Summer evenings used to mean games of Red Rover or whiffle ball until the sun slipped down below the horizon. On school nights the roller skates didn’t come off until mom set dinner down on the table.

Thirty years later the fabric of childhood looks dramatically different. After-school entertainment is more likely to involve the glitzy graphics of a computer game or an endless array of channels on cable TV. The rich scents wafting from the kitchen have been replaced by a bucket of Kentucky Fried Chicken tucked under mom’s arm as she returns from another long day at work.

The by-product of a vastly changed society is that today’s children are not only less active, but are eating far too much of the wrong types of foods. The frightening result has become an epidemic of children that are obese. In the past 20 years the number of obese children in the United States has doubled. In 1999, this meant 13 percent of children ages 6 to 11 and 14 percent of adolescents ages 12 to 19.

Thanks to an innovative program introduced a year ago by the Department of Pediatrics, obese children are learning how to lose weight and turn their lives around. “With all the kids we see, it is very rare that any of them spend less than two hours with TV or computer a day,” he said.

As inactivity and an abundance of snack foods add on the pounds, a whole host of health complications can be brought on by obesity, including orthopaedic problems, liver disorders, kidney disorders, hypertension, pulmonary disorders and menstrual irregularities. The incidence of Type 2 diabetes, which is closely linked with obesity, has increased dramatically in children. Obese children also suffer socially, and depression is not an uncommon affliction. “They are left out and ostracized, probably more than they will even admit to,” said Dr. Taylor.

Healthy Lifestyles incorporates a comprehensive approach to weight loss. “Our objective is to present a healthier way of living that affects the whole family,” said Amy Richburg, R.N., Nurse Manager, Children’s Hospital Outpatient Center, and Clinic Coordinator for Healthy Lifestyles. Children and parents are provided with extensive nutritional counseling, along with instruction on how to incorporate

“This is not as much a childhood problem as a societal problem.”

Caughman Taylor, M.D.

Department of Pediatrics and medical director of the Healthy Lifestyles program.

Inside This Issue

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Visit Our Website At:
www. med.sc.edu/specialtyclinics
In a cheery room adorned with cutouts of brightly colored autumn leaves, a group of four-year-olds work intently on watercolor paintings. A little girl in a wheelchair sits at the end of the table using an enlarged paintbrush that makes it easier for her to grip. She proudly adds the finishing touches to her Thanksgiving turkey as her classmates do the same.

While there’s nothing remarkable about such a scene, ten years ago it may not have been observed in day care centers throughout South Carolina. Yet since 1994 a federally funded grant has opened up opportunities for children with disabilities and developmental delays who need day care services. The Advocates for Better Care (ABC) Special Needs Voucher Program is managed by the Center for Disability Resources, a division of the Department of Pediatrics.

Through the program, vouchers are provided to low-income families to finance day care services for special needs children through the age of 18. Families must meet certain eligibility requirements, and a small co-payment is required on their part. The program also includes consultation, technical assistance and training furnished to day care providers by ABC Special Needs Program staff.

“Our philosophy is that all children participate to the maximum extent they can,” said Gay Clement-Atkinson, Ph.D., Training Director for the ABC Special Needs Voucher Program. Oftentimes it takes a simple solution to bring a disabled child from the sidelines into the mainstream of activity. “In today’s world you can buy a lot of expensive equipment and materials, but there really is no need. We do an awful lot of make it ourselves, revise it ourselves, enlarge it ourselves,” said Clement-Atkinson.

Occupational Therapist Katie Cutie works with Shane Hammond on spatial awareness and balance.

Atkinson and her staff have learned that a lack of information is usually the biggest stumbling block with day care center personnel. “People have fear and uncertainty about things that are unknown to them. There are a lot of myths about disabilities,” she said. So an integral part of the ABC program involves preparing day care center staff to work with disabled children and addressing their concerns upfront.

When a new child with a disability will be attending a day care center, an ABC staff member visits the center beforehand. “We talk to the child’s teacher and the director, look at the curriculum, and give an overview of the child’s disability to the staff,” she said.

Children at day care centers are also included in the education process. “Other kids may be overprotective or don’t include the disabled child because they just don’t understand. We really work on social inclusion so that the newcomer is accepted by everyone,” said Clement-Atkinson.

The program also promotes partnerships between day care centers and parents, an objective that involves Maria Tolbert, a psychology doctoral student. “We help centers reach out to parents and provide parents with information about their children,” Tolbert said. As she visits centers and helps implement the ABC program, Tolbert finds that “the staff learn that working with a disabled child is not as difficult as they thought it would be. The knowledge takes that fear away,” she said.
Infants Respond Well To Treatment

Early Intervention Is The Key To Correcting Deformational Plagiocephaly

Mommy rocks her newborn to sleep and lovingly places the baby on his back in the crib. While this sleeping position decreases her child’s risk of Sudden Infant Death Syndrome, it may increase the likelihood of deformational plagiocephaly, a condition in which his head develops an uneven shape and flattening in the back of the skull.

Because more parents are following guidelines since the early 1990s to lay babies on their backs, the incidence of deformational plagiocephaly has risen significantly since then. When an infant spends extended periods of time in this position, whether it be in a crib or an infant carrier, the pressure put on the back of the head can cause the soft skull to deform. Certain factors before birth can cause pressure inside the uterus resulting in deformational plagiocephaly, and another major contributor in recent years has been the rise in multiple pregnancies from fertility medications.

Fortunately if identified early, deformational plagiocephaly can be treated relatively easily. Dr. Jean-Francois Lefaivre, an assistant professor in the Department of Surgery with extensive craniofacial experience, is referred one or two babies a week with this condition. In addition to the flattening in the back of the head, the babies appear as if half of the head has been pushed forward and often display facial asymmetry, a bulging forehead and misaligned ears. “Timely screening by pediatricians and early intervention is the key,” said Dr. Lefaivre. “If an infant has some degree of flatness to his head, the primary care doctor may sometimes correct the problem. Babies can be placed on their bellies while they are playing, such as when they are using an activity gym on the floor,” said Dr. Lefaivre.

Range of motion exercises may be prescribed to stretch tight neck muscles that left untreated can contribute to the deformity.

When additional intervention is needed, infants can be fitted with a customized orthotic band that fits around the head. The bands, which are to be worn 23 hours a day for a number of months, are constructed of a plastic shell with a foam lining that reshapes the infant’s head as it continues to grow. “The band does not squeeze the head. The last thing you want to do is put compression on a growing head because the underlying brain is growing,” explained Dr. Lefaivre. The bands work best when babies are three to five months old since much of their growth occurs in these first few months of life. “If you refer a baby at ten months, then either the correction is less or will take a longer amount of time,” he said.

When parents bring babies to Dr. Lefaivre for follow-up after three or four months, he evaluates the current appearance of the head to a model that was constructed to make the corrective band. “You can look at the initial shape and compare; what you see is a whole lot of rounding of a flat surface,” he said.

Above: Dr. Lefaivre explains how an orthotic band reshapes the head as a baby grows. Below: He points out how a flattened head becomes rounder after treatment.
A USC nurse in the School of Medicine has taken on a mission that most parents would call daunting. She goes around telling teenagers what’s good for them, and she gets them to listen.

Angie Fontana, an assistant professor and nurse practitioner in the medical school’s Department of Orthopaedic Surgery, wants young people to know that healthy bones are built in their youth and that putting it off till later can be too late.

"The teen years are the critical bone-building years," said Fontana, who is the site coordinator for a national study on osteoporosis by the National Association of Orthopaedic Nurses (NAON). "The decisions teens make now will affect their bones for a lifetime."

Osteoporosis, which causes bones to become weak and more likely to break, is a crippling disease affecting 28 million U.S. adults. NAON’s nationwide effort is called OPTIONS - Osteoporosis Prevention: Teaching in Our Nation’s Schools. The effort tests youngsters’ knowledge of osteoporosis, gives them information on the disease and tips for its prevention, and then follows up to find out what, if any, lifestyle changes they are making to prevent osteoporosis.

Since last spring, Fontana has told hundreds of students in Columbia-area schools to think of building bone mass as being similar to putting money in a bank. "Instead of increasing the amount of money you have, you increase the amount of bone you have," she said. "You put the most bone in your account between ages 10 and 20, though you can continue making smaller deposits to age 30."

After age 30, people can only maintain what is in the account - not add more. "That’s why it’s so vital to reach young people," Fontana said.

In area high schools, students were randomly assigned to be part of an intervention group or a control group. The intervention group received a questionnaire testing their knowledge of osteoporosis, a handout titled "Power Up from the Inside Out," and were given a 20-minute presentation aimed at making teens aware that diet and physical activity patterns affect bone health later in life.

The control group received the same questionnaire and material including the handout titled "Power Up from the Inside Out." One month later, the 20-minute presentation was delivered to the control group. During this time, Fontana returned to the schools and handed out another questionnaire similar to the first to determine whether the presentation had a positive behavioral influence, including increased knowledge on osteoporosis, cessation of smoking and alcohol consumption, and modification of diet and exercise choices.

She found it relatively easy to spark teacher interest in her project. "As I proceeded," she said, "I found the teachers very interested in the project because it was easy to incorporate into their curriculum -- in classes like physical education, health, science, and biology."

Now in the follow-up phase of the study, Fontana said she is impressed by the interest that teens show in learning about osteoporosis and bone health.

"The students ask very good questions," she said. "Although we typically don’t think of students as
Managed Care Credentialing Update

Clinical Faculty Appointments

Since July 2002

**Department of Family and Preventive Medicine**

Damon Daniels, M.D.
Instructor of Clinical Family and Preventive Medicine

Donald M. Hastings, III, M.D.
Instructor of Clinical Family and Preventive Medicine

Joshua R. Mann, M.D.
Assistant Professor of Clinical Family and Preventive Medicine

**Department of Medicine**

Laurie F. Kohn, M.D.
Instructor of Internal Medicine

**Department of Neuropsychiatry and Behavioral Science**

Craig A. Stuck, M.D.
Assistant Professor of Clinical Neuropsychiatry and Behavioral Science

**Department of OB/GYN**

Paul Dietz, M.D.
Instructor of OB/GYN

Charles N. Landen, Jr., M.D.
Instructor of OB/GYN

**Department of Ophthalmology**

Junping Li, Ph.D.
Associate Professor of Clinical Ophthalmology

**Department of Orthopaedic Surgery**

Silas W. Holmes, Jr., M.D.
Assistant Professor of Clinical Orthopaedic Surgery

**Department of Pediatrics**

Marilyn T. Sprenkle, M.D.
Instructor of Clinical Pediatrics

**Department of Surgery**

James E. Morrison, M.D.
Assistant Professor of Surgery

The next quarterly credentialing meeting will be held in March 2003. For additional information on future meetings, contact Susan Wilhelm at 255.3417 or by e-mail at swilhelm@gw.mp.sc.edu.

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**Obesity (From Page 1)**

Exercise into their normal routine. Structured exercise options are offered in conjunction with a local health club and the Goodbodies Program at the University of South Carolina.

The program’s social worker sets behavioral goals for each child, and helps parents devise a reward system to reinforce children when they follow nutritional guidelines and increase their activity by exercising. Family involvement is also an important part of the program. “The parents need to be good role models in terms of eating and nutrition. We believe in stressing healthy living, not diets. Kids cannot see their parents eating ice cream and drinking two cokes a day. They also need to see their parents being active. This is not as much a childhood problem as a societal problem,” said Dr. Taylor.

When children enter the program, they spend an initial session with each of the Healthy Lifestyle team members, including a pharmacist who explains any medications that are needed to manage specific complications. See Obesity on Page 7.
Caitlin Hill always had a compliment for everyone.

“The staff members she came in contact with at the hospital were so impressed by her. They’d ask me, ‘Who is that little girl? You have to make her better,’ ” Dr. Kevin McRedmond said.

Yet the brain tumor that brought Caitlin to the pediatric oncologist at the USC School of Medicine was an aggressive one, and on December 11, 1999, the 11-year-old died. The care and concern that Dr. McRedmond provided to Caitlin and her family is something that impacted their lives as profoundly as the disease itself.

By the time Kathy and Tony Hill were referred to Dr. McRedmond, their daughter had already undergone two surgeries. After the second operation, they learned that her brain tumor was malignant. While chemotherapy and radiation treatments initially seemed to control the tumor, eventually Caitlin started to decline. Over the course of the next two and one-half years, Dr. McRedmond became an unwavering source of support to the Hills through an extremely difficult time. “He and I bonded. Dr. Kevin was more like a friend who knew a whole lot about a big problem we had,” said Kathy.

The Hills also found a compassionate educator in Kevin McRedmond. “He always tried to explain everything even though that took so much more time on his part. He’s a doctor and a very intelligent man, yet he treats parents like they are also intelligent and know what they’re doing as well,” Tony said. Dr. McRedmond understands the questions, concerns, and fears of parents with very sick children. “There are few more horrific diseases than cancer in a child. We know that everyone in the family’s lives change with the diagnosis, and we are devoted to treating the whole family,” he said of the physicians, nurses, and the psychosocial team at the Children’s Center for Cancer and Blood Disorders.

“He met me where I needed to be met,” said Kathy, who found acceptance from Dr. McRedmond in the couple’s decision not to explain to Caitlin that her illness was terminal. “Did she know she was dying? Yes. Did I tell her that? No,” Kathy said. She went on, “Dr. Kevin told us, ‘We’ll work together to keep her comfortable. It doesn’t look good, but at the same time miracles do happen. We’ll pray for a miracle.’ ”

“The number one need that families have is to know that their child is going to get better, but we cannot guarantee that,” Dr. McRedmond explained. He added, “We strive very hard to make their lives better while they are sick. We want to make sure that they can be children and that they can be a family together.”

As Caitlin’s physical condition deteriorated, it
In A Time Of Turmoil

To One Little Girl And Her Family

became more difficult for her mother to transport her for appointments at the center. It wasn’t un-
common for Dr. McRedmond to stop by the Hills’ home to check on the little girl. “I never asked; he offered,” Kathy said. So when Caitlin spent her last hours at home, it felt natural that Dr. Kevin was there along with a gathering of family members.

“T o One Little Girl And Her Family

I preach to the residents and medical students that you spend all these years learning how to take care of very sick people. The time they need you the most is when their child or family member is dying. You don’t have to do or say anything; it is a great comfort just that you cared enough to be there,” Dr. McRedmond said.

He acknowledges the grief that is unavoidable in his subspecialty. “It’s just beyond sad when children die. Yet we know that 75 percent of the patients we treat are going to be cured. We can go to work in the morning not only because we want to stamp out this dreaded disease, but because of what we get back from these children. They show us in-
credible love. They fall in love with us just like we fall in love with them,” he said.

Dr. McRedmond fell in love with the little girl who loved drawing and Beanie Babies and joking with her doctor. “Caitlin never complained. She did everything we asked of her, which was a lot. She really was an example for us grownups – that despite incredible adversity you could still be a wonderful human being and be nice to people,” he said. Almost three years later he hasn’t forgotten Caitlin or her family. Kathy Hill values his phone calls that come faithfully on her daughter’s birth-
day and the anniversary of her death. Last Decem-
ber 11 she found a purple crepe myrtle from the physician on her front porch. It wasn’t just his remembrance of the date that meant so much to Kathy. Purple was Caitlin’s favorite color.

Tony and Kathy Hill

Recommenda
tions are then sent to the child’s pedia-
trician, who will follow his or her progress on a monthly basis. Follow-up is done on a periodic basis by Healthy Lifestyles, and consultations are available with pedia-
tricians as needed.

With the addition of Dr. Katie Stephenson to the staff, Dr. Taylor hopes to shorten the time children remain on Healthy Lifestyles’ waiting list. He’s excited about a new home exercise program that will be intro-
duced, while Richburg looks forward to the develop-
ment of an eight to twelve-week course that will pro-
vide parents with additional education and direction. "Right now we can’t spend nearly the time we want

Obesity (From Page 5)
to with these kids," Richburg said.

A year after Healthy Lifestyles was established Dr. Taylor is pleased that over 50 percent of the patients who are compliant with the program have not only shed pounds but made significant improvement with weight-
related medical conditions. "It’s nothing that we do," he insisted. "If the family eats healthy and the child does something active five days a week for more than 30 minutes, then he or she will lose weight." As the pounds drop, the children’s confidence soars. "As shy as some of them may be, they come in here with big grins on their faces. They’ve become a lot more com-
fortable in their own skin,” Richburg said.
It sits in the back corner of a nearly vacant shopping center that once bustled with activity. The run-down neighborhood surrounding it shows similar signs of neglect. Yet inside the storefront clinic there is nothing deficient about the high quality health care services provided to the people who call this part of Columbia home. In fact, in 2001, over 3,400 patient visits were made to the Children and Family Healthcare Center on Two Notch Road.

Operated by the College of Nursing at the University of South Carolina, the center is staffed by nurse practitioner faculty members. The facility was established in 1998 to meet the health care needs of children placed in protective custody because of potential or actual abuse or neglect. In addition to caring for children in out-of-home placement and their caregivers, the Children and Family Healthcare Center also serves the general community surrounding the center.

A $1,980,000 grant awarded to the center in 2002 will allow the Children and Family Healthcare Center to expand the services already delivered in medically underserved communities and to improve access to primary healthcare. Sara Fuller, Ph.D., CPNP, FAAN, a faculty member and pediatric nurse practitioner, is the grant project director. She looks forward to the additional training opportunities for undergraduate and graduate students and the increased faculty involvement that the grant will also provide. “For a number of years we have been looking to expand the educational opportunities the center could offer,” she said.

The grant funding will allow an additional full-time nurse practitioner to be brought on board, along with an RN case manager and a community health worker who resides in the area the center serves. The community health worker will be involved in the extensive outreach activities planned for the next five years, and utilized in identifying new clients who could benefit from the center. Outreach will concentrate on five major health problems (hypertension, obesity, depression, cardiovascular disease and stroke, and diabetes), with screening and health education efforts focused on one health problem each year of the grant. “We’ll be targeting activities within the 29204 and 29206 zip code areas. We’re hoping that in each year of the project our patient base will go up by ten percent,” said Dr. Fuller.

Patient education will play an important role. “Health education is absolutely critical and needs to be presented in a way that’s understood by people with low literacy. It also needs to take into consideration the culture in an area that is populated by 45 percent African-Americans. If we are providing diet education, for example, we need to look at typical foods eaten in that neighborhood and not things that people have never heard of before,” Dr. Fuller said.

An increased emphasis will also be put on patient follow-up. “Once we have recognized the need for follow-up, we can do more case management for patients. We can make sure they follow through with referral appointments, work with them on transportation, and do a better job of assuring that their health needs are being met,” said Dr. Fuller.
Some of the teenagers that Dr. Bryant Fortner treats aren’t accustomed to receiving health care on a regular basis. It’s not unusual for them to lack medical homes in the community and arrive at the Department of Juvenile Justice with problems requiring attention and treatment.

An associate professor of clinical pediatrics and a physician on staff at University Primary Care, Dr. Fortner also serves as Medical Director for the Department of Juvenile Justice. A Fellow of the American Academy of Pediatrics, he is the only pediatrician in South Carolina certified as a Correctional Health Professional by the National Commission on Correctional Healthcare.

Through a contractual relationship between DJJ and the University of South Carolina School of Medicine, Dr. Fortner assists in providing health care services for adolescents at the main campus on Broad River Road and four other campuses in the Columbia area. The contract also includes on-call coverage coordinated by University Primary Care (in conjunction with the Department of Family and Preventive Medicine), and specialists are provided when required for medically necessary care. Psychiatrists from the School of Medicine routinely conduct psychiatric evaluations required by the court and parole board, and physicians from the Department of Orthopaedic Surgery travel to DJJ facilities on an as-needed basis.

The partnership between the state agency and the School of Medicine was formed in 1997, shortly before Dr. Fortner accepted the position as Medical Director after 25 years of service in the U.S. Army. “I have always enjoyed adolescents. This is a perfect match with where I am in my career,” he said. He genuinely enjoys the interaction with the youth as he conducts their initial medical evaluations and annual exams, attends to acute health care needs, manages chronic problems such as asthma and diabetes, and cares for them in DJJ’s seven-bed infirmary.

Samuel Soltis, Director of Health Services at the Department of Juvenile Justice, is more than pleased with DJJ’s relationship with Dr. Fortner and the School of Medicine. “The level of care has elevated dramatically and we can provide access to care in a much quicker fashion than we were able to previously,” he said. He also speaks highly of Dr. Fortner’s role as a preceptor with DJJ’s nurse practitioners to the community’s standard of care; we are part of the medical community and not isolated from it,” he said.

Dr. Fortner attributes the efficient delivery of health care to a cooperative effort and good communications between DJJ staff and the School of Medicine. Complimenting the Department of Juvenile Justice’s staff of committed nurses, pharmacy personnel, dental personnel, and health administrators, he added, “We all work together to provide these kids with quality health care,” he said.
When Dr. Harry Wright began practicing medicine 15 years ago, it wasn’t his choice of a specialty that people had a hard time understanding. It was the age of his patients that drew skepticism. “The number one question used to be, ‘why does a three-year-old need to come to a psychiatrist?’ That’s become a rare question these days,” said the professor in the Department of Neuropsychiatry and Behavioral Science and the Director of Infant and Preschool Programs. “People are much more aware that young children and their families do have issues that need assessment and treatment,” he said.

Dr. Wright credits an increased awareness of children’s mental health needs to a tremendous amount of research done on brain development over the past few years and accompanying media coverage about the importance of early cognitive and emotional development in kids. The sole psychiatrist in the department with a subspecialty in infant mental health, Dr. Wright is pleased that such strides have contributed to a greater understanding of the subspecialty. The field of infant mental health is dedicated to three emphases: 1) promoting healthy social emotional development of infants, toddlers and preschoolers, 2) working with families of young children that may be at risk of disturbances or disorders, and 3) treating families that are already experiencing problems with children age five and younger. Most of Dr. Wright’s work is focused on the third emphasis.

“When the most common issues are relational problems between parent and child,” said Dr. Wright, who receives referrals from a wide variety of sources. Other problems that bring children to his attention include language delays that have affected development, autism, developmental disorders, and behavior difficulties such as excessive irritability or crying. Therapy at such a young age is not a talk therapy for the child, but an educational process involving the child and his or her parents or caregivers. “The adults in the lives of very young children are extremely important. We try to find out about all the adults in a child’s life and work with them to foster positive social emotional development,” he said.

Services are also provided through an infant early childhood clinic offered in conjunction with Hall Psychiatric Institute. Children are assessed at the clinic for a range of behavioral and developmental problems. “We provide a consultation report back to the referring agency or individual. We may give recommendations such as the child benefiting from having a more structured childcare situation or being evaluated for other medical problems,” said Dr. Wright. Some children are referred to an intensive preschool program that is also based at Hall Psychiatric Institute. The half-day program utilizes a team of mental health professionals in a small group setting to help children learn to function better in a home, preschool and/or daycare environment. Children stay in the program from a number of weeks to a number of months, depending on their particular situation and how they respond to treatment. Parental involvement and education is an integral part of the process.

Dr. Wright is committed to caring for very young children, particularly in light of the fact that few psychiatric resources exist for them statewide and even on a national level. He’s witnessed firsthand what appropriate intervention can do for these children. “Identifying problems early and turning them around makes a big impact on a child’s development for the rest of his or her life. ‘We’ve seen children years later that we have helped early on and they are doing quite well. That’s always the big payoff we hope for.”
South Carolina Metrics

COMMERCIAL ENROLLMENT (PURE+POS), LARGEST 5 PLANS

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* from July 2001

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COMMERCIAL PREMIUM, PMPM, SOUTH CAROLINA REPORTING

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Healthy Bones (From Page 4)

being that concerned about their health, the ones I’ve talked to are interested and want this kind of information.”

She added: “Will this information cause them to make the changes necessary to improve their bone health? We don’t know. But prevention through education is very important. It is my passion.”

As an orthopaedic nurse practitioner, Fontana works with patients who have suffered devastating effects of osteoporosis. "It is a terrible and silent disease," she said, "and that is why it is important to help young people know the risk factors and what they can do to try to prevent the disease."

Some risk factors, such as gender, age, heredity, body size, and ethnicity, can’t be changed. For example, Fontana said, those at higher risk include women, people with a family history of osteoporosis, those who are slender, and Caucasians and Asians. Also, some diseases - or the medications used to treat these diseases, as well as steroids - can deplete bone mass. Some examples are steroids (asthma & arthritis), anticonvulsants (seizure disorders) and chemotherapy (cancer).

Young students, however, can control some risk factors through diet, exercise, and abstaining from smoking and drinking. Other factors affecting bone mass in the teen years include hormone deficiencies caused by extremes in exercising and dieting, as well as by some contraceptives.

In fact, Fontana is now conduct-

Angie Fontana has spoken about osteoporosis on radio and TV programs, including the Eldon Armstrong Show on 1320 AM.

ing another research study affecting teenagers on Depo-Provera birth control medication. Recent studies show side effects affecting bone mass. The title of the study, which will begin this fall and has been approved by the IRB, is "The Effects of Depot Medroxyprogesterone Acetate On Bone Mineral Density of Postmenarchal Adolescent Females."

"It is important for teens and their health care providers to talk about osteoporosis," Fontana said. "Having strong, healthy bones begins in the teen years, and it is important for all teens to get this message," said Fontana, who plans to continue the study in more South Carolina schools, and perhaps expand to churches and state juvenile agencies as well.

"The project is a lot of work, with consent forms from parents and kids, and lots of other forms required to conduct a research study," Fontana said. "But the attention I have gotten for the project has made all of this worthwhile."

Postscript: To thank the students who participated in the spring study, Fontana showed real ingenuity. She got a Columbia bakery to make 200 five-inch sugar cookies in the shape of a bone. Then she put them on Scooby-Doo napkins and passed them out with cartons of milk.

"I wanted the students to take home this message: drink milk, think of your bones and increase the calcium in your diet during the bone-building years," Fontana said. "That idea went well, I think. Most of the students did drink the milk instead of their usual soft drinks, and the cookies were a hit."

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