

WebMD[®]

DOWNLOAD THIS ISSUE
ON YOUR TABLET FOR
FREE FROM THE APP STORE
OR GOOGLE PLAY!

March/April 2016 / \$4.95

**THE
FOOD-
MOOD
LINK**
PG. 43

VOICE LESSONS

**Christina Aguilera
sounds off about
childhood hunger**

PG. 32

FAMILY & PARENTING

What to Do With
Picky Eaters
pg. 24

MEN'S HEALTH

Sperm Banking:
What to Know
pg. 14

FOOD & FITNESS

Medicine Ball
Workouts
pg. 42

HEALTH HIGHLIGHTS

Multiple
Sclerosis
pg. 49

LIVING HEALTHY

Women &
Hair Loss
pg. 11

HEALTHY BEAUTY

Foods for
Beautiful Skin
pg. 19



FEATURES

Pg.
32

Pg.
38

Voice Lessons

Strong. Powerful. These words are synonymous with **Christina Aguilera**—her voice, her songs, her hard-earned wisdom. The singer tapped into her experiences growing up to find that unique voice and now uses it to fight childhood hunger. The ambassador for the U.N. World Food Programme and mom of two also helps the next generation of musical talent on NBC's *The Voice*.

The Food-Mood Link

Could what you're eating have an effect on your mental health? WebMD explores the latest developments in nutritional psychiatry, including research about the connection between diet and depression and anxiety.



Download
WebMD Magazine
for **FREE**
on the App Store and
Google Play.

“
**YOU
HAVE TO
EMBRACE
YOUR
DARKNESS
IN ORDER
TO FIND
YOUR LIGHT.**
”

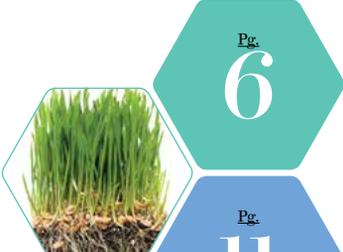
IN EVERY ISSUE

Pg. **4**
EDITOR'S NOTE

Pg. **55**
TAKE 10
Staying grounded in Hollywood isn't easy. In her new book, actor **Laura Prepon** shares the health philosophy that keeps her balanced.

WebMD Contents

MARCH/APRIL 2016

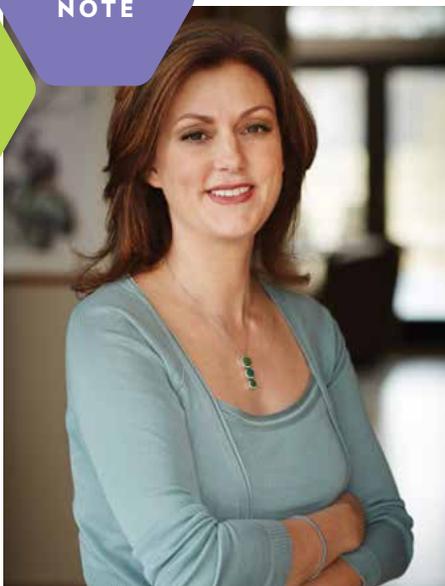
 <p>Pg. 6</p>	HEALTHY START HOT TOPICS: Can genes predict your happiness? Do junk food taxes really work? Will e-cigarettes safely help you quit? Find out and get more news you can use.
 <p>Pg. 11</p>	LIVING HEALTHY WEBMD ON THE STREET: Our experts serve up healthy living tips for a school chef who sets an example in and out of the kitchen. • MEN'S HEALTH: Banking on fatherhood? Sperm banking might be an option for you. • WOMEN'S HEALTH: Hair loss isn't just an issue for men. Here's what you can do. • HEALTHY AGING: A Q & A about the latest research on what it takes to live past 90.
 <p>Pg. 19</p>	HEALTHY BEAUTY YOU ASKED: Blemishes be gone! Get expert tips and product picks to clear up your complexion once and for all. • BEAUTY SMARTS: Skin-friendly foods that will help you stay gorgeous inside and out. • YOUR SMILE: Brush up on teeth-cleaning basics. Plus: Dirty Secret, Aisle Do, Beauty 411
 <p>Pg. 24</p>	FAMILY & PARENTING PARENTING: There's nothing scandalous about actor Scott Foley's motto when it comes to balancing work and his three kids: family first. • PREGNANCY: Don't expect to skip the dentist when you're expecting. Here's what you need to know. • BABY TALK: The best toys and gadgets for your little one. • PET HEALTH: How to make sure your four-legged friend is ready for the dog park. • KIDS' HEALTH: Should you be concerned about that picky eater on your hands?
 <p>Pg. 42</p>	FOOD & FITNESS IN SEASON: Lettuce inspire you with recipes and ideas for fresh spring salads. • OFF THE MENU: Chef Marcus Samuelsson finds inspiration around the world and right at home. • WORK IT OUT: Do you feel the burn after your workouts? Get relief for sore muscles. • FITNESS CHALLENGE: The remedy for your workout rut? Add a medicine ball.



WEBMD CHECKUP

March is **Colon Cancer Awareness Month**. • **HEALTH HIGHLIGHTS:** Tips to manage multiple sclerosis. • **BY THE NUMBERS:** Facts and figures about autism. • **LIVING WELL:** Get relief for IBS. • **MY STORY:** One reader's story of stopping a pulmonary embolism just in time. • **TEST YOUR SMARTS:** Do you know what keeps you up at night? Take the quiz to find out.

EDITOR'S NOTE



There's something about spring that inspires fresh starts. Maybe we see an end in sight to winter months when we've perhaps overindulged and not quite gotten around to all those lofty New Year's resolutions.

So what better time to feature a celebrity who has had huge success overcoming challenges and landing squarely on top? Grammy award-winning superstar **Christina Aguilera** opens up in this issue about her road to success. She also tells us about her work with the U.N.'s World Food Programme and her efforts to make a difference in the lives of others.

At WebMD we share the same goal. We want to help you make a difference in your life. One of our exciting initiatives this year is the launch of hundreds of new videos about everything from diet and fitness, and medical animations to health breakthroughs and much more.

I hope this issue inspires your own fresh start, either with uplifting stories of people who have pushed passed adversity or by discovering a new workout routine, a new recipe, or a practical health tip you can apply to your life today. Happy, healthy spring,

Kristy Hammam
Editor in Chief
kristy@webmd.com

BEST BITES

Are all fruits and veggies created equal? The answer is no. Some can help you lose weight more than others—and the delicious list might surprise you. Learn which bright-colored foods are highest in fiber and lowest in starch, and which ones to avoid.

Watch a new video at webmd.com/diet/obesity/video/fruits-veggies-weight-loss, and be on your way to healthy weight loss.



Access Now!



1 Download the free **Digimarc Discover** app, available at iTunes and Google Play.



2 Open the app. Hold your device 4 to 7 inches away from the activated icon (shown at right) to scan it. Your phone will alert you when Digimarc Discover recognizes the image.



3 Your browser will open to display a Web page where you can access WebMD articles, videos, slideshows, and more content or download WebMD apps.



Look for this icon on pages throughout the magazine.

Download **WebMD Magazine** for FREE on the App Store and Google Play.



CONNECT WITH US!



Subscribe to a newsletter!
webmd.com/newsletters



Like WebMD!
facebook.com/webmd



Tweet us!
twitter.com/webmd



Pin with us!
pinterest.com/webmd/webmd-magazine



Email the editors!
webmdmagazineeditors@webmd.net



395 HUDSON ST., NEW YORK, N.Y. 10014

EDITOR IN CHIEF

Kristy Hammam

EDITORIAL DIRECTOR

Colleen Paretty

SENIOR EDITOR

Sylvia Davis

WEBMD.COM SENIOR DIRECTOR,

EDITORIAL

Stephanie Snipes

WEBMD.COM ART DIRECTOR

Noel Triplett

CHIEF MEDICAL EDITOR

Michael W. Smith, MD

MEDICAL EDITORS

Brunilda Nazario, MD;
Hansa Bhargava, MD;
Arefa Cassoobhoy, MD, MPH

CONTRIBUTING WRITERS

Christina Boufis, Sonya
Collins, Heather Hatfield,
Jodi Helmer, Ayren Jackson-
Cannady, Katherine Kam,
Lauren Paige Kennedy,
Matt McMillen, Erin
O'Donnell, Gina Shaw,
Stephanie Watson

PUBLISHER

Vanessa Cognard

DIRECTOR, BUSINESS

OPERATIONS

Mathew Reynders

SENIOR DIRECTOR, MARKETING

Kathleen Cusack

SALES OPERATIONS ANALYST

Kisha Jackson

ADVERTISING SALES

CHICAGO

Tracy Kennedy
tkennedy@webmd.net
312-416-9275

Anna Novinger
anovinger@webmd.net
312-416-9278

NEW YORK

Claudia Fern
cfern@webmd.net
212-624-3728

Patria Rodriguez
prodriguez@webmd.net
212-417-9542

John Schaetzle
jschaetzle@webmd.net
212-624-3787

WEST COAST

Nicole Jones
njones@webmd.net
213-718-5550

SOUTHEAST

Courtney Cofield
WNP Media
courtney@wnpmedia.com
770-569-8188

CHIEF EXECUTIVE OFFICER

David J. Schlanger

PRESIDENT

Steven L. Zatz, MD

CHIEF FINANCIAL OFFICER

Peter Anevski

CO-GENERAL COUNSEL

Douglas Wamsley

CO-GENERAL COUNSEL

Michael Glick

CHIEF COMMUNICATIONS

OFFICER

Adam Grossberg

SENIOR VICE PRESIDENT,

PRODUCT MARKETING

Yiatin Chu

VICE PRESIDENT, SALES

DEVELOPMENT

Robyn Mait Levine

VICE PRESIDENT, FINANCE

James McCann

DIRECTOR, POLICY &

GOVERNANCE

Theresa Saladino



EDITORIAL, DESIGN, PRODUCTION MANAGEMENT

DEPUTY EDITOR

Andrea Gabrick

MANAGING EDITOR

Rebecca Scherr

BOOKINGS DIRECTOR

Wendy Zipes Hunter
wendy@celebrity-concepts.com

ART DIRECTOR

Melissa H. Miller

PHOTO EDITOR

Katie Ellsworth

PRODUCTION DIRECTOR

Connie Otto

PRODUCTION MANAGER

Judi Sheffer

ADVERTISING TRAFFIC MANAGER

Tommy Dingus

PRODUCTION ARTIST

Brenda M. Waugh

COPY EDITOR

Sharon K. Congdon

SENIOR VICE PRESIDENT,

MARKETING SERVICES

Joanne LoPinto

SENIOR MARKETING MANAGER

Laura Cassella

CUSTOMER SERVICE & SUBSCRIPTIONS

Manage Your Subscription

✉ **EMAIL** webmd@emailcustomerservice.com

☎ **CALL** 888-798-0088

👉 **CLICK** "Contact Us" at the bottom of every page on WebMD.com.

WEBMD MAGAZINE ON TABLET

Download *WebMD Magazine* on your iPad or Android device for free.
Go to the App Store® (apple.com) or Google Play™ (googleplay.com).



WebMD Magazine is distributed to doctors' offices throughout the U.S., online at WebMD.com, and by download from the App Store or Google Play. WebMD Magazine is not responsible for advertising claims. WebMD Magazine (ISSN 1553-9946), Vol. 12, No. 2, is published by WebMD, LLC and may not be reproduced in whole or in part without written permission of WebMD, LLC. All editorial content is reviewed by our board-certified physicians, is for informational purposes only, and is not intended to be a substitute for professional medical advice, diagnosis, or treatment. WebMD does not endorse any specific product, service, or treatment. Always seek the advice of your health care provider with any questions regarding a medical condition and never disregard professional medical advice or delay seeking it because of something you have read in WebMD Magazine. If you think you have a medical emergency, call your doctor or 911 immediately. © 2016 WebMD, LLC. All rights reserved.



HOT TOPICS!

FACTS AND NEWS YOU CAN USE

Most popular
jelly bean flavors:

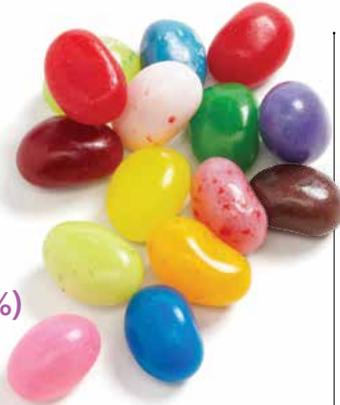
Cherry (24%)

Strawberry (19%)

Licorice, lemon, and grape (35%)

Other (22%)

Source: National Confectioners Association



Estimated
number of U.S.
high school sports
injuries during
the 2014–15
school year:

**Boys' baseball:
44,208**

**Girls' softball:
43,792**



The most
common
causes of
seasonal
allergies:
grasses,
pollen, and
mold

Source: American College of
Allergy, Asthma & Immunology



3-D movies might help doctors identify
children with undetected vision
problems. The ability to perceive depth
in 3-D is an even more accurate vision
test than the standard eye chart.

Source: American Optometric Association

THE THIRD
MOST
FITNESS-
FRIENDLY CITY
IS CORVALLIS,
ORE. **SOME
17% OF
COMMUTERS
WALK OR BIKE
TO WORK.**

Source: SmartAsset



Source: Johns Hopkins Center for
Injury Research & Policy



**9 in 10 Americans
who have strong financial
health also report strong
social relationships.**

Source: Gallup

About
79
organ
transplants
take place
every
day.

Source: organdonor.gov

2 MILLION
Number of people who attend
Alcoholics Anonymous groups in more
than 170 countries

Source: National Council on Alcoholism and Drug Dependence



Fewer than 6 hours of sleep a night
may raise a person's risk for obesity,
heart disease,
type 2 diabetes,
and stroke.

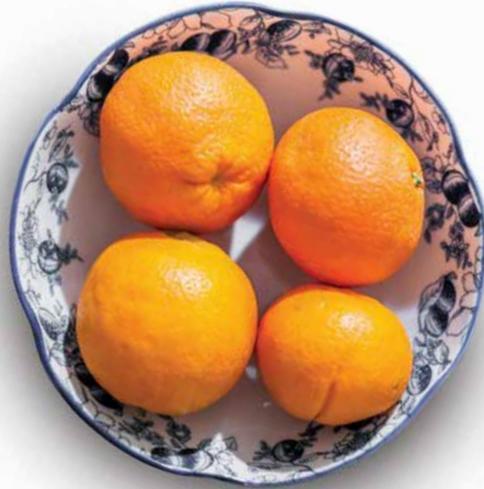
Source: Healthy Sleep





The smoking rate among 18- to 29-year-olds **FELL FROM 34% TO 22%** during the last decade—the biggest drop for any age group.

Source: Gallup



See Food

What you see is what you eat, so if you're trying to lose weight, leave some fresh fruit on the kitchen counter. And get everything else out of sight. Researchers studied 200 households. Women who lived in homes where fruit was displayed on the counter weighed about 14 pounds less than women who didn't have fruit at their fingertips. Where cookies were visible, women—but not men—weighed nearly 9 pounds more than their peers. It's candy that tempts men. Men who saw candy on their countertops outweighed their peers by 17 pounds.

Source: Health Education & Behavior

SWEET DEAL

You want to avoid sugar, but you're not keen on artificial sweeteners either. Food scientists at Cornell University have found the sweet spot. They've devised a chemical-free technique to alter the molecules in stevia so that your tongue can't detect the plant's bitter aftertaste. Don't worry—all the sweetness is still intact.

Source: Food Chemistry



88%

**OF AMERICANS
HAVE HEALTH
INSURANCE.
MOST STATES
REPORT AN
INCREASE IN
INSURED PEOPLE.**

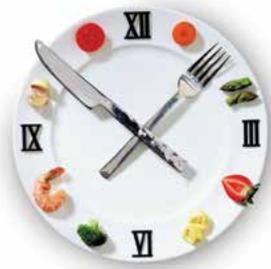
Source: Gallup



HAPPY DAYS

If you're happy and you know it, your genes might show it. That's what new research suggests. Researchers calculated the percentage of people in countries around the world who report being "very happy." They paired that figure with genetic information about people from each country. Residents of the happiest countries, which include Ghana, Nigeria, Mexico, and Colombia, were more likely to have a genetic variation that increases pleasure and reduces pain. That doesn't mean you're genetically predestined for happiness or gloom. The politics, economies, and climate of countries played a role in happiness, too.

Source: Journal of Happiness



MEAT FIRST

Want to keep blood sugar under control after meals? Eat your carbs last. In a small study, adults with type 2 diabetes ate the same meal of chicken, vegetables, bread, and orange juice on two different days. One day they had the bread and juice 15 minutes before the rest of the meal. The other day, they ate the chicken and veggies first. When those in the study started their meal with meat and veggies, their blood sugar was 28% lower 30 minutes after the meal than when they started with carbs. Their blood sugar levels remained lower for up to two hours after the meal.

Source: Diabetes Care

26

The average age of first-time mothers. That's an all-time high.



Source: U.S. Census Bureau

WebMD.com

Hot Hits

What's trending on WebMD.com right now*

What is the DASH Diet?

Vitamin D deficiency

Reasons for insomnia

Foods with probiotics

Hepatitis C symptoms

What does eczema look like?

Flaxseed's benefits

Apple cider vinegar

How much water do I need?

Panic attacks

*as of Jan. 1, 2016



Cash Cow

Want to lose weight? Make a friendly wager. In a study of 4,000 people, dieters who stood to lose money if they didn't reach their goals lost more weight than those who dieted risk-free. Dieters faced one of four consequences if they didn't lose the weight: Their money would go to a charity they didn't support; it would go to an unnamed charity; it would go to a designated friend; or the dieter would lose no money at all. Regardless of where their money was headed, dieters who had cash on the line lost more weight than those who didn't.

Source: American Public Health Association



700,000

Number of pedestrians injured or killed by motor vehicles in a year. Hey, you behind the wheel! Watch out for pedestrians.

Source: American Journal of Public Health



TIME TO QUIT

Many smokers swap tobacco cigarettes for e-cigarettes because they believe the new devices are less harmful. But new research shows that e-cigarette users—just like smokers—inhale free radicals with every drag. Free radicals are atoms that can have a dangerous chemical reaction with your body's cells, eventually damaging or killing them. Public health experts suspect free radicals play a key role in the development of cancer, heart disease, and chronic obstructive pulmonary disease.

Source: Chemical Research in Toxicology

Nose Knows

A fading sense of smell might signal that someone is developing Alzheimer's disease even before that person shows any signs of dementia. Scientists followed 1,430 older adults with normal cognition for about three and a half years. The seniors took a cognitive skills test and a smell test every 15 months. By the end of the study, 250 of them had mild cognitive impairment—a risk factor for Alzheimer's disease. Sixty-four had dementia. Those most likely to have cognitive impairment and, eventually, dementia were the ones whose ability to identify different smells declined over the years.

Source: JAMA Neurology



23,000

NUMBER OF ANNUAL EMERGENCY ROOM VISITS RELATED TO SUPPLEMENTS. WEIGHT-LOSS AND ENERGY PRODUCTS WERE AMONG THE WORST OFFENDERS.

Source: New England Journal of Medicine

SEE THE LIGHT

Longer days and more sunlight are finally here! For many people, this means relief from seasonal depression—a condition that peaks in the winter months. Standard treatment includes sitting near a light box for about a half-hour a day. Now, research shows that even people with non-seasonal types of depression can benefit from bright light. For eight weeks, 122 people with year-round depression got light therapy, daily antidepressants, both, or neither. Those who received light therapy—with or without antidepressants—improved far more than their peers by the end of the study.

Source: JAMA Psychiatry

72%

Americans who do spring cleaning every year

Source: American Cleaning Institute



"You are what you eat." Never before has that old saying been more true, thanks to compelling evidence that links food and diet to mental health. Nutritional psychiatry has caught the attention of doctors and psychiatrists who have not traditionally considered food part of treatment—and perhaps even prevention—for their patients. But growing research indicates that "diet is potentially the most powerful intervention we have," according to one of our experts in our story, "The Food-Mood Link" (page 38).

Given that almost one in four Americans develops a mental illness each year, the implications of diet's importance may be profound.

So far, researchers say, food seems to have a significant impact on the brain, affecting brain development, connections between brain cells, and even the bacteria that live in our gut, which in turn benefit mood and cognition.

Which means that what you *should* eat may be as important as what you *shouldn't* eat. Hint: A spinach salad or a salmon steak might be a terrific idea for dinner tonight.

Colleen

Colleen Paretty
Editorial Director
colleen@webmd.com

\$249 BILLION

Costs associated
with **problem
drinking** in the
U.S., mostly in
lost productivity
and treatment of
health problems

Source: JAMA



Fat Tax

Junk food taxes. Bans on super-size sodas. They're all meant to help shrink the nation's expanding waistline. But chips and sodas aren't necessarily what's making us fat, a new study says. Researchers collected surveys on the eating habits of about 5,000 people, and they found no correlation between body mass index and the amount of junk food and soda consumed. Singling out junk food as the main culprit in obesity, the researchers say, takes attention off the consequences of inactivity and lack of healthy foods.

Source: Obesity Science & Practice

BINGE-WATCHER

Admit it: AMC's hit series *Breaking Bad* was on for five years, but you watched it in about five days. Why wait when you can see all the episodes at once? Well, for one thing, a study suggests binge-watching isn't good for your emotional health. In a survey of 400 adults, those who considered themselves binge-watchers were more likely to report stress, anxiety, depression, and TV addiction. Survey respondents defined binge-watching as "significantly more than two hours per day," and younger adults were most likely to do it. If you just can't resist marathon TV sessions, researchers recommend that you at least move around between episodes.

Source: American Public Health Association

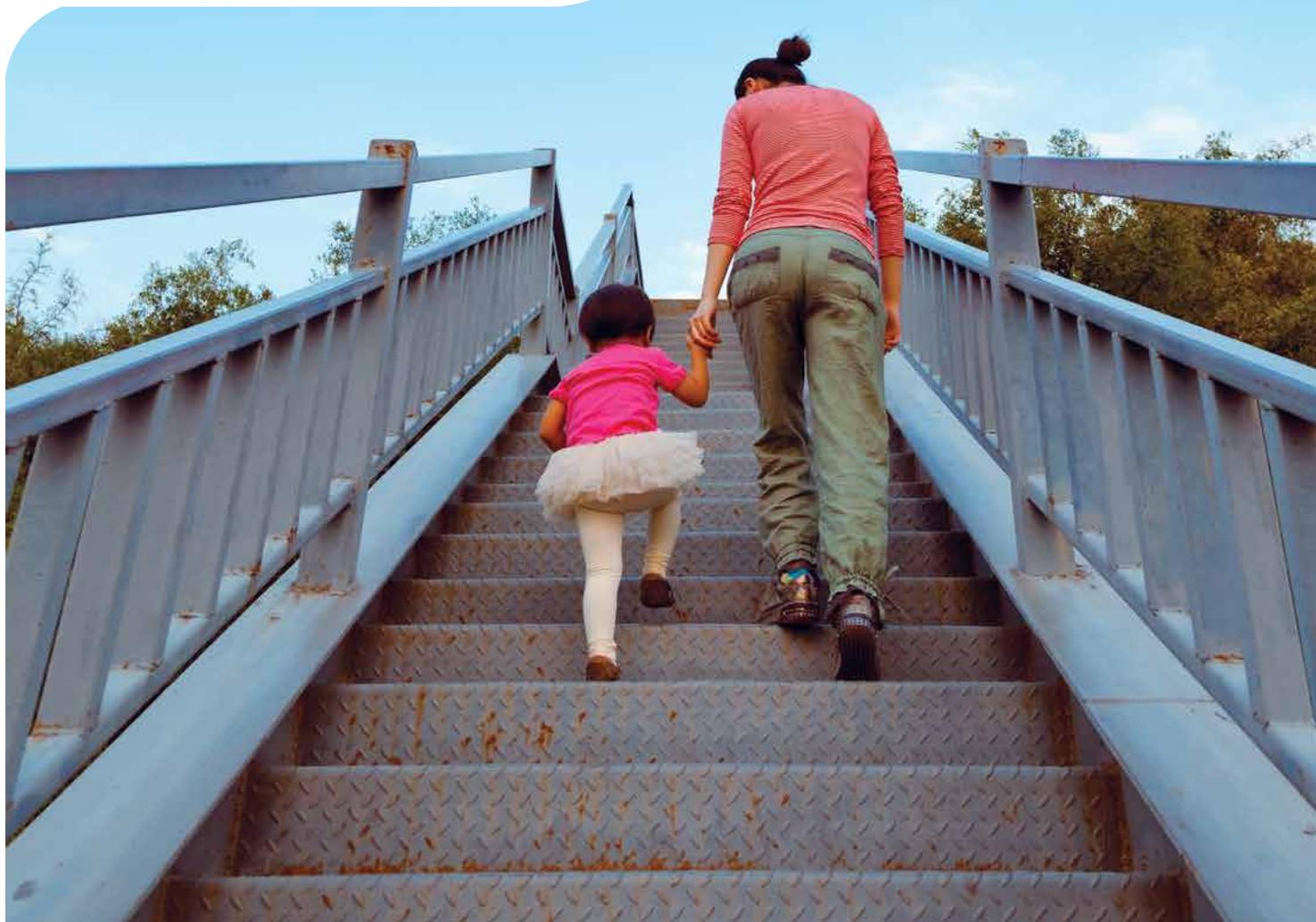




Make a Move

Living longer may be easier than you think. A recent study suggests that replacing two minutes of sitting with two minutes of walking every hour may cut your risk of premature death by 33%. Next time you settle in, create an alert to remind you to stand up and move. Any type of light exercise will do the trick. Try walking, gardening, or cleaning. Or follow these suggestions from Michele Stanten, co-author of *Walk Your Butt Off!* **Climb stairs.** Set a timer for two minutes. Go up and down until it beeps. **Make a personal appearance.** Instead of emailing or calling your co-worker, get up and talk face-to-face. **Try chair squats.**

Sit on the edge of your chair. Stand up, then sit down, touching the seat lightly before standing up again. Repeat for two minutes. **March in place.** You can even do this while you're on the phone or watching TV. These quickies won't count toward your regular exercise goals, though. For more robust health benefits, aim for at least 150 minutes of moderate aerobic activity every week.—*Kara Mayer Robinson*



SCHOOL TIES

We pound the pavement to get expert answers to your pressing health questions

Photograph by Jason Evans

DRY SPELL

"People in occupations with frequent water exposure can get hand dermatitis, which causes redness, itchiness, and cracks that can become painful and infected. Prevention is key. Use a moisturizer with dimethicone, which helps repel water from the deeper layers of skin."



Mohiba K. Tareen, MD
medical director, Tareen Dermatology,
Roseville, Minn.

BE WELL

"Germs are everywhere. Wash your hands often with soap and water. Remind kids to do the same. Avoid touching your eyes, nose, and mouth. Don't hug, kiss, or shake hands, and move away from anyone who is coughing or sneezing. Disinfect doorknobs and countertops, where viruses live."



Brunilda Nazario, MD
WebMD lead medical editor

TRY IT OUT

"Some pickiness is normal—children are naturally leery of new foods, especially ones that taste unexpected or unfamiliar. We know that repeated exposures can result in acceptance, so the trick is getting kids to try. Make foods appealing visually, so they're not rejected at first glance. It helps to make new foods look at least something like food that's familiar. And keep trying!"



Roy Benaroch, MD
pediatrician and adjunct assistant
professor of pediatrics, Emory
University, Atlanta

STRETCH RULES

"Being on your feet for long hours can cause stress in your legs and lower back. Wear supportive shoes with some give, and pad the floor where you stand the most. Throughout the day, stretch your quadriceps (thigh), hip flexor (front of hip), and hamstrings (back of thigh) muscles. Also put your hands over your lower back/buttocks with palms facing your back and gently arch backward."



Mary Ann Wilmarth, DPT
CEO, Back2Back Physical Therapy

RIGHT STUFF

"Eating healthy meals can improve school performance as well as help in development. For elementary school kids and teens, plenty of vegetables and fruits can add essential vitamins to their bodies. Whole grains and low-fat milk are also important. Limiting options that are processed or have too much sugar, such as candy, cookies, and cake, will also help kids stay on an optimal nutritional track."



Hansa Bhargava, MD
WebMD medical editor

WEBMD ON THE STREET

Rob DeLuise

School food service director/
executive chef, 40
East Greenwich, R.I.

Beluga lentil salad with organic peppers and Tasso ham sound like dishes at a high-end restaurant—not a school cafeteria. But then, few school lunchrooms have an executive chef like Rob DeLuise. He helmed the kitchens of top Rhode Island restaurants but grew weary of the frenetic pace, and night and weekend hours that kept him from his wife and kids. When Rocky Hill School needed a chef to revamp its menu, he jumped. Today he runs the kitchen like a restaurant. "It's about making the customers happy," he says. Students' response to dishes such as yogurt-marinated grilled chicken thighs and spicy spaghetti squash fritters proved he didn't have to pander with pizza and chicken fingers. "It's unbelievable how much food these kids are eating," he says. DeLuise designs his menus to meet children's nutritional needs from grades K through 12 but wonders, "How can I support their growth through all these developmental stages?" He planted a garden where students help grow the produce he serves, but he can't always get his own kids to eat their veggies at home. Being around kids all day makes germs a concern. He washes his hands often, but the water leaves them chapped and cracked. Long hours on his feet are another kitchen hazard, and he'd like some exercises to "alleviate end-of-the-day aches and pains." —Stephanie Watson



Want to be the next WebMD on the Street star? Tweet us your health issues at @WebMD. We might come to your city!



MEN'S HEALTH

Freeze Frame

FERTILITY ISSUES? SPERM BANKING COULD BE AN OPTION

By Matt McMillen

Some illnesses, serious injuries, and medical procedures can compromise a man's sperm production. If you face such circumstances, you can plan for fatherhood by freezing and banking samples of your sperm.

Occasionally, men who opt for a vasectomy freeze some sperm prior to the procedure just in case they want it later. Men in the military or other dangerous occupations may bank their sperm against the possibility of an injury that would harm their fertility.

Most often, though, the need to preserve sperm arises after a cancer diagnosis, because radiation and chemotherapy can kill the cells that produce sperm.

"One of the saddest things I see is a man who had a toxic therapy to cure cancer that left him infertile, and his doctor never discussed this possibility with him before treatment," says urologist Edmund Sabanegh, MD, director of the Center for Male Fertility at Cleveland Clinic. "If you are about to undergo any medical treatment, ask your doctor if it may hurt your fertility, and if there's any question, have your doctor refer you to a specialist to



get that question answered for you."

Sperm can be banked by anyone old enough to produce sperm, which usually starts around age 13. Before banking, you will need to abstain from ejaculating for at least three days to be able to produce a sizable sample. You masturbate into a sterile container at a clinic or at home, and then the staff will analyze your sperm. Men with a healthy number of sperm normally need to produce one to two samples; if your sperm

counts are low, you may have to provide five or six, Sabanegh says.

The sample is then mixed with liquid nitrogen to freeze it, a process called cryopreservation. Sperm bank staff then thaw a very small specimen to test whether the sperm survived freezing. "On average you'll lose about 50% of the viable sperm in a freeze," says Sabanegh, who adds that stored sperm swim or move normally just as well as fresh, even after being frozen for 20 years.

SURGICAL SPERM RETRIEVAL

SOMETIMES, PRODUCING A SPERM SAMPLE TAKES SURGERY. "TYPICALLY, WE DO SURGERY WHEN A MAN'S SEMEN HAS NO SPERM IN THE EJACULATION," SAYS EDMUND SABANEKH, MD.

The procedure, called surgical sperm retrieval, is often quite straightforward, Sabanegh says. If a man has a blockage caused by a vasectomy, for example, one technique allows the doctor to insert a needle into the testes and extract a sperm sample without having to make incisions in the scrotum. If a man has a zero sperm count, however, the surgery may be more complicated.

"We do what's called a micro-surgical testicular sperm extraction," Sabanegh says. "Using high-powered magnification, we do dozens of biopsies of different areas, trying to find a small amount of sperm left in the testicles."

Reviewed by
Sheldon Marks, MD
WebMD Men's Health Expert

Removes 99% of the #1 spring allergen.
Every wash, every time.



#1
Recommended
by Dermatologists
Allergists
Pediatricians
for Sensitive Skin

all® free clear gets out what your kids will be wearing this season, removing 99% of the tree and grass pollen that can stick to your family's clothes.

give us your worst, we'll give it our 

Learn more by visiting www.WashOutAllergens.com.

WOMEN'S HEALTH

Loss Cause

HAIR LOSS ISN'T JUST AN ISSUE FOR MEN.
HERE IS WHAT YOU CAN DO

By Lisa Marshall

● You look in the mirror one day and notice a widening part or a patch of scalp showing through your once-thick mane. Maybe you spot an alarming clump circling the shower drain.

Such moments are especially frightening for women, says Shani Francis, MD, director of the Hair Disorders Center of Excellence at NorthShore University Health System.

By middle age, 40% show signs of pattern hair loss

Many women go through a temporary hair shedding sparked by stress, illness, nutritional deficiencies, or hormonal changes.

(androgenetic alopecia), a genetically based condition in which hair follicles gradually shrink and become less active, prompting budding strands to become wispy and stubby, shed more, and grow less. Declining estrogen levels, due to menopause, may also contribute to hair loss.

Many other women go through telogen effluvium, a temporary shedding sparked by stress, illness, nutritional deficiencies, or hormonal changes. For this type of hair

loss—in which hair tends to fall out in clumps—better nutrition, rest, and time may be all you need.

If your hair loss does require treatment, you have several options.

Creams

In 2014, the FDA approved a new women's version of the OTC hair-loss cream minoxidil (Rogaine). Originally used as a blood-pressure medication, minoxidil dilates blood vessels, helping to

stimulate and nourish hair follicles. The new Women's Rogaine 5% minoxidil foam needs to be applied only once a day.

Medications

The main culprit of pattern hair loss for women is dihydrotestosterone (DHT), a derivative of the male hormone testosterone; when it gets inside hair follicles it damages them. The drug Propecia (finasteride) reduces DHT. Doctors advise

women of childbearing age to never take it.

Laser devices

The FDA approved the first laser comb in 2007. Since then, the comb has been joined by laser caps, helmets, and brushes ranging from \$300 to \$700. One 2014 study of 128 men and 141 women found those who used a laser comb three times a week for 26 weeks saw hair thicken.

Platelet-rich plasma therapy

Since 2008, platelet-rich plasma (PRP) has become popular among younger women with pattern hair loss who can't take pills and aren't good candidates for hair transplantation surgery.

There's been little research on the procedure, and treatments run about \$1,500 apiece. Francis says the jury is still out regarding PRP's effectiveness.

WHY NOW?

SOME REASONS FOR HAIR LOSS:

Excess styling

A thyroid imbalance

Low iron and low vitamin D: Have your doctor check your levels; supplement if necessary.

Medication: Going on birth control, blood pressure medication, steroids, or antidepressants can all prompt hair to shed temporarily.

Significant weight loss

Hormone changes after pregnancy or during menopause

A traumatic event, like an illness, surgery, or death in the family

Reviewed by
Brunilda Nazario, MD
WebMD Lead Medical Editor





Check out **18 Secrets for a Longer Life**, a slideshow at WebMD.com.

[LEARN HOW ON PAGE 4](#)

HEALTHY AGING

The Long Run

A Q & A ABOUT THE LATEST RESEARCH ON WHAT IT TAKES TO LIVE PAST 90

By Sonya Collins

● Claudia Kawas, MD, and her colleagues at University of California, Irvine, have studied the oldest of the old for more than a decade. The 90+ Study asks the question, “What allows people to live to age 90 and beyond?” More than 1,600 people have enrolled in the study. Kawas has tried to learn what these nonagenarians have in common, what keeps them ticking, and what keeps their minds sharp. Here are a few of the team’s findings.

the effects of Alzheimer’s or whether, if they’d lived longer, they would have gone ahead and gotten it. We’re still trying to figure that out.

The second surprising finding is that we’ve been looking at some risk factors for dementia in this age group. Virtually none of the conventional risk factors [for younger seniors] actually applies to this age group. History of hypertension, history of high cholesterol, and using statins—

“Things change with age, and we need to study these people to understand the best way to maintain their function.”

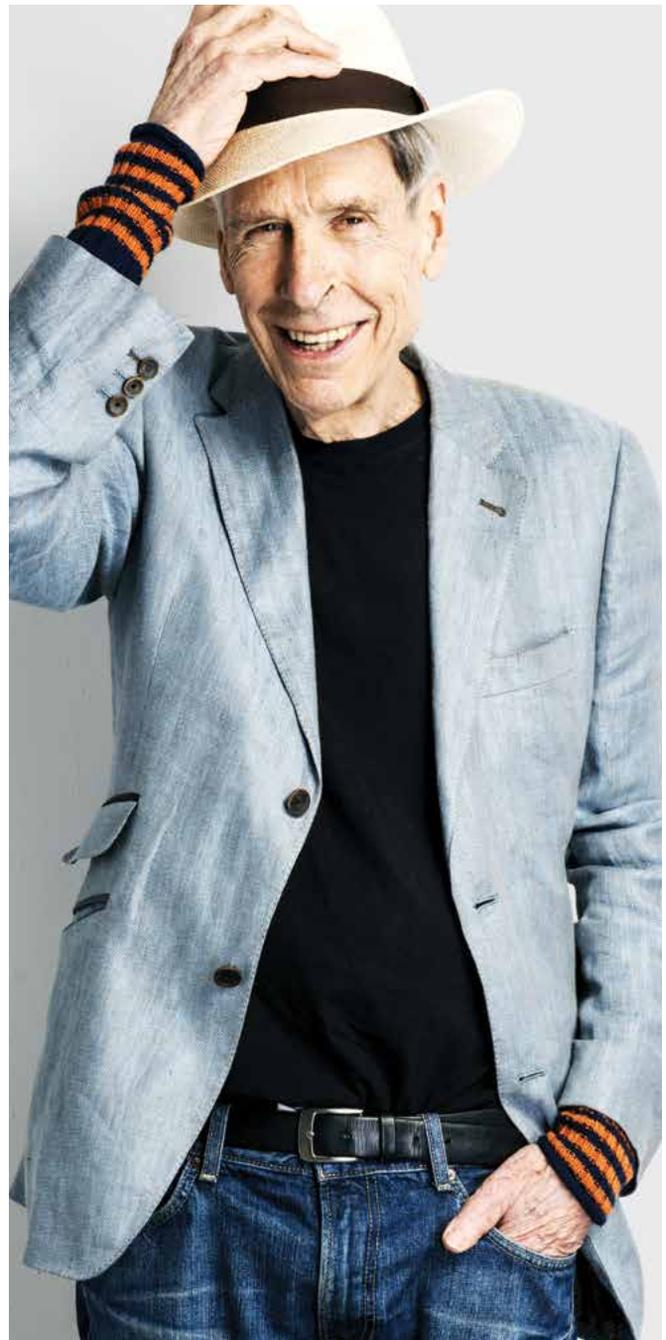
What’s the most surprising finding that has come from this research so far? There are two that have taken people aback the most. First, there’s a very high proportion of individuals in this age range who die with normal cognition or without dementia and yet have high levels of the lesions associated with Alzheimer’s disease when we look at their brains under the microscope during an autopsy. Now, the real question about those people is whether they’ve escaped

which are all risk factors in younger people—appear to protect against Alzheimer’s for people in their 90s rather than raise risk.

Do you have any idea why having high blood pressure and high cholesterol would offer protection against Alzheimer’s disease?

We’re trying to understand that now. We’re trying to figure out if it is really that having those conditions protects you or if it is the

continued on page 18



continued from page 17
 medications you took for those conditions that protected you. There are about a million other possible explanations, but those are the leading two.

We've also found that *when* you develop the hypertension matters. If you developed it in your 50s, 60s, or 70s, you don't appear to be protected by hypertension. It's only if you developed it in your late 80s or 90s.

Are there other issues that can be risky for

“People who exercise live longer than those who don't, even if it's only 15 minutes of walking a day.”

younger seniors and protective for these older ones? It's not good to be overweight when you're young, but with every advancing decade through your 70s, 80s, and 90s, it stops being a risk factor and actually becomes a protective factor for longevity. Definitely being frail and underweight is an increased risk for lots of stuff as you get older. Underweight people in our study had a 50 percent increase in their mortality, so being thin is not good when you're old. Maintaining or gaining weight is good.

It might be that being able to gain weight is a sign of robustness. The human

body tries really, really hard to gain weight as we age. Why is that? Maybe there's something good about it. Maybe we're fighting Mother Nature too much.

Why do you think it makes a difference when you develop high blood pressure or when you gain or lose weight?

I think the message is that age matters. We know better than to think that the diseases and the treatments for an infant are the same as for an adolescent or that

the health issues for an adolescent are the same as the issues for a 60-year-old. But we've always acted like whatever we've learned from 50-, 60-, and 70-year-olds also applies to 80-, 90-, and 100-year-olds. I think the real message that we're finding here is that that is not true. Things change with age, and we need to study these people specifically to understand what's really going on and what is the best way to manage their health and maintain their function.

Besides being a little overweight, what are some other characteristics that people in your study share? People who live longer get 200 to 400 milligrams of caffeine a day, which is two to three cups



of coffee. They drink alcohol once or twice a week. People who exercise live longer than those who don't, even if it's only 15 minutes of walking a day. Thirty minutes a day helped more, and 45 minutes helped the most. Mercifully, three hours of walking wasn't any better than 45 minutes.

The benefits of non-exercise activities never leveled off. Every additional hour per day that you reported doing something rather than sitting watching TV when you were in your 70s increased your likelihood of living longer. We had a smorgasbord of stuff—social engagement; going to any kind of religious, political, or social gathering; cognitive exercise like crossword puzzles and bridge.

How about the quality of their diet? A good diet matters, but any individual component didn't appear to make a difference. So the amount of vitamin C or any other vitamin in the diet didn't make a difference, nor did any particular food. It didn't matter if you ate more blueberries than everybody else.

Do you have any smokers in the group of people who live past 90? We definitely do. We have a very high percentage of former smokers. Probably more than half of them are former smokers. When they were young, the attitudes about smoking were quite different, so many of them did at least at some point smoke. We have very few current smokers.

Reviewed by
 Hansa Bhargava, MD
 WebMD Medical Editor



HEALTHY
BEAUTY

Sleeping Beauty

Your skin is your body's largest organ, and by default takes the brunt of exposure to the elements every time you step foot outside. On the bright side: According to Jeanine Downie, MD, a dermatologist in Montclair, N.J., you can prevent much of the potential damage at night. They don't call it beauty sleep for nothing! **Step 1:** Start with the simple act of washing your face every night, Downie suggests. Skipping this means you risk pollutants from the environment sinking and oxidizing (changing the color of) your skin, leading to fine lines, wrinkles, and blotchiness. **Step 2:** The effect of ultraviolet light on the skin can last for hours after exposure. So use your evening to help repair the damage, advises Joshua Zeichner, MD, a faculty dermatologist at Mount Sinai Hospital in New York City. Instead of applying topical antioxidants in the morning, add them to your bedtime regimen to help minimize damage from the day and even help rev up antioxidant defense for the next day.—*Ayren Jackson-Cannady*

YOU ASKED

All Clear

THE FIRST LINE OF DEFENSE FOR BANISHING BLEMISHES: OVER-THE-COUNTER PRODUCTS. ONE DERM'S ZIT-ZAPPING PICKS

By Ayren Jackson-Cannady

1 Acid Reign

Aveeno Clear Complexion Foaming Cleanser (\$6.99) "This is one of my favorite over-the-counter cleansers for acne, because it is packed with salicylic acid, which is lipophilic (aka oil-loving), so it has better penetration into the skin. Bonus: You could even use this for dandruff, since flakes tend to thrive in oily skin."

2 Nice Cream

PanOxyl Acne Creamy Wash (\$10.99) "Benzoyl peroxide is anti-inflammatory and a nice option for people with body acne. People using prescription topical or oral antibiotics can try this too—the benzoyl peroxide helps decrease antibiotic resistance."

3 Foam Run

Cetaphil DermaControl Oil Control Foam Wash (\$12.99) "This is a more traditional cleanser in terms of ingredients, but it has a rich foam that helps lift dirt, debris, and oil from the skin."

4 Back Story

Glytone Back Acne Spray (\$19) "This is a great product for below the neck, a salicylic spray that you can easily apply to the back (thanks to a cool 360-degree spritzer). In addition, because it doesn't have benzoyl peroxide in it, it doesn't stain your clothes."



Amy Derick, MD
clinical instructor of dermatology,
Northwestern University

Reviewed by **Mohiba K. Tareen, MD**
WebMD Skin Care Expert

**5 Spot Check**

Philosophy Clear Days Ahead Fast-Acting Spot Treatment (\$18) "Nix red blemishes with this treatment gel that can take a zit from red-hot to baby-pink overnight. Key ingredients include salicylic and glycolic acids (for fighting acne), dimethicone and squalane (for hydration), and oligopeptide-10 (for antimicrobial benefits)."

6 Welcome Matte

SkinCeuticals Physical Matte UV Defense SPF 50 (\$34) "This goes on like a moisturizer, but it functions as a sunscreen with mattifying properties. Those with oily skin love it because it gives you sun protection and also makes you look less oily."

THE OPINIONS EXPRESSED IN THIS SECTION ARE OF THE EXPERTS AND ARE NOT THE OPINIONS OF WEBMD. WEBMD DOES NOT ENDORSE ANY SPECIFIC PRODUCT, SERVICE, OR TREATMENT.

BEAUTY SMARTS

Face Value

CAN YOU EAT YOUR WAY TO GREAT SKIN? TRY THIS INSIDE-OUT APPROACH TO BEAUTY

By Kerri-Ann Jennings

• Everyone wants smooth, radiant skin.
• What you eat can bring you closer to that goal. While there's no magic food that whisks wrinkles or age spots away, the basics are simple. And chances are, you know them by heart.

Go for items that are naturally jammed with nutrients, like fruits, veggies, whole grains, nuts, fish, and other types of lean protein.

One large orange is an excellent source of vitamin C, which helps make collagen and helps keep your skin supple.

Change things up. Choose a variety of foods, so you get all the vitamins and minerals you need.

Think beyond the plate. Sleep, exercise, and sunscreen all count, no matter what you eat.

These seven foods are a great place to start.

Oats "I recommend complex carbohydrates like oats because they're low-glycemic," says Debra Jaliman, MD, author of *Skin Rules: Trade Secrets From a Top New York Dermatologist*. Low-glycemic foods don't spike your blood sugar the way refined breads, rice, and pasta can. "High-glycemic foods are known to cause acne and wrinkles," Jaliman says. Oats also have a natural plant chemical that helps prevent damage to skin cells and soothes irritation. *Also try:* other whole grains such as shredded wheat, barley, and brown rice.

Oranges These are loaded with water, so they hydrate your skin and your cells, says dietitian Elisa Zied, MS, RD, author



of *Younger Next Week: Your Ultimate Rx to Reverse the Clock, Boost Energy, and Look and Feel Younger in 7 Days*. One large orange is an excellent source of vitamin C, which helps make collagen—and that, in turn, helps keep your skin supple. In general, vegetables and fruits are great for your skin. Go for lots of colors so you get a variety of nutrients. *Also try:* pink grapefruit, tomatoes, and parsley.

Avocados These are filled with a healthy type of fat, monounsaturated fat, which helps your skin stay hydrated, Zied says.

continued on page 51

Dirty Secret

"An esthetician once showed me how to do pore extractions. Is it safe to do them on my own skin?"

No! Don't you dare! Pore extractions (physically pushing dirt and debris out of a pore or pimple) need to be done very carefully and with the proper technique and equipment by a trained professional. You have to know what to look for, what not to touch, and how much pressure to apply. If you try to do aggressive extractions on your own at home, you risk permanently stretching out your pores or even causing tiny divots in the skin called "ice pick" scars.

So, what's the better at-home alternative? Using an exfoliator a couple of times a week helps remove dead skin that piles up, clogging pores and making skin appear dull and dry.

Choose from two types of exfoliators based on your skin type. If you have sensitive skin, look for chemical exfoliants, including lactic acid, glycolic acid, and salicylic acid, which work by dissolving and loosening dead skin cells so that they easily fall off.

If you have normal skin, look for physical exfoliants, such as oatmeal or apricot scrubs, which work by using granules or other small particles to mechanically remove the dead cells on the surface of the skin.

Whitney Bowe, MD, assistant medical director, Laser & Cosmetic Services at Advanced Dermatology, NYC and Briarcliff Manor, N.Y.

Reviewed by
Stephanie S. Gardner, MD
WebMD Skin Care Expert



continued from page 47
That same healthy fat can also help you absorb some vitamins and nutrients that your skin needs. Try replacing high-fat salad dressings and mayo with avocado. *Also try:* olive oil, walnuts, and macadamia nut oil.

Lean beef Cuts such as top sirloin are a great way

to get high-quality protein, Zied says. Protein helps build collagen. Have a 2- to 4-ounce serving just two to three times a week, she says. Eat different kinds of lean protein on other days. When you cook beef, flip it often. “Cooking it over super-high heat until it’s crispy and charred creates chemicals



AISLE DO

PRODUCT PICK
Glytone Exfoliating Body Wash (\$32)

EXPERT
Chris Adigun, MD
dermatologist,
Chapel Hill, N.C.

“Anyone who has rough skin, especially those with keratosis pilaris, really needs to exfoliate and hydrate, but scaly skin makes it difficult for moisturizers to work. This body wash offers tremen-

dous results for smoothing out skin texture. I love it because it exfoliates without harsh scrubbing beads—it’s like a gentle peel for your body. The glycolic acid dissolves excess keratin without causing irritation. It’s safer than abrasive scrubs, so it’s very user friendly. If you have keratosis pilaris, you can use this every day. I use it just a couple times a week because it’s great at exfoliating my chest and legs—I even use it on my face.”



BEAUTY 411

What is the difference between a retinoid and a retinol?

They’re both derivatives of vitamin A that are well-documented anti-aging treatments especially effective at stimulating cell turnover and increasing collagen production. You’ll usually find retinol in over-the-counter products. Your skin absorbs retinol through an enzymatic process, converting it to retinoic acid. Because an extra step is required to convert retinol into retinoic acid, retinols are often less irritating to the skin. Retinoids, on the other hand, tend to be prescription treatments (such as Renova or Retin A) that contain retinoic acid, so there’s no extra step to convert the active ingredient. Prescription options have higher concentrations of retinoic acid.

Both options are safe for everyone except those with very sensitive skin and pregnant women, and are particularly useful for treating acne, wrinkles, and uneven pigmentation. Talk to your dermatologist before adding one to your routine to help minimize irritation and ensure the product won’t interfere with other active ingredients you’re using.

—**David H. McDaniel, MD**
dermatologist,
Virginia Beach, Va.

that will undo all of the anti-aging properties of the beef,” Zied says. *Also try:* eggs, chicken, tofu, beans, and fish.

Brussels sprouts These are a great source of the skin-friendly vitamins A and C as well as folate. Their vitamin C promotes collagen. And while you still need to use sun protection, vitamin A and folate may help prevent sun damage. If you remember Brussels sprouts with dread because you had them boiled when you were a child, try this: Oven-roast them with a drizzle of olive oil—you’ll find them much tastier. *Also try:* kale, collard greens, broccoli, and cauliflower.

Salmon This fish is one of the best ways to get healthy omega-3 fats in your diet. Some studies suggest that omega-3s, especially from fish, may keep skin cancer cells from growing and spreading. Aim for at least two 3-ounce servings of fish each week. Enjoy it grilled with a whole-grain side dish like brown rice or barley salad. *Also try:* flax and chia seeds, walnuts, mackerel, sardines, fortified milk, and eggs.

Grapes Resveratrol, which comes from the skin of grapes, counters inflammation, Jaliman says. “Many people think it slows the aging process, plus it may fight the effects of ultraviolet light and sun damage. But you still need to use sunscreen.” *Also try:* boiled peanuts, and cocoa powder.



Read **Weighing Your Toothpaste Options**, an article at WebMD.com.
LEARN HOW ON PAGE 4



YOUR SMILE

Stroke of Genius

YOU KNOW THE DRILL—BRUSH TWICE A DAY. BUT ARE YOU DOING IT RIGHT?

By Kara Mayer Robinson

● Is there a perfect way to brush your teeth? According to a study in the *British Dental Journal*, not all dentists are on the same page and many people get conflicting advice. Danielle Furgeson, RDH, MS, a clinical assistant professor of dentistry at the University of Michigan, helps clear up the confusion.

Choose the right tools. “You should always use either a soft or extra-soft toothbrush,” Furgeson says. “The size of the toothbrush should be what is comfortable for the size of your mouth, so that you are able to comfortably reach all the surfaces of your teeth.” Swap your brush for a new one every three to four months or when the bristles are frayed, whichever comes first.



Be gentle. “It is best to be slow and gentle, with very light pressure,” Furgeson says. “Too much pressure or quick scrubbing can damage your gums.” It’s also important to be gentle near spots where your gums have receded and the root of your tooth is exposed. “We often see what we call abrasion, where the exposed root surface appears scooped out from aggressive brushing,” Furgeson says.

Finish well. Think you should swish water around your mouth until every last bit of toothpaste is gone? Think again. Don’t rinse after you brush or you’ll lose the benefits of the fluoride, Furgeson says. And remember to floss at least once a day. Flossing between your teeth will remove plaque and reach food particles that your brush may have missed.

Avoid common mistakes. Many people brush too hard and do it too quickly. Another common mistake is missing the outer surfaces of the teeth that are in the very back of your mouth. But there’s an easy fix: Close your mouth slightly instead of opening wide. That makes your cheek more elastic so you can reach those far-back surfaces.

Don’t brush more than three times a day or you may damage your gums and root surfaces.

Choose a toothpaste with fluoride, which helps tooth enamel resist decay and fend off cavities. Tartar-control toothpaste helps prevent gingivitis, a gum disease that causes swelling and bleeding of your gums.

Time it right. Try to brush your teeth for two full minutes. Set your smartphone or an egg timer. Some electronic brushes have

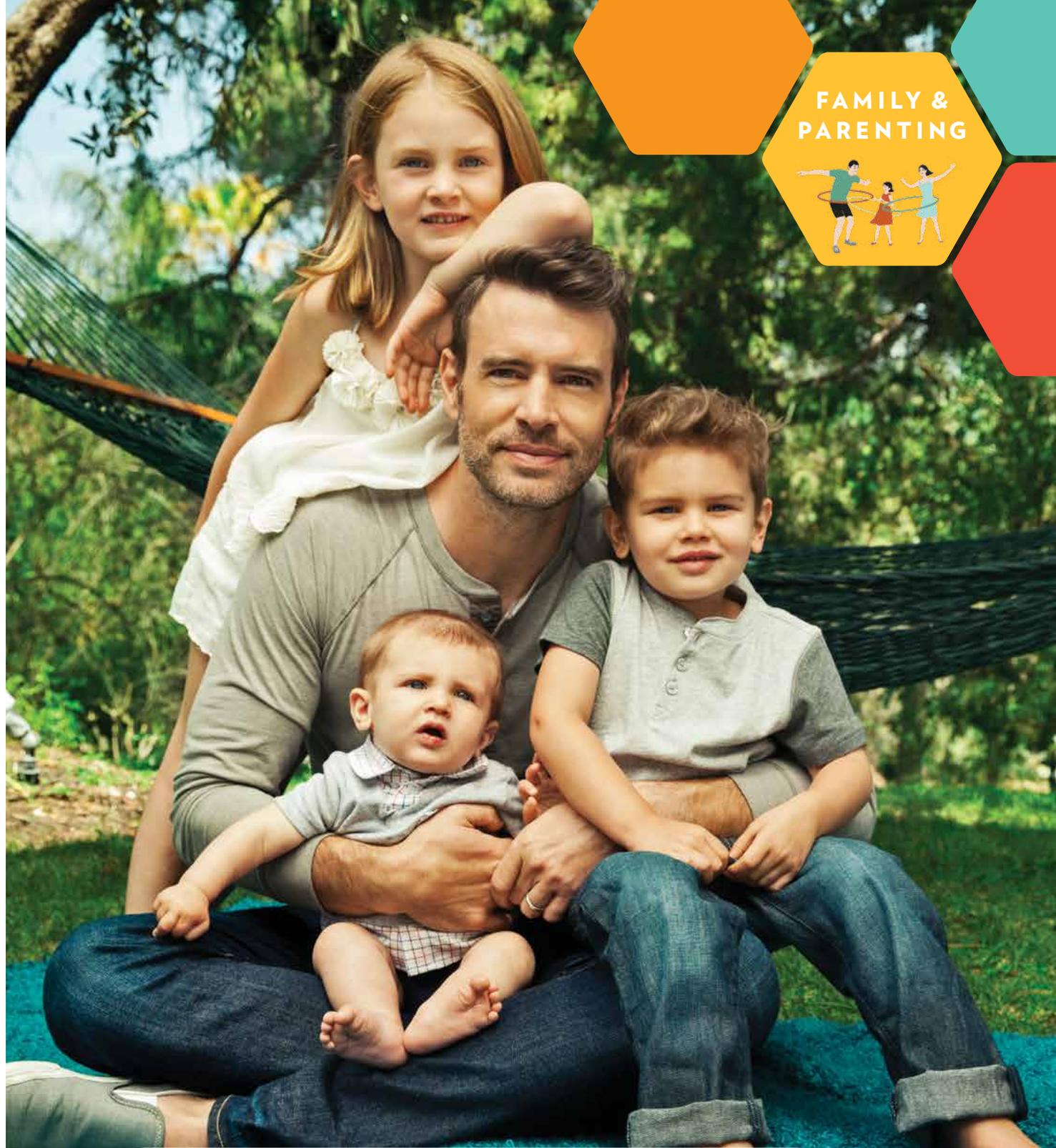
built-in timers. Brush at least twice a day—once in the morning and once before bed. But don’t brush more than three times a day or you may damage your gums and root surfaces.

Perfect your technique. As you brush, try to touch every part of each tooth with toothpaste. Remember to clean the outer, inner, and chewing surfaces. Don’t

forget to brush your tongue to get rid of bacteria and freshen your breath.

Try to keep your toothbrush at a 45-degree angle, except when you’re brushing the chewing surface of your teeth. You can also try the “roll method.” Place the bristles at a 45-degree angle, aiming toward your gum line. Then gently roll or sweep the brush toward the other end of the tooth. If you have a power toothbrush, don’t brush. Simply hold your brush in position and let it do its work.

Reviewed by
Eric Yabu, DDS
WebMD Oral Health Expert



PARENTING

Great Scott

By Stephanie Watson

As U.S. Navy Captain Jake Ballard on the hit ABC drama *Scandal*, actor Scott Foley has been imprisoned in a hole, framed for murder, stabbed in the gut, and caught up in a turbulent romance with crisis manager Olivia Pope (played by Kerry Washington). Raising three young children comes with its own set of dramas, but Foley relishes the time he spends with Malina, 6, Keller, 3, and Konrad, 1. The devoted dad says he'd readily pass up Hollywood's red carpets and glitz to spend quiet weekends at home with his wife, actor Marika Dominczyk, and their kids.



Scandal, now in its sixth season, airs on ABC on Thursdays.

● ● ● ***When you're in the middle of filming Scandal, how do you carve out time for family?***

I'm very fortunate in that we have a pretty large cast. In order to service all those characters, obviously we can't all be there every day. On most days, I can take my kids to school and put them to bed. But there are days when I'm gone before they're awake and back after they're asleep. Those days are tough.

What's family time like?

Weekends are my favorite time. I'm a pancake maker in the morning, and a quesadilla maker in the afternoon. We have a big property with a trampoline, and we're out all the time. We spend a lot of time together as a family.

How do you keep order with three young children in the house?

We are outnumbered. We've gone from man-to-man to zone defense with

the third kid. I wish I could say that I didn't yell, but you have to sometimes to talk over these kids. There are a lot of different things we do, from bribing to time-outs to television.

Being in the entertainment industry, how do you maintain a sense of normalcy for your kids?

I've been doing this for a long time—I've been through the ups and downs. And I know at this point what's real. The parties and the award shows and the photo shoots and all that stuff are just part of the game. It's not my real life. It's not something that my children are around, involved in, care about. I don't hide them from it. They see me on TV and we've had photo shoots at the house, but it's not anything that's important to them, and that's how I like it.

How has fatherhood changed you?

Before, everything I was doing was for a selfish reason—I want this part, I want to be on this show, I want people to know me. But now I want to make

sure my kids are taken care of, to make sure they have college funds, and to be a dad who is home on the weekends. These are important things to me. I think that's the biggest way—it's made me so much less selfish.

You're a spokesperson for Canine Companions for Independence.

Why is this organization so important to you?

They are an organization that trains and provides assistance dogs for people with disabilities. And they do it all free of charge. They've been around for 40 years. It's an amazing organization, and anything I can do to help them, I will.

And you have several pets at home, too?

I was raised with animals in my house, and I think animals and kids together are great. It's beneficial for both of them in so many ways. We have Frankie the dog and Stinky Joe the cat. We have some chickens. And we're going to get another dog so Frankie isn't quite as lonely.

Reviewed by
Hansa Bhargava, MD
WebMD Medical Editor



PREGNANCY

Mouth Matters

HORMONAL CHANGES CAN AFFECT ORAL HEALTH. WHAT EXPECTANT MOTHERS NEED TO KNOW

By Jodi Helmer

● Your healthy pregnancy regime includes prenatal vitamins and regular medical checkups. Don't forget to make an appointment with the dentist, too. "In the same way you get prenatal medical care, you should get prenatal dental care," says Andrea Ferreira Zandona, DDS, PhD, associate professor at the University of North Carolina School of Dentistry.

During pregnancy, certain physical and hormonal changes—including estrogen and progesterone levels—alter the way your gums react to the bacteria in plaque. This can lead to swollen, bleeding, or tender gums, a condition called pregnancy gingivitis. Left

cavities, Zandona says. Your dentist may recommend a more frequent and thorough brushing regimen during pregnancy.

Pregnancy also increases the risk of developing tumors called benign oral

Certain physical and hormonal changes alter the way your gums react to the bacteria in plaque.

untreated, gingivitis can advance to more serious gum disease. Research also links gingivitis to an increased risk of preterm birth and low birth weight.

A dental cleaning will remove plaque and reduce the risk of gingivitis and

lesions. These noncancerous growths form on the gums and cause bleeding and inflammation. They don't need to be removed unless they're painful; most will shrink or disappear after you give birth.

Morning sickness can also affect your oral health. "The acids in your stomach can erode the enamel in your teeth," Zandona explains.



ASK YOUR DENTIST

Do I need to make changes to my oral care routine? After your exam, your dentist may recommend more frequent brushing or flossing, or rinsing with baking soda and water to combat pH changes in your mouth.

Are there products or procedures I should avoid? While pregnant, you might want to refrain from some elective or cosmetic dental procedures, such as teeth whitening or veneers.

Is it safe to get dental care? If you have concerns about any treatments or procedures your dentist recommends, don't hesitate to request an explanation.

If you vomit, resist the urge to brush your teeth immediately; the acids combined with the pressure of your toothbrush could remove tooth enamel. Instead, rinse your mouth with water or a mixture of water and a teaspoon of baking soda (to lower the pH in your mouth) and wait a few minutes before brushing.

Practicing oral hygiene at home is a good start, but you also need to keep up with regular dental checkups during pregnancy. "A lot of women worry that dental treatments or X-rays will be harmful to their babies, but that's not true," Zandona says.

In addition to treating problems like gingivitis, plaque, or cavities, your dentist can help create a plan for oral health care throughout your pregnancy.

Reviewed by
Nivin C.S. Todd, MD
WebMD Pregnancy Expert



Check out **12 Ways to Help Your Infant Learn & Grow**, a slideshow at WebMD.com.
LEARN HOW ON PAGE 4

BABY TALK

Toy Story

DO ALL THOSE GADGETS HELP? HERE'S THE SCOOP ON WHAT BABIES REALLY NEED

By *Stephanie Watson*

The toy aisle of the average American retailer is a carnival of lights, color, and sound. Every shelf overflows with gadgets that flash, twirl, beep, spin, and play a symphony of kid-friendly tunes. But before you plunk down \$29.99 for a baby light-up cell phone or electric guitar, consider this: Does your child really need all those bells and whistles?

"No kid needs fancy electronic toys," says Roberta Golinkoff, PhD, the H. Rodney Sharp chair in the University of Delaware School of Education.

"Babies need sensory experiences where they can make things happen. And they like to do things over and over again."

Which means the pot and spoon from your kitchen cabinet will please your baby just as much as an expensive toy with flashing lights. In fact, the single greatest toy you can give your baby doesn't cost a thing, because it's you.

"Babies love interacting with humans," Golinkoff says. "Toys for the youngest kids really should be thought about as a platform for interaction with the adults in their lives." Talk to your baby. Sing songs, read books, and go for walks. Simply having fun together can do wonders for your

baby's emotional, cognitive, and social development, research shows.

When you do invest in toys, they should reflect your baby's developmental stage. In the first few months, infants are too young to grasp anything, but they love to look, Golinkoff says. Hang a brightly colored mobile over the crib, or a mirror for your child to gaze at his reflection.

By around 4 months, babies can grip toys. They also realize they can make things happen. Rattles, large colorful plastic keys, and



PLAY IT SAFE

ANY TOY YOU BUY SHOULD BE 100% SAFE. SOME TIPS:

Read the label to make sure it's age-appropriate.

Look for sharp edges and loose parts.

Watch for choking hazards—small parts that could get stuck in a baby's windpipe.

Use a small-parts tester or toilet paper tube to check that pieces are big enough.

Be sure any electronic toy you buy isn't too loud. Some toys can reach 90 decibels—as loud as a lawnmower and equally capable of damaging a child's hearing.

other toys that are easy to grab and shake are lots of fun. When your baby shakes the toy around, mimic her movements. "Babies love it when you imitate them," Golinkoff says.

Near the end of the first year, as agility and mobility improve, look for toys that stack (like blocks or rings), pull, or have buttons to push. The simpler the toy

the better, because the more your child has to do himself, the more it will stimulate his imagination.

During your visit to the toy store, don't forget the book aisle. Interactive stories entertain little fingers—and minds.

Reviewed by
Hansa Bhargava, MD
WebMD Medical Editor



Read **Dog Park Behavior and Etiquette Tips**, an article at WebMD.com.

[LEARN HOW ON PAGE 4](#)

PET HEALTH

Park Patrol

DOES YOUR DOG PLAY NICELY WITH OTHERS?
KEEP EVERYONE SAFE WITH THESE TIPS

By Jodi Helmer

● For some dogs, running off-leash and romping with their canine pals is a real treat. “Dogs are social creatures and like to play with other dogs,” says Susan Nelson, DVM, clinical associate professor at Kansas State University College of Veterinary Medicine. “A dog park is a great place for dogs to get some exercise and learn social skills.”

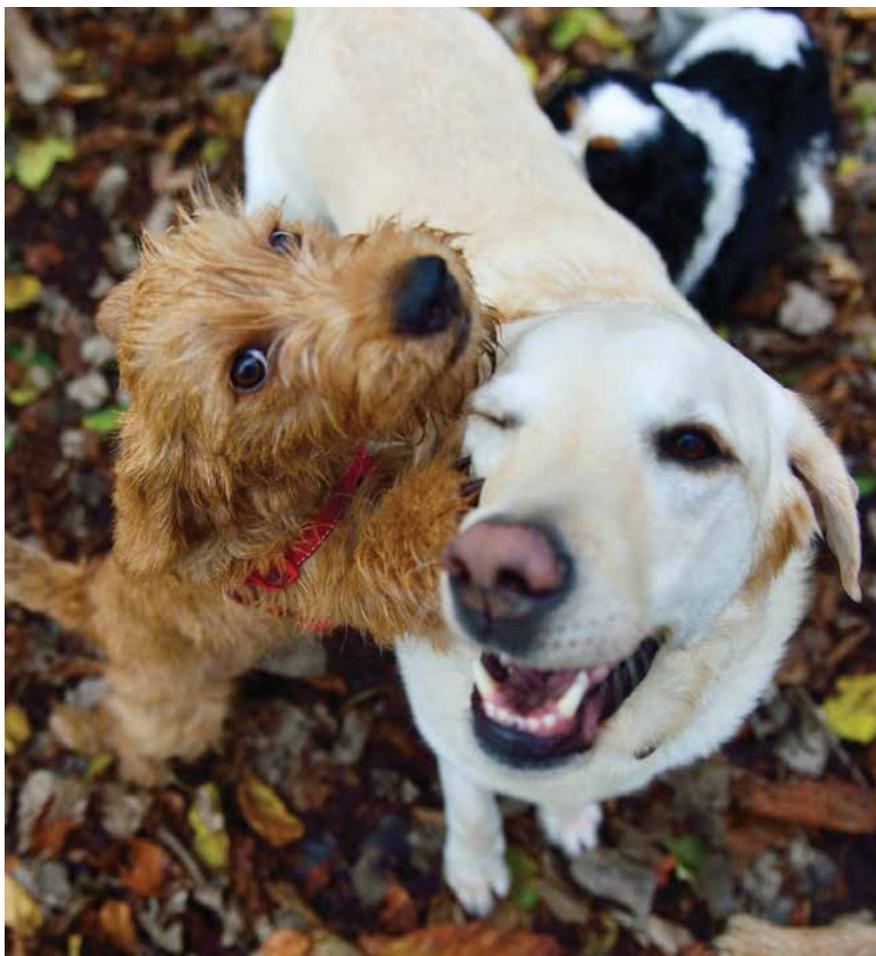
While you can easily find a dog park—more than 1,200 exist nationwide—make sure you know how to keep Fido safe before unclipping the leash.

For starters, Nelson suggests visiting a dog park solo to observe the dogs—and their owners—and decide whether

Consider the possibility that large dogs may see small breeds as prey, not playmates.

you’re comfortable with the interactions you observe. A park filled with aggressive dogs and inattentive owners is not the right place to take your pet for off-leash play, she says.

At the park, make sure the fencing is adequate. Dogs shouldn’t be able to jump over or scoot under fencing. Look for broken boards or jagged wires that could hurt your dog. Nelson also suggests sticking to dog parks with separate play areas for large and small dogs.



“A dachshund playing with a Lab could get hurt just because of the sheer difference in size; it’s safest to keep them separated,” she says. Consider the possibility that large dogs may see small breeds as prey, not playmates.

Remember, dog parks are meant for dogs that are well socialized. If your dog is aggressive or has issues with

“resource guarding” that could make him hostile toward another dog playing with a ball or Frisbee, the dog park is not the place to teach him to make friends or share his toys. Nelson suggests working with a trainer first to correct his behavior.

Nelson also warns against taking shy or nervous dogs to the park. “A fearful

Reviewed by **Will Draper, DVM**
WebMD Pet Health Expert

VLADIMIR ZAKHAROV/GETTY IMAGES

dog might bite,” she explains. “Or it could get to the park and cover behind its owner, which can be traumatic for the dog.”

Another good idea is to steer clear of the dog park if your female dog is in heat. In addition to the risk of an unplanned litter, nothing starts a dog fight faster than a group of male dogs vying for the attention of a ready-to-breed female.

To keep your dog from getting sick at the park, pick up his waste and bring a bowl for fresh water instead of letting him lap from the communal bowl (parasites can be transmitted through feces and shared water bowls). “Your dog is less likely to get sick if he’s not sharing a water bowl,” says Nelson.

The risk of illness is one of the biggest reasons to keep puppies out of the dog park. Puppies younger than 12 weeks old are not fully immunized and their young immune systems will struggle to fight common infections.

Remember to watch your dog—and the other dogs in the park—at all times. At the first sign of a problem, like growling, mounting, or other aggressive behavior that could escalate into a scuffle, call your dog over for a break. If the behavior continues, leave the park. “You have to be vigilant and try to stop problems before they begin,” Nelson says. “If there is a problem, be ready to intervene.”

In the event of a dogfight, be careful. “Do not get between dogs that are fighting,” Nelson says. Instead, she suggests throwing water on fighting dogs or using a stick (not your hands) to separate them. In case of an emergency, know the location of the nearest veterinary hospital.

“In general, dog parks are safe but you need to watch your dogs at the park just like you would watch your children on the playground,” Nelson says.



ASK YOUR VET

ADVICE FROM
SUSAN NELSON, DVM:

Is my dog up-to-date on vaccines? Your dog can encounter viruses and parasites at the park. Confirm he’s current on vaccines like rabies and distemper/parvo. Your vet might also recommend vaccinating against kennel cough, canine influenza, and leptospirosis. “Vaccinations will keep your pet from getting sick at the park,” Nelson says.

Also, make sure your dog is up-to-date on regular intestinal parasite prevention.

Does my dog have adequate protection against fleas and ticks? Ticks can lurk in grasses, and dogs and wildlife that frequent the park can transmit fleas. The best protection is keeping your pet up-to-date on flea and tick control. “Talk to your vet about which products work best in your area,” advises Nelson.

How can I prepare my dog for the park? “Some dogs are not dog park dogs,” Nelson says. If your dog is uncomfortable with other dogs, ask your vet to recommend a trainer.



KIDS' HEALTH

In the No

IS YOUR CHILD FUSSY ABOUT FOOD? HERE'S HOW TO TELL WHEN YOU SHOULD WORRY

By Gina Shaw

● Does your preschooler refuse to eat anything but chicken nuggets and ketchup? Is “I don’t like *that!*” the first thing you hear from your 6-year-old when you sit down to dinner?

A recent study from pediatricians at Duke University found that as many as 1 in 5 parents report that their preschool-aged children are “often” or “always” picky about food.

For some kids, however, “selective eating” can be more than just a phase and may be an early warning sign of other problems. The Duke study, published in the journal *Pediatrics* last fall, found that selective eaters are significantly more likely to have increased levels of anxiety later on.

So how can you tell when your child’s dinner-table dramas are likely to pass—or when you should be concerned? Dietitian/nutritionist Jill Castle, RD, LDN, co-author of the book *Fearless Feeding: How to Raise Healthy Eaters From High Chair to High School*, points out a few signs to watch for.

Weight loss or nutritional deficits “If your child eats more than about 20 different foods, and is willing to eat *something* from all the different food



groups—maybe he only eats apples and bananas, but he’s getting fruit—things are probably fine,” Castle says. When a child doesn’t gain weight appropriately or avoids whole food groups, seek professional advice.

Increasing levels of anxiety about food Does your child frequently worry about what she can eat outside the home, or express anxiety about going to events like birthday parties because there might not be foods she can eat? That’s a red flag.

Physical difficulty eating Children commonly

“chipmunk” food—holding a food they don’t like in their cheek to avoid swallowing it. “But if a child is consistently gagging, choking, or spitting out food, that’s cause for concern,” Castle says. “There may be underlying medical issues, like a hyperactive gag reflex, sensory processing issues, or food allergies that made eating unpleasant early in life.”

Pressuring a child with food issues to eat almost never works, Castle warns. “You want them to come to the table and feel happy, not expecting a battle.”

TABLE TOPICS

URGING KIDS TO “JOIN THE CLEAN PLATE CLUB” CAN BE COUNTERPRODUCTIVE, SAYS CAROLINE KAUFMAN, MS, RDN, WHO BLOGS ABOUT CHILDHOOD NUTRITION. INSTEAD:

Always have something on the table that you know your child will eat.

“Even if it’s just bread and butter, that builds security for the child. Put out newer foods as an exploration,” Kaufman says.

Try a “learning plate.”

Put new foods on a separate plate from your child’s main meal. Let her touch the food, put it in her mouth, and take it out.

Offer newer foods at the beginning of the meal, when children are hungriest. If they wander in a little early, and raw vegetables with ranch or hummus dip are sitting on the table, that’s when they’re more likely to try those things.

Present foods in different ways. Maybe your child doesn’t like the crunchy texture of raw carrots but will eat cooked carrots—or the other way around.

Don’t make food a reward or a punishment, and don’t praise kids for what or how much they eat. “Kids shouldn’t be thinking of eating and food as a way to please parents,” Kaufman says.

Reviewed by
Roy Benaroch, MD
 WebMD Kids’ Health Expert

WebMD[®] Allergy

Take Control of Your Allergies.

- Helps you to control your allergy symptoms by showing you the trigger levels in your area before you start the day.
- Prepares you for each day with personalized allergy and weather forecasts.
- Includes: Timely Alerts, Allergy Forecast, Allergy 101, Personalized Content.





By Kara Mayer Robinson

LESSONS

When singer **Christina Aguilera** let the genie out of the bottle, she introduced the world to an extraordinary sound. Now she's the voice of a generation—and for a good cause. The ambassador for the U.N. World Food Programme and mom of two speaks out about why children should never go hungry. She also opens up about domestic abuse and how she found strength in song.

Christina Aguilera has a MAJOR set of pipes.

Major. Just listen to the pop megastar's Grammy-winning song "Beautiful" and try not to be blown away. Or ask legendary songstresses Celine Dion and Patti LaBelle. Both point to Aguilera as one of the greatest voices of her generation.

The 35-year-old singer-songwriter doesn't just use her outsize talent to project lyrics or to coach hopefuls on *The Voice*, NBC's Emmy-winning singing competition. She also fires up her vocal cords to inspire others to get involved with good causes—like stamping out world hunger.

As spokesperson for Yum! Brands World Hunger Relief and ambassador against hunger for the United Nations World Food Programme (WFP), Aguilera makes public service announcements, urges people to be part of the solution—donate just \$1 to WFP and you'll feed four children—and visits countries like Haiti, Ecuador, and Rwanda to help deliver food to women and children.

Trekking to remote areas of developing countries can be gut-wrenching, Aguilera says. "In the refugee camps in particular, the stories that you hear—the escapes and the children that sometimes get left behind. In some of these remote places, women have multiple children and no means to feed them. I've even seen cases where they have to decide which one goes hungry. That's just not a way that anybody should live."

For the mother of two—son Max Bratman is 8, daughter Summer Rain Rutler is 1—seeing women and children struggle strikes a nerve. "We

worry about our children having good opportunities at school, we worry about making sure they're passionate in life, that they have a fire and have goals for themselves. One of the last things we think about is, 'Where is their next meal coming from?'" Aguilera says.

Nearly 800 million people struggle with hunger every day. Many are children.

Without proper nutrition, a child is more likely to have poor health and problems with brain development. "As adults, they're at a higher risk of diabetes and heart disease," says

Sarah Jane Schwarzenberg, MD, an executive medical director at the University of Minnesota Masonic Children's Hospital. The stress of being hungry can lead to anxiety and depression.

"There's even some hint that people who have food insecurity have a higher risk of suicide," Schwarzenberg says.

Aguilera believes world hunger is a solvable problem. So does WFP. It's striving for zero global hunger by 2030. "Two-hundred million people across the world have been lifted out of hunger,"

says Ertharin Cousin, WFP's executive director. Zero hunger is absolutely achievable, she says, but requires more momentum. (You can join the effort by visiting HungertoHope.com or texting "WHR" to 90999.)

STRENGTH IN SONG

Aguilera is also outspoken in her music, using her lyrics to shed light on social issues and to inspire people to find strength. In "I'm OK" and "Oh Mother," she alludes to domestic violence, an issue she knows personally. Aguilera oozes confidence today, but she wasn't always so self-assured. She has been through her share of dark times.

When she was a child, Aguilera's father abused her mother. Domestic violence was happening all around her, she says, in friends' families and communities where she lived. Her home environment felt unsafe and chaotic. Music became her haven. "That was my escape, my form of relief," she says.

It was also a path to empowerment. "It became my dream to get myself out of a situation and not repeat the same steps that my mom did—in marrying a man,

relying on that to be a happy ending, and having the fairy tale," she says. "I wanted to be a strong woman

**EVERY DAY,
795 MILLION PEOPLE
suffer from chronic hunger.
That's 1 in 9 people.**

**EVERY YEAR,
3.1 MILLION CHILDREN
under 5 die
from hunger.**

Source: United Nations

**HUNGER
is most prevalent in
developing countries,
particularly in
Southern Asia
and sub-Saharan
Africa.**

Source: United Nations

**It's an issue
in the U.S. too, with
14% of households
unsure if they'll
have enough food
every day.**

Source: Sarah Jane Schwarzenberg, MD





Read **Finding True Beauty in Yourself and Others**, a blog post at WebMD.com.

LEARN HOW ON PAGE 4

and never have to rely on a man for that strength and that confidence.”

At 12, Aguilera was on her way. First she nabbed a big win on the TV talent competition *Star Search*. Then she scored a role on Disney Channel’s *The All New Mickey Mouse Club*. Disney used her song “Reflection” for the movie *Mulan*, which was near-universally adored. Soon after, she landed a record deal with RCA.

But she found the music industry a challenge. She struggled to feel comfortable in her skin, find her identity, and assert herself. As she rose through the ranks, she grappled with issues of sexism and gender inequality, often finding herself in a sea of older men, some of whom tried to take advantage of her behind closed doors. “There were definitely times where I felt very uncomfortable in certain situations with older men,” she says. “You have to learn very quickly to set your boundaries and your standards.”

The experience was disheartening for Aguilera, who says she doesn’t like to “stand aside and just let a man dictate what we should wear, how we should speak, have an opinion but not too much of an opinion, be sexy but not too sexy.” But it was also during these years that she found her voice.

In the beginning, Aguilera went along with what her management and record label wanted. Her first album, *Christina Aguilera*, released in 1999, was a reflection of their ideas, not hers. But

with hit songs like “Genie in a Bottle” and “What a Girl Wants,” it quickly climbed to the top of the charts, making Aguilera a breakout star.

She was grateful for the success, but was at a crossroads. The bubblegum pop of her debut album wasn’t the music she wanted to make. She longed for songs that resonated with her personally, like the powerful “Beautiful.” “I had to make the choice. Do I venture away from straight cookie-cutter pop music and listening to exactly what my label wants to do and emulate what’s popular? Or do I go against the grain and make a record that speaks to me?”

She chose the latter. For her next album, *Stripped*, she dove headfirst into music that spoke to another side of her—less pop, more edge. She also revealed a new look, morphing from girl next door to provocative, sultry “Xtina.” Whether the album sold one or 1 million copies didn’t matter, she says, because she was doing it for herself.

To say it worked out well is an understatement. *Stripped* led to a Grammy award and catapulted her to international stardom. Next came *Back to Basics*, which debuted at No. 1. She went on to win five Grammys, sell 43 million albums, and help launch *The Voice*.

Aguilera credits her success to tapping into her inner strength, even in hard times. “It’s an innate fight-or-flight mode, really, that I think starts when you’re young,” she says. “You’re either going to thrive from a really hard situation or a tough upbringing, or you’re going to crumble from it.”

She has consistently chosen fight over flight in her life and career. Facing her turbulent childhood created a platform to speak out about domestic abuse. Confronting the

PEOPLE WHO ARE HUNGRY MAY be kids who dress well and live in nice houses, whose parents have trouble paying the mortgage and putting healthy food on the table.

Source: Sarah Jane Schweitzerberg, MD

Children who are hungry are more likely to have poor health, get sick, and be hospitalized.

Source: United Nations

CHRISTINA’S Healthy Habits

MASSAGE

“A good massage is everything. Whether it’s your partner or a day at the spa, touch can be so relaxing.”

HOT BATHS

“I love a wonderful hot bath at the end of the day—with some amazing bath oils, eucalyptus, bath salts, bubbles, anything—just to make you feel pampered and delicious for a second.”

YOGA

“Yoga is a huge, huge de-stresser for me. It also helps me align my body and my posture and keeps me connected to everything around me.”

ACUPUNCTURE

“I suggest getting some treatments here and there, for wellness and balance. Certain pressure points in the body help you sleep better.”

CARDIO

“I love going for amazing long walks around my neighborhood, which is very hilly, so it’s quite the workout.”

Hungry kids have a higher risk of emotional and behavioral problems, poor school performance, and high levels of stress.

Source: United Nations/Sarah Jane Schweitzerberg, MD



Adults who have hunger issues are more likely to have health problems like heart disease and diabetes.

Source: United Nations

challenges of the music industry empowered her to express herself. “You have to embrace darkness in order to find your light,” she says. “With your darkness come your insecurities and fears and some really sad moments, but it’s OK to cry to get through those hard times.”

EMBRACING HER PASSION

Today, Aguilera’s life is undeniably good. She’s amped up about releasing a new album this year, and her family life is rock solid. She lives with her kids and her fiancé, Matthew Rutler, in Beverly Hills, Calif. Aguilera says she and Rutler have a stable, secure relationship, and she’s proud she didn’t repeat the cycle she grew up with.

They have a lot of fun as a family, she says, like monthly visits to Disneyland. (Yes, monthly.) When there’s downtime, she likes to whip out her Wii U or thumb through Pinterest. She also basks in moments when she can “just be a mom in sweatpants, cozy and relaxing together.”

Aguilera and Rutler haven’t penciled “wedding” onto their calendars just yet. “I’ll be honest—music right now is so important to me. I have incredible things bubbling and boiling in the creative pots. It’s an exciting time for me,” she says,

adding that she’s adamant about finishing her album first. So the wedding festivities will wait.

Pursuing her music also helps

Aguilera teach Max and Summer to embrace themselves and their passions. “It’s important to me to show my kids hard work and that Mommy has a passion. Music is my passion. This is my love, this is my expression,” she says. “Hopefully it will inspire them to be expressive—and to use their own voices.”

Reviewed by
Hansa Bhargava, MD
WebMD Medical Editor

ROBB DIPPLE/HILTON MEDIA GROUP

Does what you eat affect depression and anxiety? New research and a new area of study—food psychiatry—explore the connection between food and mental health

By Kelli Miller
Photography by C.J. Burton

THE FOOD- MOOD LINK



What's for dinner?

The question now pops up in an unexpected place—the psychiatrist's office.

More research finds that a nutritious diet isn't just good for the body, it's great for the brain, too—which leads to a new concept called nutritional (or food) psychiatry.

"Traditionally, we haven't been trained to ask about food and nutrition," says psychiatrist Drew Ramsey, MD, an assistant clinical professor at Columbia University. "But diet is potentially the most powerful intervention we have. By helping people shape their diets, we can improve their mental health and decrease their risk of psychiatric disorders."

Nearly 1 in 4 Americans has some type of mental illness each year. The CDC says that by 2020, depression will rank as the second-leading cause of disability, after heart disease. And it's not just a problem for adults. Half of all long-term mental disorders start by age 14. Today, childhood mental illness affects more than 17 million kids in the United States.

Recent studies show "the risk of depression increases about 80% when you compare teens with the lowest-quality diet, or what we call the Western diet, to those who eat a higher-quality, whole foods diet. The risk of attention deficit disorder (ADD) doubles," Ramsey says.

NEW FIELD OF RESEARCH

Just five years ago, the idea of nutritional psychiatry barely registered a blip on the health care radar. A few studies examined how certain supplements (such as omega-3 fatty acids) might balance mood. But solid, consistent data appeared to be lacking.

Now, health experts say many well-conducted studies have since been published worldwide pointing to a link between diet quality and common mental disorders—depression and anxiety—in both kids and

adults. In the next few months, researchers plan to publish the results from the world's first randomized controlled trial showing how diet changes can help treat major depression.

"A very large body of evidence now exists that suggests diet is as important to mental health as it is to physical health," says Felice Jacka, PhD, president of the International Society for Nutritional Psychiatry Research. "A healthy diet is

protective, and an unhealthy diet is a risk factor for depression and anxiety."

Researchers are also interested in a possible role food allergies may play in schizophrenia and bipolar disorder, she says. Animal studies suggest a ketogenic diet—one high in fat and low in carbs—might help those with schizophrenia as well, but clinical trials in humans are still a long way off.

So far, nearly all research involving eating habits and mental health has focused more on depression and anxiety. And no direct evidence yet shows that diet can improve depression or any other mental disorder, although the new trial results could be the first to change that.

For now, experts caution that while diet can be part of a treatment plan, it shouldn't be considered a substitute for medication and other treatments.

"WE ARE WHAT WE EAT"

Here's what researchers do know about how diet may play a role in mental health: What you eat affects how your immune system works, how your genes work, and how your body responds to stress. Some of the specific findings include:

Diet is crucial for brain development. "We are, quite literally, what we eat," says Roxanne B. Sukol, MD, preventive medicine specialist at Cleveland Clinic's Wellness Institute. "When we eat real food that nourishes us, it becomes the protein-building blocks, enzymes, brain tissue, and neurotransmitters that transfer information and signals between various parts of the brain and body."

Nutritious food puts the brain into growth mode. Certain nutrients and dietary patterns are linked to changes in a brain protein that helps increase connections between brain cells. A diet rich in nutrients like omega-3s and zinc boosts levels of this substance.

On the other hand, "a diet high in saturated fats and refined sugars has a very potent negative impact on brain proteins," Jacka says.

Mood-Boosting BITES

Want to build a better brain and even improve your mood? The key is to choose foods that pack as many nutrients in as few calories as possible, says psychiatrist Drew Ramsey, MD. Nutrients that might be particularly helpful include:

B vitamins People with low B12 levels have more brain inflammation and higher rates of depression and dementia. Falling short on folate has long been linked to low moods. Mustard greens are the top nutritional powerhouse when it comes to these brain-boosting vitamins that keep your memory sharp.

Iron Research links too little iron in the blood (iron-deficiency anemia) to depression. Quick picks for upping your iron are a spinach salad or lean steak.

Omega-3s These healthy fatty acids improve thinking and memory and, possibly, mood. If you or your child plays sports, these nutrients are especially important. Growing evidence suggests omega-3s may help protect brains from concussions and other traumatic brain injuries, which have been linked to mental health conditions, including depression.

Both depression and concussion rates are soaring among kids. "Diet can have a significant impact on traumatic brain injury, both in the role of potentially preventing injury or at least increasing the resilience of the brain to withstand injury and in recovery when an injury does occur," says Michael Lewis, MD, MPH, founder of the Brain Health Education and Research Institute. Your body's best bet for these must-have nutrients is cold-water, fatty fish, such as salmon, tuna, mackerel, cod, and anchovies.

Zinc This nutrient helps control the body's response to stress. Low levels can cause depression. A great source is oysters: They pack 500% of your daily need for zinc but have just 10 calories apiece. Mussels, rich in brain-healthy selenium, are also a good choice.

Reviewed by Brunilda Nazario, MD
WebMD Lead Medical Editor



Some foods fill the gut with healthy bacteria. And that's good for the brain. Trillions of good bacteria live in the gut. They fend off bad germs and keep your immune system in check, which means they help tame inflammation in the body. Some gut germs can even help make brain-powering B vitamins.

"A healthier microbiome is going to decrease inflammation, which affects mood and cognition," Ramsey says.

Foods with beneficial bacteria (also known as probiotics) help maintain a healthy gut environment.

A high-fat or high-sugar diet is bad for gut health and, therefore, your brain. Some research hints that a high-sugar diet worsens schizophrenia symptoms, too.

Certain foods may play a role in the cause of mental disorders, or they may make symptoms worse. A nutritious brain diet follows the same logic as a heart-healthy regimen or weight-control plan. You want to limit sugary and high-fat processed foods, and opt for plant foods like fresh fruits, vegetables, and whole grains. Swap butter for healthy fats like olive oil, too. In other words, try a Mediterranean diet.

It's "an ideal diet for physical and mental health," Jacka says. Recent results from a large trial in Europe show that such an eating plan may even help prevent, and not just treat, depression.

Also, fermented foods such as kefir, sauerkraut, kimchi, and yogurt with live active cultures, which provide good gut bacteria, may help reduce anxiety, stress, and depression. Fatty fish like salmon and mackerel provide omega-3 fatty acids, vitamin B12, zinc, selenium, and other brain boosters. And dark chocolate has antioxidants, which increase blood flow to the brain, aiding mood and memory.

Unfortunately, the Western diet is "extremely low" in these nutrients, Ramsey says. He's working on a new tool called the Brain Food Scale to provide a quick look at the nutrient-to-calorie relationship.

HOW DIET CAN HELP NOW

Meanwhile, for those living with a mental health condition, diet can play a role. "No matter where you are on the spectrum of mental health, food is an essential part of your treatment plan," Ramsey says. "If you are on medications, they are going to work better if you are eating a brain-healthy diet of nutrient-dense foods."

Ramsey recommends asking your doctor about what you *should* eat—not just what you shouldn't. He hopes that one day a simple five-minute food assessment will become part of every psychiatric evaluation.

Nutritionists like the idea. "More psychiatrists need to recognize the nutritional-mental health connection," says Michelle Schoffro Cook, PhD, a member of the International Organization of Nutritional Consultants. "We can have so much power over our mental health using food and nutrients."





IN SEASON

Green Light

By Erin O'Donnell

Recipes by Kathleen Zelman, MPH, RD, LD

Happy spring! It's time to shake off winter and freshen up your plate with tasty, tender salad greens. If the cold months left you with extra pounds, low-calorie greens can help. "We find that salads are great fillers that just really satisfy your appetite," says Elisabetta Politi, MPH, RD, LDN, nutrition director at the Duke Diet and Fitness Center in Durham, N.C. Consider that a cup of shredded romaine contains a mere 8 calories but 82% of an adult's daily value for antioxidant vitamin A and 20% of the daily value for immune-protective vitamin C. And because we often eat salad greens with other healthy ingredients (think tomatoes, beets, avocados), they're an easy way to boost your veggie intake. Politi recommends super-charging salads with dark greens such as spinach, arugula, and kale. Turn over a new leaf this spring with our recipes on the next page.

Lettuce is the third-most-popular vegetable in the United States, after tomatoes and potatoes.



Meat Up

This hearty salad offers meat lovers a taste of flavorful steak without going overboard. Use a lean cut such as filet mignon, flank steak, or top loin.

Arugula Steak Salad With Peppercorn Dressing

Makes 6 servings

Ingredients

Dressing

- ½ cup low-fat buttermilk
- 1 tbsp mayonnaise
- ½ tsp sherry vinegar
- ½ tsp finely minced garlic
- ½ tsp cracked black pepper, or more to taste
- ¼ tsp kosher salt

Salad

- 4 cups baby arugula
- 2 cups watercress
- ½ red onion, thinly sliced
- 18 cherry tomatoes
- 1 medium red pepper, thinly sliced
- 1 medium yellow pepper, thinly sliced
- 1½ lbs lean steak, with fat trimmed
- ¼ cup crumbled blue cheese

Directions

1. Combine dressing ingredients in a small bowl. Whisk until blended.
2. In a large bowl, combine lettuces, onion, cherry tomatoes, and peppers. Toss with a small amount of dressing. Divide evenly onto 6 plates.
3. Grill steak over medium-high heat until medium rare, about 5 minutes per side, depending on thickness. Slice crosswise into thin slices.
4. Arrange steak atop salad on each plate. Garnish with blue cheese. Serve immediately.

Per serving

343 calories, 25 g protein, 7 g carbohydrate, 23 g fat (10 g saturated fat), 80 mg cholesterol, 2 g fiber, 4 g sugar, 276 mg sodium. Calories from fat: 61%

Reviewed by
Hansa Bhargava, MD
 WebMD Medical Editor

BREAKFAST 411



Toast: This once humble breakfast food now enjoys new levels of hipness. Fancy toast is popping up on menus across the country—from brioche with ricotta and homemade jam to rye with hardboiled eggs and Gruyère.

Why the buzz around toast? Joshua McFadden, the Oregon chef behind Portland's Roman Candle, a bakery café with seven varieties of toast on its breakfast menu, says toast is "a wonderful vehicle with endless possibilities." Get the best quality, 100% whole grain bread you can find, then try these toppings:

- **Avocado:** McFadden likes his with a squeeze of lemon juice, sprinkle of salt and pepper, and pickled chili.
- **Egg salad:** Make a breakfast-worthy egg salad by mashing hard-boiled eggs with lemon and olive oil. Top with arugula or a slice of bacon.
- **Bee pollen:** At Roman Candle, McFadden gussies up buttered toast with honey, bee pollen, and salt.
- **Smashed beans:** Heat garbanzo beans with garlic and chili powder. Mash with lemon juice and olive oil and top your toast.
- **Smoked salmon:** Cream cheese and lox works as well on toast as it does on bagels.

—**Kerri-Ann Jennings**

Wrap Star

Is it a salad? Or a sandwich? These wraps manage to be a hybrid of the two. They make a healthy light lunch and pair well with a bowl of soup for dinner. The recipe calls for bibb lettuce, but any variety with large, soft leaves will work.

Salmon Lettuce Wrap With Asian Dipping Sauce

Makes 6 servings

Ingredients

Dipping sauce

- 2 tbsp low-sodium soy sauce
- 3 tbsp hoisin sauce
- 2 tbsp rice vinegar
- 1 tsp sesame oil
- 2 tsp finely grated ginger
- 1 large garlic clove, finely minced

Wraps

- 3 (6 oz) salmon fillets
- 12 large bibb lettuce leaves, washed and dried
- ½ cups cooked brown rice or barley
- 1 small jicama, peeled and sliced into matchsticks (about 1 cup)
- 1 cup shredded carrots
- ½ lb pea pods, diagonally sliced (about 1 cup)
- 6 green onions, diagonally sliced
- chopped peanuts (optional)

Directions

1. In a small bowl, whisk together dipping sauce ingredients. Set aside.
2. Heat a large nonstick grill pan over medium-high heat. Coat pan with cooking spray. Add salmon and grill 4–5 minutes per side or until firm and flaky.
3. Top each lettuce leaf with brown rice (or barley), salmon, jicama, carrots, pea pods, and green onions. Roll up each leaf, and place seam-side down on a serving dish. Garnish with peanuts if desired. Serve immediately with dipping sauce.

Per serving

292 calories, 21 g protein, 22 g carbohydrate, 13 g fat (3 g saturated fat), 46 mg cholesterol, 4 g fiber, 5 g sugar, 373 mg sodium. Calories from fat: 39%

Americans eat almost 11 pounds of leaf lettuce per person per year.

Including a little fat in your salad—olive oil dressing, nuts, avocado—helps your body absorb the beta carotene contained in the greens.



Kale Storm

Kale salads (unlike those made with lettuce) keep well in the refrigerator for several days. Tossing the leaves with lemon dressing helps break down the tough fibers. Allow the salad to stand at least 5 minutes before serving to ensure that it's tender.

Lemony Kale Salad

Makes 6 servings

Ingredients

Vinaigrette

- 2 tbsp fresh lemon juice
- 2 tbsp apple cider vinegar
- 4 tbsp extra virgin olive oil
- 1 shallot, finely minced
- 1 tsp honey
- ¼ tsp kosher salt
- freshly ground black pepper to taste

Salad

- 1 large bunch kale (about 1 lb), ribs removed and thinly sliced (try lacinato kale—also known as dinosaur or Tuscan kale)
- ½ cup fresh or frozen shelled edamame
- 1 cup shredded carrots
- 1 large Granny Smith apple, peeled and julienned
- 2 tbsp unsalted pumpkin seeds
- 2 oz shaved pecorino cheese

Directions

1. In a small bowl, whisk together vinaigrette ingredients. Set aside.
2. In a large bowl, toss together kale, edamame, carrots, and apple.
3. Add vinaigrette to salad and toss thoroughly. Let stand at least 5 minutes.
4. Garnish salad with pumpkin seeds and cheese just before serving.

Per serving

206 calories, 7 g protein, 17 g carbohydrate, 14 g fat (3 g saturated fat), 3 mg cholesterol, 3 g fiber, 6 g sugar, 212 mg sodium. Calories from fat: 58%

WebMD.com

What's Cooking!

Thousands of people turn to WebMD.com for meal inspiration every day. Here are the most-clicked recipes.*

Apple-Spiced Pork Roast

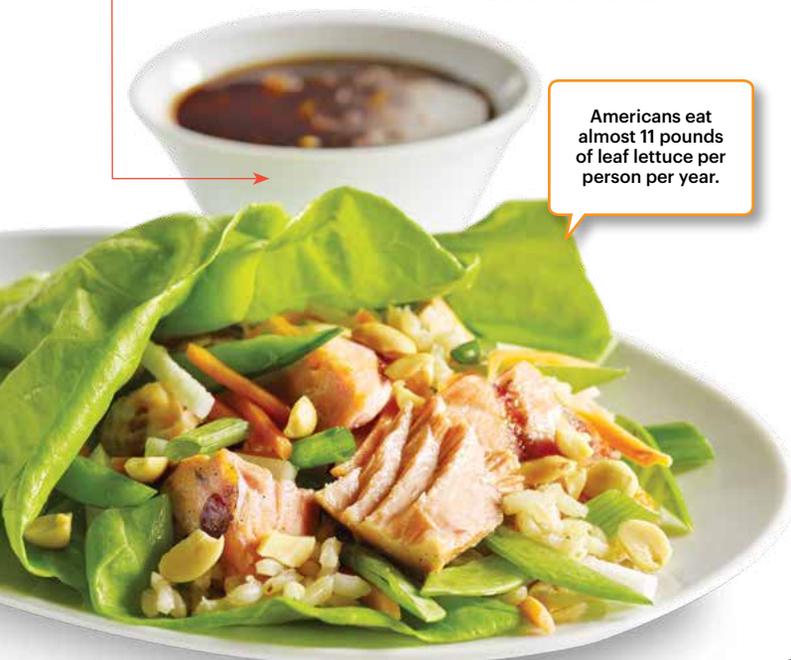
Lemon Dill Chicken

Chicken and Rice Soup

Sichuan Chicken With Peanuts

Spinach and Tomato Soup

*as of Jan. 1, 2016





Craving more recipes? Sign up for **The Daily Bite** newsletter at WebMD.com.

[LEARN HOW ON PAGE 4](#)

OFF THE MENU

Marcus Samuelsson

CHEF, RESTAURATEUR, AUTHOR

By Matt McMillen

Chef Marcus Samuelsson has had many homes. Born in Ethiopia, he was raised in Sweden by his adoptive parents. He now lives with his wife in Harlem, N.Y., and owns restaurants around the world, from Harlem's Red Rooster and Marc Burger (Chicago and Southern California) to Norda in Gothenburg, Sweden. His palate ranges as widely as his restaurant empire, as do the dishes he prepares for friends and family. His latest cookbook, *Marcus Off Duty: The Recipes I Cook at Home*, celebrates those meals.

"A simple, satisfying meal at the end of a busy day or what you make on the fly when friends show up are some of my favorite things to eat," says Samuelsson, 46. "At home, you grab whatever you're

feeling, and that kind of fun, spontaneous cooking is what I wanted to share in the book."

His salmon with dill recipe (right) is the Swedish equivalent of American meatloaf, while his doro wat tostados are a playful pairing of a traditional Ethiopian chicken stew and Latin street food. Other entries include a South African curry, a Vietnamese sandwich, fish tacos, and rib-eye steaks rubbed with coffee and chocolate.

"I love to travel and discover new flavors, walk the streets wherever I am and taste, taste, taste," says Samuelsson, winner of multiple James Beard awards. "I'm inspired when I am at a new table, whether that's at a friend's home or in an amazing restaurant."

"I love to travel and discover new flavors, walk the streets wherever I am and taste, taste, taste."

Samuelsson may run kitchens worldwide, but he's not always at the stove at home. His wife, Maya, also born in Ethiopia, dazzles him with the dishes that she prepares. "She's an amazing cook, especially Ethiopian home cooking," he says. "I like to be her sous chef. I learn a lot. I still can't figure out why her doro wat is better than mine."

When not in the kitchen or looking for inspiration at a farmers market, he's often walking or taking a morning run. "But the best is when I can play soccer with my friends. I try to make that happen as much as possible."

Reviewed by **Hansa Bhargava, MD**
WebMD Medical Editor



Dill-Spiced Salmon

Makes 4 servings

Ingredients

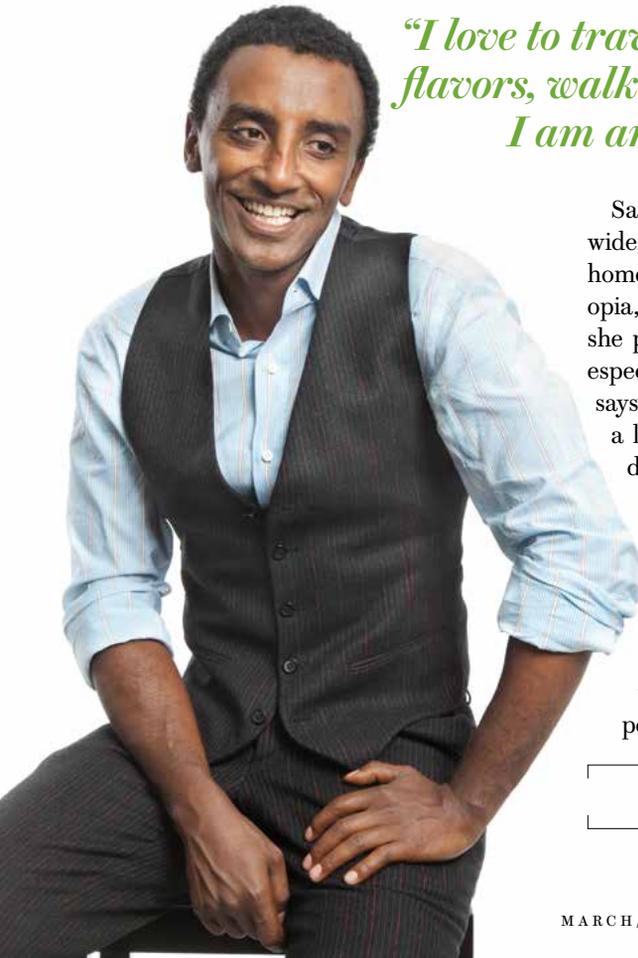
- 4 tbsp olive oil
- juice of 1 lemon
- 1 tbsp Dijon mustard
- 2 tbsp chopped fresh dill
- 2 garlic cloves, thinly sliced
- 4½ tsp chili powder
- 1 tbsp coriander seeds, finely ground
- 1 tsp cumin seeds, finely ground
- freshly ground black pepper
- 4 (6-oz) skin-on salmon fillets
- kosher salt
- 1 tbsp unsalted butter

Directions

1. In a mini food processor, blend 2 tbsp of the olive oil, the lemon juice, mustard, dill, garlic, chili powder, coriander, cumin, and ¼ tsp pepper into a paste. Transfer the paste to a bowl.
2. Season the salmon fillets with salt and pepper.
3. Heat the remaining 2 tbsp olive oil in a large skillet over medium-high heat. When it shimmers, add the salmon fillets, skin side down, and brush half the paste on the fillets. Cook 4 minutes, then add the butter. Continue to cook, spooning the oil and butter over the salmon, for 2 minutes. You'll see the color changing as the salmon cooks from the bottom. Flip the salmon and brush the remaining paste onto the other side. You just want the heat to kiss the salmon on this side, so take it out after a few seconds. Let the salmon rest a few minutes before serving.

Per serving

381 calories, 34 g protein, 2 g carbohydrate, 28 g fat (5 g saturated fat), 83 mg cholesterol, 183 mg sodium. Calories from fat: 66%



WORK IT OUT

Soothe Moves

HOW TO EASE YOUR ACHING, POST-WORKOUT MUSCLES

By Kara Mayer Robinson

● If yesterday's workout is making your muscles scream today, take it as a good sign. You most likely have delayed onset muscle soreness (DOMS), and it means you worked hard enough to create tiny tears in your muscle fibers. It can happen when you bump up your workout intensity, frequency, or length, or when you try a new activity. As your muscles heal, they'll get bigger and stronger, paving the way to the next level of fitness.

The DOMS usually kicks in 12 to 24 hours after a tough workout and peaks between 24 to 72 hours. The soreness will go away in a few days. In the meantime, these tricks may help ease the pain.

Keep moving. You may want to cling to the sofa while your muscles recover, but moving your body could make you feel better. The trick is to do something light and gentle. "My favorite is swimming or riding my bike, super easy, for an hour or so," says Jennifer Rulon, MS, a seven-time Ironman triathlete and triathlon coach.

Rest and recover. Rest is good, too. "Rest days are crucial to recover," Rulon says. Taking a day off gives your body a chance to repair itself and replenishes your energy. Rulon says the second day after an intense workout can be the toughest. So she suggests doing light exercise the day after a heavy workout, then taking off the following day.

Apply heat (carefully). If your muscles still ache after 48 hours, try heat. Heat can stimulate blood flow to your muscles to ease tightness and

**SORE OR INJURED?**

If your pain stems from an injury, you'll need different treatment. Here's how to tell the difference between delayed onset muscle soreness (DOMS) and an injury.

DOMS

You feel sore a day or two after a hard workout.

Your soreness eases up when you exercise.

You feel better after a few days.

INJURY

You feel pain during a workout.

Your pain gets worse when you exercise. Your pain lasts more than 72 hours.

If you have signs of injury, you may have a muscle strain or sprain. The RICE method (rest, ice, compression, elevation) can help.

But if the pain lasts more than a week, if the area is red, swollen, or warm to the touch, or if you have dizziness or trouble breathing, see your doctor.

help them feel better. Try a warm (not hot) towel or heating pad. But be careful. Heat comes with a lot of red flags, Rulon says. "It can cause burns, along with further inflaming muscles." Avoid direct contact with any heating device.

Get a massage. A massage can relieve muscle tension, boost blood flow, and increase the range of motion in your joints, Rulon says. It's also a great mood lifter. When your muscles are sore, a gentle massage is best. Choose one that uses light pressure, like a Swedish massage, which Rulon says is better for recovery than a deep tissue massage. Or try tender-point acupressure: A massage therapist applies pressure and holds it directly on the tender areas.

Take an anti-inflammatory. Over-the-counter anti-inflammatory medications can reduce swelling and relieve pain. Try ibuprofen (Advil or Motrin), naproxen (Aleve), or aspirin (Anacin, Bayer, or Excedrin).

Reviewed by
Michael W. Smith, MD, CPT
WebMD Chief Medical Editor



Keep off the pounds! Sign up for the **Weight Loss Wisdom** newsletter at WebMD.com. [LEARN HOW ON PAGE 4](#)

FITNESS CHALLENGE

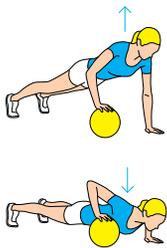
Sure Cure

PUMP UP YOUR NEXT TOTAL-BODY WORKOUT WITH A MEDICINE BALL

By **Jodi Helmer**

Think medicine balls are just for boxers and CrossFitters? Think again. A medicine ball increases resistance, builds balance, burns extra calories, and adds new twists to tried-and-true moves. Translation: “It’s a very versatile piece of equipment,” says Erin Oprea, CPT, a U.S. Marine turned certified personal trainer whose clients include singer Carrie Underwood.

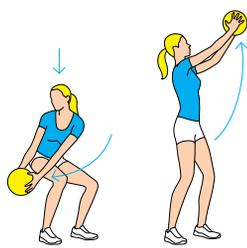
Start with a 5-pound medicine ball, incorporating these moves into your workout three times per week. As the moves get easier, increase the weight of the medicine ball to 12 pounds, keeping the number of reps the same.



Medicine Ball Push-Ups

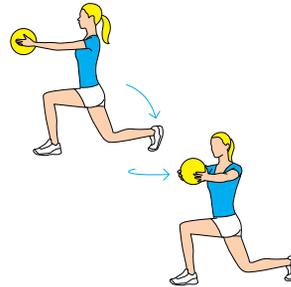
“You have to work harder to keep your balance, which really works your core,” Oprea says. The move also targets your arms, shoulders, and chest.

1. Get into a push-up position, placing your right hand on the ball and the left one flat on the ground. Your body should be in a straight line from your head to your heels.
2. Keeping your core engaged, bend your arms and lower your chest toward the floor.
3. Push up with your arms to the starting position.
4. At the top of the push-up, roll the ball to your left hand, keeping the rest of your body in top push-up position. Place your left hand on the ball.
5. Repeat five to eight times on each side.



Diagonal Chops With Squat

1. Stand with your feet just wider than hip-width apart, toes facing forward. With arms straight, palms facing each other, hold the medicine ball straight in front of you.
2. Lower into a squat, keeping your knees from extending out over your toes.
3. Keeping your arms straight, lower the ball to just outside your right knee.
4. As you return to the starting position, raise your arms above your left shoulder in a diagonal motion. Remember to keep your hips squared and pointed ahead.
5. Repeat in the opposite direction (lowering the ball to your left knee and raising it above your right shoulder).
6. Repeat 12 times.



Lunge With Medicine Ball Twist

1. Stand with feet hip-width apart. Hold the medicine ball in front of your chest, with arms straight and palms facing each other.
2. Take a step back with your right leg, still holding the ball straight in front.
3. Drop your right knee toward the floor into a lunge (your left knee will bend too).
4. While holding this position, twist at the waist, bringing your arms across the left side of your body.
5. Still holding the lunge, rotate your waist and arms back to the center.
6. Return to the standing position and repeat on the opposite side.
7. Do 12 reps with each leg.

Reviewed by
Michael W. Smith, MD, CPT
WebMD Chief Medical Editor

Q

“When is the best time to step on the scale?”

Anne Klein, 52, public relations consultant, Durango, Colo.

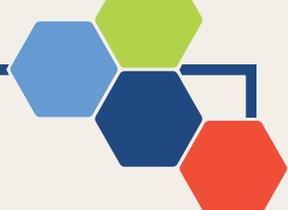


A

“The time of day—and day of the week—you weigh yourself could influence the number on the scale. As a general rule, it’s best to step on the scale first thing in the morning when your weight is less likely to be affected by the foods you eat throughout the day. Avoid weighing yourself on Monday. You’re more likely to stray from your healthy eating plan over the weekend, and the number on the scale could be misleading. Instead, weigh in on Friday morning. By the end of the week, your weight should be more accurate. Plus, seeing a lower number on Friday could give you the positive reinforcement to eat healthier foods on Saturday and Sunday.”



Joan Salge Blake, RD, LDN,
clinical associate professor in the
Nutrition Program,
Boston University



WebMD[®] Checkup

TAKING CARE, LIVING WELL



March is **Colon Cancer** Awareness Month

Colon and rectal cancers are the second-leading cause of cancer death in the United States, but they are preventable and treatable. About 1 in 20 people gets colon cancer. The disease can develop in people of any age but is most common after age 50. Besides age, family, and medical history, diet and lifestyle can play roles, too. Diets high in red meat and low in fruits, vegetables, and fiber might increase risk. Crohn's disease, ulcerative colitis, and other conditions that cause inflammation of the colon may also raise risk. Regular daily exercise can greatly reduce the risk.

All adults age 50 and up should have regular colon cancer screenings. Only 2 in 3 do. Colonoscopies and other tests that allow doctors to see the inside of the colon can reveal precancerous growths. Doctors can remove them and stop the cancer before it starts.

Surgeons can also remove early colon cancer through minimally invasive laparoscopic surgery. Some hospitals now offer robotic surgery. More advanced cancers may require removal of part of the colon and some of the lymph nodes. People whose cancer has spread beyond the colon might need chemotherapy. Researchers are studying new vaccines that could boost the immune system's response to colon cancer; this method could help fight the disease or prevent it from coming back.

Beverly Hills, 90210 heartthrob Luke Perry recorded a public service announcement to raise awareness of colorectal cancer. Reality show survivalist Bear Grylls and Lady Antebellum's Charles Kelley released PSAs for the cause, too.—*Sonya Collins*



Reviewed by Arefa Cassoobhoy, MD, MPH, WebMD Medical Editor

HEALTH HIGHLIGHTS

MULTIPLE SCLEROSIS

EXPERT TIPS TO STAY HEALTHY

By Matt McMillen

1 *Know your limits*
Multiple sclerosis causes fatigue, so adjust your work and home schedule to include periods of rest.

2 *Stay cool*
Plan your exercise during cooler times of the day to curb fatigue.

3 *Find an expert*
If your doctor says you're out of options, find another doctor who can better help you.

4 *Address sexual problems*
Don't ignore issues in the bedroom. Medications, talk therapy, and more can help.

5 *Take it easy*
Stress can worsen your symptoms, so try to relax. Meditation and deep breathing will ease your mind.



6 *Take a dip*
Exercise in a pool to improve walking, mobility, flexibility, balance, and endurance.

7 *Rebalance your chores*
Swap household tasks you find difficult for those you can manage.

8 *Eat well*
Good food helps you feel your best, so focus on a low-fat, high-fiber diet with lots of fruit and veggies.

9 *Butt out*
Smoking worsens MS. Talk to your doctor to get help with a quit plan.

10 *Exercise your brain*
Stimulate your gray matter with books, conversation, crossword puzzles, and music.

EXPERT TIPS



Rosalind Kalb, PhD
clinical psychologist and vice president, Healthcare Information & Resources, National Multiple Sclerosis Society, and co-author of *Multiple Sclerosis for Dummies*

“Depression—one of the most common and treatable symptoms of MS—makes other MS symptoms feel worse and makes it harder to participate in your own treatment. It also threatens your relationships and your quality of life. Now’s the time to talk with your health care provider.”



Paul Wright, MD
neurology chair, North Shore University Hospital and Long Island Jewish Medical Center

“Moderate exercise can help alleviate some MS symptoms and improve your overall health. Pick an exercise you enjoy so that it does not become a chore and do it regularly. Yoga, swimming, and tai chi are excellent choices.”



Annette Wundes, MD
neurologist, UW Medicine Multiple Sclerosis Center, Seattle

“The best MS drug in the world will not help if you don’t take it. Sometimes people get tired of taking their shots or pills, and sometimes side effects make it difficult to stay on track. If either is something you can relate to, let your doctor know.”

Health Happenings

Products, Ideas
& Promotions
for Healthy
Living



MAKE THE
**FIRST FIVE
COUNT** SM

Support Life's Earliest Milestones

The first five years of life lay the foundation for a child's success. Use our free online screening to guide you through the earliest developmental milestones.

makethefirstfivecount.org



Work at Home!

Be a Medical Billing Specialist!
Train at home in as little as four months to prepare medical claims and billing for doctors, hospitals and clinics. Nationally accredited. Get free facts!

1-800-388-8765, Dept. WEBB2A36.
uscieducation.com/Web36



Guaranteed Relief for Working Hands

O'Keeffe's® Working Hands® provides relief for extremely dry, cracked hands. This highly effective formula restores moisture and creates healthy looking, hydrated skin.

okeeffescompany.com



Memorial Sloan Kettering Cancer Center

More Science. Less Fear.

At Memorial Sloan Kettering, we're proud to be changing the way the world treats cancer, offering breakthroughs in cancer research, treatment, and care.

mskcc.org/morescience

Reviewed by Arefa Cassoobhoy, MD, MPH, WebMD Medical Editor

BY THE NUMBERS

AUTISM

FACTS AND STATS ABOUT TOP HEALTH ISSUES

By Heather Hatfield

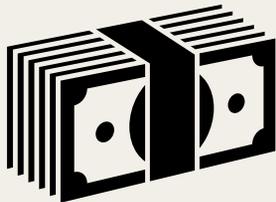


60

People diagnosed with autism each day

Annual cost of autism in the U.S.

ABOUT \$250 BILLION



1 in 68



Children in the U.S. identified as having autism

1%

of the world's population has an autism spectrum disorder

3.5 MILLION

People in the U.S. with autism spectrum disorder

50,000

People with autism who turn 18 each year in the U.S.

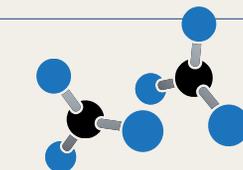
6% to 15%

Annual increase in number of people in the U.S. with autism

Projected annual cost of autism in the U.S. in 2025



\$460 BILLION



15%

of autism cases are genetic



Boys with autism

1 in 42



Girls with autism

1 in 189

1 YEAR OR YOUNGER



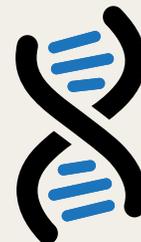
Age when autism symptoms might first be noticed

2 YEARS



Age when autism can be reliably diagnosed

100



Genes identified that might be linked to increased autism risk

Sources: Autism Science Foundation, Autism Society, Autism Speaks, American Psychological Association, CDC



Read **9 IBS Myths Busted**,
an article at WebMD.com.
LEARN HOW ON PAGE 4

LIVING WELL

IBS

TRACK YOUR IRRITABLE BOWEL SYNDROME TRIGGERS FOR RELIEF

By Christina Boufis

● Ten years ago, Nikki Martinez
● lived in constant gastrointestinal pain. “I had cramping, constipation, diarrhea. I was so nauseous, I almost couldn’t stand eating.” Martinez, then 30, was eventually diagnosed with irritable bowel syndrome (IBS), a collection of GI symptoms, which affects up to 1 in 5 people.

“We don’t completely understand what causes IBS. There is no cure, but we do know a lot about it,” says Yuri A. Saito Loftus, MD, assistant professor of medicine with the division of gastroenterology and hepatology at Mayo Clinic.

“We know there are different triggers for different people,” Loftus says. Some people have milder IBS symptoms—which include abdominal pain, bloating, diarrhea, constipation, and nausea—that come and go. Others, like Martinez, have symptoms that interfere with daily life. Here’s how you can find relief.

Find ways to de-stress. “Stress is one of the most strongly associated factors with IBS,” Loftus says. While stress doesn’t directly cause IBS, it can worsen symptoms.

How to damp down stress levels? “It could simply be doing something you enjoy or physical exercise,” Loftus says. Mind-body techniques such as relaxation exercises, mindfulness, or meditation often help, she says.

Track your triggers. Most people with IBS detect a link between the foods they eat and their symptoms, Loftus says. “For some people it may be one food group or a number of foods” that trigger symptoms. “For others, it may be something completely different.”

Keeping a symptom and diet diary can help you spot trends, Loftus says. Share your diary with your doctor to help interpret results.

Most people with IBS detect a link between the foods they eat and their symptoms.

Rethink your diet. Unfortunately, no one-size-fits-all diet can help with IBS symptoms. “I generally recommend a balanced, healthy diet,” Loftus says. And one that’s low in caffeine, a gut stimulant, she adds. Other things to avoid? Carbonated beverages, sweetened drinks, and sugar-free candy and gum, which can have sugars or agents that act as laxatives.

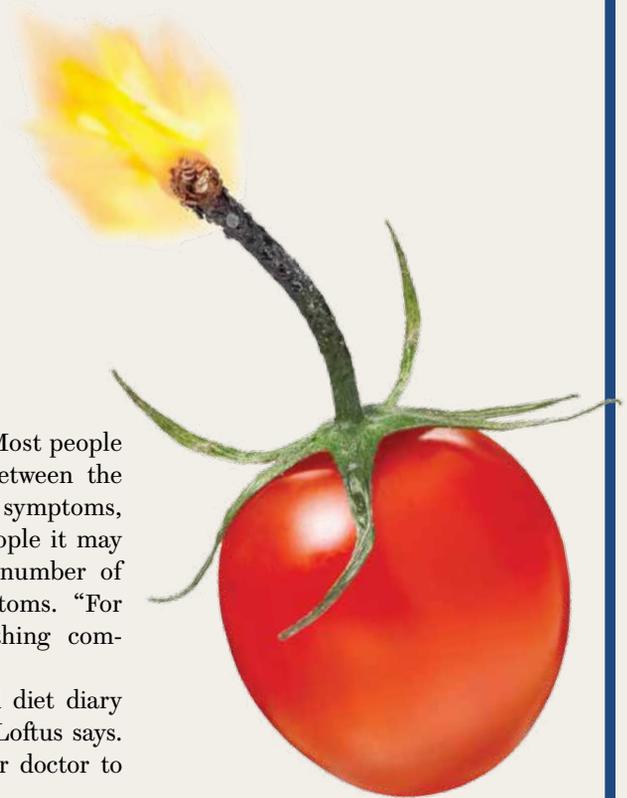
Recent studies suggest that a diet low in short-chain carbohydrates,

found in foods including milk products and some fruits, vegetables, and sweeteners, may help with IBS.

Get moving. Exercise also may relieve constipation, Loftus says. “The physical act of shaking things on the inside helps move food and waste through the body.”

Try to exercise every day, she advises. Aim for a mix of exercises—walking, stretching, bicycling, yoga.

As for Martinez, now 40, she’s pain-free. “Switching to a gluten-free diet certainly helped me. I definitely have a better work/life balance now,” she adds. And as a practicing psychologist who teaches relaxation techniques, “I learned to practice what I preach. I rarely have a flare.”



ASK YOUR DOCTOR

1. Should I avoid certain foods?
2. What dietary approach is best for me?
3. Should I keep a symptom diary?
4. How can I manage stress?
5. Can I try alternative treatments?



Reviewed by **Brunilda Nazario, MD**, WebMD Lead Medical Editor

MY STORY

LEG WORK

HOW ONE READER GOT BACK INTO THE GAME AFTER PULMONARY EMBOLISMS NEARLY TOOK HER LIFE

Ali Krieger

WebMD.com community member

In my junior year at Penn State in November 2005, two days before the NCAA tournament—a huge tournament for women’s soccer—we were playing against the men’s team when I was tackled by one of the guys and our legs got intertwined. It turned out I had a spiral fracture.

I had surgery Nov. 9 and traveled with the team to the Final Four tournament in early December. I couldn’t play, but I was there the entire time.

Over Christmas, I did a lot of flying back and forth. I went to see my mom in Florida then came back to Washington, D.C., to visit my dad. In January, my mom got remarried. I flew down for the wedding and remember saying to her, “I just feel different. I have shortness of breath and can’t really pinpoint what’s wrong.” I had pain in my chest and was lightheaded at times.

My mom said, “Let me take you to the hospital now. You need to see a doctor.” But I convinced her that I would be fine. I thought, “I’ve done all this traveling. I’m just tired.”

When I got back to Penn State, I started feeling worse. It was a Sunday night, and I called my



trainer, who said to come in Monday morning. When the guy I was dating came to see me and I told him how I was feeling, he said, “This doesn’t seem right.” He took my pulse. It was skyrocketing. He said, “We’re going to the hospital.”

The doctors couldn’t believe what they found. They said, “You’re suffering from multiple blood clots in your legs, which have gone to your lungs.”

I was 21, and never

expected to have pulmonary embolisms (also called DVT, deep vein thrombosis), or blood clots that started in my legs and traveled to my lungs.

I was told it was a perfect storm for this to occur: I was on birth control pills. I had had surgery, and then did a lot of flying. They said if I’d fallen asleep that night, I most likely wouldn’t have woken up.

I was in the hospital for a week and on blood thinners. Every day I had an electrocardiogram and multiple blood tests. The whole recovery process probably lasted six or seven months. I had to go in weekly for blood tests, had ECGs often, and had to give myself shots of blood thinners. I wanted to play soccer again, so I was working toward getting back on the field.

I definitely had to take it slow. My blood was so thin that I would bruise and bleed easily. Slowly, I started running and training again, and I was back for the preseason in August. I ended up playing my senior year.

Everything’s great now, but I do go for ECGs with the national team a few times a year. I’m just thankful that I caught the condition at the last minute.

ALI’S ADVICE

“DVTs can happen to anyone, no matter your age. Some common signs: swelling in one or both legs, warm skin on your leg, and/or pain or tenderness in one or both legs.”

“If you are at risk for a DVT, you can prevent blood clots and reduce your risks of pulmonary embolism. Talk to your doctor about what risks you may have and take the right precautions.”

TEST YOUR SMARTS

SLEEP STEALERS

DO YOU KNOW WHAT'S KEEPING YOU UP AT NIGHT? TAKE THE QUIZ

“As soon as I try to go to sleep, it seems my legs want to go for a jog,” **greaterthanzero** writes in WebMD’s sleep disorders community. The uncontrollable urge to move your legs is a hallmark of restless legs syndrome, a neurological condition that keeps an estimated 10% of Americans up at night. Poor sleep—regardless of its cause—takes a toll on your concentration the next day and puts you at risk for conditions such as diabetes and heart disease over the long term. How much do you know about these other sneaky sleep thieves that could be stealing your slumber?

1. I’m under a lot of stress.

- Yes No

2. I check my email before bed.

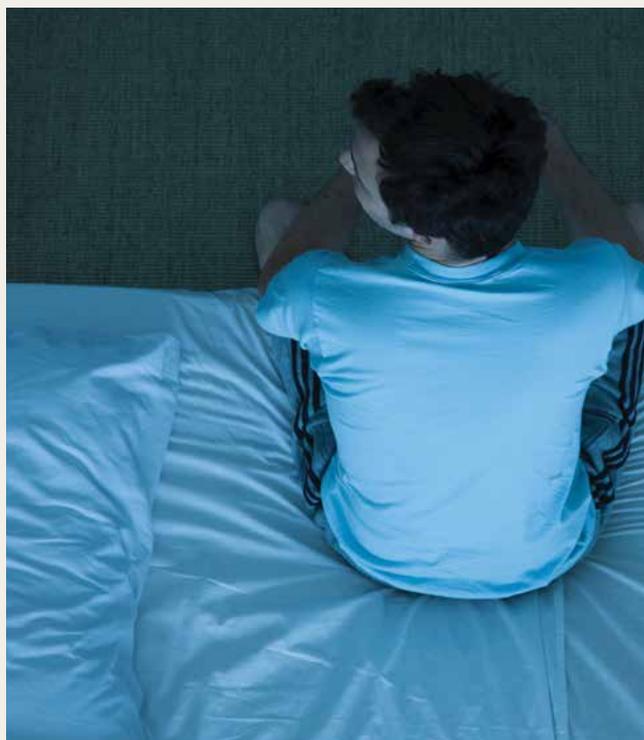
- Yes No

3. I have a few glasses of wine with dinner.

- Yes No

4. My partner says I snore.

- Yes No



ANSWERS

1. Stress is a notorious sleep disrupter. Whether your trigger is a harrowing job or a bitter divorce, the anxiety can both keep you up at night and disrupt the quality of what little sleep you do get. The more stressors in your life, the higher your odds of getting insomnia. Beat stress with a pre-bedtime wind down. Meditate, listen to your favorite music, or enjoy a warm bath to take your mind off your worries and help you drift off.

2. Whether we answer emails or post our latest exploits to

social media, 95% of Americans spend our last minutes before bed glued to some kind of electronic device. Smartphones, e-readers, and tablets emit short-wavelength blue light, which suppresses production of melatonin, a natural hormone that helps bring on sleep. To ensure a good night’s rest, save emails for morning and read a book before bed instead.

3. A few glasses of Merlot or pints of Pilsner in the evening have a relaxing effect that helps you fall asleep faster, but you won’t sleep as soundly when you drink. Alcohol disrupts REM

sleep—the deep, restorative stage in which you dream. The more you drink, the more disrupted your sleep becomes. Alcohol also increases urine production, leading to middle-of-the-night wake-up calls from your bladder.

4. Snoring doesn’t just disrupt your partner’s sleep—it could also be a sign that you have sleep apnea, a condition that

causes brief pauses in breathing throughout the night. The snore is your body waking you up to restart your breathing. Sleep apnea interrupts sleep and leaves you weary the next day. A sleep study can determine whether this disorder is at the root of your snoring. If so, a mouthguard, a breathing device called CPAP, or other therapies can return you to restful slumber.

ASK YOUR DOCTOR

1. How can I relieve stress?
2. What kind of bedtime routine will help me sleep better?
3. Could I have sleep apnea or another sleep disorder?
4. Do I need a sleep study?

SOURCES: Harvard Medical School, National Institute of Neurological Disorders and Stroke, National Sleep Foundation, WebMD Sleep Disorders Health Center

Laura Prepon

Actor/Author

1 **In your new book, *The Stash Plan: Your 21-Day Guide to Shed Weight, Feel Great, and Take Charge of Your Health*, you say you were “at war” with your body for years. Why?** In my 20s I had no energy, and felt sick all the time. Actors work long, weird hours—we’re up at 4 a.m. and drink pots of coffee. Weight became a problem. I couldn’t take it off or fit into the clothes at work. I always ate well and worked out. I couldn’t figure out what was wrong.

2 **How did your success in Hollywood and its pressure to be thin affect you?** If you’re going to be an actress, you have to be conscious of weight; you just do. For so many years I dreaded fittings, but it’s part of our industry. So many actresses become very, very thin. They hit it big and are under this tremendous pressure. All of them lean out. The attention on weight is so strong.

3 **Did you seek medical attention?** I had my thyroid checked, saw different specialists, and they all said different things. I tried every diet known to man. It just messed up my body more and became a vicious cycle.



4 **Then you met nutritionist Elizabeth Troy, your co-author. What did you learn?** She’s an integrated health coach who taught me how the body won’t function properly if the gall bladder and liver are blocked.

5 **Your health approach includes healing broths, stretching, and preparing your**

own food. Why? Broths are important. One of the first things Elizabeth said to me was: “You need to do the broths.” Within days I felt better. They have cartilage and collagen. Our bodies need and make collagen; it helps your body operate as it should.

6 **The word “stash” in your plan refers to what?** A “stash” is a

treasure trove of awesome food. I’ve always cooked at home and prepared a bunch of food to last a few days. If you’re tired and working all day, we take away the worry and concern so you don’t have to think about it. It gets you working with food, having a relationship with the food you put into your body.

7 **Does your emphasis on stretching**

and releasing blocked energy paths in the body adopt an Eastern approach? Ask doctors how long they studied nutrition and how it affects the body. Most will say zero. There is a large population of overweight Westerners right now. Our stretching approach is based on a 5,000-year-old theory.

8 **Describe your “80/20” philosophy.** This is not a fad diet. It’s a way to live your life. Being the queen of bad diets, I can tell you diets don’t work. This teaches people the basics for the rest of their lives. You have to know what your body can handle. In other words, yes, eat butter. But not a stick of butter.

9 **What’s your current workout regimen?** I swim. I do the rebounder, which is a mini-trampoline. I take dance lessons. I love dancing—it’s freeing and the body loves it. I stretch with Elizabeth to keep things open and flowing.

10 **What’s your perfect day?** Walking along the streets of Paris, and maybe along the Seine, on an awesome autumn day with my significant other.—*Lauren Paige Kennedy*