Childhood obesity in Hawai‘i is a significant problem; in some of our rural and low-income communities more than 40% of children entering kindergarten are overweight or obese. Studies in this issue of the Hawai‘i Medical Journal Supplement highlight other concerns related to the development of obesity in childhood.

The current problems reflect the complex and rapid changes in our society over the last 30 to 40 years and our underlying biologic susceptibilities. Think about your own childhood, what you ate, how you ate and played and the differences of your experiences from those of your children and grandchildren. For families living in poverty, or near poverty as many in Hawai‘i do, the changes have been most dramatic and the solutions less apparent.

Individual behaviors including eating behaviors, food choice, and physical activity are shaped by the powerful influences of society and the environment; today these include television, video games, work schedules, child-care realities, transportation barriers, and educational challenges. Unhealthy behaviors become embedded by social expectations and less obvious issues such as food insecurity, housing, employment barriers, and racism — issues that have likely worsened in this recent recession.

The discussion around childhood obesity often involves personal and parental responsibility and choices in nutrition and physical activity. Focus on the individual is what we in health care have been trained to do; it is what we are comfortable doing. It has also been the prime focus socially and politically. Such a view takes responsibility away from government and industry.

But focusing only on the individual ignores the fact that we now live in a world where the default and easiest choice is to remain sedentary and to eat large amounts of fat filled, sweetened foods. Caloric beverages are now the single greatest source of added sugar in the American diet. Portion sizes have ballooned. Salt, sugar, and fat content have skyrocketed. Hawai‘i’s cultural traditions that embrace food as an offering of gratitude, graciousness and love have evolved to support this. The food incentives throughout a child’s day include the Krispy Crème donut omiyage and the 1000 calorie “snack” bags after every soccer and baseball game starting from age five.

Studies have identified factors in the modern food environment that disable the body’s physiologic and psychological regulatory systems that are supposed to govern the delicate balance between hunger, satiety, and weight. These obesity generating forces have made it incredibly difficult to be “responsible” especially for those struggling with poverty and other modern stressors in life.

Health education is important. Kids and parents must become interested in behavior change and healthy lifestyles and have some knowledge and understanding on how to take those steps. Families must understand that disease can be prevented without feeling blamed. Education must be culturally sensitive and locally relevant. But of course we know that health education alone will not create behavior change. Healthy behavior change cannot and will not happen in a vacuum.

What is the role of the pediatrician and other health professionals in the problem? Some fear that we will do more harm by talking about obesity. Some say that there is no proof that spending our time talking about weight and growth does anything. Is obesity really a high priority in the face of other health disparities? School failure, drug use, homelessness, mental health and behavioral concerns, and developmental concerns are all top priorities in childhood. These issues are all important.

While many physicians may doubt their influence, studies have shown that families trust and listen to their doctors. I’ve pondered these questions at length and have informally asked parents and kupuna their thoughts. The overwhelming majority have been in favor of pediatricians talking about growth, chronic disease risk and nutrition. As one grandmother said, “If my doctor doesn’t talk to us about these issues with us, who will?”

But if we are to bring about change and prevent childhood obesity and related diseases, we must support our families and begin addressing the issue at all levels — from the individual to the systems and policies that shape the environment. Healthier choices must become the default choice for children and families. Healthcare providers must become part of this collective change. As in the tobacco movement, health professionals must take on a dual approach, addressing both the individuals and the complex environment with a comprehensive array of medical and community interventions including community-wide campaigns, school-based interventions, mass media strategies, and action to bring about legal and regulatory changes. The passage of a tax on sweetened beverages in Hawai‘i is one such measure.

Addressing the Child and the Parent

The goal of our work as child health care providers is to optimize the health and well being of all children. We understand that talking to parents and children about weight and eating habits is not easy. However, parents expect an assessment of growth starting from infancy and discussions about weight can be framed around this expectation. Consider talking about their child’s growth and indicate your concern about the child’s risk for chronic disease. Most importantly promote health, well-being, and family support without imparting guilt or shame. Table 1 outlines some tips for child healthcare providers in the clinical setting to promote health and prevent obesity.

Addressing the Community

Child health care providers are seen as leaders in the community and a trusted source of information. Physicians and other health professionals thus have the opportunity to greatly influence and advocate for system changes at the local, state, and national levels that will support health through optimal education, nutrition, and physical activity for all children. Table 2 outlines some of the initiatives taking place in Hawai‘i. Providers, already constrained by busy schedules, can lend support simply by becoming aware of the issues, signing petitions, promoting the issues and efforts to others especially parents. As Dr. Rita Lavizzo-Mourey from Robert Wood Johnson Foundation says, “Without programs such as these, physicians alone will not stop the progress of the epidemic and without the voices of physicians, these programs will not achieve their potential.”
Table 1. Promoting health and addressing the topic of childhood obesity

1. Regular growth assessment and counseling:
   a. Measure body mass index (BMI) at every well-child visit 2 years and older: Focus on the consistency of growth over time – some kids may grow consistently along a higher BMI percentile and may not be at risk for obesity-related disease. Be concerned about those with upward weight divergence.
   b. Assess patterns about lifestyle – This includes consumption of sugar-sweetened beverages, screen time, physical activity as well as sleep and stress. Consider using a survey that the family fills out before they see you.
   c. Assess pertinent family history of diabetes, early cardio-vascular disease etc.
   d. Assess the family and community context of each child and family such as family and social support, food security, childcare and after school care as well as community environments. These factors will help providers understand the framework that has supported the development of obesity and how it might be addressed.
   e. Assess readiness to change and interest using open-ended questions – “Can we talk about your child’s growth?” or “Have you thought about making some changes at home around eating?”

2. Target behavior change that is attainable and that the parent and child are interested in changing – eating meals regularly, eating meals with the TV off, serving more water.
   a. Focus on one behavior at a time. Don’t demand a complete lifestyle overhaul.
   b. Commend parents for positive behaviors.
   c. Discuss these issues with families, not just those with weight issues.

3. Focus on “health and wellness promotion” and not obesity. Don’t blame or nag.

4. The topic is VERY sensitive and emotionally charged. Consider avoiding the terms “overweight” and “obesity.” These terms promote weight-based stigma, guilt and often create immediate barriers.

5. Honor the role of the parent(s) in promoting healthy lifestyles and help them support and model healthy behaviors at home without overemphasizing weight.

6. Promote breastfeeding - Support and promote the development and implementation of peripartum policies and practices that optimize breastfeeding initiation and maintenance. For more information: http://aappolicy.aappublications.org/cgi/content/full/pediatrics;115/2/496

Table 2. Community Initiatives in Hawai’i

Hawai'i Initiative for Childhood Obesity Research and Education
Based at the University of Hawai'i (UH), John A. Burns School of Medicine (JABSOM), the mission of Hawai'i Initiative for Childhood Obesity Research and Education (HICORE) is to provide leadership of collaborative, multi-disciplinary research and education in order to reduce childhood and adolescent obesity in Hawai'i. For information on educational and clinic resources on childhood obesity: http://www.hicore.org/

Hawai'i Nutrition and Physical Activity Coalition (NPAC)
Based at UH JABSOM Office of Public Health Studies, the coalition advocates for system level changes and policies to improve physical activity and nutrition for the people of Hawai'i. It is funded by the Hawai'i Department of Health, Healthy Hawai'i Initiative and has paid NPAC Chairs on each island. For more information contact NPAC: http://www.npachawaii.org/

Hawai'i Department of Education (DOE) Wellness Guidelines
The DOE recognizes that there are links between education, learning, nutrition, the food served in schools, physical activity and student wellness. To enable the development of life-long healthy habits, each of Hawai'i's public schools will implement the Wellness Guidelines by June 2011. This includes prohibitions for soda in vending machines, candy and cookies for fundraisers and revising recipes and products served in the cafeterias to meet USDA nutrition standards. Child health care providers in Hawai'i should be informed of these guidelines and support efforts in the communities they serve to implement the policies. http://doe.k12.hi.us/foodservice/toolkit/wellnessguidelines.pdf

Farm to School
Farm to School connects schools and local farms with the objectives of serving healthy meals in school cafeterias, improving student nutrition, providing agriculture, health and nutrition education opportunities, and supporting local and regional farmers. Organizations involved: Kokua Foundation, Hawai'i NPAC, Hawai'i Island School Garden Network, Kauai School Garden Network. For more information: http://www.farmtoschool.org/HI/programs.htm

Built Environment
One Voice for Livable Islands Coalition:
The mission of One Voice is to achieve healthy community design in Hawai'i by making walking, public transportation and bicycling fundamental for transportation and recreation. We Pursue Our Mission through: Advocacy, Community Mobilization, and Public Education. Member Organizations include AARP Hawai'i, Hawai'i Bicycling League, Hawai'i Public Health Association, Kauila Urban Design Task Force, Kauai PATH, Injury Prevention Advisory Committee, Maui Bicycle Alliance, PATH. For more information: http://www.hbl.org/content/one-voice

Safe Routes to School Hui
The Hawai'i Safe Routes to School Hui and One Voice for Livable Islands is a network of non-profit organizations, government agencies, schools, and professionals working together to advance the Safe Routes to School movement and healthy community design in the State of Hawai'i. For more information: http://www.hawaiiasferouteshui.org/

Peoples Advocacy for Trails Hawai'i (PATH)
Path is a grassroots organization based in Kailua-Kona. It works in partnership with other organizations across the state and the country to make it safe, fun and easy to walk, hike, ride a bike and live a healthy, active lifestyle in Hawai'i.
Website: http://www.pathhawaii.org/

Conclusion
Childhood obesity is a significant issue in Hawai'i and a response to the changes in our community and environment over the last 3 decades. Research and our own individual experiences support the premise that lifestyle behaviors are influenced by powerful environmental and social factors. Currently the factors favor obesity. Addressing the issue and bringing about meaningful behavioral change on the individual level requires intense coordinated collective action by health professionals and the community to create systems changes and conditions to support personal healthy choices and lifestyles for all of Hawai'i’s children and families.

References
The mission of Hawai‘i Initiative for Childhood Obesity Research and Education (HICORE) is to provide leadership of a collaborative, multi-disciplinary effort in research and education to address childhood and adolescent obesity in Hawai‘i, especially among the most vulnerable of Hawai‘i’s children and families.

Members of the initiative represent many sectors of the local community and include members of the University of Hawai‘i John A. Burns School of Medicine Department of Pediatrics, Department of Public Health Sciences and Epidemiology, Department of Native Hawaiian Health, Department of Complementary and Alternative Medicine, UH School of Nursing, State of Hawai‘i Department of Health, State of Hawaii Department of Human Services, Hawai‘i Medical Association, American Academy of Pediatrics-Hawai‘i Chapter, YMCA and several other community organizations.

HICORE recognizes the work of the State of Hawai‘i Department of Health and the Hawai‘i Physical Activity and Nutrition Plan. HICORE efforts continue within the framework of this plan and in collaboration with the Hawai‘i’s Nutrition and Physical Activity Coalition.

The goals of HICORE:
1. To serve as a repository of childhood and adolescent obesity research projects conducted in Hawai‘i
2. To provide guidance to partner agencies and foundations regarding research priorities in the area of childhood and adolescent obesity for the state of Hawai‘i,
3. To serve as a center for the education of community members, students, residents, physicians and others in the area of childhood and adolescent obesity in Hawai‘i
4. To conduct research on childhood and adolescent obesity relevant to people of Hawai‘i

For more information, please contact us at info@hicore.org

Please also visit HICORE’s Website for information and resources for healthcare providers and researchers interested in childhood and adolescent obesity in Hawai‘i and the Pacific on our Website: www.hicore.org
Simple Steps for a Healthy Ohana

Healthy kids and healthy families make everything possible. Eating and physical activity patterns start in early childhood. 5-2-1-0 is our way of promoting healthy lifestyles for children and families. We realize healthy living can be challenging so we encourage everyone to start small, think big and take one step at a time.

---

**EAT HEALTHY**

**5 FRUITS, ROOTS & VEGETABLES**

Fruits, roots and vegetables, including root vegetables such as taro (poi) and sweet potato, are packed with nutrients. To get the amount recommended, most of us need to increase the amount of fruits, roots and veggies we currently eat.

---

**WATCH LESS**

**2 HOURS OF SCREEN TIME**

Two hours or less of computer, video and TV screen time every day. Increased screen time has been linked to lower reading scores, behavioral problems and unhealthy weight.

---

**PLAY MORE**

**1 HOUR OF PHYSICAL ACTIVITY**

Activity that makes your heart pump faster and your body breathe harder make you strong, helps you feel good and think clearly. Kids in active families are more likely to be active adults.

---

**CUT DOWN**

**0 SUGARY DRINKS**

Sugary drinks such as soda, sweetened tea, sports drinks, fruit punch and other fruit-flavored drinks have little health benefit. Sweetened beverages add empty calories, about 150 calories and 9 teaspoons of sugar per 12 oz. can of soda.

---

**HEALTHY TIPS**

**A** Be a role model - Include at least one fruit, root or vegetable at every meal and snack

**B** When possible, avoid frying – try steaming, baking, stir-frying

**C** Try-A-Bite rule - Offer new fruits, roots and veggies and encourage everyone in the family to try a few bites each time. it can take 7 to 10 tries to like a new food.

---

**A** Encourage your whole family to decrease screen time to 2 hours or less each day

**B** Keep the TV and computers in a central location and out of your child’s bedroom

**C** Enjoy your family - turn off the TV when eating and talk about the day

---

**A** Take gradual steps to increase your physical activity level

**B** Do short amounts of activity several times a day until they add up to 60 or more minutes each day.

**C** Physical activity should be fun – swimming, surfing, paddling, walking, running, dancing, gardening and yes, even vacuuming!

---

**A** Encourage your family to love water. Serve it. Choose it. If it’s there, people will drink it. And remember water has zero calories.

**B** Be wary of commercials. Juice products labeled “ade,” “drink” or “punch” often contain mostly corn syrup sweetener and less than 5% real juice.

**C** For kids 2 years and older, encourage fat free or low fat milk rather than whole milk.

---

For more information please contact us at [www.hawaii5210.com](http://www.hawaii5210.com)