; Autism Research Institute, 2011). There are no clear explanations for this 10-fold increase, but doubtless some part of the change reflects more precision in the diagnosis of children with developmental delay and mental retardation (Palfrey & Richmond, 2005).

Intentional and unintentional injuries are also becoming more prevalent among children in the U.S. despite their significant drop between 1981 and 2000 (Committee on Evaluation of Children's Health and Board on Children, Youth, and Families Division of Behavioral and Social Sciences and Education, 2004). In 2001, 44 percent of deaths between the ages of 1 and 19 were caused by unintentional injuries (Anderson & Smith, 2003). Injuries are now the most common cause of death and disability to children and adolescents in the United States (Rivara, 2005).

To come to grips with the pressing and increasing needs of children and youth (such as needs that arise as a result of obesity, asthma, injuries, violence and mental health concerns), the importance of interweaving healthy lifestyles, community health initiatives, health education and private health care delivery (Palfrey & Richmond, 2005) needs to fully acknowledged in this country. The health education component, in its various forms, plays a vital role in the

dissemination of information conducive to health.

The availability of health education books for children in the U.S.

To provide a clearer picture of what health education books are, the term "health education" should be first defined. Currently, there are multiple definitions of health education. The Joint Committee on Health Education and Promotion Terminology has defined health education as "any combination of planned learning experiences based on sound theories that provide individuals, groups, and communities the opportunity to acquire information and the skills needed to make quality health decisions" (2001). Similarly, according to the World Health Organization, health education is "any combination of learning experiences designed to help individuals and communities improve their health, by increasing their knowledge of influencing their attitudes" (2011). Thus, health education books and other tools, such as websites, brochures and videos, foment those learning experiences designed to deliver information and educate individuals on the skills needed to improve their health.

Books are still chosen mot frequently as a medium for learning (Livingstone & Bovill, 2001) despite recent changes in the media world. Several studies have found reading to be superior in regards to learning and more likely to cultivate higher-order, inferential thinking (Scott, 2006). Researchers have also concluded that reading leads to more-knowledge based meanings than those produced by television for example, which tend to be more concrete and detached from previous knowledge (Scott, 2006). In addition, higher levels of television viewing also correlate with lower academic performance, attention problems, and may impoverish the development of the pre-frontal cortex (Healy, 1998). Books, on the other hand, not only help to develop vital language skills, but can also enhance children's social skills as they become

participants in their own learning (Scott, 2006) and improve hand-eye coordination (Freedman-De Vito, 2004).

However, it is a fact that new technology has greatly impacted the production and sales of all juvenile books in the U.S. For example, the number of new juvenile titles has constantly been declining since 2002 (Grabois, 2007), while the total number of retail sales and profits generated has been on the rise for the last five years (Grabois, 2007; Rich, 2009). In recent years, there has been a particular significant expansion in the market for educational books, toys and software aimed at pre-school children as parents are becoming more interested in home learning (Buckingham, 2007). To some extent, these factor account for the emergence of "edutainment", a hybrid mix of education and entertainment that relies heavily on visual material, on narrative or game-like formats, and on more informal, less didactic styles of address (Buckingham, 2007). Both the private and public sectors are now relying on "edutainment" to address such health and social issues as substance abuse, immunization, teenage pregnancy, HIV/AIDS, and cancer (Edutainment, 2011).

In regards to educational books for children with health topics, there seems to be plenty on issues regarding illnesses, medical procedures, mental disorders, coping with death, dental health, germs and viruses, disabilities and the human body in general (*Appendix A*). These books vary in format, content and length. Some books are based in real-life stories while others on well-known fictional characters, such as Barney, Curious George and the Sesame Street gang. Others include photographs whereas other illustrations by renown illustrators. Recipes and other activities are used in some to reinforce the theme of the book. Finally, some books also include suggestions for parents and have been translated into other languages such as Spanish. Prices for these books range on average from \$3.95 to \$39.00 and authorship varies from healthcare

professionals to professional associations.

These kinds of books are available in various settings and can be purchases through different means. Health education books for children are freely accessible at different national children's hospitals, including the Cincinnati Children's Hospital Medical Center and the Brenner Children's Hospital in North Carolina, public libraries, colleges such as American University in Washington, D.C., and schools. They are sold at local bookstores, national bookstore chains, including Barnes and Noble and Books-A-Million and their websites and through other online retailers, including Amazon.com, Ebay.com, Alibris.com, and Overstock.com. In addition, several websites suggest these books. These websites range form websites of general interest such as Ask.com to websites for teachers as Apples4teacher.com and the Oral Health Unit website of the University of Texas Health Science Center.

# The need for new and improved health education books

In April 2010, a small questionnaire was created for parents of school-aged children to be used during telephone interviews as an attempt to collect qualitative information on parents' perceptions of health education materials and healthy practices (*Appendix B*). Compared to mailed surveys or to face-to-face interviews, the telephone interview offers a relatively easy method of collecting self-reported data at a moderate cost (McKenzie, Neiger & Thackeray, 2009). The questionnaire was also translated into Spanish as an attempt to cater to those parents with limited English proficiency or who felt more comfortable with the Spanish language (*Appendix C*).

Known parents of children ages 2-9 who had telephone access were selected. Interviewer bias was acknowledged and each interview was conducted in a professional manner and

questions were clarified without causing respondents to change an initial response. In addition, the standard questionnaire was the only one used.

Ten parents and one grandmother were interviewed in a two week period, from April 11 to April 25, 2010. The great majority of parents were female of Hispanic background (these interviews were conducted in Spanish). However, parents who described themselves as White and Asian American were also interviewed and these interviews were conducted in English. All parents were from different socioeconomic backgrounds and resided in different states: Hawaii, Maryland, Virginia, Colorado, California and Arizona. The average length of interviews was 8 minutes and interviews were conducted in the daytime. The average number of kids per parent was 2.5 and ages ranged from 8 months to 29 years. Parents with both male and female kids were also interviewed.

From the results, the vast majority of parents seemed to agree that the most pressing concern in regards to their children's health was their eating habits, more specifically eating healthy. Some responded that exercise, swine flu, lack of stress, asthma, sleeping habits, development, and food in schools were also big concerns. When asked specifically asked if they believed there were enough educational materials for kids that dealt with health topics, the majority replied that there were not enough or did not know. One parent even added that there could be some out there, but that they had not been properly advertised. However, two participants responded that there were plenty. When asked if they knew what were the current health issues that were affecting kids in the U.S., some did not know while others mentioned obesity, cholesterol, diabetes, ADHD, allergies, swine flu, immunizations, diet, nutrition, chicken pox, asthma, hormones, being overweight, autism, developmental delays, cold, fever, and PE education in schools. When asked if their kids had an active lifestyle, most parents said

yes and some provided examples as to what this meant ("my son plays soccer", "we like to go biking", "she plays a lot", etc.). Finally, when asked if they believed their kids had healthy eating habits, the vast majority said yes and one replied only Monday through Friday.

Parents were also asked on the type and format of books that would be more interesting to their children. A book that included fictional characters with basic text along with some photographs seemed to be the ideal type. Other parents added that precise words should be included, that the book had to be colorful, that is should be fun and include activities, and that the information should also be relevant for the parents and easy to comprehend. When asked if such a book would improve their children's well-being, all parents said yes. Lastly, all parents believed that healthy habits could be learned at an early age and highlighted its importance.

It is also very important to mention that some parents gave further comments:

- 1) Kids need to be in daycare at an early age so that they can play with other kids.
- 2) When introducing new foods into their diet, one should try over and over to make them eat it and get used to it.
- 3) I would love to see books that showed what the main food groups were so that my kids could make good eating choices.
- 4) A book of this nature would be great and would motivate kids.
- 5) Nutritional information is greatly needed.
- 6) Parents need to motivate kids to be more physically active.
- 7) Books of this nature should be affordable.
- 8) Books should also be interesting for parents.
- 9) Medical terminology can sometimes be boring.
- 10) Some parents are just feeding their kids processed foods.

After a thorough analysis of the books found and survey results, some findings raise a number of concerns. A first concern is related to book production, revision and advertising. Consistent with book trends listed above, few have been recently been published while the vast majority appeared on the market during the 1980s and 1990s, and those that have recently been published have not been properly advertised. Also the great majority of these books have not been revised nor adapted into new formats, for example into formats compatible with e-book readers and other devices. This can certainly pose a problem due to constant advances not only in technology but also in the medical field as more research is done and more information on certain conditions/illnesses is found. Another major concern is that books on the most pressing issues affecting children's health in the U.S., such as dietary habits, physical activity and excessive gain weight, are less numbered in accordance with parents' perceptions. Only a handful of comprehensive books on these subjects were found in contrast with other topics (*Appendix A*).

Books on healthy eating habits seem to be by far the most numerous from this group. Examples of books on healthy eating habits include *Gobey Gets Full*, *Good Nutrition in a Nutshell* TM by Judy Caplan MS, RD; *Super Baby Abigail's Lunchtime Adventure Children's Book* and *Havoc at the Hillside Market with the Super Crew* Children's Book by Melissa Halas-Liang MA, RD, CDE; *Blue's Snack Party* by Sarah Landy; *Dinosaurs Alive and Well*, *A Guide to Good Health* by Laurie Krasny Brown and Marc Brown; *The Edible Pyramid: Good Eating Every Day* by Loreen Leedy; *Gregory, The Terrible Eater* by Mitchell Sharmat; *Will Never Not Ever Eat a Tomato* by Lauren Child; *The Race Against Junk Food* by Anthony Buono; and *The Vegetable Show* by Laura Krasny Brown. All these books emphasize healthy eating habits, a balance diet and increased consumption of fruits and vegetables.

Books on the risks of being overweight were less numbered. Examples of these books were: *I Can Be Healthy* by the American Medical Association Alliance; *Too Much* by Linda Taylor West; *I Eat When I'm Sad, Food and Feelings* by Rae Simmons; *Oscar and Otis: Fat Fighters* by Alicia Kirschenheiter; *What's Up With Pam?: Medikidz Explain Childhood Obesity (Superheroes on a Medical Mission)* by Kim Chailman-Blair and John Taddeo; and *The Gulps* by Rosemary Wells. This kind of books deal with the medical aspects of obesity and offer several suggestions in tackling this health issue.

Lastly, fewer books on the benefits of physical activity were found. Among them, the following were of particular interest: *Dinosaurs Alive and Well, A Guide to Good Health* by Laurie Krasny; *I Can Be Healthy* and *Be a Winner: Shape up for Life* by the American Medical Association Alliance; *Hop, Skip and Jump* by Nicola Tuxworth; and *Dr. Craft's Active Play, Fun Physical for Young Children* by Dr. Craft. These books propose several activities and/or sports in which children can engage in as a way to increase physical activity whilst having fun.

#### **Conclusions**

The health of the U.S. population generally, and children's health in particular, lags behind that of many Western industrialized countries (Shi & Starfield, 2000). Childhood obesity rates in the U.S. are among the highest in the world, and type 2 diabetes, asthma, mental disorders and unintentional injuries among youth are all rapidly increasing. Health during childhood must be a major concern both because children are important in their own right and because the nation cannot thrive if it has large number of unhealthy adults (Committee on Evaluation of Children's Health and the Board on Children, Youth and Families Division of Behavioral and Social Sciences and Education, 2004).

The direct and indirect costs of obesity, cardiovascular disease and stroke among adults, which include inpatient hospitalization, pharmaceuticals, physician visits, workdays lost, lost productivity, disability pensions and premature mortality, have augmented since 1995 (Reuters, 2009; Edberg, 2010). It is estimated that cardiovascular disease and stroke costs alone constituted a \$503.2 billion dollar burden on the U.S. healthcare system and labor market in 2010 (Reuters, 2009).

Research gathered from the past 30 years has shown a relationship between these conditions and known risk factors, such as physical inactivity and poor eating habits, and that in many cases, they can be prevented by a change in lifestyle and behavior. Healthy attitudes and behaviors can be learned at an early age and should be emphasized among youth.

The health education component, through the use of children's books, should be stressed as books, in their various forms, continue to be a major source of information and are easily available in the U.S. Health education books for children have the power to convey important health information via stories, fun pictures and easy activities that can be easily understood by young readers. Although books on some of the most pressing issues around children's health have been on the market for some time, for example on mental disorders, these books need to be revised and new books with new information should be published. Books on other issues, including poor eating habits, lack of physical activity and excessive gain weight, are relatively new despite numerous studies conducted over the last 20 years indicating their impact among youth. These issues are of special concern as they can trigger the onset of life-threatening diseases.

The need for new and improved health educational material aimed at children exists and should be seen an important factor in reversing current trends. Healthy children are more ready

and able to learn and, in the longer term, are more likely to become healthy adults who will contribute as a productive citizenry and workforce to the continued vitality of society (Committee on Evaluation of Children's Health and the Board of Children, Youth and Families Division of Behavioral and Social Sciences and Education, 2004).

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## Appendix A

# a) Books about illness/injury/hospitalization/doctors/medical procedures

A visit to the Sesame Street Hospital (Deborah Hautzig, 1985)

Why am I going to the hospital (Claire Ciliotta, 1981)

My doctor, my friend (P.K. Hallinana, 1996)

Barney and Baby Bop go to the doctor (M. Larsen, 1996)

Curious George goes to the hospital (H. Rey and M. Rey, 1966)

When Molly was in the hospital: a book for brothers and sisters of hospitalized children (D.

Duncan, 1994)

Berenstain bears go to the doctor (Stan & Jan Berenstain, 1981)

Cooper gets a cast (Karen Olson, 2003)

Cooper gets a CT scan (Karen Olson, 2002)

Cooper gets an x-ray (Karen Olson, 2001)

Going to the doctor (T. Berry Brazelton, 1996)

Going to the hospital (Anne Civardi, 2000)

Good-bye tonsils! (Juliana Lee Hatkoff and Craig Hatkoff, 2001)

Imagine a rainbow: a child's guide for soothing pain (Brenda S. Miles, 2006)

Inside story: a kid's guide to kidney and liver transplants (by Karen Crowe, 2001)

Jenny's in the hospital (Seymour Reit, 1984)

Marvin's marvelous medicine (Nancy Loranger-Kuntz, Rita Secola and Doug Leffin, 1993)

"O, my" in tonsillectomy & adenoidectomy : how to prepare your child for surgery, a manual (Laurie Zelinger., 2009)

*Take a look and see ... every inch of me* (Wyeth-Ayerst Laboratories, 2000)

Tubes in my ears: my trip to the hospital (Virginia Dooley, 1996))

What about me?: when brothers and sisters get sick (Allan Peterkin, 1992)

Why, Charlie Brown, why: a story about what happens when a friend is very ill (Charles M.

Schulz, 2002)

## b) Books on mental disorders and related emotional states (grief, frustration, sadness, etc.)

About dying: an open book for parents and children together (Sara Stein, 1974)

The fall of Freddie the Leaf (Leo Buscaglia, 1982)

The tenth good thing about Barney (Judith Viorst, 1971)

Sad days, glad days

Together we'll get through this

Sad isn't bad

The saddest time

The face at the window; Ian's walk: a story about autism

Just because I am

I'm frustrated (Dealing with Feelings)

Joey Pigza loses control

Help me say goodbye

Allergy busters: a story for children with autism or related spectrum disorders struggling with allergies (Kathleen A. Chara and Paul J. Chara, Jr., 2004)

Don't despair on Thursdays! : the children's grief-management book (Adolph Moser, 1996)

Face first (Priscilla Cummings, 2001)

Gentle Willow: a story for children about dying (Joyce C. Mills, 2004)

*I miss you : a first look at death* (Pat Thomas, 2001)

Lifetimes: the beautiful way to explain death to children / in between / (Bryan Mellonie and Robert Ingpen, 1983)

Sad isn't bad: a good-grief guidebook for kids dealing with loss (Michaelene Mundy, 1998)

Samantha Jane's missing smile: a story about coping with the loss of a parent (Julie Kaplow and Donna Pincus, 2007)

*Taking seizure disorders to school : a story about epilepsy* (Kim Gosselin, 2001)

Tear soup: a recipe for healing after loss (Pat Schwiebert and Chuck DeKlyen, 1999)

Water bugs & dragonflies: explaining death to young children (Doris Stickney, 2004)

What happens when someone dies? : a child's guide to death and funerals (Michaelene Mundy, 2009)

What is heaven like? (Beverly Lewis, 2006)

When dinosaurs die : a guide to understanding death (Laurie Krasny Brown and Marc Brown, 1996)

When my autism gets too big: a relaxation book for children with autism spectrum disorders (Kari Dunn Baron, 2003)

#### c) Books on dental health

A visit to the dentist (Eleanor Fremont)

*Brush your teeth please* (Leslie McGuire)

Dear Tooth Fairy (Alan Durant)

*How many teeth* (Paul Showers)

Little Rabbit's loose tooth (Lucy Bate)

Open wide: Tooth School inside (Laurie Keller)

The night before the Tooth Fairy (Natasha Wing)

*The story of the Tooth Fairy* (Tom Paxton)

*Throw your tooth on the roof: tooth traditions from around the world* (Selby Beeler)

What do the fairies do with all those teeth? (Michel Luppens)

Berenstain Bears visit the dentist (Stan & Jan Berenstain)

Tusk! Tusk! (Annie Mitra)

# d) Books on germs and viruses and ways of preventing the spread of germs (including hand washing)

Those mean nasty dirty downright disgusting...but invisible germs (Judith Anne Rice)

Germs make me sick (Melvin Berger)

The Ten Potato Scrub (Marjorie T. Cooke)

Buddy Bear's hand washing troubles (Marjorie T. Cooke)

Your skin and mine (Paul Showers)

Wash your hands! (Tony Ross)

*Oh, the things you can do that are good for you* (Trish Rabe)

Germ patrol: all about shots for tots ... and big kids, too! (Neil Shulman, Todd Stolp, and Robin Voss, 1998)

Jimmy and the eggs virus (Mary Tasker, 1994)

Katie caught a cold (Charlotte Cowan, 2005)

Peeper has a fever (Charlotte Cowan, 2005)

Sadie's sore throat (by Charlotte Cowan, 2006)

Scholastic's the magic school bus inside Ralphie: a book about germs (1995)

#### e) Books on HIV/AIDS

Be a friend: children who live with HIV speak (Albert Whitman, 1994)

My grandma has AIDS: Annisha's story (Valerie Reeder-Bey and Annisha Monic Wilburn)

You can call me Willy: a story for children about AIDS (Joan C. Verniero, 1995)

#### f) Books on heart disease

Cardiac kids (Vicci Elder, 1994)

# g) Books on the body (general)

Brain (Rebecca Treays, 1996)

Care and keeping of you: the body book for girls (Valorie Lee Schaefer, 1998)

Children's human body encyclopedia: discover how our amazing bodies work (Steve Parker, 2007)

Hear your heart (Paul Showers, 2001)

*Heart : our circulatory system* (Seymour Simon, 2006)

Humans (Jenny Tesar, 1994)

I'm a big kid now! (Joae Graham Brooks, 1989)

Magic school bus: inside the human body (Joanna Cole, 1989)

*Understanding your brain* (Rebecca Treays, 1995)

Understanding your muscles & bones (Rebecca Treays, 1997)

#### h) Book on auditory problems

Chris gets ear tubes (Betty Pace, 2001)

Deaf child crossing (Marlee Matlin, 2002)

Little elephant with the big earache (Charlotte Cowan, 2004)

*Tubes in my ears : my trip to the hospital* (Virginia Dooley, 1996)

#### i) Books on diabetes

CJ has diabetes (Julie Olson, 2007)

Cooper has diabetes (Karen Olson, 2003)

Frances learns about diabetes (Alyssa Coombs, 2004)

#### j) Books on bowel movement and related diseases

Clouds and clocks: a story for children who soil (Matthew Galvin, 2007)

It hurts when I poop!: A story for children who are scared to use the potty (Howard J. Bennett, 2007)

Moose with loose poops (Charlotte Cowan, 2009)

Toilet paper flowers: a story for children about Crohn's disease (Frank J. Sileo, 2005)

# k) Books on disabilities and serious medical conditions (general)

*Don't call me special : a first look at disability* (Pat Thomas, 2002)

Easy for you to say: q & a's for teens living with chronic illness or disability (Miriam Kaufman, 1995)

Little Tree: a story for children with serious medical problems (Joyce C. Mills, 1992)

When someone has a very serious illness: children can learn to cope with loss and change (Marge Heegaard, 1991)

When will I feel better? : understanding chronic illness (Robin Prince Monroe, 1998)

Yes I can!: a kid's guide to dealing with physical challenges (Kathleen M. Muldoon)

#### 1) Books on genetic disorders

Just like me: a story for beginners with sickle cell disease (Tina Taylor, 2009)

#### m) Books about smoking

Kids say don't smoke: posters from the New York City: smoke-free contest (Andrew Tobias, 1991)

Smoking stinks!! (Kim Gosselin, 1998)

#### n) Books on respiratory illnesses

Taking asthma to school (Kim Gosselin, 1998)
Taking cystic fibrosis to school (Cynthia S. Henry, 2000)

#### o) Books on cancer

Taking cancer to school (Cynthia S. Henry and Kim Gosselin, 2001) When someone you love has cancer: a guide to help kids cope (Alaric Lewis, 2005)

## Appendix B

All answers will be kept confidential. The purpose of this survey is to gather information for a possible series of books targeted at kids ages 3-8 on various health topics. All answers would be greatly appreciated.

Questions for telephone interview (10 min max)

- 1- Number of children
- 2- Age(s) / Gender
- 3- What do you think is the most pressing concern in regards to your child's (children's) health?
- 4- Do you think there are enough educational materials for kids that deal with health topics?
- 5- Regarding printed materials, how do you think the material should be presented? Graphics? Text? Type of characters? Format (pop-up, activities at the end, with pictures of real kids, etc.)? Number of pages?
- 6- Do you know what are the current health issues affecting kids in the U.S.? Please list some.
- 7- Does (Do) your child (children) have an active lifestyle? Please explain.
- 8- Do you consider your child (children) to have healthy eating habits? Please explain.
- 9- Do you think such a book would improve your child's (children's) well-being?
- 10- Do you think healthy habits can be learned at an early age?
- 11- For classification purposes. Do you consider yourself as White? Asian American? Hispanic?

  African American? Native American or American Indian? Native Hawaiian or Pacific Islander?
- 12- Additional comments

## Appendix C

## (Spanish version)

Todas las respuestas serán estrictamente confidenciales. El propósito de esta entrevista es para recopilar información para una posible serie de libros para niños entre las edades de 3 a 8 años con respecto a varios temas de salud. Se agradecerán todas las respuestas.

Preguntas para la entrevista telefónica (10 minutos máximo)

- 1- Número de hijos
- 2- Edades/ Sexo de cada uno
- 3- ¿Cuál consideraría usted como la preocupación número uno en cuanto a la salud de su(s) hijo/hija/hijos/hijas?
- 4- ¿Cree usted que hay suficientes materiales educativos diseñados para niños que hablen de varios temas relacionados a la salud?
- 5- En cuanto a materiales educativos, ¿cómo creería usted que la información debería ser presentada? (dibujos, texto, tipo de personajes, formato, número de páginas)
- 6- ¿Conoce algunos de los problemas de salud que están actualmente afectando a niños en los Estados Unidos? Por favor, nombre algunos.
- 7- ¿Su hijo/hija/hijos/hijas realiza(n) mucha actividad física, es decir juega(n) mucho, practica(n) algún o varios deportes, etc.?
- 8- ¿Su hijo/hija/hijos/hijas tiene(n) buenos hábitos alimenticios?
- 9- ¿Cree que este tipo de libro mejoraría la calidad de vida de su(s) hijo/hija/hijos/hijas?
- 10- ¿Cree usted que los niños pueden aprender buenos hábitos a una edad temprana?
- 11- Para clasificación. Indique su descendencia: Blanca/ Hispana/ Indio Americano/ Afroamericano/ de las islas del Pacifico/ Asiática
- 12- Comentarios/sugerencias

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