

A GOOD DEATH: RETHINKING END OF LIFE PAGE 44

WEBMD.COM

WebMD®

OCTOBER
2018

CUTTING-EDGE
COSMETIC
PROCEDURES

PAGE 20

MAKE EVERY NIGHT
TACO TUESDAY

PAGE 51

TEENS AT
RISK:
WHAT IS
DRUNKOREXIA?

PAGE 30

THE HEALING
POWER
OF LIGHT
THERAPY

PAGE 40

'GIRL, YES'

**TIFFANY
HADDISH**

ON THE **POWER OF POSITIVE THINKING**

PAGE 34

FEATURES

34

Positively Hilarious

Tiffany Haddish on
the power of therapy

40

Healthy Glow

Light therapy might
have potential as a
treatment option for
several conditions

44

A Good Death

Looking at dying
and the end of
life in new ways

*"If I focus
on positive
thoughts and
attitudes,
then it's
least likely
I'll fail."*

TIFFANY HADDISH

CANCER UPDATE

12 **Men's Health**

How risks associated with women also endanger men

14 **Fitness Smarts**

Exercise may reduce treatment side effects, lower recurrence risk, and extend survival

26 **Parenting**

How to tell your kids you have cancer

31 **Pets**

Spot the warning signs of cancer in your dog or cat

56 **On the Horizon**

The latest news in cancer research

61 **Quiz**

Are you up to speed on advancements in breast cancer?



33



16



15



50



28

LIVING

- 11 **Spousal Support**
Are you tuned in to your partner's feelings?
- 15 **Mind Matters**
How negative self-talk can affect your health
- 16 **Women's Health**
When to avoid sex

BEAUTY

- 17 **Healthy Hair**
Get a quick fix for gray roots
- 18 **Expert Picks**
An arsenal of at-home treatments
- 19 **Derm Q&A**
Check out the latest in hair-removal options
- 20 **Beauty Smarts**
Innovative treatments for hair loss, wrinkles, and skin texture
- 23 **Anatomy Of . . .**
What's in hair mousse?

FAMILY

- 24 **Early Interaction**
A surprising way to boost your child's language development
- 27 **Pregnancy**
What's safe to do when you're pregnant
- 28 **Baby**
Get the scoop on infant eczema
- 30 **Teen Health**
What you should know about drunkorexia
- 25 **Kids' Health**
Beware of apps that may be tracking kids

FOOD

- 49 **Good for You**
Roast Brussels sprouts for hearty and healthy fall meals
- 50 **Build a Better**
Tips for mastering vegetable soup
- 51 **3 Ways: Tacos**
Dress up this kid-friendly favorite
- 53 **Root Vegetables 101**
Get the scoop on beets, sweet potatoes, and more



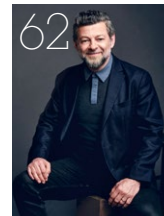
NEW HOPE FOR
PEOPLE WITH
DEPRESSION
PG 55

CHECKUP

- 55 **Cutting Edge** | The latest research on mental illness
- 58 **Who's Who?** | On the job with pediatricians
- 59 **By the Numbers** | Facts and stats on oral health
- 60 **Health Highlights** | Tips for the cold and flu season

In Every Issue

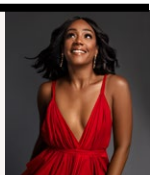
- 4 **EDITOR'S NOTE**
- 6 **UPFRONT**
News about research on teens and marijuana, new diagnostic technology, and more
- 62 **TAKE 10**
Actor Andy Serkis on *Mowgli*, his work with children, and why he's excited about the next generation



62

On the Cover

PHOTOGRAPHY BY:
ELTON ANDERSON, JR.



FROM THE WEBMD TEAM

WHAT PROMISING ADVANCE IN CANCER TREATMENT ARE YOU MOST EXCITED ABOUT?



Over the years, the ability to both test for cancer and treat the disease has greatly improved.

As a result, more people who get cancer are living longer. From immunotherapy to precision medicine, you can read about some of the latest cancer breakthroughs in our Checkup section in this issue (page 55). Despite the advances, there is so much more research that needs to be done, and it takes time. That said, there have been great strides and the future of cancer research is hopeful. This month, we asked WebMD journalists and physicians what promising advance in cancer research most excites them.

Kristy Hammam
Editor in Chief
kristy@webmd.com



John Whyte, MD, MPH, WebMD Chief Medical Officer

The use of real-world evidence driving outcomes—in real time. Instead of waiting days and weeks for treatment response, new tools will figure out the right dosing and correct treatment regimen for each patient. And this will minimize dreaded side effects.



Brenda Goodman, WebMD Senior News Writer

Cancer diagnosis and treatment used to be based on location. If you had a tumor in your breast, for example, you got breast cancer drugs to treat it. More and more, though, doctors are sequencing the genes of tumors to more precisely diagnose and treat them. The ability to match cancer-killing drugs to specific genetic changes is exciting and potentially life-saving.

Arefa Cassoobhoy, MD, MPH, WebMD Senior Medical Editor



I'm excited about the recent firsts in genetics research translating to cancer treatment. Now with gene therapy, immune cells can be genetically altered to attack cancer cells. Another treatment fights cancer based on the genetics of the cancer cells rather than location. In the future, we'll see more patients benefit from these kinds of therapies.

Correction: In the September 2018 cover story about Sonequa Martin-Green, we misspelled the name of her *Walking Dead* co-star Lauren Cohan. We regret the error.





395 HUDSON ST., NEW YORK, NY 10014

EDITOR IN CHIEF

Kristy Hamman

EDITORIAL DIRECTOR

Colleen Paretty

EXECUTIVE EDITOR

Jennifer Fields

VICE PRESIDENT, EDITORIAL DEVELOPMENT

Stephanie Snipes

ART DIRECTOR

John Todd

MANAGER, EDITORIAL DEVELOPMENT OPERATIONS

Alyson West

VICE PRESIDENT, PUBLISHER

Vanessa Cognard

SALES OPERATIONS ANALYST

LaTeisha Clay

CHIEF MEDICAL EDITOR

Michael W. Smith, MD

SENIOR MEDICAL EDITORS

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

MEDICAL EDITOR

Neha Pathak, MD

CONTRIBUTING WRITERS

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

CORPORATE

CHIEF EXECUTIVE OFFICER

Steven L. Zatz, MD

CHIEF MEDICAL OFFICER

John Whyte, MD, MPH

CHIEF FINANCIAL OFFICER

Blake DeSimone

SVP, CORPORATE DEVELOPMENT AND GLOBAL STRATEGY

Jeremy Schneider

VICE PRESIDENT, FINANCE

James McCann

DIRECTOR, POLICY & GOVERNANCE

Theresa Saladino

ADVERTISING SALES

NEW YORK

CLAUDIA FERN

cfern@webmd.net
212-624-3728

PATRIA RODRIGUEZ

prodriguez@webmd.net
212-417-9542

CHICAGO

TRACY KENNEDY

tkennedy@webmd.net
312-416-9275

ANNA NOVINGER

anovinger@webmd.net
312-416-9278

WEST COAST

NICOLE JONES

njones@webmd.net
213-718-5550

mxm

PART OF
Accenture Interactive

805 THIRD AVE.,
NEW YORK, NY 10022

PRESIDENT

Georgine Anton

CHIEF CLIENT OFFICER

Tom Sebok

CHIEF CREATIVE OFFICER

Roald van Wyk

ACCOUNT MANAGEMENT

GROUP DIRECTOR

Marissa Bryan

ACCOUNT DIRECTOR

Eric Meisner

ACCOUNT SUPERVISOR

Wenona Williams-Fassinou

PROJECT MANAGER

Kellie Kramer

SENIOR MARKETING

SERVICE MANAGER

Annie Gormley

EDITORIAL

EDITOR

Michelle Rubin

ASSISTANT EDITOR

Aaron Calvin

FOOD EDITOR

Elizabeth Elliott

COPY CHIEF

Grant Fairchild

BOOKINGS DIRECTOR

Susan Pocharski
spocharski@gmail.com
617-869-1713

CREATIVE

GROUP DESIGN DIRECTOR

Missy Bergwall

ART DIRECTOR

Lindsay Timmons

ASSISTANT ART DIRECTORS

Amber Hanson
Brittany Long

PRODUCTION

ASSOCIATE PRODUCTION DIRECTOR

Sigrid Anderson

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 is distributed to doctors' offices throughout the U.S. and online at WebMD.com. WebMD Magazine is not responsible for advertising claims. WebMD Magazine (ISSN 1553-9946), Vol. 14, No. 7, 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. © 2018 WebMD LLC. All rights reserved.

CANCER

The Path Ahead

First, there's reason to cheer: Cancer deaths are on the decline thanks to earlier detection, better treatments, and fewer Americans smoking. However, we're still a long way from putting this deadly disease into the annals of history where it belongs.

1.7
million

Number of new cancers that will be diagnosed in 2018.

729,000

Number of cancers diagnosed in 2018 that could have been prevented if more people stopped smoking, lost weight, exercised, ate more nutritious foods, and practiced other good health habits.

266,000

Number of new breast cancer diagnoses in 2018, making it the most common type of cancer among women. Prostate cancer is the most common type in men, with 165,000 new diagnoses this year.

\$80.2 billion

Amount of money Americans spent on cancer treatments in 2015.

IN THE NEWS

A Better Death



COLLEEN PARETTI
Editorial Director
colleen@
webmd.com

When you think about it, the way death and dying are not a big part of American conversation is a little strange. After all, probability is a solid 100%, but most of us tend to shy away from end-of-life topics. That is starting to change. More people are determined to speak up, plan, collaborate, and get in front of their own demise instead of chancing the outcome so common to so many: Dying away from home, in a hospital, hooked up to machines, enduring invasive treatments that may not help and only prolong the inevitable. The idea of a “good” death is here, in state legislatures, in medical facilities, even in “death cafes,” where friends, family, and strangers meet to discuss this once-taboo topic. “The more we talk about it early, the less scary it becomes,” notes one expert we spoke to. Explore **“A Good Death” on page 64**, and then take a seat at—or start up—a death cafe near you. Let me know what happens. —*Colleen*



TOO MUCH BEEF?

In a 22-year study of 2,441 men ages 42 to 60, those who ate the most protein—mostly from meat—had the highest risk of heart failure. Risk increased among men who ate 97 grams—that’s the amount of protein in nearly 14 ounces of ground beef—or more per day. Daily protein needs are based on weight and physical activity. You need about .8 grams of protein for each kilogram of body weight. So, a 200-pound sedentary man needs 73 grams per day. You’ll get that in about 10 ounces of ground beef or 8.5 ounces of chicken breast.

SOURCE: *Circulation: Heart Failure*



30,000

NUMBER

of fatal falls among older adults in the last year. Staying active can help maintain balance and lower fall risk.

SOURCE: CDC



Fight the Resistance

Headway in the fight against antibiotic resistance: Prescription rates are down from 8.4% of all children’s prescriptions in 2002 to 4.5% today. You and your children should only take antibiotics for bacterial, not viral, infections.

SOURCE: JAMA



PIGMENT PREDICTIONS

Scientists have discovered 124 new genes that determine hair color. The finding can advance research into diseases, such as melanoma, that affect people differently based on pigmentation.

SOURCE: *Nature Genetics*



DRUG OF CHOICE

More kids than ever now stay away from smoking and drinking, according to a survey of 275,559 young people ages 12 to 21. Almost half of the people surveyed said that they don't drink or smoke anything. But among those who do, the number who try marijuana before tobacco and alcohol is rising fast. In 2004, one in 20 kids tried pot first. Today, that number has nearly doubled to one in 12. That's important because kids who try marijuana before booze and cigarettes are more likely to become heavy users or dependent on the drug.

SOURCE: *Prevention Science*

Arlington, Virginia's rank among the nation's healthiest cities; it has the lowest smoking rate and highest self-reports of excellent health. At the bottom of the list: Toledo, Ohio.

SOURCE: American College of Sports Medicine



Follow-Up Facts

Millions of people get concussions, or mild traumatic brain injuries, every year, yet only about half receive the necessary follow-up care to check for possible long-term physical, psychiatric, and cognitive problems. If you are diagnosed with a concussion, ask your doctor about follow-up care.

SOURCE: *JAMA*

MAN VS. MACHINE

Do you have annual skin checks in which a doctor inspects your moles for signs of melanoma? One day, the doctor might snap a few pics and feed them into a machine to get your results. Researchers taught a computer to recognize melanoma by showing it more than 100,000 photos of either malignant melanomas or benign moles. When the researchers pitted the trained machine against 58 dermatologists from around the world, the computer caught 95% of the melanomas while the live experts identified just under 89%.

SOURCE: *Annals of Oncology*



DIET AND BREAST CANCER

A low-fat diet could help fight breast cancer. Researchers followed 48,835 postmenopausal women for eight years. The ones who ate a diet rich in fruits, vegetables, and whole grains and got only 20% of their calories from fat were 8% less likely to develop breast cancer than the women who ate their usual diet. Low-fat dieters who did develop breast cancer outlived their usual-diet peers. They were also less likely to die from any cancer or heart disease. Ten years after breast-cancer diagnosis, 82% of the low-fat dieters were still living compared to 78% of their counterparts.

SOURCE: JAMA Oncology

THE LOW-ALCOHOL EFFECT

Beware of wine and beer labels touting low-alcohol levels. Researchers asked 264 regular drinkers to taste-test wines and beers with regular, low-alcohol, or super-low-alcohol labels. The lower the listed alcohol content, the more the taste-testers imbibed.

SOURCE: Health Psychology



48
million

NUMBER

of Americans who contract a food-borne illness each year. Rigorous hand-washing, proper food storage, kitchen cleanliness, and checking restaurant grades help reduce risk.

SOURCE: C.S. Mott Children's Hospital



SCANS FOR SMOKERS

Lung cancer is the leading cause of cancer death. An estimated 154,040 people will die from it this year. Yet less than 2% of current or former heavy smokers get recommended lung cancer screenings. The United States Preventive Services Task Force recommends that people ages 55 to 80 years old who have smoked at least 30 pack-years—that's the number of packs smoked per day multiplied by the number of years smoked—have a lung CT scan.

SOURCE: American Society of Clinical Oncology

50
million

NUMBER
of people who have
dementia worldwide.

SOURCE: *Psychological Medicine*



DIRECT LINE

Many doctors offer a smartphone app or online patient portal that provides quick and easy access to your doctor and your health records. But older adults, the people who may benefit the most from a fast-track to their health care providers, don't seem to take advantage of these tools. A recent study found that only about half of adults ages 50 to 80 set up an account on an online patient portal when their health care provider offers it. The top reason for avoiding the portals was concern about handling health information online.

SOURCE: University of Michigan Institute for Healthcare Policy and Innovation

BYE-BYE, BULLY

Bullying can do long-lasting damage. Researchers followed 600 kids for five years from the seventh grade to the eleventh. The ones who reported being bullied at any time during the study were more likely than

their peers to show signs of eating disorders and signs of depression. Parents should take action right away to address bullying and its long-term consequences.

SOURCE: *JAMA Psychology*



Fish Fight Heart Disease

Two 3.5-ounce servings of fish each week may ward off heart disease. Go for oily ones with omega-3s. Think salmon, albacore tuna, mackerel, lake trout, herring, and sardines.

SOURCE: *Circulation*



SPOUSAL SUPPORT

Mind the Gap

Do you know when your spouse feels blue?

Learn how to read the signs.

WHEN YOU LIVE WITH SOMEONE FOR any length of time, you start to think alike. You might even begin to look alike, research shows. Yet even in a long-standing relationship, you may not be attuned to your partner's emotional state. A recent study from Southern Methodist University shows that couples don't pick up on subtle everyday signals their spouse is sad or down, and instead they assume everything is all right. Missing these cues day after day could gradually damage your relationship. To stay in tune with your partner's mood, pay attention. Assume less and listen more, the authors say. —STEPHANIE WATSON

Looking for a doctor?
Use **WebMD's**
Physician Finder. Go to
[WebMD.com/findadoctor](https://www.webmd.com/findadoctor).

MEN'S HEALTH

Cancer Watch

Cancer risks commonly associated with women also endanger men



THE HUMAN PAPILLOMAVIRUS (HPV) AND DNA MUTATIONS LINKED to breast and ovarian cancer are cancer risks commonly associated with women. New research, however, shows that both should raise red flags among men and the medical professionals who treat them.

BREAST AND PROSTATE CANCER

In 2015, about 2.5 million people in the U.S. underwent testing to determine if they had genetic mutations linked to cancer. Such mutations

account for about 10% of all cancers. But only one in four of those tested were men, according to a 2018 study by UCLA researchers. And only one in 10 were screened for BRCA1 and BRCA2, mutations that dramatically raise the risk of breast cancer in men as well as women.

Though breast cancer is very rare in men, the same mutations also heighten a man's chances of developing aggressive prostate cancer at a younger age.

"The low incidence of testing in men reflects where the focus has been in terms of public awareness," says prostate cancer specialist Tomasz M. Beer, MD, a professor of medicine at Oregon Health and Science

→ **Mistaken Identity**
One potential sign of cancer—a lump in your neck—can be confused with an infection.

University in Portland and deputy director of OHSU's Knight Cancer Institute. "In

the medical community, we are now more focused on these risks than we have ever been."

That focus has developed significantly in the last year or so, and it has led to a greater appreciation that men with advanced prostate cancer have considerably higher risk of also having a genetic mutation like BRCA. "That's new and important to know," says Beer.

Why? Gene mutations often run in families, so close relatives may be carrying the same cancer risk and not know it. (BRCA mutations also increase the risk of ovarian cancer in women.) Identifying such mutations in men with prostate cancer may improve their care.

"There's emerging knowledge about unique and specific treatments

that target DNA repair, so men known to have a specific mutation would get treated differently," Beer explains. "That's in evolution, but it's becoming a reality."

Right now, doctors don't know whether genetic testing will eventually help prevent prostate cancer. "But," says Beer, "it, too, is very much an evolving field."

HUMAN PAPILLOMAVIRUS

Another cancer risk factor men need to understand: HPV. The most common sexually transmitted virus, HPV currently infects an estimated 79 million Americans. The virus, which can be spread both orally and by genital contact, often causes no problems and goes away on its own. However, some HPV causes cancer. Men with oral HPV are five times more likely than women to have a high-risk type, and while a highly effective vaccine exists, only 10% of eligible men have received it.

The result? "HPV-related cancers among men are on the rise," says oncologist Priscila Gonçalves, MD, who specializes in head and neck cancers, including those caused by HPV.

Gonçalves, associate director of the Center for Novel Cancer Therapies at Northwell Health Cancer Institute in Lake Success, New York, says that

HPV in men most often causes oropharyngeal cancers, which occur in the back of the throat. The virus can also cause anal and penile cancers. These cancers can often be treated successfully if caught early. "That makes awareness so important both among the public and medical professionals," says Gonçalves.

A painless lump in your neck, for example, could indicate cancer, Gonçalves says, but doctors not attuned to this cancer risk may mistake it for an infection. That will delay diagnosis.

The HPV virus can be prevented by a vaccine, which the CDC recommends for boys as young as age 9 so that it's effective before they become sexually active. Men remain eligible through age 26. By then, says Gonçalves, most men will have been exposed to the virus. (Girls and young women should also be vaccinated.)

Unfortunately, awareness that boys benefit from the vaccine remains low. That, says Gonçalves, must change, because if HPV does not resolve on its own, you're stuck with it for life.

"At this time, there's nothing we can do to get rid of the virus," says Gonçalves, "and that is why getting our children—both boys and girls—vaccinated is so important."



ASK YOUR DOCTOR

Q If I have HPV, will I get cancer?

HPV-related cancers are not very common, so don't live in fear. At the same time, learn the symptoms and be vigilant.

Q Can I spread HPV if I have it?

Yes. Practice safe sex to reduce the risk of passing the virus to others.

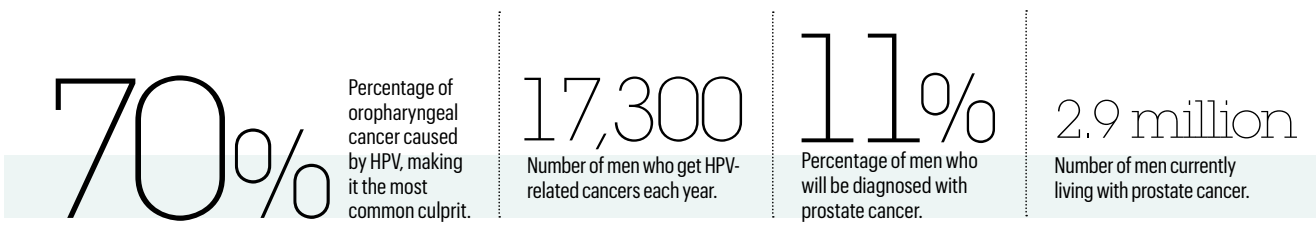
Q What red flags should I look for in my family health history?

Take note of prostate, breast, and ovarian cancers, especially among close relatives who died of any of these diseases at a young age.

Q Should I be screened for genetic cancer risks?

First, talk to a genetic counselor about the pros and cons of testing. You may prefer not to know you're at risk for something unpreventable.

BY THE NUMBERS





Search for the article **Your
Cancer Recovery Wellness
Plan** on WebMD.com.

FITNESS SMARTS

Work Out Your Cancer Care Plan

New research shows how exercise may reduce treatment side effects, lower recurrence risk, and extend survival



ARE YOU IN TREATMENT FOR CANCER? EXERCISE SHOULD BE PART OF YOUR treatment plan, says a recent report from the Clinical Oncology Society of Australia. People who have a cancer diagnosis should avoid inactivity and progress toward 150 minutes of moderate aerobic exercise and two to three moderate-intensity resistance exercise sessions each week.

“Exercise makes people feel better and have less fatigue, less depression, and fewer side effects from their therapy, and it might actually augment the effects of therapy to help patients live longer and better lives,” says Viraj Master, MD, director of the Urology Clinical Research Unit at Winship Cancer Institute of Emory University in Atlanta, Georgia. The report adds to growing evidence of the benefits of exercise before, during, and after cancer treatment, especially for three of the most common cancers in the U.S. today: breast, colon, and prostate.

Among women with breast cancer, those who exercise the most are least likely to die from the disease, research shows. “The studies include a variety of breast cancer stages, but particularly advanced breast cancer, and the more exercise you did, the longer you lived,” says Master. Women whose physical activity is equivalent to about three to five hours of walking each week got the greatest survival benefit.

When people with colon cancer walk about five hours a week at a normal pace—or do other exercise of the same intensity—they are 35% less likely to die from that cancer than people with colon cancer who don’t exercise. “When you look at people of the same age, stage, and tumor status, the person who exercised lived longer,” says Master.

In a study of 2,705 men with prostate cancer, men who did vigorous activity—think jogging, swimming, biking—for three or more hours each week were 61% less likely to die of prostate cancer than those who exercised less than an hour a week. Prostate cancer survivors who walked briskly for three or more hours a week had a 57% lower risk of recurrence than survivors who walked less than three hours at an easy pace.

“The strongest benefits of exercise are in the top cancers in the U.S. today,” says Master. “It seems evident that in other cancers we will also see these benefits.”

4 Tips

YOUR CANCER TREATMENT PLAN COULD BRING BETTER RESULTS WHEN IT INCLUDES EXERCISE. **VIRAJ MASTER, MD,** SUGGESTS SOME WAYS TO DO THAT.

START EARLY

Begin an exercise program before any planned surgery. “If we can ‘pre-habilitate,’ not rehabilitate, before surgery, it is quite likely you’ll do well,” Master says.

DON’T OVERDO IT

If you’re new to exercise, start out slow and easy and build up, whether that means walking at a slower speed or a shorter distance or using lighter weights. “The best thing you can do is to start, and starting anywhere is OK,” says Master.

LISTEN TO YOUR BODY

“If you’re fatigued from chemo and after five minutes at the gym, you’re even more fatigued or start to feel faint, that’s not the time to up the incline and the speed on the treadmill,” says Master.

STAY SAFE

Certain kinds of cancer treatment can weaken your immune system. If you’re getting treatment during flu season, that might not be a good time to go to the gym where other people may be sick. Work out at home for a while.



Search for the article
What Is Positive Thinking?
on WebMD.com.

REVIEWED BY *Patricia A. Farrell, PhD*
WebMD Medical Reviewer

MIND MATTERS

Easy Does It

People who show themselves some love have better health overall

→ Soothe Yourself

Positive self-talk can lower stress levels.



"I'M SO FAT." "I'M A TERRIBLE MOTHER." "I STINK AT MY JOB." CHANCES ARE, YOU'VE hurled one of these—or worse—insults at yourself at some point. Sure, you have high expectations of yourself. But did you know that putting yourself down could take a toll on your health?

"When we attack ourselves, [stress] levels go up and we have an inflammation of the immune system," says Kristin Neff, PhD, co-author of *The Mindful Self-Compassion Workbook*. That's why, Neff says, self-compassion, rather than self-criticism, is the healthier choice.

Harmful self-criticism isn't constructive. "Constructive criticism is 'I could have spoken more kindly to my child,' while unconstructive self-criticism is judgmental

and may include name-calling, like, 'I'm a mean mom,'" says Neff. That's the kind you want to avoid.

Self-compassion, on the other hand, is about cutting yourself some slack. A self-compassionate response to losing your patience with your child could include phrases such as, "I'm under a lot of stress. What can I do to take care of myself right now? All parents lose their patience with their children sometimes. That doesn't make me a bad mother."

When you replace criticism with a little love, you could see a range of health benefits. Research shows that self-compassionate people report fewer signs of depression and better overall physical health. They are also more likely to practice healthy behaviors, such as getting enough sleep, that can lead to better health. When people learn self-compassion, practicing it improves several markers of good health.

First, levels of cortisol in the saliva—a sign of stress that can be a precursor to inflammation and disease—drops. At the same time, immunoglobulin A in the saliva—a hallmark of a healthy immune system—rises. What's more, the act of self-compassion seems to increase heart-rate variability, which is an indication that the body is relaxed rather than under stress.

If it feels strange to talk to yourself this way at first, Neff assures, "it comes more naturally to some people than others, but it's definitely a learnable skill."

4 Steps

NOT EVERYONE HAS A NATURAL TENDENCY TO SHOW THEMSELVES LOVE, BUT ANYONE CAN LEARN, SAYS **KRISTIN NEFF, PhD**.

TAKE NOTICE

"Notice your self-talk," Neff advises. "Is that the way you would talk to a close friend who is feeling bad about herself?"

BE KIND

Self-critical statements, such as "I'm fat," are judgmental. Self-compassionate ones, such as "losing weight is hard," are kind.

KNOW YOU HAVE COMPANY

When you're self-critical, you tend to think you are the only one who's made this mistake or has this flaw. "The self-compassionate person says, 'Everyone struggles. It's not just me,'" says Neff.

KEEP PERSPECTIVE

Remind yourself that even though you're struggling, it's not the end of the world.



Search for the **Women's Health Message Board** at WebMD.com



WOMEN'S HEALTH

Unsafe Sex

Sex is a healthy part of any relationship, but sometimes it's not a good idea

TIMING IS EVERYTHING WHEN IT COMES TO MAKING LOVE, AND ASIDE FROM NOT being in the mood, sex can be unsafe or unwise in certain cases. Here are five times when you should abstain.

YOU HAVE A GYNECOLOGIST APPOINTMENT THE NEXT DAY

Having sex the night before your annual visit can inflame your cervix and make your Pap test results harder for your doctor to interpret. "Also, sometimes it's difficult to see the cervix because there's semen in it," says Ozhan Turan, MD, associate professor of obstetrics and gynecology and director of the Division of Maternal and Fetal Medicine at the University of Maryland School of Medicine. He suggests that you use a condom or avoid sex 24 hours prior to your appointment.

YOU HAVE A HIGH-RISK PREGNANCY

As long as you have a normal pregnancy, you can have sex all the way into your ninth month, Turan says. However, the advice is different if you're at risk for preterm labor. Sex triggers the production of prostaglandins—hormones that can cause contractions.

YOU'VE RECENTLY DELIVERED

After childbirth—whether you deliver vaginally or via C-section—your body needs time to heal. Generally, that takes a few weeks, but your doctor can tell you how long to wait. Even if you've been cleared for sex, the drop in estrogen after delivery and during breastfeeding can dry out your vagina and make sex more painful. Hold off on intimacy for a few extra weeks, or use a lubricant, Turan says.

YOU HAVE AN INFECTION

When you or your partner have an STD like chlamydia (in women) or gonorrhea, bacteria can travel from your vagina into your uterus and other reproductive organs during sex and cause pelvic inflammatory disease (PID). "And, if you don't use a condom, you could infect your partner," Turan says. Hold off on sex if you or your partner have symptoms of an STD.

YOU'VE RECENTLY HAD SURGERY

Your doctor will advise you to delay sex after any procedure involving your belly or reproductive organs. After a hysterectomy, Turan tells his patients to wait at least eight weeks until they fully heal.

When deciding whether it's safe for you to have sex, "the most important thing is to be aware of your body," Turan says. Pay attention to warning signs like bleeding and pain, and use them as a guide to call your gynecologist.

ASK YOUR DOCTOR**Q Am I at risk for an STD?**

Having unprotected sex—especially with multiple partners—increases your odds of getting an infection. If you're not in a monogamous relationship, consider using condoms.

Q How do I know if I have an infection?

Abnormal bleeding, foul-smelling discharge, and painful sex are some of the signs of an infection that should put your sex life on hold and prompt you to see your gynecologist.

Q What should I do if sex hurts?

Many factors can lead to painful sex, from endometriosis to vaginal dryness. For vaginal dryness, a lubricant can make sex more comfortable, but still see your doctor to check for treatable medical causes.

Q What if I'm never in the mood?

Everyone loses desire once in a while, but if you're persistently uninterested in sex and it affects your relationship, you might have a problem that needs to be treated. Talk to your doctor about treatment options.

HEALTHY HAIR

Get to the Root of It

Keep dyed roots bold and beautiful until your next salon appointment. Here's how.

NO ONE WANTS TO SIT AT THE salon for hours every three to four weeks. But unless you're ready to rock your natural gray hair, you really can't avoid it. You can, however, prolong the time between appointments in a few ways. First, try a root concealer such as Color Wow, as New York City colorist Kali Ferrara suggests. "Just find the color that best suits you and apply to roots for a quick, temporary fix that will hold you over until your next appointment," she says. Another option: Use your hair's natural texture to keep the focus off of the grays growing in. If you're overdue for your hair color and you like the look of your natural hair, tease strands for a little volume that goes a long way toward hiding the roots.

—AYREN JACKSON-CANNADY



Balance

FRESH START

• SkinCeutical Clarifying Clay Masque (\$52)

"Made with hydroxy acid for sloughing away dead skin, Kaolin and bentonite clay to absorb excess oil, and calming plant extracts, this mask leaves skin feeling healthy and balanced."

FINISH LINES

• Avène RetrinAL 0.1 Intensive Cream (\$70)

"This concentrated cream contains a peptide that helps prevent wrinkles with less irritation or redness."



EXPERT PICKS

Powerhouse Products

Keep your skin in check before your next dermatologist appointment with these recommendations from Marie Jhin, MD, a dermatologist in San Francisco, for at-home treatments that address everything from blackheads to wrinkles.

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.



EYE SPY

• ROC Retinol Correxion Eye Cream (\$18)

"I love this non-greasy and hypoallergenic cream—it's gentle enough to use around the entire eye area, but strong enough to help ward off wrinkles."

Prevent

Gentle

MOISTURE MAGNET

• Neutrogena Rapid Wrinkle Repair Regenerating Cream (\$21)

"If your skin is looking dull and blah, this is the product. On top of fine-line-fighting retinol, it has super hydrating hyaluronic acid to plump skin up. It's so moisturizing, you can use it on your neck, too."



Hydrate Improve

WIPE OUT

• Dr. Dennis Gross Alpha Beta Universal Daily Peel Packettes (\$88)

"These convenient at-home peel packets help improve uneven skin tone, fine lines, and large pores. The best part is that they're designed to do all of that with little to no irritation."





Looking for a doctor?
Use WebMD's
Physician Finder. Go to
WebMD.com/findadoctor.

DERM Q&A

Clean Sweep

To wax, pluck, shave, laser, or thread? No matter which body part you'd like to make smooth, silky, and hair-free, our expert has answers.



WITH ADVANCES IN TECHNOLOGY, YOU HAVE MORE HAIR-REMOVAL options than ever. But with so many at your disposal, how do you choose? That depends on your goal, budget, and maintenance level. Beverly Hills dermatologist **Tess Mauricio, MD**, CEO of MBeautyClinic.com, clears things up.

Q What's best for unwanted facial hair: upper lip, chin, and sideburns?

MAURICIO Laser or light-based hair removal offers the best chance for permanent hair reduction. These small areas shouldn't be very expensive to treat in a doctor's office. Or you

can use at-home devices. I like Luma Rx. It works using intense pulsed light.

Q What are the benefits and drawbacks of laser hair removal?

MAURICIO With light skin and dark hair, it's very effective—and when done properly, very safe. When you have skin of color, you're at a higher risk for burns and complications. The cons are higher cost and having to go to the doctor's office. You'll need a series of treatments—on average, seven—and may need maintenance over time.

Q What's electrolysis—and is it effective?

MAURICIO Electrolysis is the use of electricity to target and kill individual hair follicles. It's good if you have blond or gray hairs because laser hair removal won't work. Electrolysis isn't practical for large areas because you have to destroy individual hair follicles one at a time.

Q Are traditional at-home techniques good options?

MAURICIO Waxing, depilatories, and shaving are instant, quick,

and cheaper ways to temporarily take care of unwanted hair. Waxing gives longer-lasting results because you're pulling the roots. But shaving and waxing can cause ingrown hair when the hair comes back.

Q After removal, will hair grow in thicker and darker?

MAURICIO Everyone's response varies. If the areas are under-treated with laser or light energy, there's a chance it won't work or even cause more hair growth, so it pays to go to an expert.

Q Can prescription drugs slow hair growth?

MAURICIO Vaniqa (eflornithine) cream is prescribed by your doctor and has been shown to decrease hair growth, but you have to continuously use it or the effect diminishes. Many dermatologists also prescribe a pill called Aldactone (spironolactone) that's FDA-approved for blood pressure management. At lower doses it helps regulate hormones in the skin and can lead to reduced facial hair growth. But, again, you have to take it continuously to maintain its effect.

4 Questions

READY FOR LASER HAIR REMOVAL? THE AMERICAN ACADEMY OF DERMATOLOGY RECOMMENDS RUNNING THESE QUESTIONS BY YOUR DERMATOLOGIST FIRST.

IS IT A GOOD OPTION FOR ME?

Lasers don't work for everyone. Your dermatologist will consider your hair color, skin color, hair coarseness, where it is on your body, and where it is in the growth cycle.

HOW MANY TREATMENTS WILL I NEED?

Find out how long each treatment takes, how many office visits you'll need, and total cost involved.

WHAT RESULTS CAN I EXPECT?

Also ask: Will I see an improvement right away? How long does it take to get full results? How long do results last?

WHAT ARE THE RISKS?

Are there side effects? Is there anything I can do to prepare in advance?

Search for the slideshow
No-Knife Cosmetic Fixes at
WebMD.com.

BEAUTY SMARTS

The Old Is New Again

Innovations in treating hair loss, wrinkles, and skin texture are built off insights from existing treatments. Check out these cutting-edge non-invasive cosmetic procedures.

WHILE SO MUCH OF MEDICINE IS A CALCULATED SCIENCE, SOME OF THE most common treatments evolved from their originally intended purpose—Rogaine was originally a high blood pressure medication, Warfarin started as a rat poison, and Viagra treated angina.

The same has happened with cosmetic dermatology. Doctors have discovered, often accidentally, new uses for existing lasers and injectables. As a result, they have a growing menu of non-invasive cosmetic advancements available. “This is an exciting time for the field of cosmetic medicine,” says Anthony Youn, MD, a plastic surgeon in Troy, Michigan. “Dermatologists and plastic surgeons have so many technological advances available now—and the innovation continues every day.”

These three new applications for existing treatments now offer benefits beyond their original intent.

PLATELET-RICH PLASMA THERAPY FOR HAIR RESTORATION

Originally an orthopedic treatment used to reverse joint degeneration, platelet-rich plasma therapy (PRP) is now a routine option for addressing hair thinning and loss, says Katherine Holcomb, MD, a dermatologist at Pure Dermatology in Metairie, Louisiana. The procedure involves withdrawing the patient’s own blood, spinning it in a centrifuge to separate the

platelets, and injecting them into the scalp.

How this technique works in the joints and the scalp is the same as how your body heals a wound. “If you cut yourself, platelets are the first cells that start the healing process,” says Manjula Jegasothy, MD, a dermatologist in Coral Gables, Florida, and an associate professor of dermatology at the University of Miami, Miller School of Medicine. “They contain growth factors that stimulate the creation of new cells. The same premise works on the hair follicle to create healthier hair growth.”

In terms of thinning hair, PRP essentially “wakes up” dormant follicles, telling them to grow new hair and stimulate follicles that have shrunk in size so that the hair grows thicker, Holcomb explains. “Anything that stimulates hair growth will improve the quality of



the hair,” she says. “I like PRP because it’s pretty much risk-free. It’s your own blood—you’re using a treatment directly from your own body.” The downside is that insurance doesn’t cover it, and costs can rise to \$1,000 per treatment—you’ll likely need three sessions over the course of a year and then periodically after that.

But results are encouraging. “I’m seeing results in one treatment and some patients grow up to 50% of the hair they’ve lost,” Jegasothy says.

PICOSECOND LASERS FOR GENERAL SKIN REJUVENATION

Picosecond lasers were designed to remove tattoos, but new versions of the technology are now part of the anti-aging arsenal. “Pico lasers have become a great way to smooth the skin, reduce fine lines, and tighten skin with minimal downtime,” Youn says.

“Picosecond lasers were an innovation in tattoo removal because they deliver energy so quickly that they can efficiently break up tattoo ink,” says Jeremy Brauer, MD, a clinical assistant professor of dermatology at New York University Langone Medical Center in New York City. When researchers treated tattoos that happened to be near stretch marks, the marks also improved, which led to research in how these devices can address issues including fine lines, sun damage, and loose skin.

What makes the picosecond lasers an advance is that they deliver pulses of energy to the skin at one-trillionth of a second. These pulses vibrate the lower level of the skin to stimulate the production of

collagen and elastin. As a result, skin looks more even-textured, Brauer explains.

An added benefit of the picosecond lasers is their ability to target uneven pigmentation on a variety of skin tones. “Pico technology is unique because it’s safe for all skin types,” Holcomb says. “The energy can address the pigment cells that cause brown spots with less risk to darker skin tones,” she says.

Recovery from each session is minimal and usually involves slight redness. Each session can cost between \$300 to \$1,400 depending on the area. You and your doctor will have to determine how frequent your visits should be, but Holcomb reports seeing results in as few as one or two treatments.

MINI INJECTIONS OF NEUROMODULATORS TO PREVENT WRINKLES

Botox, Dysport, and Xeomin, a class of injectable neuromodulators, may be synonymous with smoothing wrinkles, but the injectable was originally employed as a way to control eyelid spasm.

An ophthalmologist used it to treat patients with blepharospasm. When one remarked on how the injections also reduced her forehead lines, the doctor mentioned it to her dermatologist husband—and the rest is history. Over the last two decades, doctors have used the injectable to treat a host of medical and cosmetic issues. The newest evolution uses very small doses of a neuromodulator to prevent wrinkles before they appear and provide a subtler effect in the short term.

THE SCOOP
Pore-fect

A SIMPLE GUIDE FROM NEW YORK CITY DERMATOLOGIST MICHELE GREEN, MD, FOR BEATING BLACKHEADS ONCE AND FOR ALL.



DON'T RELY
ON STRIPS

News alert! Blackhead strips won't prevent blackheads (pores clogged with grease and dead skin that turn dark when exposed to oxygen) because they don't affect your skin's oil production. They can, however, temporarily make your pores look smaller.

CLEANSE
CORRECTLY

Look for cleansers with acne-fighting ingredients such as salicylic acid or benzoyl peroxide. Salicylic acid helps clear blocked pores and reduces swelling and redness, while benzoyl peroxide exfoliates the skin and kills bacteria.

EXFOLIATE
REGULARLY

Acne-fighting chemical exfoliators such as glycolic acid and salicylic acid are able to get into the lipid barrier of the skin, eliminating blackheads. Look for handy, disposable pads saturated in these ingredients to get easy at-home peel benefits.

READ THE LABEL

Comedogenic oils and pore-clogging ingredients that are common in skin-care products and cosmetics are a major cause of blackheads. If you have pore problems, make sure your skin-care products say “non-comedogenic.”

Aisle Do

SALVAGE CHAPPED LIPS WITH THESE EXPERT FAVORITES THAT LOCK IN MOISTURE.



PRODUCT PICK

VASELINE LIP THERAPY TIN (\$4)

“This is the best moisturizer, and it keeps the skin barrier healthy. I also love the cherry flavor and nice tint. And if you have kids, it doubles as a wound healer for scrapes on the go.”

Mona Gohara, MD
associate clinical professor, Yale
Department of Dermatology

PRODUCT PICK

BURT'S BEES BEESWAX LIP BALM (\$3)

“The balm makes a protective barrier that’s not a bit heavy on lips. It’s very soothing, and I like that it contains vitamin E, a natural moisturizer.”

Diane Madfes, MD
assistant professor of dermatology, Mount
Sinai School of Medicine

PRODUCT PICK

EOS LIP BALM (\$3)

“My lips tend to get dry when I work out. This lip balm contains shea butter and vitamin E, so it’s great for hydration.”

Debra Jaliman, MD
dermatologist, author of Skin Rules:
Trade Secrets from a Top New York
Dermatologist

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.

GETTY IMAGES

Continued from page 21

“Many people aren’t looking for a frozen effect,” Holcomb says. “Younger patients like the subtle results.” When muscle movement is limited, the skin isn’t creased, she says. So you aren’t able to form the wrinkles to begin with—these smaller doses are able to prevent or delay their formation.

Elizabeth Tanzi, MD, a dermatologist in Chevy Chase, Maryland, agrees. “For those who want softer results, I’ll use a lower dose so the treated areas look natural, not stiff,” she says. “This benefits my patients under 50 with early fine lines who don’t need as high a dose.”

You’ll pay about the same as you would for a standard injectable treatment because doctors usually charge per treatment area—about \$500 on average.

Bottom line: Cosmetic treatments are evolving almost daily, so a visit to your doctor’s office might surprise you with new options that go above and beyond what you may already be familiar with.

Dirty Secret

“I USE THE SAME DISPOSABLE RAZOR FOR MONTHS AT A TIME. SAFE—OR NOT?”

SHAVING TIME

“You shouldn’t keep your razor around for more than a month—your blade can dull in just four or five uses, depending on how often you shave and how large the areas are. No matter how new a razor is, you should toss it if you see rust spots or the blade looks warped.”

STAY SHARP

“As the razor’s edge dulls, you have to exert more pressure to slice each hair, and that increases the odds you’ll nick or cut yourself. Plus, pressing and dragging the dull metal over your skin causes irritation in the form of razor burn. And the longer your shaver sits in a damp shower, bacteria and fungus

have more opportunity to grow. If one of those microbes enters a cut, you’re risking an infection of the hair follicle (folliculitis), impetigo, or even cellulitis.”

SMOOTH MOVES

“To extend the life of your razor and reduce the risk of irritation, use a shaving cream to diminish friction. Clean your razor in hot water after each use, taking extra care if you’ve cut yourself. Store it in an upright position so the blades can dry between uses to ensure you’re not providing an environment in which bacteria can thrive.”

—**Papri Sarkar, MD**
dermatologist, Brookline,
Massachusetts



ANATOMY OF...

Hair Mousse

The story behind the styling foam



NOT JUST DESSERT

L’Oreal introduced hair mousse, French for “foam,” to Europe in the early 1980s and it shortly became ubiquitous in the U.S. Mousse has become so common because it’s so versatile and useful for many hair types. Formulas are able to volumize, hold, condition, smooth, and even deposit color.

CATCHING AIR

The essential ingredient in a mousse recipe is air. The injection of oxygen, with an aerosol can or through a manual pump, transforms the runny liquid into a fluffy foam that you can apply easily.

MOUSSE IS LOOSE

What makes mousse novel in the world of hair styling is that the coating agents adhere to individual strands. As the product dries, the film holds each hair while pushing away from the others, creating shape and fullness without gluing them together like a spray or gel does.

READY WHIP

The basic recipe for mousse includes water and alcohol to carry and disperse the ingredients. Polymers and resins do all the heavy lifting. They form a flexible film on each strand that is able to deliver styling benefits without leaving the hair feeling stiff.

GET EVEN

For the most even mousse application, squeeze it directly into your palm. Take a fine-tooth comb and apply the foam directly to your roots, working in small sections. For all-over application, rub the mousse between your hands to break it down before working it throughout your hair.

BRUSH OFF

For springy coils, comb damp hair and apply mousse throughout. Then keep your hands—and brush—off. After air-drying or using a diffuser on your blow dryer, your coils will hold their shape.

EARLY INTERACTION

Baby Talk

When babies make sounds, other babies listen. Could hanging out with other infants boost your child's language development?

BABIES LOVE THE SOUND OF other babies' voices, even before they start babbling themselves, according to a new study from researchers at Canada's McGill University. They found that 5-month-old babies spent 40% longer listening to the "goo-goos" and "ga-gas" of other infants than to adults making the same sounds.

"Infants' own vocalizations are quite potent; infant speech seems to capture and hold infant attention, sometimes prompting positive emotions," said Linda Polka, PhD, an associate professor at the McGill School of Communication Sciences and Disorders in Montreal. She suggests that this fascination may support the earliest stages of speech development.

You can encourage baby-to-baby chatter at mommy/daddy-and-me groups, baby yoga classes, and story time at the library. —GINA SHAW



Search for the article **What Is Stress?** at WebMD.com.

KIDS' HEALTH

Toxic Stress

In her new book, pediatrician Nadine Burke Harris sounds the alarm about childhood trauma, touting research that correlates early adversity with damaged health in adulthood



A DECADE AGO, NADINE BURKE HARRIS, MD, A PEDIATRICIAN BASED IN San Francisco, happened upon a mid-1990s research study on adverse childhood experiences (ACE) that surveyed 17,000 mostly white, middle-class, college-educated adults. Its 10 questions measured occurrences of physical, emotional, substance, and/or sexual abuse in the family home when these adults were young. It also noted parental separation through divorce or imprisonment, mental health issues, and neglect. Researchers then directly overlaid these findings with individual health outcomes in adulthood.

The results shocked her: The higher the ACE score, the higher risk a person in the survey had of developing physical conditions such as heart disease, stroke, autoimmune disorders, and cancer in adulthood (with greatly increased odds for depression, obesity, and substance abuse, too). Considering the CDC reports that one in four children suffers abuse or neglect, and that

few pediatricians screen for traumatic experiences, Burke Harris was surprised more health providers weren't focused on prevention and treatment during a child's formative years.

This knowledge changed her mission at her clinical practice. Today, Burke Harris identifies young patients living with adversity to help treat its negative effects now—before chronic stress causes physical and behavioral problems down the line. In 2013 she co-founded the Center for Youth Wellness, and in 2015 she gave a rallying Ted talk that to date has garnered nearly 4 million views. Here, the debut author discusses ACE and the main message of her book, *The Deepest Well: Healing the Long-Term Effects of Childhood Adversity*.

Q How does adversity physically impact our bodies?

BURKE HARRIS Not all adversity is bad. The way our bodies respond to stressful events was designed to be adaptive. When we release high levels of stress hormones, it activates our bodies to respond to a threat. Our hearts beat stronger and faster. We increase our blood pressure and sugar. We activate the fear center of the brain. Small amounts of stress hormones can enhance clear thinking from short-term adrenaline. It's when we have an

overwhelming response from cortisol that clear thinking is impaired.

Q What happens when a child is regularly exposed to traumatic experiences?

BURKE HARRIS When exposed to high doses of adversity, the normal functioning of the body's stress thermostat doesn't work—you lose your ability to turn it off. The stress response may be turned on inappropriately or be more persistent. It goes from being adaptive or life-saving to maladaptive or health-damaging.

This overactivity is called the toxic stress response. It's characterized by changes to the brain and neurologic system; to the immune system, leading to increased inflammation and inhibition of the ability to fight off viruses; and to our hormonal systems, including stress hormones such as adrenaline and cortisol, as well as to normal levels of other hormones, too, like growth hormone, thyroid, and pubertal hormones.

Q Can this maladaptive stress response actually alter DNA?

BURKE HARRIS Stress doesn't change our genetic code, but it can change how our genetic code responds to our environment or outside stressors. This is what's called epigenetic regulation. If you think about the genetic code as musical notes on a page, then epigenetic regulation can be thought of as a musical notation that would tell you to play this part loudly or skip that entire section. This is the way our environment influences our bodies, leading to long-term changes in how our cells are wired to respond.

Q What kind of health problems rise in adulthood among those with high ACE scores?

BURKE HARRIS Having an ACE score of four or more [meaning, a "yes" answer to four or more questions] is associated with a dramatically increased risk for seven out of the 10 leading causes of death in the United States, including double the risk of heart disease, slightly more than double the risk for cancer, two and a half times the risk for stroke, eleven times the risk for Alzheimer's disease, and one and a half times the risk for diabetes.

Q Has the study been advanced or updated since it offered its original findings?

BURKE HARRIS Yes, there was a global ACE update in 2017 that included research from 22 countries. [Those with higher ACE scores] now have 30 times the risk of suicide, are four and a half times more likely to be depressed, and have 10 times the risk of being an IV drug user.

Q Are some people more susceptible than others to toxic stress?

BURKE HARRIS The science tells us there is some predisposed vulnerability that may be genetic. We also know that protective factors make a big difference. So safe, stable, and nurturing environments can actually buffer the stress response.

For example, the hormone oxytocin is released when we hug each other—it's a bonding hormone that connects humans to each other. Its release interferes with the stress response and helps shut it off. Kids get oxytocin from their caregivers.

Treating ACE

You can search online to find the adverse childhood experiences (ACE) quiz. If your ACE score is four or higher, Burke Harris says the most important thing you can do is "to recognize your stress response may be overactive" and to consider making some lifestyle changes. She advises beginning by creating a "strong buffering environment" through a supportive partner, therapist, or network of friends. In addition, research shows the following actions may help counteract ACE in adulthood:

GET YOUR EIGHT HOURS

"Sleep is one of the first things affected by adrenaline and cortisol," she says. "Managing sleep is important because sleep is a regenerative process for the brain. While we sleep, our stress hormones go down. Not sleeping enough generates and aggravates stress hormones"—even when we happily stay up all night partying in Vegas or just talking with a friend.

SEEK SOUND CONNECTIONS

Healthy relationships "release oxytocin and aid neuroplasticity, the ability of the brain to make new connections," she says. "Our brains are wired to respond to stress, yet they constantly edit that wiring. While this happens at the highest rates in childhood, our brains have the ability to continue to rewire in response to safe and nurturing relationships."

PRIORITIZE EXERCISE AND NUTRITION

Working out "reduces stress hormones and inflammation, and improves immune system function," Burke Harris says—"as long as you're not doing ultra-marathons" that cause inflammation. Eating a healthy, balanced diet counteracts the stress response, too.

BE MINDFUL

"Mental health treatments [therapy, medication] can help strengthen the parts of the brain that are responsible for recovery from provocation to help calm the stress response," says Burke Harris. Meditation and mindfulness, she adds, also assist the sympathetic nervous system, reduce inflammation, and improve the integration and activation of the prefrontal cortex to better regulate the body's stress thermostat.

BY THE NUMBERS

676,000

Number of victims of child abuse or neglect reported to child protective services (CPS) in 2016.

1 in 4

Number of children who have suffered some form of child abuse or neglect in their lifetime, according to a non-CPS survey estimate. One in seven children have been abused or neglected in the past year.

About 1,750

Number of children who died from abuse or neglect in 2016.

20%

Percentage of improvement in classroom productivity and engagement among students when positive, stress-relieving methods were applied at partnering schools.

GETTY IMAGES

GETTY IMAGES



Search for the article **Pregnancy Myths, Dos, and Don'ts** on WebMD.com.



PREGNANCY

Safe—or Not?

An expert weighs in on what's OK—and what's not—during pregnancy

YOU KNOW THAT HAVING A BABY WILL CHANGE YOUR LIFE, BUT HOW MUCH DO you need to change during those nine months before delivery? The answer isn't always straightforward, and it can be hard to tell what's a smart move and what's overkill. **Zev Williams, MD, PhD**, chief of the Division of Reproductive Endocrinology and Infertility and associate professor of obstetrics and gynecology at Columbia University Medical Center, addresses a few key issues.

Q Can I travel by plane?

WILLIAMS Absolutely, as long as you're not too close to your due date. Many airlines have rules about when, exactly, pregnant women are no longer allowed to fly. It's not because it's dangerous, but you don't want to go into labor over the Pacific.

If you do opt to travel at any point during your pregnancy, you should know that sitting still for a long time—whether it's on a plane or in a car—can raise your risk

of dangerous blood clots, and pregnancy alone also ups this risk. Protect yourself by walking the aisles or pulling over at a rest stop so you can move around every hour or two.

Q Can I exercise while pregnant?

WILLIAMS Yes, and you should, because it's good for you and the baby. That said, stick with moderate activity. This is not the time to be training for a marathon, unless you are accustomed to strenuous activity. Get the OK from your doctor first.

Q Do I have to give up coffee?

WILLIAMS Go ahead and enjoy a cup. Some women get pregnant and decide to go cold turkey on caffeine, which can cause terrible rebound headaches. There's no evidence whatsoever that one or two cups a day is harmful.

Q Should I change my beauty routine?

WILLIAMS That really depends on what it currently involves. Most makeup, cleansers, shampoo, and deodorants are still fine to continue using during pregnancy, but if you get chemical hair treatments (like relaxers), then it's best to take a break until after you deliver. No one has carefully studied all these chemicals during pregnancy, but they have the potential to be quite potent. I'd err on the side of caution.

If you currently use acne or anti-aging products, check with your doctor. Retinol, even in the topical form, is one common ingredient you should avoid during pregnancy. This and other ingredients may cause development problems in an unborn baby.

4 Tips

MORE PREGNANCY DOS AND DON'TS TO KNOW ABOUT FROM ZEV WILLIAMS, MD, PhD.

STRESS AND MISCARRIAGE

Stress doesn't increase the chance of having a miscarriage. While it's still a good idea to get stress in check, no evidence shows that being frazzled will cause you to lose a baby.

WARM, NOT HOT

You can take a warm bath, but stay out of scalding hot tubs. You don't want your core body temp to get too high, which may harm an unborn baby's development.

STEER CLEAR OF ALCOHOL

You may think a drink now and again may be fine. But abstaining is best. "There's no safe limit," says Williams.

GO EASY ON EMPTY CALORIES

Limit added sugars and fatty foods to avoid gaining too much weight during your pregnancy.



Search for the slideshow
**Baby Skin Care: Simple
Tips to Keep Baby's Skin
Healthy** at WebMD.com.

BABY

Red Alert

Staying on top of eczema, a skin condition common in infancy, might prevent your baby's risk of allergies as she grows



YOU MAY THINK OF BABYHOOD AS A TIME OF SOFT, SMOOTH SKIN, BUT AT LEAST 10% of babies develop eczema before age 2. Also known as atopic dermatitis, eczema is an inflammatory skin condition that makes skin unable to hold onto moisture, creating red, itchy, rough patches. It often runs in families and can appear in babies as young as 3 months old.

"Infantile eczema often shows up only on the face, and babies look like they have a sunburn," explains Amal Assa'ad, MD, clinical director of the division of allergy and immunology and director of the FARE Center of Excellence for Food Allergies at Cincinnati Children's Hospital Medical. But the rash may also appear in elbow folds or behind your baby's knees; in fact, Assa'ad notes she has seen it almost everywhere on the body. Affected skin can be intensely itchy, she adds, which prevents good sleep and leads babies to scratch their skin or rub against bedding or other surfaces for relief, creating an infection risk.

Eczema treatment involves keeping the skin well-moisturized, in part through short daily baths. "A lot of people think of bathing as drying, but if you do it the right way, the skin actually becomes more moisturized," Assa'ad says. Soak

baby in tepid water for about 10 minutes, washing dirty areas gently with a non-soap cleanser. Do not scrub the rash.

After the bath, pat baby dry. If your doctor has prescribed an anti-inflammatory steroid ointment, apply it now, and follow immediately with a moisture barrier. Assa'ad recommends products such as Vaseline and Vanicream. Avoid products that contain alcohol or fragrances, which can irritate the rash. Assa'ad also warns against products that contain nut or seed oils, such as almond or sunflower seed oil, which can enter the baby's body through tiny cracks in rashy skin and may increase her risk of serious food allergies as she grows.

"The skin is an unusual route into the body, so the immune system responds by creating allergy antibodies, which can trigger an allergic reaction," Assa'ad says. In fact, research suggests that babies with eczema have an increased risk of peanut allergy because peanut particles enter through dry, cracked skin, prompting the immune system to react when they eat peanuts. Keeping skin healthy and well-moisturized may reduce the risk of such allergies, Assa'ad says.

To prevent eczema flare-ups, keep your baby at a comfortable temperature—heat, sweat, and cold can all worsen symptoms. Eczema triggers can be highly individual, Assa'ad adds, so be attentive to spot your baby's patterns.

ASK YOUR DOCTOR

Q I'm doing everything right. Why is my baby's skin still flaring up?

Check in with your child's doctor, who may prescribe medicated ointment or suggest other tweaks for relief.

Q Should my baby see an allergist?

Moderate to severe eczema may signal that baby is at increased risk for peanut allergy or other allergies, Assa'ad says. Ask your pediatrician if you should have your infant evaluated for allergies.

Q How can I prevent my baby from scratching her eczema?

Keep her nails trimmed short, cover itchy areas with light clothing, and consider covering her hands with infant mittens or sleeves.

Looking for a doctor?
Use WebMD's
Physician Finder. Go to
WebMD.com./findadoctor.

REVIEWED BY Roy Benaroch, MD
WebMD Medical Reviewer



PARENTING

When You Have Cancer

An expert suggests ways to have this most difficult conversation with children

RECEIVING A DIAGNOSIS OF ANY KIND OF CANCER IS TERRIFYING FOR ANYONE. But when you're a parent, the news comes with another set of worries: How do I tell my children I have cancer? How do I help them cope with this diagnosis when I'm barely able to think about it myself?

You don't have to tell your children right away, says Nancy Borstelmann, PhD, MPH, director of social work at Dana-Farber Cancer Institute in Boston. But it's better that you do tell them. "Take time to absorb the news yourself first. Then talk with your partner or other adult family members about how you're going to share the information," Borstelmann says. "You can also ask a therapist at the hospital where you'll be getting treatment for guidance. Remember: You know your child best."

It's natural to want to protect children from bad news, but when something as big as cancer is happening in the family, kids will sense the emotional and physical changes.

"It's best that they hear the news from you directly instead of overhearing it or imagining something even scarier than cancer," says Borstelmann.

HOW DO YOU HAVE THIS TALK?

Tell the truth in a way your child can understand. Preschoolers and early elementary age children will need very limited information, while older kids and teens will need more specifics.

Explain what will happen with your treatment and how it will affect you—and them. For example, if you know you'll be getting chemotherapy every Friday, explain that on those days Aunt Jane or Grandma will be taking them to school, and you might need to rest a lot the next day.

Welcome questions openly, even if you don't know the answer. You can say, "That's a really good question. I'm going to have to ask my doctor about that and I will come back and tell you."

Make sure they know they didn't cause this. "Younger children, in particular, tend to personalize things and may believe they somehow made Mom or Dad sick," says Borstelmann. "And reassure them that cancer isn't contagious. Even older kids sometimes worry about that."

Don't try to say everything all at once. "It's okay to break this up into several conversations," says Borstelmann. "Mostly, they need to know it's okay to come to you with their questions and worries."

The Big Question

"ARE YOU GOING TO DIE?" WHAT CAN YOU SAY WHEN YOUR CHILD ASKS YOU THE BIGGEST, SCARIEST, HARDEST QUESTION OF ALL? DEPENDING ON WHAT YOU KNOW ABOUT YOUR CANCER AND ITS PROGNOSIS, SAYS **NANCY BORSTELMANN, PhD, MPH**, YOU MIGHT CONSIDER ONE OF THESE ANSWERS.

"Some people do die of cancer, but I'm getting really good treatment. I have good doctors, and I'm not expecting that to happen to me."

"We don't always know about the future, but I am doing everything I can to get better. The doctor told me I have a very good chance of recovering."

"Everyone responds differently to cancer treatment, but scientists are developing new and better treatments all the time."

"I am sick, but I'm not dying right now. Even if things get worse, we'll figure out what to do together, and I promise I'll tell you exactly what's going on."

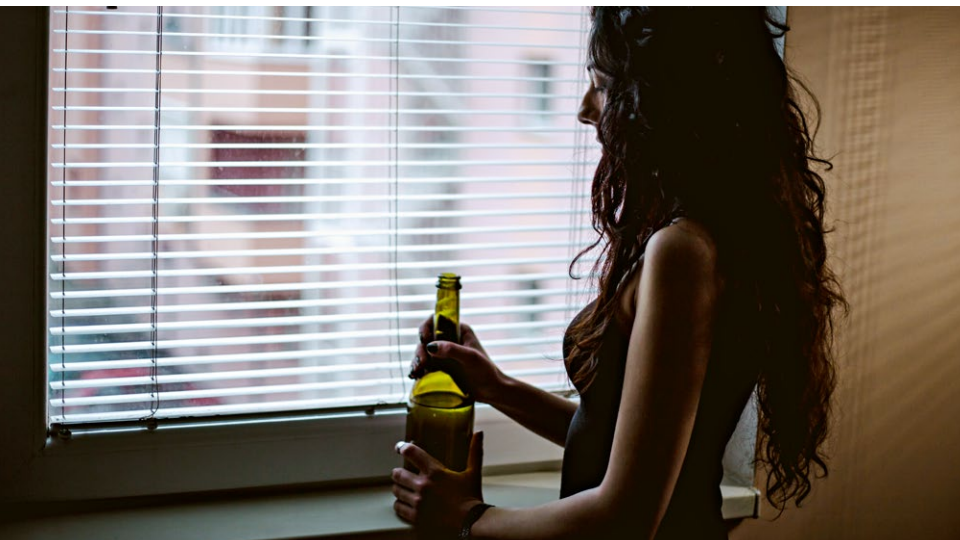


Search for the slideshow **A Visual Guide to Understanding Eating Disorders** on WebMD.com.

TEEN HEALTH

The Dangers of Drunkorexia

Older teens and college students who binge drink while restricting calories from food set themselves up for sexual assault, bad grades, and poor health



THE NATIONAL INSTITUTES OF HEALTH (NIH) REPORTS 60% OF COLLEGE STUDENTS drink alcohol monthly, with two-thirds binge drinking at least once within the same timeframe. And nearly 6% of all new college freshmen arrive with a pre-existing, untreated eating disorder. Data at one university collected over 13 years shows an increase of disordered eating up 32% among female students and 25% among males, according to the National Institute of Mental Health (NIMH).

So, what happens when these two unhealthy behaviors collide?

Dipali Rinker, PhD, LPC, assistant professor in the department of psychology at the University of Houston and co-author of a study on disordered drinking among college students, says, “When someone withholds food calories, over-exercises, or takes diuretics or laxatives to drink without gaining weight, that’s ‘drunkorexia.’ People engaged in this behavior tend to drink more.”

Rinker adds the problem has become “a lot more noticeable” in the past 10 years, likely because social media shines a light upon it even as the pressure to stay slim has increased for both genders, who share the same level of risk.

Drunkorexia is defined as four or more drinks in one sitting for women and five

or more drinks for men, she says. “Up to 80% of the students in our survey of 1,184 self-identified heavy drinkers said they’d engaged in one or more ‘drunkorexic’ behaviors within three months of being sampled.”

The physical dangers of drunkorexia include poor nutrition, alcohol poisoning, blackouts, stomach disruption, and headaches. “There are social issues, too, to consider,” Rinker adds, such as drunk driving and the added risk of assault while under the influence of alcohol. A recent national survey on college drinking backs this assertion: 97,000 students suffered alcohol-related sexual assault or date rape; 696,000 students reported being assaulted by another student who’d been drinking; and 1,825 students died from alcohol-related injuries, including automobile accidents. All surveyed students were between the ages of 18 and 24.

Poorer academic performance is another result. The NIH reports binge-drinking college students who consumed alcohol at least three times per week were roughly six times more likely than those who drank but never binged to perform poorly on a test or project as a result of drinking and five times more likely to have missed a class.

Intervention is key, says Rinker, “because the same students who restrict calories to get drunker, faster, tend to have a greater capacity for alcohol consumption—which can lead to alcohol-related problems, or alcoholism, down the line.”

4 Questions

DIPALI RINKER, PhD, HAS ANSWERS ABOUT DRUNKOREXIA, A GROWING PROBLEM FOR TEENS AND YOUNG ADULTS, ESPECIALLY THOSE IN COLLEGE.

ARE UNIVERSITIES RESPONDING TO THIS PROBLEM?

Not yet, Rinker says. “They know alcohol, body image, and sexual assault are all concerns, but not necessarily how they’re interconnected.”

HOW CAN A PARENT HELP PREVENT DRUNKOREXIA?

“Be aware of how college kids drink. And have the conversation about alcohol with your children before they leave for school,” Rinker advises. “Explain how some drinking behaviors are actually very dangerous.”

WHAT ARE SOME RED FLAGS TO LOOK FOR?

Social media posts can reveal a lot. Excessive partying and exercise, skipping classes or meals, poor grades, fatigue, and depression can also be signs of the disorder.

WHAT RESOURCES CAN PARENTS TURN TO FOR HELP?

The NIH shares comprehensive resources for student drinking problems—search “CollegeAIM.” Or contact the National Eating Disorders Association (NEDA).

Search for the video **Canine Cancer** on WebMD.com.

PETS

Dealing with Cancer

Just like people, cats and dogs can develop this deadly disease. Know the warning signs and help keep your pet healthy.



a much better chance of being able to do something about it if it's caught early," says Michael Kent, DVM, professor in radiation oncology at the University of California, Davis School of Veterinary Medicine.

As with their human counterparts, cats and dogs are diagnosed with cancer mostly in middle and older age. That's

→ **Your Best Bet**

If you see any noticeable changes in your pet, consult your vet.

generally around 6, 7, or 8 years old for both cats and dogs, though cats tend to live longer, says Kent. As your pet ages, be sure to take him in for a yearly checkup with the vet. While this won't prevent cancer, it may be found earlier and your vet can spot any other problems as well, he adds.

WATCH FOR SIGNS

Pets can't tell you if they're not feeling well, so you need to keep an eye out for signs that something has changed. "Probably the most common thing to look for are any lumps or bumps in both dogs and cats," says Kent.

Other red flags? Watch for weight loss; a change in appetite; difficulty breathing, eating, or swallowing; abdominal swelling; discharge; lethargy; changes in urination; and any nonhealing sores or wounds, says Borgatti.

Lameness, especially in larger-breed dogs, could be a sign of bone cancer, she adds. And don't ignore bad breath or mouth sores, which should be investigated by your vet, says Borgatti.

Yet while you want to be alert to any of these signs in your pet, don't panic if you find them. They don't necessarily spell cancer. Many nonspecific signs such as weight loss could be caused

by other conditions, such as diabetes, says Kent. "There are many lumps and bumps that could be just little fatty deposits, what we call lipomas, which are usually benign," he adds. But you do want to get these things checked out by your vet. Lipomas can be cancerous (called liposarcomas), though they are very rare.

Bottom line: If you notice any changes in your pet, bring them to the attention of your vet as soon as possible.

PROTECT YOUR PET

Can you prevent cancer in dogs and cats? Exposing your pet to second-hand smoke may increase the risk of cancer in cats and dogs, according to some studies, so you shouldn't let your pet be around it, says Kent. Also, some evidence suggests that using certain pesticides on your lawn where your dog plays may increase the possibility of lymphoma, Kent says.

"We do know that light-colored dogs and also white cats with pink noses shouldn't be sunbathing," says Kent. "Just like with people, they're subject to UV damage and can get squamous cell carcinoma or other types of skin tumors." Try to keep pets, especially light-colored ones,

from direct sunlight, even though they may love it, he says.

Finally, spaying and neutering at any early age can protect your pet against the development of mammary and testicular tumors later on, says Borgatti.

While overall most cancers can't be prevented, "it's important to keep pets active, fit, healthy, and on a balanced diet for the overall health of your dog and cat," she adds.

DIAGNOSIS AND TREATMENT

What happens if your pet does get cancer? Know that it's not necessarily a death sentence, says Kent. "It depends on the type of cancer, when it's found, and how long it's been there. But we cure many, and we're able to help many more [animals] live for long periods of time afterward."

Treatment options are similar to those in humans, including surgery, radiation therapy, and chemotherapy, says Borgatti. Any side effects are usually far less severe than they are in people, she adds.

"We dose for quality of life and not having our patients very sick," says Kent. "That's something we stress very much in veterinary medicine—the quality of life of our patients."

4 Questions

Ask your veterinarian about these important issues, say **Michael Kent, DVM**, and **Antonella Borgatti, DVM**.



Q Is this normal for my dog or cat?

Many behavioral or bodily changes are not simply signs of aging, says Borgatti. Don't hesitate to ask, "Is this something we should be concerned about?"

Q Is there a cancer diet?

Not really, says Kent. "You want good, balanced nutrition, whether that's commercial food or home-cooked." If you do decide to cook for your pet, talk to a veterinary nutritionist first.

Q Can I give my pet supplements?

While many are on the market, little research about supplements exists, says Kent. Talk to your vet if you decide to give supplements, since they may interact with other drugs.

Q What about chemotherapy side effects?

"The vast majority of dogs and cats do very well with chemotherapy," says Borgatti. "Some don't have any side effects, and those that do are manageable." In addition, most dogs don't lose their fur, says Kent.

BY THE NUMBERS

50%

Percentage of dogs older than age 10 that will develop cancer, according to the American Veterinary Medical Association (AVMA).

66%

Percentage of households in the U.S. that have a cat or a dog, according to the AVMA.

52%

Percentage of cats in the U.S. that have not been to a veterinarian in the past year for a checkup, according to a recent survey.

KIDS' HEALTH

Privacy Alert

Do the apps on your child's phone violate her privacy?
New research suggests the majority are illegally tracking kids.



WHEN YOUR CHILD CLICKS ON AN APP ON A PHONE OR TABLET, HOW MUCH information does she give away—and to whom? This is a question more parents may want to ask in the wake of research suggesting that many free apps for kids may be violating federal privacy laws.

"Most of us have no idea how much information is being collected through all those clicks or are aware of the profiles that are being built about us and our children in the name of commercial marketing," said Dipesh Navsaria, MD, an associate professor of pediatrics at the University of Wisconsin.

One recent study of nearly 6,000 popular children's apps found that more than half appear to violate the Children's Online Privacy Protection Act (COPPA), which prohibits the collection of locations, phone numbers, email addresses, contact lists, browsing habits, photos, and other personal identifiers from children age 13 and younger without parental consent.

The study also found that many apps make it easy for a small child to inadvertently give "parental consent." "If you're a child who can't read, you can easily click a big 'OK' button without knowing what it means," says study author Serge Egelman, a researcher at the International Computer Science Institute in Berkeley, California.

Egelman says such private information is often gathered and sold to third parties, who use it to develop targeted advertising—including junk mail, spam, or pop-up ads—for

both child and parent. This information could also ultimately be used by potential employers or universities to glean information about where a person lived as a child, his or her socioeconomic or health status, or other sensitive information from the past.

Navsaria notes that young children are often not cognitively mature enough to know the difference between an advertisement and reality, and pre-teens lack the foresight to envision how personal information they share today may be used years from now. "To collect data from children and use it to market to them is inherently exploitative. That's why there are laws against it," he says.

In April, two dozen child advocacy groups filed a complaint with the Federal Trade Commission (FTC), alleging that YouTube—which 80% of 6- to 12-year-olds use—violates COPPA. (YouTube has countered that the site is not intended for children younger than 13.)

Meanwhile, Egelman and Navsaria are calling on lawmakers and tech giants like Google and Apple to do more to ensure that child-targeted apps provided through their sites comply with the law.

What can parents do? Navsaria suggests taking a close look at the privacy settings on your child's phone or tablet, keeping an eye on which apps they're using, and reminding them to ask you for permission before sharing information: "Let them know at an early age that there is such a thing as sharing too much."

BY THE NUMBERS

57%

Percentage of children's apps researchers tested that appear to violate federal data privacy laws.

5%

Percentage of apps that track children's location without parental consent.

40%

Percentage of apps that share children's personal information without "applying reasonable security measures."

19%

Percentage of apps that unlawfully collect and share personally identifiable information that can be used to track a child over time and across devices.

For details about specific apps studied, go to www.appcensus.mobi.



ELTON ANDERSON, JR.

POSITIVELY HILL ARI OUS

COMEDIAN AND ACTOR **TIFFANY HADDISH** PUTS A PAINFUL PAST BEHIND HER WITH PLENTY OF HUMOR

BY LAUREN PAIGE KENNEDY | REVIEWED BY MICHAEL W. SMITH, MD, WEBMD CHIEF MEDICAL EDITOR

If there's one word to describe Hollywood "It Girl" Tiffany Haddish, it's *positive*. Her infectiously "up" vibe renders A-list actors, talk show hosts, and audiences of all stripes defenseless.

In fact, it seems Haddish, 37, has laughed her way to the top. After breaking out at the box office with last year's *Girls Trip*, she stars opposite her friend and mentor Kevin Hart in *Night School*, which hit theaters in September. She shares the small screen with Tracy Morgan in the witty, gritty TBS series, "The Last OG," renewed for a second season. Her first Showtime standup comedy special, "She Ready," earned rave reviews. She hosted the MTV Movie & TV Awards in June. And her 2017 memoir, *The Last Black Unicorn*, is a headline-making bestseller.

But don't mistake this famously funny lady for an overnight success. She built a career over two decades of performing at family bar mitzvahs and touring comedy clubs. What makes her triumph—and her buoyant attitude—all the more remarkable is how she overcame a traumatic childhood, followed by a rocky young adulthood.

"As a little kid I was happy-go-lucky, but later, for a long time, I kept to myself because I was afraid," Haddish says now. "Then I saw that movie *Who Framed Roger Rabbit*, and he tries to make everybody laugh. I was like, 'Hmm, let me see if I can make people laugh.' In order to do that, you have to have some kind of positivity."

As a teenager she made a conscious choice to chase happiness. "People who focus on the negative all the time? You don't bounce back from nothin', because your focus is on the bad stuff. There's no resilience in negativity; it's just more pain. If I focus on positive thoughts and attitudes, then it's least likely I'll fail," says Haddish.

She credits this smiling determination, coupled with a fierce work ethic and years of therapy, with becoming the breakout star—and the healthy, confident woman—she is today.

HISTORY OF ABUSE

Haddish is reflective on—and generously forgiving of—her parents, who left her with some emotional scars.

Abandoned by her father when she was 3, Haddish was raised in poverty in South Central Los Angeles by her mother, who was involved in a terrible car accident when Haddish was 9. The accident left her mom with a traumatic brain injury (TBI). Once she returned home, this previously loving parent routinely physically and emotionally abused



TOP: Kevin Hart, Haddish, and Taran Killam in *Night School*.
LEFT: Haddish on "The Carmichael Show."
RIGHT: Haddish in *Girls Trip*.

LEFT: GETTY IMAGES; TOP: ELI ADE / UNIVERSAL PICTURES;
RIGHT: MICHELE K. SHORT / UNIVERSAL PICTURES

both Haddish and her younger half-siblings.

Uncontrolled and even violent outbursts can occur after someone has a TBI. According to one study posted by the National Institutes of Health, "aggression is one of the most common consequences" of TBI and "may manifest as verbal and/or physical" in nature.

"I had so much hate for my mother," Haddish admits. "But the only reason I had so much hatred for her is because I love her so much. She's the first person I ever loved. And then for her to hurt me . . . but after going to counseling and learning about brain injuries and trauma to the head, that helped me to see it's not necessarily her fault."

The mistreatment went on for years. When Haddish was 12, the state intervened; she and her siblings entered foster care, and her mother was placed in an institution. Separated, the kids bounced around from home to home until her grandmother gained custody when Haddish was 15. Then, at 18, she found herself homeless after her grandmother announced she was an adult now—and on her own. Haddish lived off and on in her Geo Metro, working odd jobs and dreaming of launching a comedy career.

EMOTIONAL RESCUE

"I was definitely broken," she says of her younger self. "Just not destroyed. I made a lot of bad choices and

mistakes." These likely include numerous romantic disasters, as well as a short-lived run as a pimp to a single, willing call girl, detailed in her book with self-deprecating humor: "I was pretty negative from time to time, because, you know, I'm a human! But I learned from those experiences."

When asked whether or not she sought professional help to work through her past pains, Haddish doesn't hedge: "Girl, yes! Years, years, years of therapy! I remember I once sat down with a therapist who told me something about myself, and I said, 'Uh, no!' A year later, I was like, 'Huh. She was right.' I went to therapy in my early 20s and again through my mid-20s. I stopped when I got married. Then I went back into therapy at the end of my marriage. Now, I go every month. If I'm not home, I Skype with my therapist."

Haddish is divorced, and she'd rather not talk about her ex, thank you very much. But she does offer this practical advice to couples who are stuck in unhappy unions: Be like her favorite film and *Get Out*. But on therapy? She'll happily wax on: "If I've got some emotions I need to unload, or I'm feeling despair? Anybody who asks me, I'll tell 'em in a minute that, shoot: *I need a session!*"

The comedian then gets serious with a message for her fellow African Americans. According to the National Alliance for Mental Illness (NAMI),

MENTAL HEALTH GAP

Tiffany Haddish credits years of therapy for overcoming a traumatic youth—even if most African Americans call a pastor or primary care physician before a psychiatrist, according to National Alliance for Mental Illness (NAMI).

William Lawson, MD, PhD, associate dean for health disparities at the Dell Medical School at the University of Texas, explains this discrepancy in care.

HISTORICAL SUSPICION

"Stigma exists in all communities, not just the African American community, over mental health issues. But there's fear that comes with diagnosis" among this group, Lawson says. The U.S. has a history of medically experimenting on the black community. Also, "African Americans with psychosis are more likely to end up in the correctional system," he says, rather than a mental health facility.

LACK OF ACCESS

"We know early intervention works. If we intervene early we have better long-term health outcomes," Lawson says of mental health disorders. "While primary care physicians do incredible jobs, many of them don't have the mental health training to properly refer patients—and providers simply aren't there" in predominantly black neighborhoods.

FEWER INSURED

"African Americans are less likely to have private insurance," Lawson adds. And, "psychiatrists often do not provide affordable services or reimbursement rates." According to the Henry J. Kaiser Family Foundation, insurance among non-elderly African Americans varies widely between the states, approaching 50% in Mississippi and 52% in the District of Columbia.

For resources and links for your community, Lawson suggests visiting NAMI's website at nami.org. Or contact the Association of Black Psychologists, Black Psychiatrists of America, Inc., the American Public Health Association, or the National Medical Association.

this group is 20% more likely to have mental health issues such as depression and anxiety due to social and economic factors. Yet despite this troubling fact, only 15% seek help from a psychologist or psychiatrist, compared to 40% of their white counterparts.

“From my experience, the black community thinks [therapy is] going to hurt you, or they’ll do experiments on you, or whatever . . . the black community is afraid,” Haddish says. “I’m always like: ‘Hey. You can go to a counselor and just talk. They’re not allowed to touch your body or nothin’ like that! Just have a conversation.’”

Besides, she argues, it’s discreet. “You know when you try to talk to your friends? And your friends spread your business and make it 10 times worse? Sometimes you just need to break up your emotional thoughts. By going, you have that safe place to talk about things in your head you’re trying to figure out—and you can figure them out. And move on! Life is easier to deal with because you’re not holding onto all that, you know?”

And let’s not forget about frenemies. “Sometimes it’s just a place to cry, or have someone tell you it’s gonna’ be OK,” says Haddish. “You can’t always do that with your family because they can be haters! Or messed up in the mind! Or, you can’t cry in front of your friends, ‘cuz they gonna think you weak! But counselors, who I pay all this money to? Oh, they goin’ to get these tears today!”

RIGHTING OLD WRONGS

Now that Haddish is in demand, she rightly earns the big bucks—and she’s using her financial gain for good.

She bought her mother an apartment. “My mama’s doing way better now,” she says. “I got her out of the institution. She’s going to the best psychologists, gets the best nutrition. I got her exercising three or four times a week. The [extra] weight and her diabetes have gone away. I’m just elevating her existence. And giving to her what I know she would have given to me had she not been hurt.”

Overcoming old emotional wounds can play a vital role in improving both mental and physical health in adults who’ve suffered adverse childhood experiences (ACE), says James Garbarino, PhD, Maude C. Clarke Chair in Humanistic Psychology at Loyola University Chicago, who works with juvenile offenders with histories of childhood trauma.

Long-term studies show adults with high ACE scores—meaning, people who report neglect, abandonment, and/or emotional and physical abuse as kids—are at greater risk for developing depression and anxiety, as well as cardiovascular problems, cancer, and high blood pressure decades later. (Haddish fits this bill; last year she learned she had high blood pressure—now controlled under a doctor’s care.)

But these health risks can be reduced through regular exercise, meditation, therapy, and emotional healing. “One of the keys is to get to the point when [those with high ACE scores] can transcend negativity, often with a mother who’s

abandoned or abused them, and get to a place of reconciliation,” Garbarino says. “That’s part of [Haddish’s] success story.”

The research backs this up, he adds, suggesting those who work through old emotional wounds do better both physically and mentally in the long run. “Otherwise, it sits there like a lump of coal in your soul for the rest of your life.”

Both Haddish and her mother are enjoying the benefits of their renewed relationship. “Now, my mama tells me she’s proud of me,” Haddish says. “She calls and says, ‘Make sure you take your vitamin C!’ She’s trying to do motherly things. It’s really cute. And she’s learning about my life . . . my sister showed her *Girls Trip* and she was like, ‘Who taught Tiffany how to do that?’”

Haddish laughs at the thought with pleasure.

THE GREATEST LOVE

Haddish has also had to learn how to embrace her self-worth. She innately understood how to do this professionally, demanding headlining gigs and bigger paychecks from comedy clubs and her agents as her name blew up.

Now, she does it physically, too, by taking care of herself.

“I cut down on alcohol,” she says. “I drink a gallon of water, try to eat at least one dark green vegetable, and take my vitamin every day,” she says. “Plus, I exercise [daily] for like 10 minutes. I do planks, leg kicks, imaginary jump rope—anything to get my heart pumping. And I love to dance. Sometimes I’ll dance for 20 minutes instead.”

Still, “the gluten-free thing will never happen,” she says, laughing, although she admits to taking occasional Pilates classes using Groupon coupons. (She scored a spokeswoman role with the company after writing in her memoir about her love for Groupon’s deals.)

Success, however, can tucker a girl out. “I miss sleeping,” she says. “I could sleep 12 hours a day! Now, I wake up early, 4 or 5 a.m., work till late at night, then come home to do it all over again. But for me work is fun, so it doesn’t feel like hard work. I’m doing the thing I love most.”

“BY GOING [TO THERAPY], YOU HAVE THAT SAFE PLACE TO TALK ABOUT THINGS IN YOUR HEAD YOU’RE TRYING TO FIGURE OUT—AND YOU CAN FIGURE THEM OUT.”



ELTON ANDERSON, JR.



BY Lisa Marshall
REVIEWED BY Neha Pathak, MD
WebMD Medical Editor

HEALTHY GLOW

LIGHT THERAPY
IS MAKING A
COMEBACK,
AND ONGOING
RESEARCH SHOWS
IT MIGHT HAVE
POTENTIAL AS A
TREATMENT OPTION
FOR SEVERAL
CONDITIONS

GETTY IMAGES

In the 30 years since Donna Keller-Ossipov had her first migraine, she's tried everything to keep the crushing headaches at bay. They came every few days anyway, forcing her to retreat to a dark room, nauseated and incapacitated.

So when Keller-Ossipov learned of a clinical trial testing green light therapy for migraine, she didn't hesitate to sign up. Months after the study ended, she still bathes herself in the green glow of a portable LED light two hours per day, setting it next to her as she winds down at night. She hasn't had a migraine since.

"I don't know how it works," says the retired 61-year-old nurse. "But it works."

The trial, at the University of Arizona, is among dozens of ongoing studies exploring whether exposing the skin or eyes to specific wavelengths of light can help treat health problems. At Massachusetts General Hospital, researchers are studying whether a red-light-emitting helmet can help traumatic brain injury patients recover. At the University of California, San Francisco, scientists are studying whether a similar device can stall mental decline in people with Alzheimer's disease. Dermatology offices and high-end spas routinely use light therapy to treat skin problems. And thanks to the recent availability of low-cost, heat-free—and safer—light-emitting diodes (LEDs), you can find more do-it-yourself gadgets for treating acne, depression, and pain online.

"I think interest in light therapy is definitely increasing," says Michael Hamblin, PhD, an associate professor of dermatology at Harvard Medical School. "Instead of trekking to the doctor's office to have light shined on them, consumers can now shine light on themselves at home. The light is basically the same, there are few safety issues, and it is a fraction of the cost."

HOW LIGHT THERAPY WORKS

As far back as the early 20th century, doctors placed patient beds on sunny balconies as treatment for rickets or psoriasis. In 1903, physician Niels Finsen won the Nobel Prize for inventing a giant lamp to treat skin tuberculosis (lupus). In the 1920s, Olympic athletes bathed beneath UV rays before races to boost performance.

So-called phototherapy fell out of favor when medications and rising fears about

skin cancer came along. But in the past decade, with the rise of lower-cost lasers and LEDs that deliver precise wavelengths with minimal skin-damaging UV rays, the practice is coming back—U.S. consumers spent \$309 million on light therapy in 2016, and the global market is projected to grow 5% annually in the next decade, according to a report by Future Market Insights.

But how exactly does it work?

As Hamblin explains, people—like plants through photosynthesis—have a chemical reaction to light. When particles of light hit the skin, they're absorbed by light-sensitive molecules inside cells, which kick-start a response. That response varies, depending on the wavelength, or color, of light and where it's used.

For instance, when longer wavelength or visibly red light hits the skin, it nudges mitochondria (a cell's powerhouses) to make energy more efficiently and boost production of healing anti-inflammatories or disease-fighting antioxidants. The light is a "very mild form of stress that activates protective mechanisms in the cells," says Hamblin, who's also principal investigator at the Wellman Center for Photomedicine.

If the light comes through the eye, it stimulates nerves that lead from the retina to the brain. That influences production of neurotransmitters like serotonin and dopamine, which affect mood, explains Raymond Lam, MD, a researcher in the department of psychiatry at the University of British Columbia. Shorter wavelength or visibly blue light is very good at making you wakeful. When it enters the eye, it hinders production of melatonin, which helps with sleep.

LIGHT THERAPY FOR SKIN AND MOOD

The most common and accepted medical uses are in dermatology. Because of the way it fights bacteria, blue light is routinely used in doctors' offices to treat acne, while red light is used to treat wrinkles. "When you stimulate mitochondria, it makes older cells behave more like youthful cells," says New York City-based dermatologist Meghan Feely, MD.

Several companies have recently rolled out blue light therapy masks to treat acne. In July, the FDA cleared BlueControl, a wearable blue light device to treat mild to moderate psoriasis at home.

Doctors say inexpensive home gadgets are typically safe if patients follow directions to wear protective glasses and stay out of the sun after treatment when needed. But they are not likely to work as well as professional treatments. (In the office, doctors often apply a cream to make the skin more sensitive to the light.) At-home gadgets may not help

more severe cysts and blackheads, says Feely. "As long as people have realistic expectations, I think these devices can be a great adjunct to existing treatment tools."

To boost mental health, doctors have used tabletop white or blue light boxes primarily to treat seasonal affective disorder, a form of depression that tends to hit when days get shorter and bright natural light can be scarce. The theory: By using artificial light to promote alertness by day, the treatment can reset an off-kilter biological clock, restoring regular sleep patterns and boosting mood.

Lam's research suggests that people who have nonseasonal depression can benefit too, possibly by boosting production of feel-good neurotransmitters when they look into the light.

One 2015 study compared four groups: a placebo group; a group that spent 30 minutes per day exposed to a 10,000-lux fluorescent light box (about the brightness of morning summer light); a group that took antidepressants daily; and a group that did both.

After eight weeks, 29% of the antidepressant group felt better (less than the 33% of the placebo group), while 50% of the light therapy group and 76% of the combo group improved.

People with bipolar disorder should steer

clear of light boxes, as they can aggravate mania, Lam says. But he often prescribes light therapy alongside medication for patients with depression: "Most people think of light therapy as something for winter depression only. The idea that it might work for nonseasonal depression is less well-known."

FUTURE FRONTIERS

When it comes to using light therapy for other serious diseases, skepticism is high, research in humans is scarce, and results are mixed.

One recent large study of light therapy for stroke patients was discontinued early for "futility." Other studies on light therapy for wound healing have been inconclusive.

But Hamblin, who has been studying light therapy for 30 years, believes that with the right doses, wavelengths, and techniques, it holds a wealth of unrealized promise for widespread disorders like chronic pain and decline in memory and thinking skills.

One review of 16 trials totaling 820 patients found that near-infrared light (a slightly longer wavelength than red) applied to the skin eased neck pain immediately after treatment and for weeks to follow. The market has since been flooded with light therapy pillows for neck pain.

Another small study of patients with dementia found that when they wore a device that gives off near-infrared light to the skull and inside the nostril for 20 to 25 minutes daily for 12 weeks, they did better on memory and thinking tests. Larger trials are in the works.

Meanwhile, Mohab M. Ibrahim, MD, director of the pain management clinic at University of Arizona, is focusing the bulk of his research on green light, which has a slightly longer wavelength than blue, for chronic pain.

His research shows that when rats are exposed to green LED light through the retina, it boosts production of natural painkillers called enkephalins in the spinal cord. That could be why, in a preliminary trial in humans, patients with migraine like Keller-Ossipov reported fewer or less severe attacks.

Ibrahim cautioned subjects never to use the light during a migraine (light exposure can aggravate them) but rather to use it daily for 10 weeks to prevent them. "This is still very experimental, and more research is needed," he stresses. "But we are very excited by the results."

So is Keller-Ossipov.

Since starting the green light therapy, she has cut her medication in half and been able to go back to school to get a master's degree. "I can tell you one thing," she says. "I'm not giving that light back."

THE HEALING POWER OF COLOR

Different colors, or wavelengths of light, can have **distinctly different impacts** on **cells, tissues, and human health**, says Michael Hamblin, an associate professor of dermatology at Harvard Medical Center. While using light therapy is still controversial for **many conditions** as researchers learn about **optimal wavelengths, duration, and frequency**, here's a closer look at what some research shows so far.

CLEANSING BLUE:

Blue light applied to the skin can kill acne-causing bacteria deep within follicles and, when combined with red light, calm skin inflammation. Look at blue light and it will suppress your melatonin levels, making you more alert. That's why experts discourage the use of blue-light-emitting electronics before bedtime and encourage the use of blue-light fixtures at the office.

REJUVENATING RED:

When red light hits the skin, it stimulates energy production in a cell's powerhouses, making old or injured cells behave like younger, healthier ones, dermatologists say. While research is mixed, this rejuvenating effect has made red light therapies popular for minimizing wrinkles, boosting hair growth, and accelerating wound healing.

PAIN-KILLING GREEN:

Research in rats shows that exposure to green light can boost levels of natural pain-killing compounds in the spinal cord, making them less reactive to pain. Studies are now underway in humans.

ANTI-INFLAMMATORY INFRARED:

Infrared light (which is invisible and has a slightly longer wavelength than red) can penetrate the skin, reducing inflammation and easing chronic pain, some studies show.

STIMULATING ORANGE:

Studies show that looking at an orange light for as little as 10 minutes may boost alertness and improve cognition. Some experts say it can also boost appetite—one reason fast food restaurants tend to use orange in logos.

MOOD-BOOSTING WHITE:

Numerous studies suggest that exposure to bright white light (which is a combination of all colors) may boost feel-good neurotransmitters in the brain, fending off depression.

GETTY IMAGES



By R. Scott Rappold

Reviewed by Brunilda Nazario, MD,
WebMD Senior Medical Editor

Illustrations by Nicole Xu

a good death

Growing numbers of
people are **talking**
about death, dying,
and the **end of life**
in new ways

When Beth Wood's cancer returned in 2014 after 20 years of remission, she made an instant choice: no chemotherapy, radiation, or other life-altering treatments that could only stave off the inevitable.

She told her husband as much in the same breath as informing him the cancer was back, after what was supposed to be a routine visit to the doctor.

"She made a decision to say, 'I'm not going back through that again. I want quality of life, not quantity,'" says her husband, David Wood, of Nashville. "And we were given almost three more years."

They traveled the country and spent a final Christmas with the children and grandchildren, and when she died at the age of 65 on Dec. 29, 2016, it was peaceful, at home, with Beth secure in her faith she was going to a better place. It was, says her widower, a "good death."

"I thought a lot about those two words. I think to understand death, you have to understand the life of the person. For her, she was not scared of death," he says.

This is a concept more Americans, from the elderly to the terminally ill to the doctors who care for them, are embracing. Eight states have passed laws allowing doctor-assisted suicide, although a judge



AID-IN-DYING LAWS

By the end, Kathy Myers couldn't even get out of bed on her own. A lifelong smoker in Aurora, Colorado, she had chronic obstructive pulmonary disease.

There were no more bike rides with her husband, no more trips to the mountains, no more working in her garden, no more doing anything without an oxygen tank. So when Colorado voters approved doctor-assisted suicide in 2016, she was determined to use it. But because of misunderstandings or a reluctance to act under the new law, she had a hard time finding a doctor willing to help.

"What we came up against was a lot of ignorance. Our family doctor said it was going to take court orders and years before we could opt for that," says her husband, Herb Myers.

After the couple pleaded for help through local media, a doctor got in touch and made a house call, agreeing that Kathy met the criteria under the new law: a prognosis of less than six months to live and sound mental capacity. A second doctor confirmed, as required by the law, and on March 12, 2017, Herb emptied 100 capsules of Seconal into a glass of Gatorade.

They held hands as she drifted into unconsciousness. A short time later, a hospice nurse confirmed she had no vital signs. It was, Herb said, "very gentle and very quick." She would've been 63 the next day.

In the first year of Colorado's law, 69 people were prescribed aid-in-dying drugs by 37 doctors, and 78% were able to die at home, according to the Colorado Department of Public Health and Environment.

Nationwide, the movement has come a long way since Jack Kevorkian went to prison in 1999 for assisting patient suicides. Oregon in 1994 became the first state to pass an aid-in-dying law, which has been used more than 1,000 times. In that state, Catholic groups and other conservatives remain opposed, although they are not actively fighting the law.

Sam DeWitt is the Colorado access campaign member for Compassion and Choices, a Denver-based nonprofit that advocates for such legislation around the country. The organization and its staff and volunteers have worked to educate doctors about the new law. They

find the most opposition in rural areas and at medical facilities with religious affiliations or out-of-state ownership. Medical facilities can opt out of the law, prohibiting their pharmacies from filling such prescriptions or avoiding such deaths occurring on the premises, but they can't forbid doctors from taking part.

"It really is a two-pronged approach to getting acceptance. We need patients to know their rights and be willing to have a hard conversation with their doctor, but we also need to educate the doctors . . . so patients feel comfortable discussing [ending their lives] and the doctors feel comfortable prescribing or referring them to someone who will prescribe," DeWitt says.

After Kathy Myers' story made

headlines, Herb Myers' phone rang constantly with people asking for help finding a doctor. Those calls have diminished as the process in Colorado has gained more acceptance. And while he misses his wife of 38 years, he has no regrets.

"Anything else we did would have just prolonged her life and her suffering. I think it was the right thing to do," he says. "I think everybody should have the right to go the way they want."

TALKING ABOUT DEATH

Sarah Farr is an end-of-life doula in the Washington, D.C., area. While doulas are better known for providing help for births, Farr hosts regular meetings known as death cafes for people to discuss this once taboo topic. Other end-of-life doulas

work one-on-one with people who are dying, helping them memorialize their lives and plan their deaths.

"I think in America, we live in a very youth-centered culture, a very kind of anti-aging culture. There's a lot of denial of death. We don't usually see people die in our homes anymore," Farr says. Becoming an end-of-life doula has become popular, with 18 training sessions held around the country in 2018 alone, according to the International End of Life Doula Association.

According to Deathcafe.com, on any given day half a dozen such meetings convene around the country. Farr put out chairs for 15 at the last gathering she hosted; 50 people showed up. Discussions run the gamut of death-related topics, and attendees range from young people to the elderly. Most have witnessed a death or have had someone in their life pass away, and Farr sees them looking for some control over what is essentially uncontrollable: their own deaths.

"A lot of people want to maybe share stories of a death they witnessed," she says. "People say, 'If I could have a say in it, this is how I'd want to die.' Choosing [the] day and time of our deaths; it's just something we don't have control over. But that doesn't mean we can't plan for it if it was to happen, in terms of using hospice care, dying in a hospital versus dying at home, exploring different things you can do with your body after you die, discussing home funerals."

Of course, a "good death" could be something different for each person. Emily Meier, PhD, a clinical psychologist at UC San Diego Health, recently studied research from around the



RESOURCES FOR A GOOD DEATH

THESE WEBSITES AND ORGANIZATIONS ARE A SAMPLE OF RESOURCES FROM WHICH YOU CAN FIND MORE INFORMATION ABOUT END-OF-LIFE OPTIONS.

Deathcafe.com: An international calendar of upcoming "death cafes," this website lists when and where people of all ages can meet to discuss life and death matters.

Theconversationproject.org: An initiative of the Institute for Healthcare Improvement, this website is full of resources for families who want to discuss end-of-life options with a loved one. You can download or print out a "conversation starter kit," as well as guides for talking to your doctor about end-of-life options and choosing a health care proxy to make decisions if you are unable.

Prepareforyourcare.org: This nonprofit website lets you download an advance directive form for whatever state you live in, so loved ones and medical professionals will know your health-care wishes in the event you are incapacitated or unable to communicate. Videos have step-by-step instructions on how to fill out the forms.

Compassionandchoices.org: This nonprofit advocates for aid-in-dying laws across the country. The website includes information on existing laws, how you can help your state adopt such a law, and a hotline for people to call if they need to discuss end-of-life issues.

Inelda.org: The International End of Life Doula Association includes a directory of these experts who can help people come to terms with issues related to their deaths. Some, much like birthing doulas, will work with a person to help memorialize their lives and face their death.

Nhpco.org: The National Hospice and Palliative Care Organization website is full of resources on this end-of-life option, including helping patients find a hospice to meet their need.

world on death and identified 11 core themes for a good death. Among these are lack of pain, religious and emotional well-being, a feeling of life completion, dignity, closeness of family, and quality of life. Being able to die at home is also a strong desire.

Meier says talking about a good death and what that means in advance is the best way to make it happen. No matter the age, she encourages people to prepare advance directives, wills, and other end-of-life documents and share their wishes with loved ones.

“If the conversations are ongoing, and even when you’re healthy, if you have conversations about, ‘What’s most important to me at this point in my life?’ a lot of those things are going to stay the same at the end of life,” Meier says. “The more we talk about it earlier, the less scary it becomes because it’s very challenging to have those conversations in the last moments and trying to scramble together to make sure people are having, so to speak, a good death.”

THE HOSPICE ALTERNATIVE

Some people think of hospice as a place people go to die. At Alive Hospice in Nashville, it’s where they go to live as well as possible until they die.

Chief medical officer Robert Berkompas, MD, says the non-profit hospice has only 55 beds but treats 4,000 patients a year who have a prognosis of six months or less to live. Most of the care is given in patients’ homes by a team of nurses, doctors, counselors, and

others who work in a variety of health care fields.

“We actually ask them: What are their expectations? What are their desires? It’s fairly common they don’t want to suffer physically, with pain and nausea and swelling, so we address all that,” Berkompas says.

But what if they only want to stay alive long enough for an upcoming wedding? What if their treatment plan has side effects that make their final days unbearable?

“We let the patient direct as much of their perception of what a good death would be and work with that,” he says. “If we can give them a great deal of control within the hospice environment, I hope we’re giving them the best of both worlds.”

As a doctor trained to always fight illness, Berkompas had to change his philosophy. He works with other doctors to help them get away from the treat-at-all-costs approach.

“When we say, ‘I really don’t have any more treatment for that illness that is effective or promising,’ I can say, ‘But I still have a treatment for you.’ It’s going to be helping you through this process of dying, and hopefully it will be a good death and not spending



your final days in an ICU or a hospital,” says Berkompas.

For David Wood, whose wife declined aggressive treatment for her terminal cancer, Alive Hospice made all the difference in making her final months bearable. Nurses visited their home every other week, giving her medication to deal with pain. And when she couldn’t get out of bed on her own, a nurse came. If he had questions at 2 a.m., he called and someone from the hospice answered. It gave him the confidence to keep her in the house and be her caregiver until the end.

It was the most intimate time in their 43 years of marriage.

“She wanted me to live again, to love again, to play again,” says David, who has since remarried. “She had time to tell me things to let me go. At the same time, I was letting her go. She was comfortable. She told me, ‘David, I am not scared about where I’m going because I know who I’m going to.’ Hospice just gave me and her the confidence to have a good death. To me, it’s to make the transition from this world to the next.”

“The more we talk about it . . . the less scary it becomes, because it’s very challenging to have those conversations in the last moments.”



GOOD FOR YOU

Little Sprouts

Scope out your grocery store or farmer's market for Brussels sprouts, in season now. Roasting this super food brings out a nutty sweetness perfect for fall meals.

IF YOU'RE A BRUSSELS SPROUT SKEPTIC, CHANCES ARE YOU HAVEN'T HAD them prepared well. They offer impressive nutrition: Just one half-cup provides 81% of an adult's daily value of vitamin C (which supports immunity), 8% of fiber (which promotes healthy digestion), and 12% of the B vitamin folate (which appears to protect DNA from damage). They're also chock-full of glucosinolates, compounds that inhibit cancer cell growth. Roasting makes them delectable. Rinse sprouts, trim their bottoms, and cut in half length-wise. Toss them with olive oil, salt, and pepper. Roast on a sheet pan at 400°F for about 20 minutes, until browned and leaves are crispy. Drizzle with balsamic vinegar and enjoy. —ERIN O'DONNELL



Search for the slideshow
Stir It Up With Soup at
WebMD.com.

REVIEWED BY **Hansa Bhargava, MD**
WebMD Senior Medical Editor



MAKE IT

- Double the recipe. Cool uncovered then freeze half your soup for nights you don't want to cook.
- Use a heavy-bottomed pot, like a good Dutch oven. This allows you to lightly caramelize the veggies without the risk of burning them.
- Build a base of flavor. Sweat some onions in olive oil until they begin to color, then add garlic and a little salt.
- Use leftovers. Didn't eat all the roast parsnips or sweet potatoes last night? Add them for depth of flavor and to help thicken your soup.
- Add flavors at the right point. A good rule of thumb: Dry herbs go in at the start; add fresh herbs at the end to preserve their flavor.
- Salt frequently but judiciously. To bring out flavor, sprinkle a little salt in as you add veggies and broth.
- Plan the proper order. Determine which vegetables take longer to cook than others and add them first.
- Chop uniformly. Cut your veggies into similar-size pieces so that they cook evenly, but don't stress about being too precise.
- Take your time. Soup should be simmered to draw out the maximum amount of flavor. Your taste buds will tell you when it's ready.
- Top it off. Give your soup a final flavorful finishing touch—shredded cheese, grilled bread, or a spoonful of sour cream, smoked paprika, or lemon juice.

BUILD A BETTER

Vegetable Soup

Celebrate each season's bountiful and nutritious produce with a hot bowl of vegetable soup, a dish that's easy to master and make your own

VEGETABLE SOUP, SAYS KATE McMILLAN, BOASTS SO MANY QUALITIES VALUED BY HOME COOKS: It's full of flavor and good-for-you ingredients and can be as simple or sophisticated as you want it. "The number of recipes and variations you can make are endless, and it's so nourishing and comforting" says McMillan, author of *Soup of the Day*. "Experiment and have fun." Incorporate some of her tips the next time you cook.

Frozen Burgers

CRAVING A BURGER? TRY ONE OF THESE FULL-FLAVORED, READY-TO-COOK VERSIONS, SELECTED BY REGISTERED DIETITIAN KATIE CAVUTO, MS, AUTHOR OF *WHOLE COOKING AND NUTRITION*.



ENGINE 2 POBLANO BLACK BEAN BURGER

"Get 6 grams of protein in this 130-calorie veggie burger, which provides balanced nutrition, all from whole food ingredients like beans, whole grains, and seeds."



GRASS-FED BUBBA BURGER

"A high-quality, slimmed down version of Bubba's popular original patties, these will satisfy your burger cravings and supply 21 grams of protein with less fat and fewer calories."



BEYOND MEAT'S BEYOND BURGER

"Boasting 3 grams of fiber, 20 grams of protein—comparable to beef burgers—and only 5 grams of carbs, this veggie patty looks and tastes like the real thing."



APPLEGATE ORGANICS TURKEY BURGER

"A leaner, lower-calorie alternative to traditional beef burgers, these organic ground turkey burgers bring on the protein: 20 grams per four-ounce serving."



HENRY AND LISA'S WILD ALASKAN SALMON BURGER

"Made with sustainable, wild-caught salmon, each burger offers a generous 650mg of heart-healthy omega-3 fatty acids and about half the calories of comparably sized beef patties."

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.

3 WAYS

Tacos

Tacos are tasty, kid-friendly, and easy to load with healthy ingredients. Try three new ways to turn every night into Taco Tuesday.



→ **Tortilla Trick**
To make corn tortillas warm and pliable, cover a stack with a damp paper towel and heat briefly in the microwave.

PHOTOGRAPHY: RICK LOZIER; FOOD STYLING: CHARLIE WORTHINGTON

RECIPES BY Kathleen Zelman, MPH, RD, LD

1

Superfood Tacos

These tacos hold a host of flavor and disease-fighting antioxidants. The addition of sweet potato and avocado makes them especially satisfying. This recipe includes queso fresco, a soft Mexican cheese, but any shredded cheese will do.

MAKE IT Sauté sliced red and yellow peppers, sliced red onion, and minced garlic in olive oil until just tender. Add a can of rinsed black beans, 1 tsp cumin, and ½ tsp red pepper flakes and cook 3 to 5 more minutes. Add the mixture to warmed corn tortillas. Top with chopped tomato, avocado, roasted sweet potato, and a sprinkle of shredded queso fresco. **SERVES 4**

PER SERVING (2 TACOS) | 398 calories, 14 g protein, 58 g carbohydrate, 14 g fat (4 g saturated fat), 8 mg cholesterol, 14 g fiber, 7 g sugar, 137 mg sodium. Calories from fat: 37%

2

Fish Tacos with Honey-Ginger Dressing

The combo of flavorful fish, crunchy coleslaw, and savory sauce makes the fish taco a winner. Any white fish will work here; consider mahi-mahi, cod, or tilapia. For the slaw, we like delicate Napa cabbage, but a blend of red and green cabbage also works.

MAKE IT In a large bowl combine ½ cup nonfat Greek yogurt, 2 tbsp honey, a splash of lemon juice, and 2 tsp fresh grated ginger. To the dressing add 3 cups of shredded Napa cabbage, 1 cup shredded carrot, and a small shredded apple; toss. Season 1½ lbs of white fish with salt and pepper and sauté in a pan for 4 to 6 minutes per ½-inch thickness of fish, or until flaky, turning once halfway through cooking. To serve, top warmed tortillas with the fish and coleslaw. **SERVES 4**

PER SERVING (2 TACOS) | 328 calories, 37 g protein, 33 g carbohydrate, 6 g fat (1 g saturated fat), 72 mg cholesterol, 6 g fiber, 9 g sugar, 290 mg sodium. Calories from fat: 16%

3

Grilled Chicken Tacos with Avocado, Corn, and Cotija Cheese

A tasty marinade makes chicken breast the star of these tacos. This recipe calls for grilled corn; throw two ears on the grill as you cook the chicken or find grilled corn in the frozen veggie section of your supermarket. It also includes cotija, a salty Mexican cheese.

MAKE IT Place 1 lb chicken breast in a zip-top bag with the juice of 2 limes, ¼ cup olive oil, 2 cloves chopped garlic, 1 tsp cumin, salt, and black pepper. Marinate at least 30 minutes. Discard marinade and grill chicken over medium-high heat, about 14 minutes, or until the internal temperature is 165°F, turning once halfway through grilling. Meanwhile, grill 2 ears of corn for 15 to 20 minutes. Cut kernels from the cob. Warm tortillas on the grill until soft. Fill each tortilla with sliced chicken, corn, avocado, cilantro, and a sprinkle of cotija cheese. **SERVES 4**

PER SERVING (2 TACOS) | 371 calories, 34 g protein, 39 g carbohydrate, 10 g fat (2 g saturated fat), 73 mg cholesterol, 7 g fiber, 1 g sugar, 273 mg sodium. Calories from fat: 23%



BEETS

Deeply colored—either garnet or golden—beets have a rich, earthy flavor. Try them roasted, raw, pickled or even in sweet treats like red velvet cupcakes. You can also sauté the tops.

SWEET POTATOES

Grill them, bake them like fries, or make them into a pie filling. Versatile sweet potatoes, which absorb the flavors of what they're cooked with, should be a year-round staple.

CELERY ROOT

With its beautiful creamy white interior and distinctive flavor, celery root can be mashed like potatoes, pureed for delicious soups, or cut into thin raw sticks to add crunch to salads.

PARSNIPS

Creamy white with a sweet, nutty flavor brought out by roasting or braising, serve them for dinner or dessert. Think soups, mashes, or as a sub for carrots in a classic carrot cake.

CARROTS

Right for both sweet and savory dishes, carrots cross so many world cuisines. Make a pesto from their green tops, shave them into salads, or roast them to concentrate their sweetness.

FOOD 101

Know Your Roots

Root vegetables may not win any beauty contests, but beneath their skin lie wonderful flavors and loads of nutrition

IN THE RIGHT COLD AND HUMID conditions, root vegetables can be stored for months. But don't let them linger in your vegetable drawer—add them to your next meal. “These richly flavored nutrition powerhouses are true superfoods,” says Diane Morgan, author of *Roots: The Definitive Compendium*. They can be prepared in a great variety of ways, both raw and cooked. Here are five of Morgan's favorites.

PHOTOGRAPHY: RICK LOZIER; FOOD STYLING: CHARLIE WORTHINGTON

CUTTING EDGE

Every year, about one in five Americans lives with mental illness, such as depression, bipolar disorder, and schizophrenia.

Depression is the leading cause of disability among 15- to 44-year-olds.

New research shows that only one in three people who receives a diagnosis starts treatment within 90 days. About seven in 10 people who start antidepressants eventually get complete relief of their symptoms. For the 30% of people who don't find relief, there is hope.

KETAMINE, AN FDA-APPROVED anesthetic and pain-killer, could soon be available for medication-resistant depression. The drug can start to relieve symptoms, including suicidal thoughts, in hours. Combined with other medications, ketamine helps people with bipolar depression as well. The first ketamine-based treatment for depression—an esketamine nasal spray—is on the fast track to FDA approval.

An experimental, non-drug treatment for medication-resistant depression improves on an older

approach. Since 2008, doctors in the U.S. have used magnetic pulses in stubborn cases of depression to stimulate a part of the brain associated with mood regulation. Though effective, transcranial magnetic stimulation takes 40 minutes per day, five days per week, for up to six weeks. A new treatment, intermittent theta burst stimulation, offers a three-minute form of the therapy. Research shows that the short version works as well or better than the original in people with medication-resistant depression. Shorter

sessions could allow doctors to treat many more patients.

Major genetic research could lay the groundwork for new, more effective treatments for depression. More than 200 international researchers collaborated to uncover 30 previously unknown points in the human genome—the sum total of a person's DNA—associated with depression risk. Better understanding of genes that increase risk for depression can lead to customizable prevention and treatment strategies.

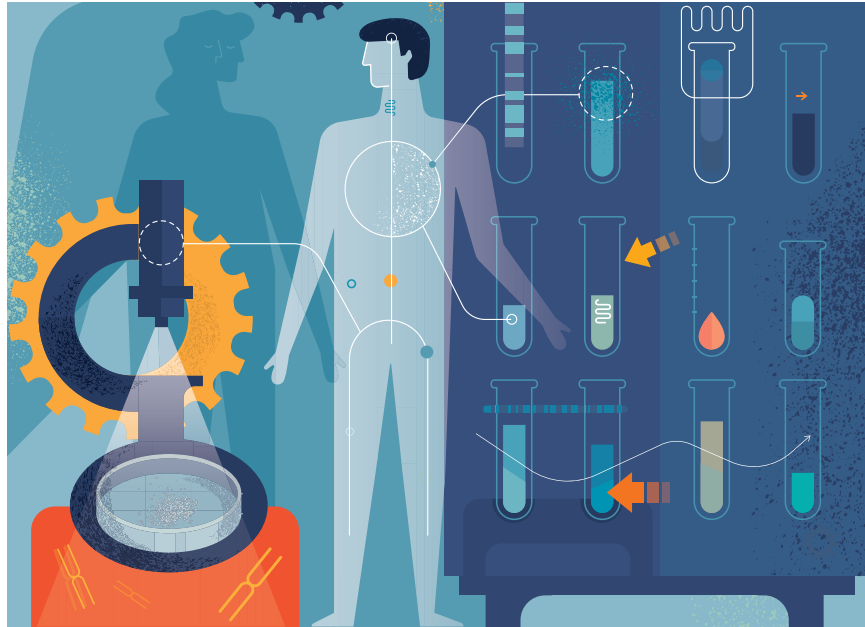
—SONYA COLLINS

Search for the article **Cancer Treatment Breakthroughs** at WebMD.com.

ON THE HORIZON

Cancer Mission

Researchers in various fields explore multiple paths to treat a disease that takes many forms



THE SEARCH FOR “A CURE FOR CANCER” IS ALMOST AN OUTMODDED IDEA. Science tells us that cancer is not a single disease, and it won’t be a single approach that cures it. One-size-fits-all surgeries followed by chemotherapy are giving way to customized approaches. Today, many people who have cancer have personalized treatment options available to them based on the type of cancer, the tumor’s unique characteristics, and how the cancer interacts with the immune system.

“Precision medicine looks at how we can best pick who’s going to benefit from which therapy or combination of therapies,” says Funda Meric-Bernstam, MD, medical director of the Institute for Personalized Cancer Therapy at The University of Texas M.D. Anderson Cancer Center.

IMMUNOTHERAPY

Cancers can sneak past the immune system unseen. That’s one reason they can be so deadly: When cancer develops in the body, the immune system doesn’t recognize it as a threat. Last year, the FDA approved the first CAR-T cell therapy, a drug that reprograms a person’s own immune cells, the T-cells, to recognize

and kill certain blood cancers. Today, CAR-T cell therapy is approved for three blood cancers. Taking that concept a step further, scientists are now exploring the use of cutting-edge gene-editing technology, called CRISPR-Cas9, to more precisely edit immune cells into cancer-killing machines.

The re-engineering of T-cells is one of several approaches called immunotherapy that trigger the immune system to fight cancers that were once invisible to it. “The evolution of immunotherapy treatments has been transformational,” says Meric-Bernstam.

Drugs dubbed **checkpoint inhibitors**, which also interfere with T-cell behavior, have changed the outlook for many people with cancers of the skin, lungs, bladder, kidneys, and head and neck, as well as Hodgkin’s lymphoma. Certain proteins on your T-cells act as an “off” switch to prevent them from attacking your healthy, normal cells. Those normal cells have another protein that identifies them as non-threatening. When the T-cell protein and the healthy cell protein attach to each other, that signals the immune system to leave the normal cells alone.

The problem is that some cancer cells have proteins that make them look harmless too. That’s how they trick the immune system. Several FDA-approved drugs, and many others in clinical trials, can block those two proteins from attaching

to each other, which unleashes the immune system against the cancer.

An FDA-approved vaccine can trigger the immune system to attack advanced prostate cancer that is already present in the body. It doesn’t cure the cancer, but it can extend life. Vaccines for other cancers have had promising results in clinical trials but have not yet gained FDA’s approval.

TARGETED THERAPY

Tumors, just like people, have characteristics that make them unique. Many different genes or proteins could be responsible for tumor growth. These so-called drivers could be more important than, or at least as important as, the site of the cancer, such as the breast, lung, or pancreas.

One gene might feed one person’s tumor, while another gene drives someone else’s.

Targeted drugs can shut off or seriously slow down some tumor drivers. This approach has brought new hope to diagnoses with once-bleak outlooks.

“Only a few years ago, we had no treatment options for melanoma,” says Meric-Bernstam. “With the discovery of BRAF gene mutations, BRAF inhibitors have transformed melanoma outcomes.” Compared to

chemotherapy, which attacks cancer cells and healthy cells, targeted therapy can have fewer side effects. These treatments are available for certain cancers, including lung and colorectal as well as HER2+ breast cancer.

With the increasing speed and the falling cost of reading the DNA sequence of tumors, scientific discovery has flourished. Researchers continually uncover additional drivers that could be targets for new drugs. What’s more, identifying the right drug for the right patient grows increasingly easier. “Gene sequencing was once a research tool for select patients or select questions,” says Meric-Bernstam, “and now it’s a platform for better understanding each individual patient’s disease and the best therapy choice for them.”

Genes perform their function, such as promoting the growth of a tumor, with the help of RNA—ribonucleic acid—the messenger that carries instructions for a gene’s function. RNA-interference technology could one day allow scientists to literally kill the messenger that carries instructions for tumor growth or other harmful processes. This technology could target genes that transform normal cells into tumor cells, called oncogenes, or defective genes that are supposed to suppress tumor growth but don’t function properly.

“Precision medicine’s here to stay,” says Meric-Bernstam. “Eventually, I think we’ll be looking at DNA, RNA, and potentially immune factors to make decisions about optimal therapy.”

GLOSSARY

CHECKPOINT INHIBITORS:

medications that trigger an immune-system attack on certain types of cancers. Some cancer cells carry proteins that make them look like normal, healthy cells. Checkpoint inhibitors block those proteins, so the immune system recognizes the cells as a threat.

DNA:

deoxyribonucleic acid, the hereditary material passed down from parents to offspring that lives in almost every cell in a person’s body. DNA contains information in the form of a code that consists of four chemicals: adenine, guanine, cytosine, and thymine. The order of the chemicals determines the instructions for how the body runs, similar to how letters form words and then sentences.

DRIVER MUTATION:

a variant in a gene in a tumor that causes that tumor to grow.

IMMUNOTHERAPY:

medications, including checkpoint inhibitors, that stimulate the body’s own immune system to fight cancer.

PRECISION MEDICINE:

medical treatment that takes into account individual variation in a person’s genes, environment, and lifestyle. Also called personalized medicine.

BY THE NUMBERS

63

Number of new cancer drugs approved in the last five years for 78 different uses and 24 different types of tumors.

14

Number of new cancer drugs approved in 2017. All are targeted therapies.

23

Number of tumor types for which “checkpoint inhibitors” are a possible treatment.

\$133 billion

Dollars spent on cancer medicine worldwide in 2017. That’s up from \$96 billion in 2013.

700+

Estimated number of cancer drugs currently in late-stage development. That’s up 60% in the last decade.

34

Number of different tumor types that could benefit from immunotherapy drugs currently in clinical trials.

14

Average number of years it takes a new drug to reach the market after the developer files a patent.



Looking for a doctor? Use
WebMD's Physician Finder.
Go to [WebMD.com/findadoctor](https://www.webmd.com/findadoctor).

REVIEWED BY *Hansa Bhargava, MD*
WebMD Senior Medical Editor



WHO'S WHO

Pediatrician

What does this medical professional do?

THERE MIGHT BE CARTOON CHARACTERS ON THE BANDAGES AND LOLLIPOPS for well-behaved patients, but pediatrics is serious business. Providing medical care to pint-size patients requires grown-up credentials.

CARE STARTS AT BIRTH

Babies have their first appointments with pediatricians right after birth. Hospital pediatricians are on call to assess newborns and perform routine screenings for hearing and jaundice levels; the first im-

→ Growing Up

Pediatricians undergo extensive training so they can provide complex care to a range of patients.

munizations are given before babies are discharged from the hospital. A few weeks later, babies need to go for follow-up appointments (and additional immunizations). Some children have the same pediatricians from birth through adolescence.

IT'S NOT ONE-SIZE-FITS-ALL CARE

Pediatricians serve as the primary medical providers for children. In the course of monitoring growth and development and diagnosing and treating childhood illnesses, pediatricians can see a range of patients—from babies with diaper rash to adolescents dealing with chronic medical conditions.

Because of the complexity of the care they provide, pediatricians undergo extensive training. After graduating from medical school, they spend three-plus years in a rigorous residency program. Pediatric specialists might undergo additional training.

SPECIALIZATION IS COMMON

While all pediatricians treat children, some choose to focus on subspecialties of childhood medicine, such as oncology, endocrinology, emergency medicine, and infectious diseases. Pediatric cardiology is the most common subspecialty within pediatric medicine, according to the American Board of Pediatrics (ABP).

In 2002, ABP introduced a new certification for developmental-behavioral pediatricians. These specialists treat children who need specialized care for issues such as learning disorders, attention and behavioral disorders, and developmental issues, including those associated with premature birth.

BY THE NUMBERS

115,401

Number of practicing pediatricians in the United States.

61%

Percentage of pediatric residents planning careers in general pediatrics (33 percent are interested in medical subspecialties).

57.3%

Percentage of female pediatricians.

15.4%

Percentage increase in the number of job openings for pediatricians by 2026.



Search for the slideshow **Top Tips for Beautiful Teeth and Gums** at WebMD.com.

REVIEWED BY *Arefa Cassoobhoy, MD, MPH*
WebMD Senior Medical Editor

Oral Health

BY THE NUMBERS: Facts and Stats on Trending Health Topics

42%

Percentage of U.S. children ages 2 to 11 with cavities in their baby teeth

1 IN 12

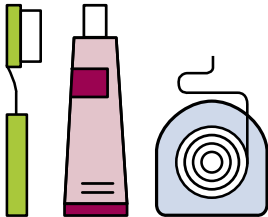
U.S. adults ages 20 to 64 with gum disease

7.9

U.S. adults' average dental health score on a 10-point scale

74%

Percentage of Americans who have access to fluoride in their drinking water

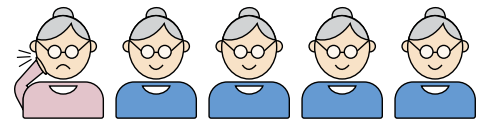


1 IN 3

U.S. children ages 2 to 4 who saw a dentist in the past year

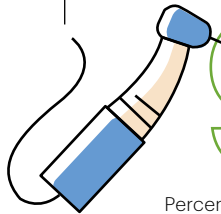
1 IN 5

U.S. adults 65 and older with untreated tooth decay



96%

Percentage of U.S. adults 65 and older with cavities

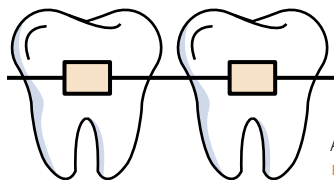


1 in 4

(27% is the actual percentage) U.S. adults 65 and older with no teeth

60%

Percentage of U.S. adults ages 20 to 64 who saw a dentist in the past year



2

Average number of years required to wear braces

1 in 25

(3.75% is the actual percentage) U.S. adults ages 20 to 64 with no teeth



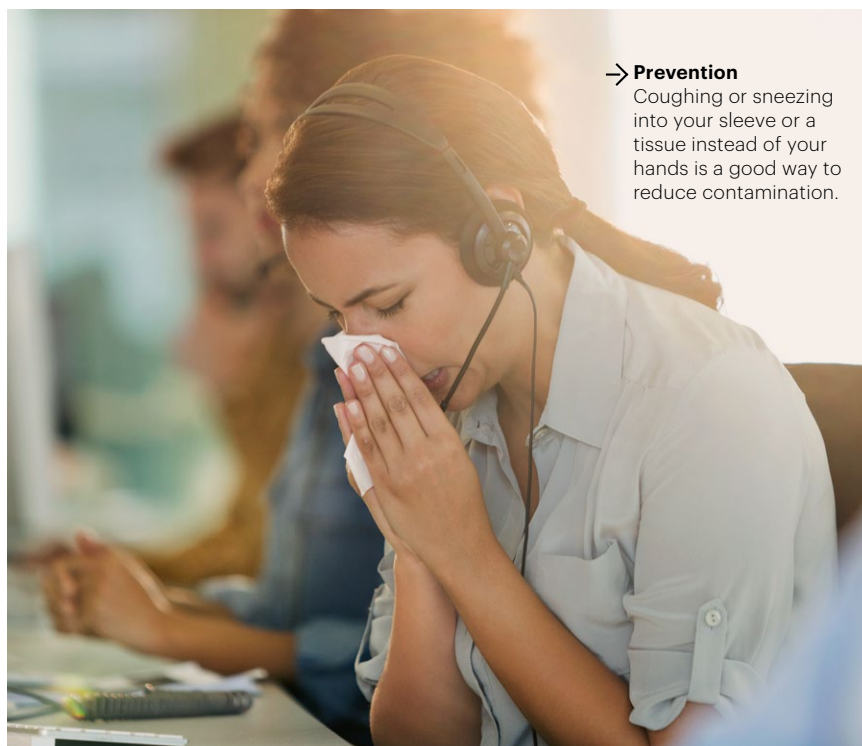
Search for the slideshow **Is It a Cold or the Flu?** at WebMD.com.

REVIEWED BY *Hansa Bhargava, MD*
WebMD Senior Medical Editor

HEALTH HIGHLIGHTS

'Tis the Season

Don't let colds and the flu get you down. Follow these expert tips.



→ Prevention

Coughing or sneezing into your sleeve or a tissue instead of your hands is a good way to reduce contamination.

10 Ways to Cope

1. ACT FAST

Take antiviral flu medication within 48 hours of symptoms for the best results.

2. STAY HEALTHY

Reduce stress and get plenty of sleep to keep your immune system strong.

3. DRINK UP

Loosen congestion and avoid dehydration with lots of water—but skip alcohol and caffeine.

4. DON'T WAIT

If you—or someone you're caring for—have trouble breathing, get help immediately.

5. FLUSH PROPERLY

To avoid infections, use only boiled, sterile, or distilled water in your neti pot.

6. KEEP IT CLEAN

To kill cold and flu viruses, disinfect surfaces you often touch.

7. KNOW THE DRILL

Learn the flu prevention plan at your child's school or day care program.

8. PROTECT YOURSELF

Have a doctor's appointment? Wear a mask in the waiting room.

9. PROTECT OTHERS

Cough or sneeze into a tissue or your sleeve, not your hands.

10. AVOID ANTIBIOTICS

Remember that antibiotics don't help colds and flu.



Search for the slideshow **A Visual Guide to Breast Cancer** at WebMD.com.

REVIEWED BY *Arefa Cassoobhoy, MD, MPH*
WebMD Senior Medical Editor

QUIZ

Breast Cancer— What's New?

Over the past 25 years, the number of women dying from this disease dropped by about 40%. New tests and treatments are at least partly responsible for these survival gains. Take this quiz to see how much you know about breast cancer advances.



ASK YOUR DOCTOR

Q Should I get genetic testing?

If you have a strong family history of breast or ovarian cancer, or you've had one or both of these diseases, consider getting tested for the BRCA 1 and BRCA 2 gene mutations.

Q What type of breast cancer do I have?

Testing your cancer to find out what factors—like hormones or proteins—cause it to grow can help your doctor find the most effective treatment.

Q How can I prevent cancer from coming back after treatment?

You can't completely prevent a return, but eating more fruits and vegetables and staying active will improve your odds of staying cancer-free. If you're at high risk for a recurrence, your doctor might prescribe a hormonal therapy to lower your risk.

Q What about new treatments for my cancer?

New breast cancer therapies are in development. If treatments you've tried haven't slowed your cancer, ask your doctor if you should enroll in a clinical trial of an experimental drug.

Quiz

1

If you have an HER-2-positive breast cancer, you need specific medicines to treat it.

☐ TRUE
☐ FALSE

2

To monitor breast cancer, doctors can look for markers in a woman's urine.

☐ TRUE
☐ FALSE

3

There's no way to prevent breast cancer if you're at risk.

☐ TRUE
☐ FALSE

4

Women who have male relatives with breast cancer may want to get tested for the BRCA genes.

☐ TRUE
☐ FALSE

5

A 3D mammogram may find more breast cancers than a 2D mammogram.

☐ TRUE
☐ FALSE

6

Gaining weight could lower your risk for breast cancer.

☐ TRUE
☐ FALSE

Answers

1. True. About one in five women with breast cancer has too much of the protein HER-2 on the surface of her cancer cells. A few currently available drugs treat HER-2-positive breast cancers by targeting this protein.

2. False. Cancer, and other cells in your body that respond to cancer, produce higher levels of substances called markers. Markers for breast cancer are in the blood, not the urine. Doctors find them using blood tests.

3. False. You can do a few things to lower your odds of getting breast cancer. Don't smoke, drink alcohol in moderation only, and stay active. A few drugs can also reduce your chance of getting breast cancer if you're at high risk.

4. True. A brother, father, or other close male relative with breast cancer increases your likelihood of carrying the BRCA 1 or BRCA 2 gene mutation. If you have one of these mutations, your lifetime risk of getting breast cancer is 85% and you may need earlier screening.

5. True. 3D mammograms—also called tomosynthesis—expose you to slightly more radiation than a 2D mammogram, but they may find more cancers and reduce your chance of having to go back for a follow-up test.

6. False. Losing weight if you're overweight or obese might reduce your breast cancer risk. One study found that postmenopausal women who lost 5% or more of their body weight were 12% less likely to be diagnosed with breast cancer.

Andy Serkis

Actor, 54, London



1

Your new movie, *Mowgli*, opens Oct. 19. You directed it, and you play Baloo. How did you stay healthy while filming?

I try to not drink when I'm filming. It really does help clear your mind and sharpen your senses. I go through periods leading up to production where I try to get healthier. I actually look forward to the rigor. The big trick is to do everything in moderation, but I'm a bit of an all-or-nothing person.

2

Do you work out?

I'll do press-ups, sit-ups, all of that, but I'm not a weight-lifting person. I'm really not a gym person. I'm an outdoor junkie. I absolutely crave wilderness. I used to do a lot of climbing in my youth—hill walking and trekking. I cycle to work quite a lot. We, as a family, go for walks in the nearby hills.

3

Why did you stop climbing?

When you have a family, you start to become aware of your responsibilities. I do love being in mountain environments, but I don't do the hardcore soloing and ice climbing as much as I did—although I'm probably sort of yearning to do it again in a secret way.

4

You have three kids: Ruby, 19; Sonny, 17; and Louis, 13. What did you learn from being a parent?

As a human being, it's taught me everything. It's taught me that you need to create an atmosphere where everyone is valued and everyone feels they can function to the best of their ability. I learned that by observing my wife, Lorraine, who is brilliant at it.

5

What's your best health habit?

I try to keep off sugar, which is hard. As a family we try to eat healthily. We make a lot of juices—beet, carrot, orange. We eat a lot of avocado, a lot of quinoa.

6

Are you a vegetarian?

I'd been a vegetarian since I was 18, then I started eating fish when I was about 30. We were shooting *Lord of the Rings* and I needed more protein. But I haven't eaten meat since I was 18.

7

Do you sleep well?

I'm a terrible sleeper. I literally get about four hours of sleep. I can feel very sluggish during the day, but I have 10-minute power naps

and feel fully recharged. My friends will tell you that I can easily drop off to sleep.

I can literally be in a conversation and nod off. [At night] I know you shouldn't bring your phone into the bedroom and your laptop into bed, but I'm ridiculously undisciplined when it comes to that. I'll tell you what: I'm at my most creative between 5 and 6 in the morning. That's generally when I have my best ideas.

8

You do fundraising and advocacy for Best Beginnings, which helps children at risk by supporting their physical, emotional, and language development, and Barnardo's, which helps children exposed to poverty, sexual exploitation, disability, and domestic violence. Why is helping children important to you?

I'm passionate about children having an equal start in life. I look at my children, how lucky they are, and I feel obligated in some small way to help others have as solid a start as they possibly can.

9

Is the best part of life behind you or in front of you?

Oh, wow. I always think it's ahead of me because change is good. I'm excited about the next generation, where my children are going, and what they're going to be doing. I'm always equally excited about the next film I'm going to direct or the next character that I'm going to take on. I'm constantly changing, and I learn so much from the different experiences I have.

10

Is there a secret to a good, healthy life?

I think it's absolutely all about really living in the moment, being present. When work is demanding so much of you, being with people that you love being with and to be present is the most important thing.

—KARA MAYER ROBINSON

WebMD®

STRONGER

THAN RHEUMATOID ARTHRITIS



FLIP OVER FOR
WebMD
MAGAZINE

PREVENT JOINT DAMAGE · 1 | KNOW YOUR RA NUMBERS · 3
FOUR THINGS TO ASK WHEN YOU VISIT YOUR DOCTOR · 4

FOCUS ON

Joint Damage 101

A LEADING RESEARCHER EXPLAINS HOW RA HURTS JOINTS AND WHY YOU SHOULD ACT TO PREVENT FURTHER DAMAGE

By Stephanie Watson

The signs of rheumatoid arthritis (RA)—swollen, stiff, and sore joints—are pretty obvious to anyone who lives with this disease. Much less obvious are the processes going on under the surface that make joints swell and ache.

Unlike osteoarthritis (OA), in which joint cartilage gradually wears away over years of use, RA is a disease of inflammation. “That inflammation leads to the production of factors that drive joint destruction,” says Ellen Gravallese, MD, Myles J. McDonough Chair in Rheumatology at the University of Massachusetts Medical School.

Gravallese and her colleagues have been studying how inflammation destroys cartilage and bone in RA for the better part of two decades. What they’ve discovered is that a few separate processes are behind joint damage, pain, and deformity.

One process damages bones in the affected joints. Cells within the inflamed joints produce a substance called RANK ligand (RANKL), which increases the production of osteoclasts. Normally, osteoclasts break down bone as part of the natural repair process. Then, other cells called osteoblasts rebuild bone. When inflammation produces massive numbers of osteoclasts, they break down bone too rapidly to rebuild. “It’s like putting fuel on a fire,” Gravallese says.

A separate process damages cartilage, the rubbery connec-

tive tissue that cushions and protects bones at the joint. Inflammatory factors in the joint lining—like interleukin-1 (IL-1), interleukin-6 (IL-6), and tumor necrosis factor-alpha (TNF-alpha)—trigger the production of destructive enzymes that break down cartilage. Inflammation also destroys the scaffolding of bone that supports the cartilage. “It’s like you’re building a house and you lose the scaffold you’re trying to build upon. Therefore, the cartilage attached to that scaffold is going to be destroyed,” Gravallese says.

Pain is often a sign that the inflammation isn’t well controlled, she adds. The better you control inflammation, the less likely you’ll be to progress to joint damage. That’s why it’s important to let your doctor know right away if you have ongoing joint pain.

Thanks to a new generation of drugs that block

inflammatory factors like IL-6 and TNF-alpha, people with RA no longer have to settle for a lifetime of pain and disability. “These drugs are effective at controlling inflammation in rheumatoid arthritis,” says Gravallese. “If inflammation is under good control, you can prevent the progression of bone destruction in the disease.” Preventing inflammation also does a pretty good job of controlling RA pain, she adds.

As a result, far fewer people with RA have to undergo joint replacement surgery today than in years past. “That’s because we’re so good now at controlling inflammation, and we can prevent the joint damage that previously required surgery,” Gravallese says.

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



? ASK YOUR DOCTOR

1. **Will my RA get worse if I don't treat my pain?** Joint pain in RA is often a sign of persistent inflammation. If you're in pain, see your rheumatologist, who can adjust your medication to better control inflammation.
2. **What else can I do to protect my joints?** Exercise is very important to keep your joints flexible. Swimming, walking, and tai chi are some of the best—and safest—exercises for people with RA.

WebMD Stronger is not responsible for advertising claims. WebMD Stronger (ISSN 1553-9946) is published by WebMD LLC and may not be reproduced in whole or in part without written permission of WebMD LLC. All rights reserved. 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 Stronger. If you think you have a medical emergency, call your doctor or 911 immediately. 2018 WebMD LLC. All rights reserved.

HEALTH SMARTS

Loving Care

CAREGIVERS ARE AN ESSENTIAL SUPPORT SYSTEM FOR PEOPLE
WITH RHEUMATOID ARTHRITIS

By Stephanie Watson

When Andre Marcial married Chantelle, his childhood sweetheart, four years ago, he immediately assumed two new roles: husband and caregiver. Since Chantelle was diagnosed with rheumatoid arthritis (RA) nearly 20 years ago, her day-to-day life has been marked by pain, fatigue, and other disabling symptoms that often pop up unexpectedly.

“One thing about rheumatoid arthritis is that it’s unpredictable,” says Chantelle. “Some days my hands hurt. Some days my hips or knees hurt. It can be fatigue, which is sometimes extreme. My medication can also cause side effects. Waking up and just being able to go doesn’t happen much anymore.”

Once they wed, Andre took over, anticipating what Chantelle’s needs and doing the things she can’t manage, like running to the grocery store after work, reminding her to take her medicines, or driving her to doctor’s appointments. Sometimes, that means going straight



from his overnight security job to an appointment. “It’s tiring because by the time we get back it’s usually late. I’m trying to head off to bed to get ready for the next day,” he says.

More than 43 million people in the U.S. are caregivers to a spouse, parent, child, or other loved one with a chronic illness. The burden of caring for someone with RA has lifted somewhat in recent years, thanks to a new generation of disease-modifying

drugs that more effectively relieve symptoms like joint pain and stiffness. Yet even people with well-controlled RA need help—and emotional support.

“I guess the most important thing I do is try to stay positive and encourage her,” Andre says. “I always ask, ‘What’s going on today?’ I just try to be helpful and realize that she doesn’t even know sometimes.”

Though caregiving is a rewarding endeavor for those who do it, watching a

person deal with a painful and debilitating disease can also be frustrating. “I wish I could help ease the pain more,” Andre says.

One way he tries to help is by making sure Chantelle gets to all of her appointments so her doctor can address any issues she’s having. Because she stays on top of her treatment, “my rheumatoid arthritis is pretty well controlled. I work with an amazing team of doctors, and my rheumatologist is wonderful,” she says.

Andre’s support is invaluable. “I would not be functioning if it weren’t for him,” she says. “To have somebody who’s not only supportive but who anticipates what the next step will be is crucial.”

If you’re an RA caregiver and need support, you can find it from arthritis advocacy groups like Creaky-Joints (creakyjoints.org) and the Arthritis Foundation (arthritis.org).

Reviewed by
Neha Pathek, MD
WebMD Medical Editor

4 TIPS

A good caregiver can make a big difference for someone with RA. Here are some ways to help, from Veena Ranganath, MD, UCLA Health rheumatologist and associate clinical professor of rheumatology at the David Geffen School of Medicine.

Be Understanding

RA flares are unpredictable. Understand that a person can have good days—and bad days—and adapt as needed.

Go to Appointments

Doctors’ appointments can sometimes be overwhelming, so go along to listen, note, and remember all of the doctor’s recommendations.

Ask for More Options

It can take up to three months to get relief from a new RA drug. If a person’s current treatment isn’t helping, ask his or her doctor about adding faster-acting drugs like corticosteroids or NSAIDs as a bridge until the drug starts working.

Get Vaccinated

Doctors recommend that people with RA stay up to date on their vaccinations to prevent infections. Get vaccinated, too, and you’ll protect your loved one even more.

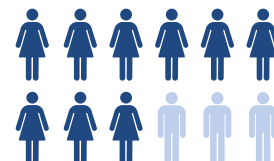
BY THE NUMBERS

Rheumatoid Arthritis

By Heather Hatfield

1.5 MILLION

U.S. adults with rheumatoid arthritis



3x

Number of
women vs. men
with rheumatoid
arthritis



2x TO 4x
Estimated **increased likelihood**
of depression if you have
rheumatoid arthritis

1%

Portion of
the global
population
with
rheumatoid
arthritis

26%

Projected
percentage
of American
adults with
arthritis by
2040

37%

Global percentage of rheumatoid
arthritis patients younger than 65
eventually **unable to work**



20%

TO

40%

Percentage of patients
whose **drug treatment**
leads to lasting
remission



14.6

MILLION
U.S. adults with any type
of arthritis who have
severe joint pain



\$39.2 billion

Annual U.S. cost of
rheumatoid arthritis

33%

Increased risk of
rheumatoid arthritis
if you are obese



40%

Increased chance of **early death** among
women with rheumatoid arthritis

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

CHECKUP

Your RA Visit

THESE SMART QUESTIONS WILL HELP KEEP YOUR HEALTH ON TRACK

By Barbara Brody



Trust. Honesty. Openness. These qualities are key in any good relationship, and when you have moderate to severe rheumatoid arthritis (RA), that includes your relationship with your doctor.

To start, you should see a physician, usually a rheumatologist, every three months. “You want to continually assess disease activity and side effects of medication. We also do blood work to check inflammation markers and make sure that your kidney and liver function is OK,” says Linda A. Russell, MD, a rheumatologist at the Hospital for Special Surgery in New York.

While testing is important, you also want to have an in-depth conversation with your doctor. These four questions will help guide you.

Q Does pain mean I’m having a flare?

Possibly. “If you’ve already had significant damage to a joint, then it might still hurt even if you’re in remission,” says Russell. This problem is more likely if you developed RA before the introduction of biologic drugs (the first one hit the market in 1998). That said, you should always tell your doctor about any pain so he or she can check it out. Joints that are warm, tender, or swollen with fluid are tip-offs of inflammation that needs to be treated.

Q I think I’m having a flare. What should I do?

Speak up and alert your doctor. “We can increase

your dosage of medication, try changing medication, or give you a short course of oral prednisone [a steroid that fights inflammation],” says Russell. If only one joint is involved, then you might be able to get an injection of cortisone instead of taking oral steroids.

Q What can I do, besides take medication, to improve my pain and mobility?

Being active is really important, though you may need to ease up a little during a flare. “Most people who participate in a regular exercise program feel better and

have less stiffness,” says Russell. It’s especially important to keep the muscles around both-ersome joints strong. “If you have bad knees but really strong thigh muscles, that will make it easier to get around,” she says. Losing weight if you’re overweight is also a good idea.

Q I’m worried about catching an infection. What can I do?

You can take steps to keep from getting sick. Most people with moderate to severe RA take methotrexate along with a biologic drug that targets specific parts of the immune system. Biologics work really well to prevent joint damage, says Russell, but because they suppress the immune system, they also leave you vulnerable to infection. Your doctor can explain which vaccines to get and when. Avoiding sick people and practicing good hygiene is also important. If you’re currently sick, your doctor might advise stopping your biologic drug for a few weeks.

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