

texas

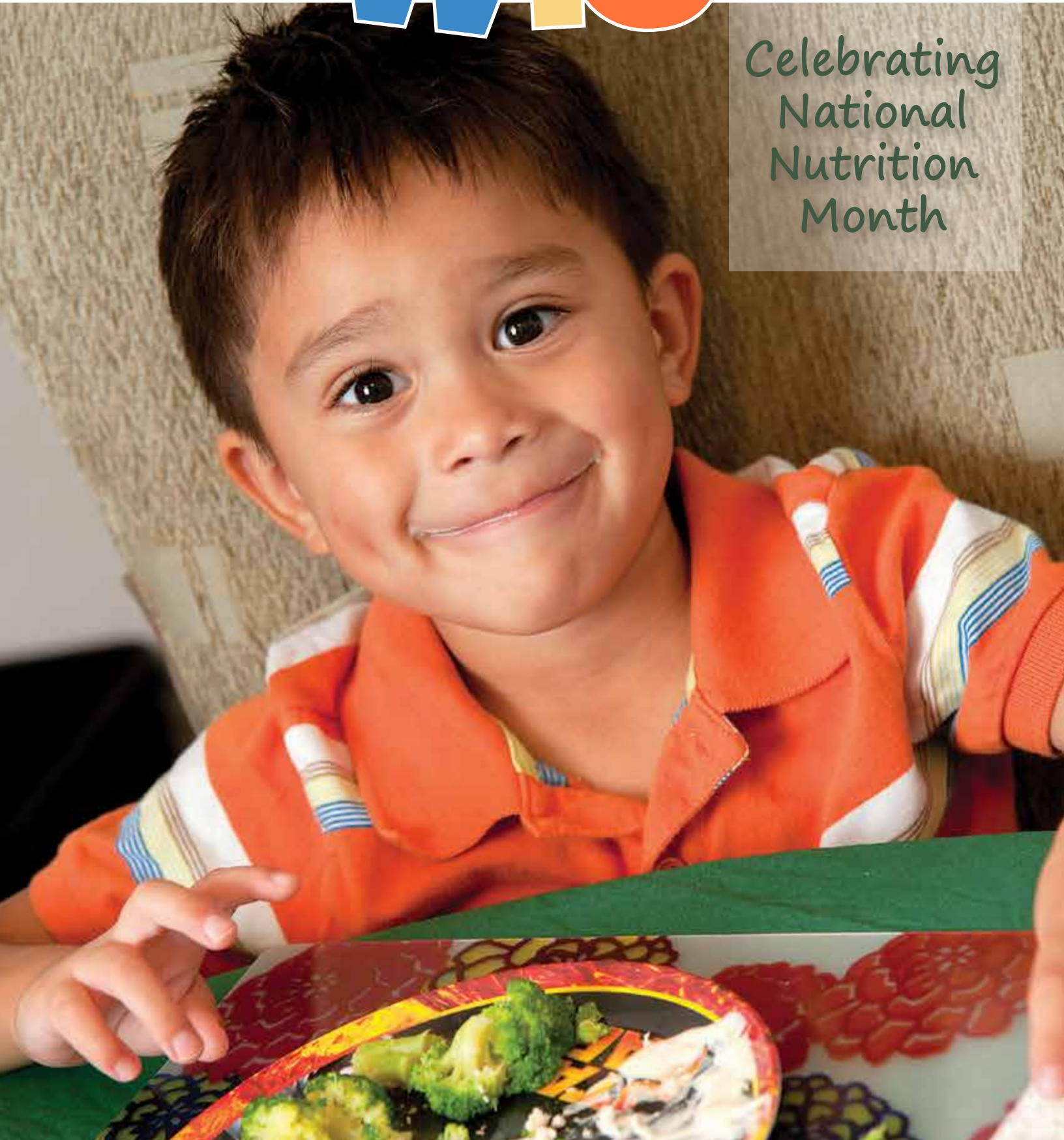
March/April 2013



news

Volume 22, Number 2

Celebrating
National
Nutrition
Month



Spreading the Word on Nutrition

At Texas WIC we strive to provide a better quality of life for our most vulnerable women and children not only with nutritious foods, but also through education and services. Because our purpose is to help our participants achieve and sustain a healthy lifestyle, we dedicate this issue to National Nutrition Month. This year we celebrate the 40th anniversary of the campaign created by the Academy of Nutrition and Dietetics to “focus attention on the importance of making informed food choices and developing sound eating and physical activity habits.”

Our issue begins with tips from the state WIC nutritionists about how they make eating right, their way, every day. Take a peek into the lives of the professionals who walk the walk and talk the talk and see if the tips they provide might also work for you and your clients.

This issue also provides you with research to fortify your nutrition toolkit surrounding eating and behavior. In “Baby Behavior — Breaking the Baby Code” on page 16, learn how understanding baby’s cues can

result in decreased overfeeding, decreased formula feeding, and increased exclusivity in breastfeeding. On page 18, “Food Addiction — Emerging Evidence” gives an overview of what researchers are finding in brain chemistry, specific foods, maternal diet, and more that could play a possible role in the growing obesity epidemic.

If your agency hasn’t already applied for an Obesity Prevention Mini Grant (OPMG), you’ll soon have the opportunity to do so. This grant is a great resource for local agencies to use to develop strategies to prevent obesity not only among WIC participants but also for staff. For more information and a little inspiration, read “Obesity Prevention Mini Grant Project Overviews” on page 14 to learn about some of the outstanding projects already developed.

I urge you to do something special for National Nutrition Month whether it is in your local agency, your personal life, or in the community. Do what you do best — spread the word, educate, and motivate others to eat healthy, every day, their way.



From the Texas WIC Director
— Mike Montgomery



- 2** Spreading the Word on Nutrition
- 4** State Nutritionists Share Their Healthy Eating Styles
- 7** When Riding to Work Is More than a Means of Transportation
- 10** TALWD Celebrates 25 Years
- Pull Out Section** ► **WIC Wellness Works**
- 11** Distinguished Guests Visit State WIC
- 12** Summer Nutrition Program
- 14** Obesity Prevention Mini Grant Project Overviews
- 16** Baby Behavior – Breaking the Baby Code
- 18** RD Corner: Food Addiction – Emerging Evidence 18

Mike Montgomery
Texas WIC Director

Linda Brumble
Manager
Nutrition Education / Clinic Services Unit

Patti Fitch
Manager, Clinic Services Branch

Shirley Ellis
Manager, Nutrition Education Branch

Mandy Seay
Publication Coordinator

Clare Wolf
Managing Editor / Designer

Chris Coxwell
Photographer

Jeremy Boehm, Betty Castle,
Joseph de Leon, Renee Mims, Irma Rendon,
Lorise Grimbball, Karina Prado
Contributing Editors & Designers

Health and Human Services
Printing Services
Printing

Leticia Silva
Subscriptions

TEXAS WIC NEWS SUBMISSION GUIDELINES:
If you have a story idea you would like to submit for consideration in the Texas WIC News please send an email to Mandy.Seay@dshs.state.tx.us.

If you would like to write an article, please request subject approval and our writer's guidelines prior to writing the article. Keep in mind that each Texas WIC News issue is planned five months in advance. Articles submitted will be considered but not guaranteed for publication.



Department of State Health Services
Nutrition Services Section
P.O. Box 149347, Austin, TX 78714-9347
<http://www.dshs.state.tx.us/wichd/default.shtm>.

Comments may be sent to the managing editor at Publishing, Promotion, and Media Services, P.O. Box 149347, Austin, TX 78714-9347, or by email to WICNewsEditor@dshs.state.tx.us.

In accordance with federal law and the U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability.

To file a complaint of discrimination, write USDA, Director, Office of Adjudication, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410 or call toll free 1-866-632-9992 (Voice). Individuals who are hearing impaired or have speech disabilities may contact USDA through the Federal Relay Service at 1-800-877-8339; or 1-800-845-6136 (Spanish). USDA is an equal opportunity provider and employer.

NOTICE TO SUBSCRIBERS:

Texas WIC News is available online at <http://www.dshs.state.tx.us/wichd/gi/wicnews.shtm>. If you are a current subscriber who would prefer to receive the Texas WIC News online, send your email address to WICNewsSubscriptions@dshs.state.tx.us and we will notify you by email as soon as an issue becomes available online.

Texas WIC News (USPS 016-975) is published bimonthly by the Department of State Health Services, P.O. Box 149347, Austin, Texas 78714-9347. Subscriptions are free. Periodicals postage paid at Austin, Texas.

POSTMASTER: Send address changes to WICNewsSubscriptions@dshs.state.tx.us or WIC News Subscriptions, Texas WIC News, Texas Department of State Health Services, P.O. Box 149347, Austin, TX 78714-9347.

State Nutritionists Share Their Healthy Eating Styles

by Lisa Rankine, R.D.
Clinic Services Program Coordinator

March is National Nutrition Month and this year it is an extra special celebration because it is the 40th anniversary of National Nutrition Month. The goal of National Nutrition Month is to encourage personalized healthy eating styles and to recognize food preferences, lifestyle, culture, ethnic traditions and health concerns that impact food choices. The 2013 theme is *Eat Right, Your Way, Every Day*. Registered dietitians play a critical role in helping people eat right, their way, everyday. Try some of these fun food tips and healthy habits collected from nutritionists at the state office.



Tiffany Brown

I start my day with a leaf of kale, a leaf of Swiss chard, $\frac{1}{8}$ of an avocado, $\frac{3}{4}$ cup coconut water, 15 frozen blueberries, and $\frac{1}{2}$ frozen banana. I throw in one scoop of protein powder and 1 tablespoon ground flax seed. That's my "breakfast of champions!"

Cathy Plyler

To get your family to eat their vegetables, incorporate them into a stew or soup. I am Hispanic and one of my favorite dishes is "Calabasita," a stew-like dish using Mexican squash (a small green squash that is rounder than zucchini), sautéed with spices, chicken, tomato, onions, and corn. This recipe was a special treat for my children who are now preparing it for their families.



Casey Wilburn

"Healthy eating your way" is important for our family. We plan a menu for the week and use Sunday afternoons to prepare lunches for the upcoming week. I grocery shop on a budget once a week and buy fresh fruits and vegetables to eat early in the week and frozen fruits and vegetables to eat later in the week. I write our menu and activities for each day of the week on a chalkboard in the breakfast area. My boys love to assist in our menu planning and meal preparation.



Patricia Koym

My favorite meals are quick, easy, and nutritious. My favorite for work is a green salad with lots of tomatoes, celery, cucumbers, red bell pepper, and a sprinkle of sunflower seeds with a low calorie dressing. I like quick and easy preparation because I swim after work three days a week.

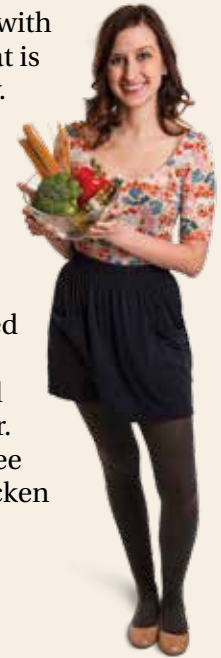
Elizabeth Bruns

To get my sister and me to eat grapefruit, my mother would slice grapefruit in half, sprinkle brown sugar on top, and broil it for a few minutes until the sugar was bubbly and caramelized. We'd have to wait for the sugar to cool and harden before she would let us eat it. Whenever my mother asked if we wanted grapefruit, she'd get a hearty "YES."



Brittney Adams

I love pasta, so I came up with a quick and easy pasta that is delicious and also healthy. The basic ingredients are whole grain pasta and olive oil. I usually add the rest depending on what vegetables I have in the house. My favorite veggies to add are sundried tomatoes, pepperoncini, spinach, mushrooms, and garlic, all sautéed together. Top it off with some fat-free feta cheese and some chicken sausage or tempeh if you want to add protein.



Hildreth England

My husband is a big meat eater, and I'm not. But we've found a compromise by eating more fish. It's helped us get healthy fats into our weekly diet (and in his case, reduced saturated fat), and we've found recipes and cooking methods that we both like. It doesn't have to be expensive or hard to cook. Keeping frozen tilapia handy for fish tacos or canned salmon for grilled salmon burgers is one way we make fish quickly and cheaply. We took baby steps at first, kept at it, and now it's a healthy habit for both of us!



Paula Kanter

If you have a vegetarian in the family (like my husband), lentils and brown rice with onions and mushrooms make a great dish! Both lentils and rice have been food staples for centuries. Eaten together, they offer an inexpensive, low-fat, nutritious source of complete protein, fiber, iron, and other essential minerals.



Lisa Rankine

Healthy eating at our house has to be quick. With band, volleyball, cheer, Girl Scouts, and PTO activities, it seems like we only get to eat together on weekends but we always have healthy choices. We love stir fry including veggies, beef or chicken, and a bottled stir fry sauce makes a quick, healthy, and tasty dinner.





Katie Lanier

I stick to the 'outer loop' of the grocery store and try my best not to shop when hungry. This keeps me around fresh produce, fresh meat, dairy, and grains. Walking up and down the chip aisle is bad news for both my wallet and my meal plan for the week.



Angela Gil

Beans are a regular staple in my household. I cook pinto, black, kidney, and even lentils. They are cheap, easy to cook, versatile, high in fiber and protein, and freeze well. My kids can live on bean and cheese tacos. To make them even healthier, I use a whole wheat tortilla and only use spices to cook the beans.

Cristina García

My toddler went from eating a great variety of foods to only picking out certain things he wanted to eat. To keep him interested in trying new foods, I started playing a game with him linking the food to the nutrient found in that food to what that does to help his body grow. For example, I would say "Carrots have vitamin A and vitamin A is good for your eyes," or "Chicken has protein and protein helps you build muscles." I try to keep it simple. I found this to be a real easy way to reiterate the fact that the food we eat fuels our bodies to keep us healthy.



Mandy Seay

I really enjoy fruits and vegetables, but I'm no purist — I like pizza, burgers, and sweets too. Instead of depriving myself, I follow the 80/20 rule: 80% of the time I eat very healthy and 20% of the time I splurge (and then exercise a little harder that day).

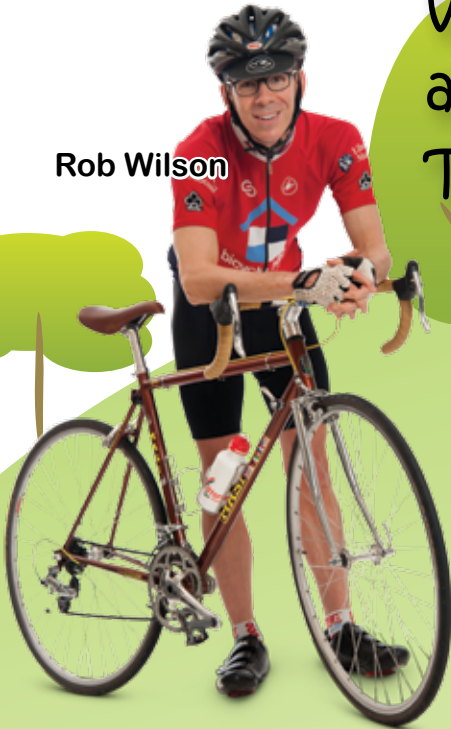
Lindsey Randall

I live in the country, so going to the grocery store for fresh produce on a daily basis is an inconvenience. I like fresh, so to eat healthy and to enjoy quality family time, we have a garden that we harvest together. Gardening allows my toddler, Lawson, to play in the dirt and familiarize himself with fresh okra, peppers, and tomatoes, which he calls by name as he picks them.

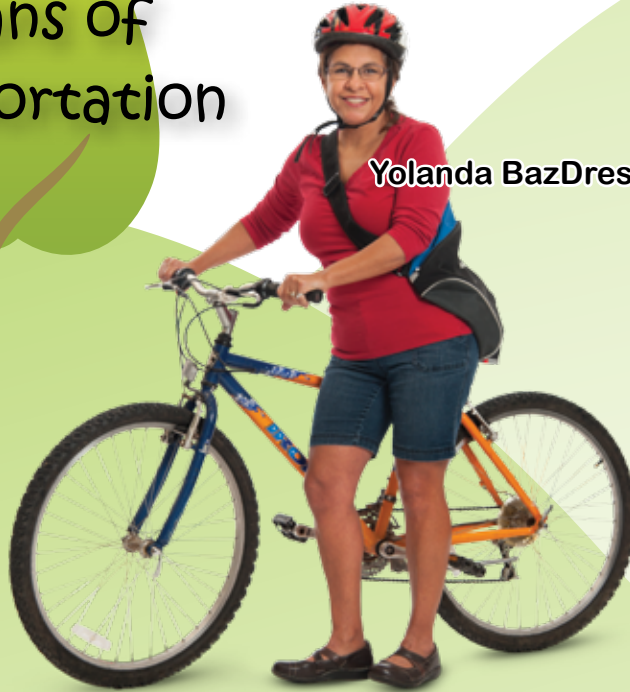


When Riding to Work is More than a Means of Transportation

Rob Wilson



Yolanda BazDresch



by Clare Wolf
Editor/Designer, Texas WIC News

When IDL Studio Manager Yolanda BazDresch learned her car would be in the shop for several days, she worried about how she would get to work without inconveniencing her family and friends. BazDresch made a decision that had a lasting impact; she decided to ride her bike to work. BazDresch soon realized that bicycling was more than just a means of transportation, "...It is invigorating! Going home, it's good for decompression." Three years later, BazDresch still enjoys riding her bike to work. She is not alone.

There are eight WIC employees at the state agency who regularly ride their bikes to work.

For David Bogdanski, the pure enjoyment of riding is his primary reason for bicycling to work. "I love riding my bike. It seems like bikes have always been a part of my life. If I ride to work I can get a workout and travel at the same time," said Bogdanski, systems analyst for vendor claim processing, who travels 11 miles to work each way. It usually takes Bogdanski 40 to 50 minutes to commute to work, "My best time is 37 minutes. My goal is to get that down to 35 minutes."

Rob Wilson, systems analyst and team lead for the WIC Field Support Service Desk, who commutes 10 miles each way agrees, "It's just fun to ride my bike and to see how fast I can get to work and get home."

Nutrition Education Coordinator Matt Harrington, whose fastest time on his 16-mile ride to work is 42 minutes, likes the quiet time between work and home.

Joseph DeLeon enjoys his nine mile commute for health reasons. "I sit in a cube for 10 hours a day. It's a great switch to be outdoors, get my heart moving, and really live in the moment. Even though I'm tired after the ride, I feel exhilarated," said DeLeon, web coordinator for Publishing, Promotion and Media Services.

Whether or not to bicycle to work depends

For Joel McCorquodale, juggling a busy schedule of working full time, taking a college class, and raising three children influences his decision of whether or not to ride his bike to work on any given day. McCorquodale, systems analyst in charge of software testing for applica-



Bill Spence



Joseph DeLeon



David Bogdanski

“6:30 am – It’s dark. I’m on my bicycle and sitting at a red light. I have a bright headlight and a flashing tail light and reflectors so I know that I am visible. There’s a car in the oncoming left turn lane. I’m wondering if the driver sees me. My light changes to green and I start to go when I see the car turning across my path. Even though I have the right of way, I yield to let the car pass ignoring the slight.”

—BILL SPENCE
PROGRAM SPECIALIST IN WIC VENDOR TRAINING

tions, who bicycles three to four times a week, said, “Sometimes it depends on whether someone needs a ride home after school! My wife and I coordinate closely to get everything organized so things work out.”

“...Neither snow nor rain nor heat nor darkness...” deter the cyclists. Maybe. Most agree that wind or temperature rarely factors into their decision on whether or not to ride. Although some said they didn’t mind riding home in the

rain, most agreed that they would rather not ride to work in heavy rain or icy conditions.

For many of the cyclists, riding to work offers an economic advantage. When Jeff Wendt, who commutes approximately 34 miles a day, added the time spent traveling by car to the time spent working out every night at the gym, he realized he could accomplish both in the same

amount of time by bicycling to work and save over \$150 a month. “...I saved \$72 a month for gas, and using seven cents a mile adds another \$40 a month in maintenance... [With other discounts, it totals] roughly \$125 a month. Since I was getting plenty of exercise every day, I decided that I didn’t need to go to the gym any longer, adding another \$35 a month,” said Wendt, programmer in the Application Development Unit.

Several cyclists experienced health benefits

“My resting heart rate is lower, my weight is lower, and the power that I’m able to generate is higher. I also notice that my mood is better. I’m completely awake when I get to work and I’m more relaxed when I get home,” Bogdanski said.

McCorquodale agreed, “I used to have high cholesterol; after biking for six months, my levels are no longer high! Also, I lost 15 pounds.”

DeLeon realized similar health benefits, “Yes, I’ve lost about 40 pounds, my legs are much more muscular, and my cholesterol has steadily decreased.”

No shortage of advice for newbies

For anyone thinking of riding to work for the first time, our cyclists had plenty of advice – everything from starting small and gradually



Joel McCorquodale



Jeff Wendt



Matt Harrington

building your endurance to making sure your bike is equipped with a spare tube, a tube repair kit, pump; and you know how to use them.

Spence advised first timers to “...Do your homework. Go online and research bikes for commuting, helpful accessories, bike laws, and commuting advice from reputable websites. A few include: www.bicycling.com (general info on bikes and advice of all sorts including bicycle commuting), <http://bicycleaustin.info/> (whether you live in Austin or not, Michael Bluejay has assembled a treasure trove of links and advice regarding bike commuting, riding in traffic and practical bicycling in general), and <http://www.biketexas.org/> (an advocacy website with loads of links and advice).”

The advice most frequently given by the WIC cyclists was to plan your route.

“Determine as safe a route as possible, which won’t often be the most direct route, and get to know every low-hanging branch, speed bump, and pothole along the way,” DeLeon said.

Wilson noted that when planning your route, “...avoid major roads and intersections as much as possible.”

McCorquodale agreed and suggested using Google Maps “...to find the quickest and safest routes through neighborhoods.”

Safety is key!

Wendt said, “Be seen! Bright clothing and plenty of lights.”

Spence advises, “Don’t assume you can ride the same route you drive. Map your ride to bike lanes and roads less travelled by vehicles. You may have the right to ride on any street (except freeways) but that doesn’t make it a good idea. Buy a good helmet. Buy a good lock. Buy a set of good lights. These include lights to see with and to be seen with. Ride your route at an off peak hour and familiarize yourself with every hill and pothole before you begin commuting. ...Obey the rules of the road, but realize they will not save you. Exercise situational awareness ALWAYS. Leave your music player in your bag. You need all your senses.”

Bogdanski adds, “Pay attention to what is going on around you... Use hand signals (nice ones) to communicate with drivers in ambiguous situations... Smile. ...Take the lane if that is going to put you in the safest position on the road. Avoid passing on the right. Keep an eye out for occupants when you’re passing parked cars because they may not see you before opening the car door.”

Harrington concludes, “Bike vs. Car – car always wins.”

TALWD Celebrates 25 Years

by Margaret Payton, M.B.A., R.D.
WIC Director, LA #100 City of Amarillo

Last September, Texas Association of WIC Directors (TALWD) held its 25th Annual Meeting in Lubbock, Texas, where speakers and awards highlighted the meeting.

Aisling McGuckin, RN, MSN, MPH, from Healthy Texas Babies spoke about the initiative to decrease preterm births and infant mortality in Texas. Reducing infant mortality will not only improve the health of Texas babies and mothers but also save millions of dollars in health-care costs.

Linnea Sallack, MPH, RD, director of the Center for Food Assistance and Nutrition (CFAN) at Altarum presented research showing that WIC participants value the education and counseling they receive at WIC as much as, if not more than, the food benefits. She pointed out that the individual attention and caring manner of WIC staff is what the clients say makes them return to WIC.



Terry Bryce, the National WIC Association chair, talked about how the dedicated, competent staff that provides excellent customer service is what sets the WIC program apart from other programs. He encouraged every WIC director to “Walk the Talk” and advocate for WIC in their communities.

Dr. Nick Yphantides, the keynote speaker, discussed the grave health risks of smoking, lack of exercise, and poor diet. He noted that these behaviors lead to diseases that account for 50 percent of all deaths. He also shared the inspiring story of his incredible 247 pound weight loss. His powerful message was “You have to change the way you see before you can change the way you look.”



Two awards were also presented at the annual meeting; the TALWD Customer Service Award and the Art Fuston Award. The TALWD Customer Service Award was given to Rob Wilson, systems analyst and team lead of the WIC Field Support Service Desk, who has been described as someone who is always calm, courteous, polite, knowledgeable, understanding, and a great problem solver willing to go the extra mile to help.

The TALWD Art Fuston Award was given to a director who has made significant contributions to TALWD and the Texas WIC program, Tina Horkey, WIC director, LA 42 – Williamson County and Cities Health District. Tina has not only acted as treasurer and regional representative in TALWD but has also participated in various TALWD committees and task forces. She is dedicated, organized, and a generous and warm individual who is always ready to lend a helping hand.

CORRECTION: In the November/December 2012 Issue of the Texas WIC News article titled “A Year Ending in Success — The Texas WIC WCS Certification Training Program” the City of San Angelo was incorrectly identified as Local Agency 54 instead of Local Agency 56.

Bucket List — For Your Health

A bucket list is usually created to fulfill dreams before you take your last breath. Why wait until the latter years of our lives to make this happen? You can set any deadline you want to complete items on your list (such as before you reach the next decade of your life), and you can make more than one kind of list (traditional, birthday, goal bucket lists). Making a list of things you would like to experience or accomplish in life has many benefits.

Benefits of Creating a Bucket List:

Gives you a sense of joy or satisfaction

Identify what you have always wanted to do. Do things that are fun and rewarding or that relieve stress. Research shows a link between goal accomplishment and happiness. As you start crossing items off your list, you are sure to feel more fulfilled.

More clearly see the things in life you value

When you write down what you want to do, you realize what is important to you. This may lead you to reprioritize certain areas of your life. Use this list to keep your life in perspective and as a check in progress towards your goals.

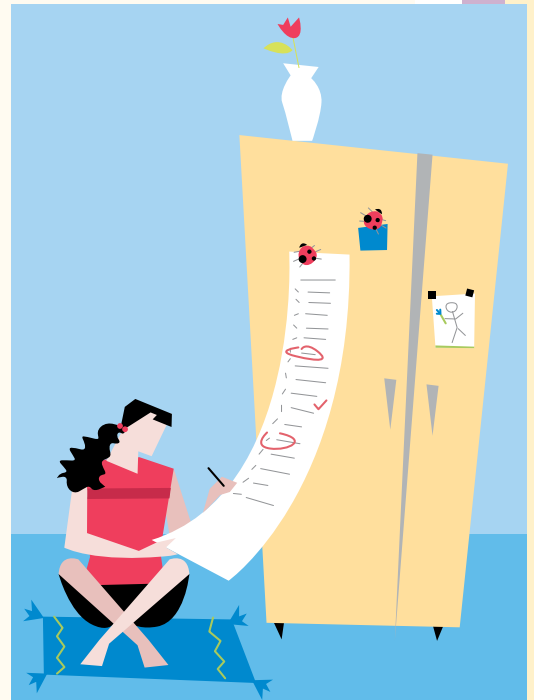
Allows you to choose and reprioritize goals in life

What do you want people to say about you long after you are gone? Now add items to your list that will help build this characteristic. First, try setting simple goals that are easier to accomplish, and then build in goals that may take more time or support to reach.

Reduces stress

As you accomplish goals or try new things in life, you feel happier or more adventurous. This also reduces burn-out from day-to-day activities. Pick items for your bucket list that won't create more stress in your life — this is not a to-do list, it's a wish list.

The research is clear. The happiest people wake up every day to short- and long-term goals that involve taking risks, connecting with others, and persistence. Properly-set goals provide a roadmap for our lives, and we end up being proactive instead of reactive. We



(continued on page WWW — Insert D)

30-Day Wellness Challenge to Enhance Overall Wellbeing!

The 30-Day Wellness Challenge was a month-long opportunity to try new things and enhance the overall well-being of WIC staff members at Local Agency 7, Site 9. Attempting to change everything at once can be overwhelming, so this challenge focused on the journey instead of the destination. The daily challenges included potlucks in pursuit of friendship, catnaps in pursuit of relaxation, and flossing in pursuit of a healthy smile. Each day spotlighted a specific task to help WIC staff members make changes to improve their health and well-being. After completing the 30-Day Wellness Challenge, WIC staff members channeled their inner wellness champion and pledged to continue one or several healthy habits throughout the year.

Staff spent four weeks focusing on improving their health and completed the 30-Day Wellness Challenge with a 97 percent success rate! Here's what the Wellness Challenge Champions from LA 7, Site 9 said about the challenge and how it helped improve their lives:

"My 11 month old is the love of my life. Because of participating in this challenge, I see how important it is to keep up physical activity. I made a promise to myself to get a wagon, so that I can take my baby with me and be a wonderful example and role model for her and create fun and interesting activities, bonding, and being together." – Cheryl

"My daughter and I have made promises together to look after each other for physical activity. We encourage each other to walk more. When one or the

other doesn't feel like it we cheer each other on to get up and get going! Then we GO!" – Maria

"I take the challenge seriously. I am doing more outside walks at lunch. I am keeping up my promise to myself of giving others specific compliments more often. I am practicing being grateful every day."
– Georgia

"I find myself walking farther and longer. I have the buddy system. My friends call or text me when they are ready to walk or jog and we are accountable to each other. We consistently remind each other — if they can do it, I can do it." – Sheroca

"I am attending Zumba classes. I think the challenge was really great because it was broken down into small and attainable goals. We could accomplish them in a very busy clinic." – Merla

"The challenge kept me motivated — TEAMWORK. It promoted sharing — we exchanged books and interesting magazines to challenge our brains with new and useful information. The idea of taking one day at a time calmed the nerves. Writing everything that I am grateful for puts it all in perspective. Now I don't take the small things for granted." – Daphne

"I walk in place at work. When I work standing, I keep moving. Clients may see me and ask what I am doing and it is a good ice breaker and they think I am a good example. I have lost several pounds doing this!" – Dorrie

"This challenge has helped the clinic to work together. It has created teamwork and positive



Project 7, Site 9, after completing the WIC WELLNESS 30-day challenge. Front row left to right: Dorrie Jemison, Sandra Miera, Sandra Garcia, and Juanita Garza. Back row left to right: Georgia Clark, Merla Pineda, Maria Mata, Mary Sestilio, Sheroca Richard, Karen Svetz, Vanessa Bryan, and Cacey Lorentzson.

energy. It has helped to look at the big picture. I am always on the go and it has taught me to slow down and smell the roses — spirituality for peace of mind.”
– Sandra

“I love to see everyone working together for a common goal on the road to better health. I firmly believe in the whole person concept. Every aspect, emotional, mental, spiritual, as well as physical, contribute to total wellbeing. Great Job! I am glad you are on my team!” – Karen

“I did the challenge for fun and ended up losing 3 pounds to boot!” – Mary

Way to put the challenge to the test, LA 7, site 9!
If you or your agency would like another copy of the 30-Day Wellness Challenge, contact Debbie Lehman at debbie.lehman@dshs.state.tx.us or 512-341-4517.

CONTRIBUTED BY: KAREN SVETZ
NUTRITION EDUCATION COORDINATOR

recipe

Stuffed Zucchini

Adapted from allrecipes.com

Serves: 4

Ingredients:

- 3 zucchini
- 1 pound lean ground turkey
- 1 cup dry bread crumbs
- 1 clove garlic, minced
- 1 (32 ounce) jar spaghetti sauce
- ½ cup grated Parmesan cheese
- ½ cup shredded mozzarella cheese

Preparation:

Preheat oven to 350 degrees.

Trim stems from zucchini and slice lengthwise. Scoop out seeds. (Note: some recipes suggest saving seeds and mixing with turkey mixture.) Mix ground turkey, bread crumbs, garlic, and Parmesan cheese. Stuff zucchini with turkey mixture and place in 9 x 13 inch baking pan. Pour sauce over zucchini and cover pan with foil.

Bake in preheated oven for 45 minutes, or until ground turkey is cooked. Remove foil and cover with mozzarella cheese. Cook until cheese is melted.

Nutritional Information Per Serving:

433 calories; 20 g total fat* (7 g saturated fat; 6 g monounsaturated fat; 5 g polyunsaturated fat); 216 mg cholesterol; 28 g carbohydrates; 36 g protein; 12 g fiber; 1379 mg sodium**; 380 mg calcium; 4 mg iron

*To lower total fat and saturated fat content, reduce the amount of cheese.

**To lower sodium content, use lower sodium spaghetti sauce.



Bucket List — For Your Health

(continued from page WWW — Insert A)

are also more optimistic because we are always looking forward, not behind.

– CAROLINE ADAMS MILLER, MAPP

A CERTIFIED PROFESSIONAL COACH AND AUTHOR

Common items that appear on bucket lists are traveling, renewing wedding vows, volunteer work, or thrilling adventurous activities. In order to shake it up, make a health bucket list. This will provide the same sense of joy and satisfaction, and offer you the chance to improve your health and quality of life.

Check out the list below, and challenge yourself to create a bucket list — for your health.

My Health Bucket List

1. Run/Walk a 10K.
2. Join a book club.
3. Try a Zumba class.
4. Stop snacking in front of the TV.
5. Learn how to cook nutritious foods.
6. Schedule my yearly check-ups, on time!
7. Learn to swim.
8. Love myself for all that I am.
9. Find a workout partner.
10. Pass on a love of physical activity to my child.

References

- Miller, C.A., & Frisch, M.B. (2009). *Creating your best life: The ultimate life list guide*. New York, NY: Sterling Publishing Company, Inc.
- Ness, S.M. (2011). *Use a bucket list to help fulfill your dreams*. Retrieved from <http://www.mayoclinic.com/health/bucket-list/MY01676>



Mind Games

Find the seasonal produce in the word search puzzle.

Fruits: blackberries, grapefruit, oranges, peaches

Vegetables: beets, broccoli, cabbage, carrots, cauliflower, celery, cucumbers, lettuce, mushrooms, kale, onions, potatoes, spinach, squash, sweet potatoes, tomatoes, turnips, zucchini

B L A C K B E R R I E S S G S
 I I O B A O C S U C V E Y R E
 G L G R N U E E A P O R O A O
 E E O I A O L B L T Q H J P T
 V C O C T N B I A E C M P E A
 S N U A C A G T F U R P E F T
 S T M T G O O E C L F Y A R O
 J O E E T P R U S Y O E C U P
 T B I E T E M B V N G W H I H
 E Y I E B B L O L E D F E T C
 S T E A E S T O R R A C S R A
 Q W J R S M O O R H S U M E N
 S E S V E T U R N I P S A L I
 U Z U C C H I N I M Z P E A P
 K M N H S A U Q S H N T E K S

Share your wellness success stories for a chance to be spotlighted in Texas WIC News and inspire other WIC staff! Contact your State Wellness Coordinators, Debbie Lehman at debbie.lehman@dshs.state.tx.us or 512-341-4517 or Katie Lanier at Katie.Lanier@dshs.state.tx.us or 512-341-4514.



Distinguished Guests Visit State WIC

by Shirley Ellis, M.S., R.D.
Nutrition Education Branch Manager

Last September staff at the state WIC office had the honor of hosting a visit from Audrey Rowe, Administrator for the Food and Nutrition Service (FNS) at the U.S. Department of Agriculture (USDA) in Washington, D.C. Rowe was accompanied by three representatives from the FNS Southwest Region, Division Director Eddie Longoria, Public Affairs Director Leslie Lankster, and Public Affairs Specialist Terri Romine-Ortega. State staff, including WIC Director Mike Montgomery and Assistant Commissioner for the Family and Community Health Services Division Evelyn Delgado, enjoyed a very informative and productive visit with Rowe and the regional staff.

Rowe expressed her support for WIC's collocation of services as well as the joint efforts with other programs, with an appreciation for WIC and the role Texas WIC plays in supporting moms in the community. Rowe was delighted with the success of the Summer WIC EBT pilot in El Paso and the data showing that it worked to reduce food insecurity in that area. She was also excited to hear about the proposed improvements to the MIS system that TXIN offered.

After visiting the state office, Rowe and the USDA staff toured Mom's Place, the Austin based lactation services center, where they had the opportunity to observe client interaction first hand. Rowe visited with the City of Austin/Travis County WIC Program Director Donna Sundstrom and the Mom's Place staff

to learn about the many breastfeeding efforts at the local level. Rowe appreciated visiting with peer counselors and learning about their procedures for answering the 1-800 Breastfeeding Hotline. She was excited to hear that this number is available to anyone who has questions about breastfeeding.

One of the highlights of the visit was when Rowe observed a WIC peer counselor provide assistance to a new breastfeeding mother. Rowe sat in on the counseling session, with the consent of the mother, and watched as the peer counselor instructed the mother on how to properly latch her infant to her breast. During the counseling session, Rowe was able to visit with the mother and to provide encouragement in the mother's effort to breastfeed.

Rowe's obvious appreciation for breastfeeding provided an excellent opportunity for WIC staff to explain the great strides and efforts that Texas is making in this area. She was especially impressed by the mobile app of the Health Care Provider's Guide to Breastfeeding, the far reaching efforts of the Every Ounce Counts campaign, and the availability and accessibility of breastmilkcounts.com, regardless of participation in WIC.

Rowe expressed her enthusiasm and gratefulness for our program along with her intention to relay to Capitol Hill the information she learned during her visit.

Photo above (left to right): Eddie Longoria; Phillipa Adebo, WIC Area Coordinator; Elizabeth Zamora, Breastfeeding Peer Counselor; Donna Sundstrom, WIC Director; Audrey Rowe; Drasha Cravin, Breastfeeding Peer Counselor Senior; Angela Fritsch, Breastfeeding Coordinator; Heather Buquoi, Breastfeeding Peer Counselor.



Summer Nutrition Program

by Anita Ramos, R.D.
Clinic Nutrition Specialist
and
Paula Kanter, R.D.
Clinic Nutrition Specialist

During the school year, many children receive free and reduced-price breakfast and lunch through the School Breakfast and National School Lunch Programs which are administered by the U.S. Department of Agriculture (USDA). During the summer months, children who are eligible have access to nutritious meals at locations participating in the Summer Food Service Program (SFSP). When school is not in session, approximately four of every five children appear to lack access to subsidized meals on an average day and need the access the SFSP provides. However, participation in the program has been historically low. The SFSP participation for El Paso County has been approximately 12 percent of eligible recipients and for the state of Texas approximately 11 percent.

In 2010, the Agriculture Appropriations Act authorized and provided funding for the USDA to implement and rigorously evaluate the Summer Electronic Benefits Transfer for Children (SEBTC) Demonstration. The Texas Department of State Health Services Women, Infants and Children (WIC) and the Texas Department of Agriculture (TDA) partnered and were awarded grants for a SEBTC Demonstration during the Summers of 2011 and 2012 using the WIC EBT infrastructure.

The pilot project's aim was to reduce the level of food insecurity among children and provide

the USDA with critical information about the impact of cutting-edge nutrition interventions to achieve real progress in the fight against hunger among our children during the summer months.

SEBTC benefits were provided to randomly selected households with children in pre-kindergarten through 12th grade who were eligible for Free or Reduced Price School Lunch (FRP). The site that was chosen as the demonstration area was the Ysleta Independent School District in El Paso County. Each eligible child received approximately \$60 in WIC food benefits per month. This amount is comparable to the total monthly cost of breakfasts and lunches under the School Breakfast Program (SBP) and the National School Lunch Program (NSLP). The food benefits were loaded onto an EBT card and included the following foods:

- Juice – 64 ounces
- Milk – 3 gallons
- Cheese – 1 pound
- Cereal – 36 ounces
- Eggs – 1 dozen
- Whole grains – 3 pounds
- Beans and/or peanut butter – 2 items
- Tuna and/or salmon – 18 ounces
- Fruits and vegetables – \$16.00 cash value benefits

Texas WIC and TDA then partnered with the

El Pasoans Fighting Hunger (EPFH), formerly West Texas Food Bank (WTFB) of El Paso, as the participating entity to serve as the first line of contact for participants during the 2011 and 2012 demonstration. Texas WIC worked extensively with EPFH and provided information for participants using a train the trainer approach. EPFH was responsible for providing participant training for English and Spanish speaking participants on approved foods and the use of their card. They were also responsible for card distribution and replacement. The EPFH dietitian provided recipes using SEBT foods. Texas WIC created the food packages on the card, loaded the card, issued payment to vendors, provided grocer training, and gave participant support.



Summer 2011 Demonstration Summary	Summer 2012 Demonstration Summary
1,527 families (2,483 children) were eligible to receive a card	3,439 families (5,776 children) were eligible to receive a card
1,143 families (1,897 children) used a SEBTC Summer Nutrition Card	2,509 families (4,336 children) used a SEBTC Summer Nutrition Card
Benefits were available June 1, 2011 through August 21, 2011	Benefits were available June 7, 2012 through August 26, 2012
Average redemption rate per food type was 94%	Average redemption rate per food type was 95%
A total of \$253,376.33 in SEBTC purchases was paid	A total of \$626,124.88 in SEBTC purchases was paid

The following table is a summary of the redemption rate per food item for 2011 and 2012. The food redemption rate per month shows that participants' redemption was high

indicating that most people who received food benefits purchased the food. The USDA has indicated that the demonstration will continue in the summer of 2013.

Redemption Rate per Food Item*

Year & Month	Milk	Cheese	Eggs	Juice	Cereal	Beans & Peanut Butter	Fish	Whole Grains	Fruits & Vegetables	
2011	June	95%	99%	99%	99%	98%	93%	90%	94%	95%
	July	95%	99%	100%	99%	97%	95%	91%	92%	94%
	August	93%	97%	97%	97%	92%	92%	89%	84%	84%
2012	June	93%	99%	99%	99%	97%	94%	90%	93%	94%
	July	95%	99%	99%	99%	98%	95%	91%	94%	95%
	August	90%	98%	99%	99%	95%	93%	90%	90%	90%

*Redemption rate was calculated using information from families that redeemed benefits during the demonstration.

Obesity Prevention Mini Grant Project Overviews

by Angela Gil, R.D., L.D.
Nutrition Education Consultant

Every year local agencies are given the opportunity to apply for the Obesity Prevention Mini Grant (OPMG). These funds go towards projects that will help the agencies' efforts in improving the health of their community. For FY 2012, 37 local WIC agencies participated and a total of \$650,000 was allocated to the agencies. While planning and preparing the project is no easy feat, there are definite

rewards and a sense of accomplishment for all those involved. Every staff member, from the local agency director to the front desk clerk at the clinic, must be on the same page in order for an OPMG project to succeed. Three agencies that understand how valuable each member of the WIC team is in implementing an OPMG project are LA 33, LA 27, and LA 29.

Cross Over the Rainbow with WIC

CONTRIBUTED BY TIFFANY QUEVEDO, R.D., L.D.
ASSOCIATE WIC DIRECTOR AND OPMG COORDINATOR FOR LA-27

Since 2008 Local Agency 27, South Plains Community Action Association WIC program, has participated in the Obesity Prevention Mini-Grant program, which has consisted of cooking demonstrations, breastfeeding education, and physical activity. Lubbock's most successful event has been the Jubilee Health Fair. The festivity is held at the Lubbock WIC clinics and the health fair is gradually moving to partnering sites in the South Plains and Permian Basin. The Jubilee is especially devoted to all WIC participants, and staff strongly encourage the entire family to attend. Scheduling this event monthly gives our participants the opportunity to choose to attend this celebration in place of a class to earn nutrition education credit.



The Jubilee Health Fair takes place in the WIC lobby and includes Walk over the Rainbow education and cooking demonstrations. Taught by our nutritionists and local breastfeeding peer counselors, Walk Over the Rainbow is a fun way to encourage physical activity. This game mimics a cake walk contest, but the prizes are baggies filled with colorful, cut-up fruits and vegetables. The children really enjoy this activity because there is movement, music, and a positive outcome for the family by learning the overall nutritional value of fruits and vegetables.

Breastfeeding is another celebration that is recognized at the Jubilee Health Fair. The class is taught by a breastfeeding peer counselor who discusses the importance of mother's milk and the nutrient content of human milk. Incentives such as breastfeeding bags, breastfeeding lullaby CDs, water bottles, and soccer balls are given to participants.

This fun-filled experience ends with a cooking demonstration. The audience is invited to participate in the food preparation process. Budget-friendly shopping tips are given along with modified recipes for healthier home-style meals with guidance from the MyPlate.gov website.

The WIC Jubilee Health Fair is a great opportunity to motivate WIC clients on behavioral modification and healthy eating habits to last a lifetime.

Healthy Kids = Healthy Families

CONTRIBUTED BY TERESA FRANCESCUTTI, B.S.N.
NUTRITIONIST
AND OSCAR HERNANDEZ, B.S.
PUBLIC HEALTH SPECIALIST

“Healthy Kids = Healthy Families” has been an effective project for WIC families at LA 33, City of El Paso WIC program. A total of 160 participants started the project and 143 completed the five month classes at five WIC Centers. Anthropometric results show a decrease of 0.3 in body mass index for children and 0.1 for adults.

Five classes were created to promote healthy habits. Anthropometrics were gathered monthly and surveys were given to assess behavior changes and provide opportunity for feedback.

The results of the surveys were outstanding! After the first class, “Welcome to Healthy Kids = Healthy Families,” which focused on psychological and health risks of obesity including positive reinforcement to improve self-esteem, 80 percent of the mothers noted they are now using this technique.

Giving clients information in the “I Can Try That” class about how to read food labels, calorie-reduced foods, and the portion plate, resulted in 64 percent of participants using the portion plate three to five times per week.

The “Move it with WIC” class focused on toddler physical activity and it motivated 40 percent of the participants to exercise 30 to 45 minutes a day three to five times a week and 36 percent worked out daily.

The “El Paso Active Art Tour” promoting family bonding as well as physical activity during a one mile educational tour to the San Jacinto Plaza and Museums of History and Art inspired 64 percent to participate in family activities once a week.

The “Cooking with WIC” food demonstration and distribution of cookbooks motivated 68 percent of participants to eat home-cooked meals more often.

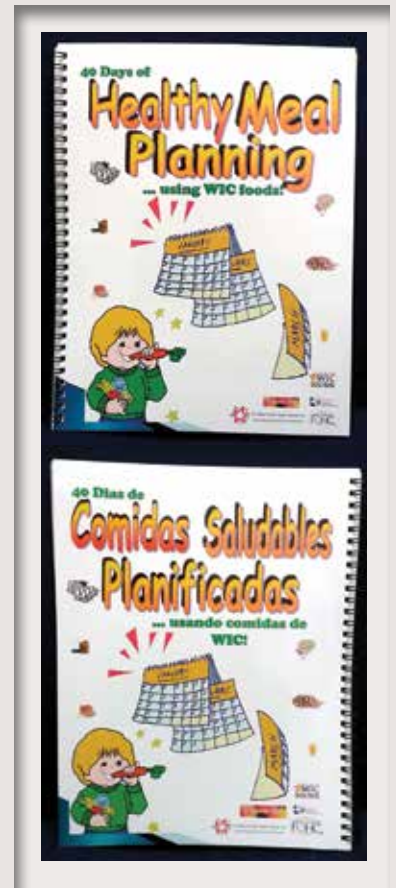
The project was not only rewarding to staff, but also beneficial for clients. The participants gave us the message that they thrive on educationally fun activities that they can apply to their daily lives. Our staff believes that the improvements in behavior portrayed in the surveys will amount to better health in our clients’ future.

40 Days of Healthy Meal Planning...using WIC foods!

CONTRIBUTED BY MANDY NEVIN, R.D., L.D.
LA29 NE/OPMG COORDINATOR

“Now, how can I use that information?” is often said by the WIC clients we serve. Like most of us, WIC clients get great information about obesity prevention, but struggle with how to “fit” one more thing into the day. Busy lives and growing family needs send all of us into a spiral of “just getting by.”

LA 29, Fort Bend Family Health Center program, produced a 40-day meal-planning guide using WIC foods. Clients use this along with the *Let’s Cook with Fruits and Vegetables* cookbook provided by the state WIC office and prepare healthy meals for their families. While eating correct portion sizes and balanced meals in the comfort of their own home, clients learn to incorporate the nutrition messages heard at WIC appointments. Each meal and snack offers a tip about healthy food choices, wise shopping, or an easy idea for kids to help in the kitchen.



Please visit the Obesity Prevention Mini Grant web page at <http://www.dshs.state.tx.us/wichd/nut/obesity.shtm> to discover more about other OPMG projects. If your local agency is interested in applying for the OPMG for FY 2014, applications will be made available soon. Contact Angela Gil, RD, LD, at 512-341-4590 or at angela.gil@dshs.state.tx.us for more information on how to apply.

Baby Behavior — *Breaking the Baby Code*

by Kaylene Thompson, R.D., L.D.
Nutrition Education Consultant



Imagine you're a new parent and taking your first flight with a newborn. Solo. You're nervous, but somehow breeze through check-in, security, and boarding with your baggage and baby. Baby is sleeping peacefully the whole time. Wow, how did you get so lucky? You gate check your stroller, board the plane, bump your way to your seat, and sit down. Ahhh... finally. Then boom! Baby wakes up, is crying, and you can't figure out what's wrong. Heads turn and stares commence. You wonder "Is he hungry? Is he too hot or cold? Does he need a diaper change? Is he sick?" You try everything imaginable, but baby isn't calming down. You set into panic mode.

Crying is a stressful thing to hear, and it sends a "Do something now!" message to our brain. Sometimes parents aren't sure exactly what to do. Most see crying as a hunger cue and are quick to offer a bottle to quiet baby down. Others may distract baby with toys, bounce baby, relying on gut instincts, advice from family and friends, and the internet for solutions. So what does it mean when babies do the things they do? Or do they even mean anything at all?

Understanding Baby Behavior

The good news is that babies are excellent communicators. They cry and use cues to let us know exactly what they need, but it does take time to learn the art of a baby's language. Jane Heinig, IBCLC, PhD, Executive Director of the

University of California Davis Human Lactation Center, and her team partnered with California WIC to launch a statewide Baby Behavior Campaign. The main focus is to provide caregivers anticipatory guidance to a newborn's behavior in three main areas — sleep, cues, and crying.

Dr. Heinig and the team at UC Davis have researched the effectiveness of teaching baby behavior and found that when parents understand their baby's cues, they respond in an appropriate way. This resulted in a decrease in overfeeding, a decrease in formula feeding, and an increase in exclusive breastfeeding. The following sections provide an overview of some information from the Baby Behavior Campaign.

Sleep

Parents often have misconceptions on how their babies should sleep, wanting their baby to be sleeping through the night at a young age. They see a baby who sleeps through the night as a 'good' baby and might overfeed, use rice cereal, or formula to try to get baby to sleep longer. The truth is that babies, especially newborns, have very small stomach sizes and they need to wake up many times to feed. Babies also wake up to be comforted by their parents.

So what's normal? In the first six weeks of life, babies may only sleep for one to three hours at a time. They will wake up frequently and

unpredictably throughout the day and night. From 6 weeks to 3 months, baby may begin sleeping slightly longer through the night but it is still normal and healthy to wake up often. At about 6 months, a baby may sleep up to six hours at a time. Every baby is different, and may wake up more often during growth spurts, changes in routine, or illness.

Babies sleep in two ways — light sleep and deep sleep. Both kinds of sleep are important for a baby’s health.

Light Sleep

(also known as rapid eye movement or REM sleep)

Helps baby’s brain grow	Helps baby’s brain rest
Baby is dreaming	Relaxed and heavy
Eyes twitch	Floppy arms and legs
Gentle movements, noises, or changes in breathing	Regular breathing
Wakes easily	Does not wake easily

Deep Sleep

A parent who tries to lay a baby down during light sleep might accidentally wake them up. They should wait until their baby is in deep sleep to put them down. A parent can keep the lights low when feeding, burping, or changing a baby’s diaper at night to help get baby back to sleep more quickly. Always encourage parents to sleep when baby sleeps to feel more rested.

Cues

Babies use cues to communicate what they need, and though they are not perfect at first, they will get better with practice. With time, parents will also get better at understanding cues and responding more quickly.

How to tell if a baby is hungry or full:

Hunger Cues	Fullness Cues
Hands near mouth	Sucks slower, turns, or pushes away from nipple
Bends arms and legs	Relaxes arms
Makes sucking noises	Falls asleep
Searches for nipple (rooting)	

How to tell if a baby wants to play or if they need a change of pace:

Engaged: Wants to be Near You	Disengaged: Wants Something to be Different
Relaxed face and body	Stiff hands, arms, legs
Stares at your face	Looks or turns away, arches back
Reaches toward you	Sleepy, glazed look in eyes
Wants to play	May get fussy

If a baby wants something to be different, a caregiver can move baby away from distractions and sounds until they are ready to interact again. Dim the lights, hold the baby, or lay him down for a nap if he is tired.

Crying

Babies cry for many reasons. They may need a diaper change, want comfort, be sick, hungry, afraid, tired, or need something to be different. If a parent has checked everything and the baby is still crying, they can try to hold the baby close, and repeat the same action over and over until baby calms down. This can take several minutes.

Tips to calm a crying baby

- Speak or sing softly
- Gently rock, sway, or bounce baby
- Gently massage baby’s arms, back, or legs

Ready For Take Off!

It’s time to fasten your seatbelts; you are now a Baby Behavior Expert! Look for some of these cues the next time you’re around a baby and share some of the ‘secrets’ of baby behavior with parents.

If you’d like more information about the California WIC Baby Behavior Campaign visit: <http://www.cdph.ca.gov/programs/wicworks/Pages/WICCaliforniaBabyBehaviorCampaign.aspx>

Food Addiction —

Emerging Evidence

by Mandy Seay, R.D., L.D.
Nutrition Education Consultant

**Obesity**

It is no secret that our country is facing an obesity epidemic; approximately 90 million Americans are obese and more than 400,000 people die annually due to obesity related issues. Texas is the 10th highest in adult obesity and 7th highest in adolescent overweight and obesity in the nation.

A relatively new, yet controversial, theory is that obesity may be a form of addiction with characteristics similar to drug dependence. As more scientific evidence appears, researchers are finding that brain chemistry and structure, self-medicating behaviors, and genetics may all be contributing factors leading to food addiction.

Defining Food Addiction

Currently there is no definition or diagnostic criterion for food addiction. However, recommendation has been proposed in the revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) that the Eating Disorders category be renamed to Eating and Feeding Disorders to reflect various feeding disorders, including food addiction. (The revised DSM-5 will be published in May 2013.)

Many researchers use drug dependence criteria to help define food addiction: "A maladaptive pattern of substance use leading to clinically significant impairment or distress." Dependence is confirmed by meeting three of the seven criteria:

1. Tolerance
2. Withdrawal

3. Greater amount or longer duration of use than intended
4. Desire or attempts to cut down or quit
5. Seeking
6. Interference with life
7. Use despite negative consequences

Brain Chemistry and Addiction

While addiction has been traditionally associated with drugs, palatable foods appear to activate the same pathways in the brain. Dopamine (DA) is a neurotransmitter that motivates us to engage in various gratifying activities while providing feelings of pleasure and reward.

Studies using neuroimaging have found that drug addicts and obese individuals often have fewer dopamine receptors than healthy individuals thereby requiring them to seek out more because they are never truly satisfied.

Repeated exposure to addictive substances can disturb the balance in the frontal cortex of the brain that deals with control, decision making, and judgment, thereby leading to a vicious cycle.

Addictive Foods

Foods that are thought to be potentially addictive include sweets, fats, and sweet/fat/salty combinations. In animal studies, tolerance to sugary foods was observed with an increased intake each day. When removed from their diet, the animals went through withdrawal by exhibiting anxiety and tremors. For fat, animals had similar behavior but did not go through

withdrawal. When rats were given fat and sugar together, they were more likely to be obese than if they were exposed to sugar or fat alone.

It has been theorized that eating normal foods found in nature does not cause addiction and is rarely abused. However, when foods are processed to become hyperpalatable, it changes the body's ability to self-regulate.

Cues

Typical eating and hunger cues are responses to decreased energy. However, these cues may be triggered from environmental stimuli or learned behavior which can alter motivation for food. Researchers have found that subjects show a greater drive to eat when shown photos of palatable foods. These same behaviors have been observed in drug abusers. An addicted individual may see someone they have done drugs with and the memory alone triggers the dopamine response and desire to repeat the behavior. Food is not much different; except food is everywhere and must be consumed to survive.

Maternal Diet

Mounting scientific evidence shows that early life exposure to elevated dietary maternal fat can lead to long lasting changes in DA mediated behavioral responses to drugs and hyperpalatable foods such as sodas, fries, and ice cream.

Tips for Managing Addictive Eating Behaviors

Be Mindful of Cues

Instead of giving into urges, learn from them. Smells, commercials, and certain friends are just a few things that may prompt you to return to old behaviors. If you find yourself being triggered, distract yourself from an urge: talk to someone supportive about your struggle, or remind yourself of consequences, or the memories of how you felt after giving in to an urge.

Structure

By eating in a consistent and structured manner, emotion- or cue- driven eating will be less likely to occur. Eat breakfast every day and small balanced meals and snacks every

three to five hours. Eat proper portions and give yourself at least 20 minutes to digest before deciding if you are still hungry or not.

Avoid crash dieting, as being overly restrictive can lead to bingeing.

Eat Mindfully

Listen for hunger cues. If you aren't sure if you are hungry or not, ask yourself: "Do fruits or vegetables sound appealing to me right now?" If the answer is no, you are not truly hungry.

Manage Stress

Stress is a powerful motivator to seek out and eat energy-dense palatable foods. While there may be some satisfaction during the course of eating, regret usually follows. Find ways to incorporate at least one stress-reducing activity into your daily routine. Additionally, come up with a non-food strategy to deal with stress in the event it arises suddenly.

Get Adequate Rest

Research finds that the less people sleep (five hours or less), the more likely they are to be overweight or obese and prefer eating higher calorie foods due to hormonal disruption. Stick to a sleep schedule, don't go to bed hungry or stuffed, include exercise in your daily routine to improve sleep quality, and avoid nicotine and caffeine before bed.

Exercise

Exercise has been shown, in both animal and human studies, to increase dopamine receptors and the volume of the brain's cortex. Physical activity improves communication between the body and brain; it expends energy while suppressing the appetite; improves body composition; and alters food preferences and responses to food.

Resources:

- Zhamg Y., K.M. von Deneen, J. Tian, M.S. Gold, Y. Liu. Food addiction and neuroimaging. *Current Pharmaceutical Design*. 17; 1149-1157.
- Naef L., L. Moquin, G. Dal Bo, B. Giros, A. Gratton, C.D. Walker. 2011. Maternal high-fat intake alters presynaptic regulation of dopamine in the nucleus accumbens and increases motivation for fat rewards in the offspring. *Neuroscience*. 176; 225-236.



WIC, Nutrition Services Section
Department of State Health Services
P.O. Box 149347
Austin, TX 78714-9347

PERIODICALS

ADDRESS SERVICE REQUESTED

Publication No. 06-10664

Texas WIC News is now available on the Texas WIC website!
<http://www.dshs.state.tx.us/wichd/gi/wicnews.shtm>



next issue:

**Spring into Summer
Healthy and Fit**