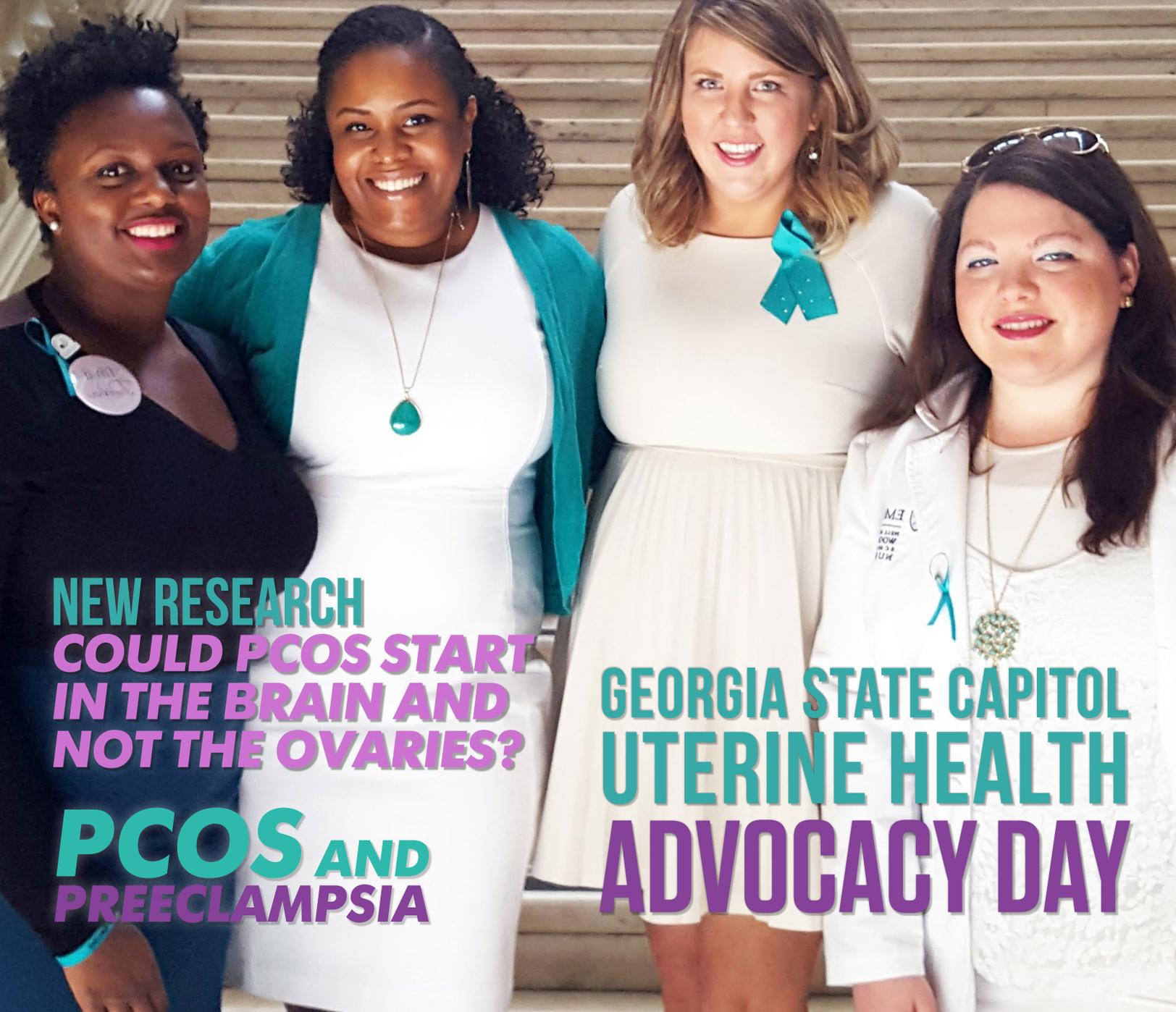


# PCOS Challenge

MAY - JUNE 2017 | VOLUME 2 | ISSUE 3

**DATING AND PCOS**  
**THE DIFFICULT**  
**CONVERSATIONS**



**NEW RESEARCH**  
**COULD PCOS START**  
**IN THE BRAIN AND**  
**NOT THE OVARIES?**

**PCOS AND**  
**PREECLAMPSIA**

**GEORGIA STATE CAPITOL**  
**UTERINE HEALTH**  
**ADVOCACY DAY**

**UNDERSTANDING FOOD ALLERGIES, INTOLERANCES AND SENSITIVITIES**

# CONTENTS



3 Letter from the Executive Director



4 **PCOS: Could It Start in the Brain and Not the Ovaries?**

By Kirsty Walters



6 **PCOS: Food Allergies, Intolerances and Sensitivities**

By Angela Grassi, MS, RD, LDN



10 **Dating and PCOS: The Difficult Conversations**

By Gretchen Kubacky, PsyD



14 **Hijacking of the Menstrual Cycle by PCOS**

By Monica Best, MD



16 **Advocacy Day for Uterine Health at the Georgia State Capitol**

By Danielle DeUrso



19 **RESOLVE Advocacy Day**

20 **PCOS Awareness Weekend 2017**

24 **Stroke in Women**

26 **PCOS Challenge Mobile App Powered by Medisafe**

28 **Preeclampsia and PCOS**

By Renetta DuBose

30 **Opinion Editorial: Stress and Weight Gain**

By Candice Rosen, RN, BS, MSW, CHC

32 **PCOS Challenge Advisory Board Announcements**

38 **PCOS Fat Loss Tips**

By Erika Volk

40 **Cyster Corner**

Featuring Ashley Levinson



44 **PCOS Friendly Recipe of the Month**

## EDITORIAL CREDITS

### Editor-in-Chief

Sasha Ottey, MHA

### Graphic Design

Olena Lykova; William R. Patterson

### Photographs

Afolabi Sogunro; William R. Patterson

### Writers

Danielle DeUrso; Renetta DuBose;  
Amy Nguyen

### Editors

Vicky T. Davis; Kali Mincy, MS;  
Engrid Roy, MA;

### Contributors

Monica Best, MD; Angela Grassi, RD;  
Gretchen Kubacky, PsyD;  
Candice Rosen, RN; Erika Volk;  
Kristy Walters, PhD

### Sponsorship/Advertising Inquiries

Call (404) 855-7244 or visit  
[PCOSChallenge.org/pcos-contact](http://PCOSChallenge.org/pcos-contact)

### Disclaimer

The contents of PCOS Challenge magazine are for informational purposes only. The contents are not intended to be a substitute for professional medical advice, diagnosis or treatment. Always seek the advice of your physician or other qualified healthcare provider with any questions you may have regarding a medical condition.

No part of this publication may be reproduced or utilized in any form or by any means, electronically or mechanically, without written permission from the publisher.

© Copyright 2017 PCOS Challenge, Inc.  
All rights reserved.

## LETTER FROM THE EXECUTIVE DIRECTOR

Welcome to the third issue of the new *PCOS Challenge* magazine. In this issue, we recognize some of the national health observances and awareness initiatives for May and June which are relevant to those of us living with PCOS. Some of these important monthly observances include Stroke, Mental Health and Pre-eclampsia Awareness.



### Join PCOS Challenge As We Create Change

PCOS Challenge is continuing its leadership role in advancing the cause for women and girls with polycystic ovary syndrome by engaging thousands of people around activities, programs, media and research associated with PCOS. We are increasing our legislative advocacy efforts as part of our mission to help raise awareness and increase public support for those living with the condition. Most recently, we joined forces with The White Dress Project at the Georgia State Capitol to “make a case for uterine health” and supported RESOLVE: The National Infertility Association on Capitol Hill in Washington, D.C. to advocate for resources and support of those building their families through adoption and assisted reproductive technology.

For PCOS Awareness Month in September, PCOS Challenge will bring together hundreds of women from all over the United States and throughout the world for the PCOS Awareness Weekend on September 16-17<sup>th</sup>. This weekend is where we will all come together in unison to spread awareness about polycystic ovary syndrome, walk or run the Bolt for PCOS 5K, attend the PCOS Awareness Symposium and join initiatives to promote PCOS research and healthcare. We encourage you to [sign up as a volunteer or team leader.](#)

Thank you for supporting PCOS Challenge and our vision to make PCOS a public health priority!

In good health,

*Sasha Ottey*

Executive Director  
PCOS Challenge, Inc.



# PCOS

## COULD IT START IN THE BRAIN AND NOT THE OVARIES?

By Kirsty Walters, PhD

**P**COS is the most common endocrine, metabolic and reproductive disorder worldwide. It is characterized by irregular hormonal function and androgen excess (steroid hormones normally associated with men, such as testosterone). This can lead to acne and excess male-like hair growth, as well as reduced fertility, due to a difficulty in ovulating and miscarriage. Women with PCOS also commonly suffer from obesity and have a higher risk of developing

cardiovascular disease and type 2 diabetes. Despite this condition being so common, its cause is unknown and there is no cure at present. Unfortunately, current management of PCOS is suboptimal as it only treats the symptoms of PCOS, not the underlying cause. Our team has been carrying out research to identify the mechanisms that lead to PCOS, with the hope that we can develop treatments for the cause rather than just the symptoms.

In our [new study](#) published in the *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, we propose a new concept for how we think about PCOS. Our data provide evidence that this syndrome may start in the brain and not the ovaries as has long been assumed. In our research using animal models, we have shown that excess levels of androgens can replicate features of human PCOS. Importantly, we found that the key to PCOS is the actions of the excess androgens in the brain and not just in the ovaries. We found that if we silenced the actions of androgens in the ovary, features of PCOS still developed. However, if we nullified the androgen actions in the brain, the majority of the features of PCOS did not arise. These findings allow us to now start to understand what actually underlies PCOS. This is significant because it gives us a new area of focus as we develop treatments that target the cause of PCOS.

While this study has been carried out in mice and not humans, the many similarities between how mouse and human reproductive systems are regulated means this study provides us with compelling evidence that excess levels of androgens most likely play a key role in causing PCOS. Furthermore, we have identified that the brain is an important site in the development of the condition.

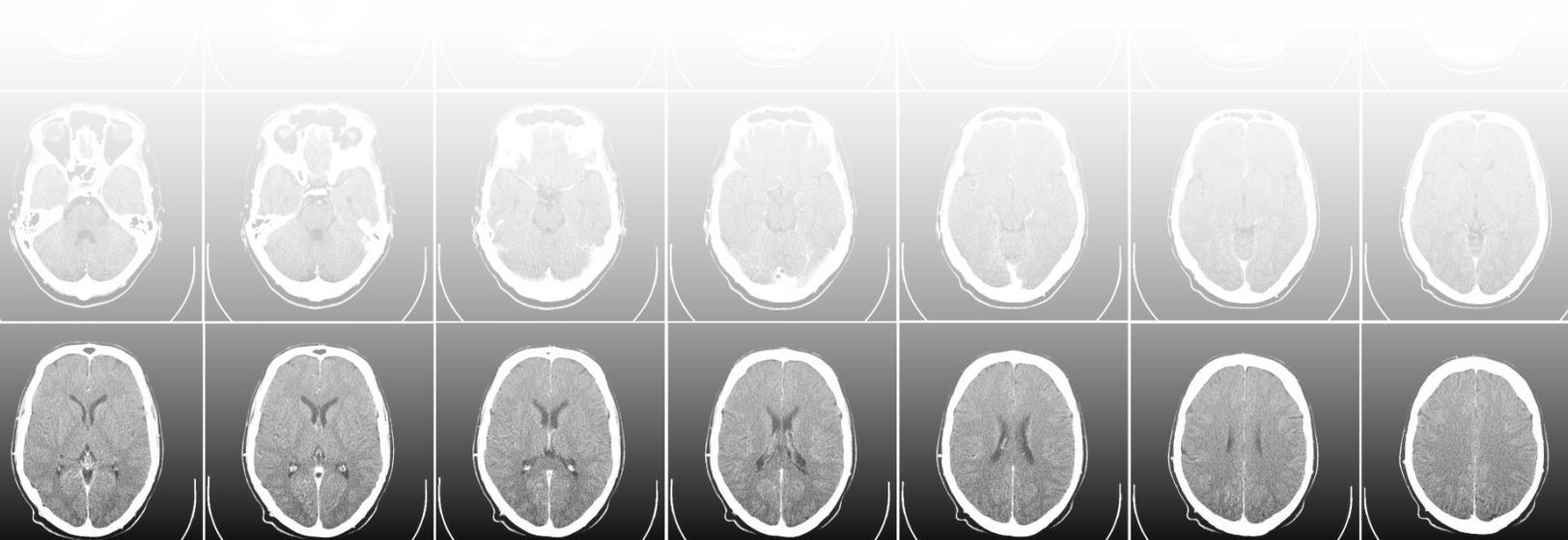
We are still some way off from a cure for PCOS, but our research gives us a new target to study. Our hope is to develop innovative and effective treatments for women with PCOS, ones that address the condition's cause rather than just its symptoms.



## MORE ABOUT KIRSTY WALTERS, PHD

Dr. Kirsty Walters was awarded her PhD in female reproductive biology from The University of Edinburgh, Scotland. Subsequently, Dr. Walters undertook postdoctoral studies at the ANZAC Research Institute/The University of Sydney where her research examined the mechanisms regulating female reproductive biology, endocrinology and physiology. Currently she is a Senior Lecturer and head of the Ovarian Biology Laboratory in the School of Women's & Children's Health, at the University of New South Wales, Sydney, Australia. Her research group's focus is to understand the role of androgens (male steroid hormones) in normal ovarian function and in polycystic ovary syndrome.

[UNSW.edu.au](http://UNSW.edu.au)





# PCOS: FOOD ALLERGIES, INTOLERANCES AND SENSITIVITIES

By Angela Grassi, MS, RD, LDN



**F**or those suffering from food allergies, intolerances and sensitivities, enjoying food can sometimes be a challenge. About one-third of all adults believe they have food allergies although the actual number of true food allergies is estimated to be much lower. More people suffer from food intolerances and sensitivities than food allergies.

While a link between polycystic ovary syndrome (PCOS) and food allergies, intolerances and sensitivities has not been identified, eating foods that cause adverse reactions can increase inflammation in the body and possibly make PCOS symptoms worse.

## WHAT ARE FOOD ALLERGIES?

Food allergies affect six to eight percent of all children and four percent of adults. The most common food allergens in adults are shellfish (shrimp, crayfish, lobster and crab), milk, wheat, soy, peanuts, tree nuts (walnuts) and eggs.

A food allergy is an abnormal response to a food, triggered by the body's own immune system. Food allergens are proteins that enter your bloodstream after the food is digested. From there, these allergens target organs and tissues and cause allergic reactions.

Adverse reactions to food usually begin within minutes to a few hours after ingestion. For some, simply touching or inhaling food in the air may cause an allergic reaction. Anaphylaxis is a rare but potentially fatal condition in which many bodily systems are affected at once.

Signs and symptoms of food allergies can vary. The most common signs and symptoms include swelling or itching of the lips, mouth and throat, nausea, vomiting, cramping or diarrhea, and eczema.

## DIAGNOSING FOOD ALLERGIES

Food allergies can be diagnosed by a board-certified allergist who will typically conduct a detailed history, physical exam and lab tests. Keeping a food diary with a record of symptoms may be needed. A skin-prick test is one of the most useful ways allergists test for food allergies.

Elimination diets can also help determine foods to which one is allergic. Suspected foods are completely eliminated from the diet for several weeks to see if symptoms resolve. If improvement is seen, the suspected foods may be slowly reintroduced, one at a time, to see if symptoms occur.

## TREATMENT FOR FOOD ALLERGIES

Once a food allergy is determined, the only treatment is to avoid that food. This requires careful reading of food labels. Working with a registered dietitian nutritionist can help those suffering from



### MORE ABOUT ANGELA GRASSI MS, RDN, LDN

Angela Grassi is founder of the PCOS Nutrition Center, which provides evidence-based nutrition information, supplements and coaching to women with PCOS. Angela is a past recipient of the Ricardo Azziz PCOS Challenge Advocacy Leadership Award. She is the author of *PCOS: The Dietitian's Guide*; *The PCOS Workbook: Your Guide to Complete Physical and Emotional Health*; and *The PCOS Nutrition Center Cookbook: 100 Easy and Delicious Whole Food Recipes to Beat PCOS*. As a woman with PCOS herself, Angela has dedicated her career to PCOS advocacy, education, and research.

[PCOSNutrition.com](http://PCOSNutrition.com)

food allergies with meal planning and ensuring that nutrient needs are being met. In addition, epinephrine pens should always be carried by individuals with a history of severe allergic reactions.

## WHAT ARE FOOD SENSITIVITIES?

Typically those with food sensitivities have delayed reactions in which it may take up to 72 hours after eating for symptoms to occur. Symptoms associated with food sensitivities may include diarrhea, hives, eczema, excess mucus production, "brain fog," migraines, joint pain and fatigue. Food sensitivities also affect the immune system and can cause inflammation.

Diagnosing food sensitivities is complicated, and elimination diets are less reliable, given that it may take days to see a reaction and that there may be multiple foods involved. Mediator Release Testing (MRT) is a blood test that can test for a large number of food sensitivities. Avoiding the strongest offending foods can reduce inflammation and symptoms.

Continued on page 8...

## WHAT ARE FOOD INTOLERANCES?

While food allergies and sensitivities affect the immune system, a food intolerance does not. Some people's digestive systems cannot properly digest foods. For example, those with lactose intolerance are deficient in an enzyme needed to digest milk; when these individuals eat dairy products, they tend to have gastrointestinal side effects like nausea, gas and diarrhea.

Irritable bowel syndrome (IBS) is another type of food intolerance. Those who suffer from IBS may

find the FODMAP approach helpful in managing their symptoms. The acronym FODMAP stands for Fermentable-, Oligo-, Di- and Monosaccharides and Polyols and refer to a group of certain sugars and fibers in the diet that can cause gastrointestinal distress in IBS sufferers.

If you suspect you have an allergy, intolerance, or sensitivity to a food, you should seek treatment. Making the necessary changes to your diet will make you feel better and improve your PCOS symptoms.

# HEALTH AWARENESS

## PCOS CHALLENGE RECOGNIZES

# 2017

YEARLY PLAN &  
CALENDAR

WORLD WIDE

## May

American Stroke Awareness Month

Mental Health Month

National High Blood Pressure Education  
Month

National Physical Fitness and Sports Month

Preeclampsia Awareness Month

Food Allergy Action Month

National Women's Health Week

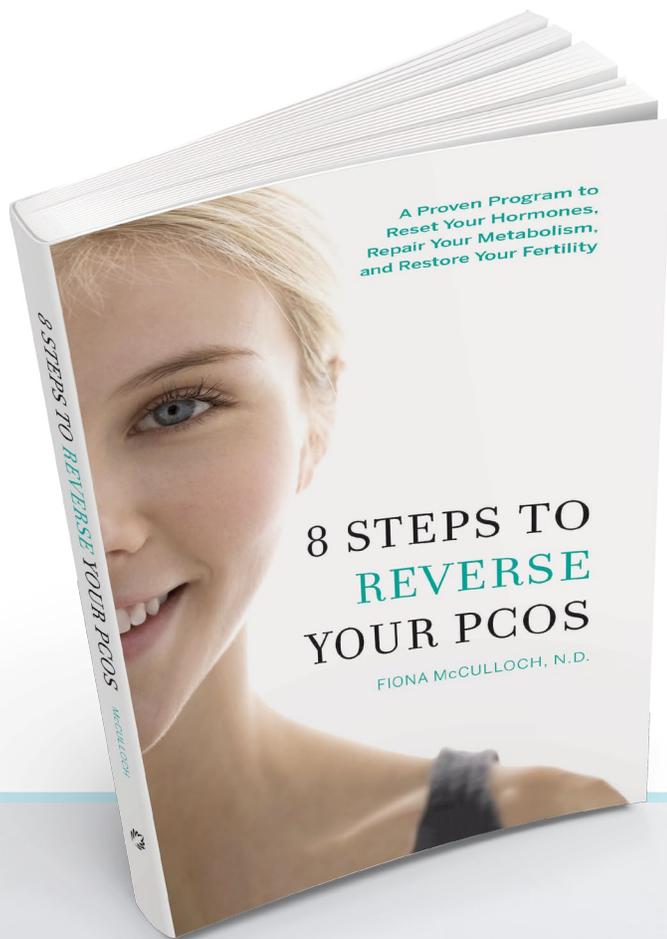
## June

National Cancer Survivors Day (June 4th)

# 8 STEPS TO REVERSE YOUR PCOS

A Proven Program to Reset Your Hormones, Repair Your Metabolism, and Restore Your Fertility

In this new encyclopedic handbook for women with PCOS, Dr. Fiona McCulloch dives deep into the science underlying the mysteries of the condition, offering the newest research and discoveries and a detailed array of treatment options. 8 Steps to Reverse your PCOS gives you the knowledge to take charge of your PCOS-related health concerns addressing hair loss, acne, hirsutism, irregular menstrual cycles, weight gain, and infertility.



Dr. McCulloch introduces the key health factors that must be addressed to reverse PCOS. Through quizzes, symptom checklists, and lab tests, she'll guide you in identifying which of the factors are present and what you can do to treat them. You'll have a clear path to health with the help of this unique, step-by-step natural medicine system to heal your PCOS.

FionaMcND 

DrFionaND 

Available on  
**amazon.com**

[drfionand.com](http://drfionand.com)



# DATING AND PCOS: THE DIFFICULT CONVERSATIONS

By Gretchen Kubacky, PsyD



**I**f you're new to dating, the whole thing can be kind of strange and terrifying. If you've been at it a while, you may be feeling less optimistic, a little jaded, or even have experienced some deep hurt in the process. One of the most daunting things facing women with PCOS is how to handle PCOS-related topics while dating. Here are some tips on how to bring up the subject.

## EARLY DATING: SURFACE EXPLORATION

If you're serious about finding a relationship partner, the purpose of a first date is merely to determine if you're interested enough to have a second

date. Because PCOS is an unknown for most people, and it's a "disease," treat it the way you would handle any other bad news. You don't want to talk about your crazy ex, the abortion you had in high school, your mother's alcoholism, or anything else that might scare someone off. Same with PCOS.

This is not about lying; it's about becoming more intimate in a gradual and meaningful way that strengthens a growing relationship, while protecting you from injury by someone who isn't attached enough to be decent and thoughtful, and may just bail out on you.

## NEXT STAGE DATING: GETTING INTIMATE

This means getting more intimate emotionally as well as physically. As a health psychologist, I'm all about protecting and promoting your health, so of course I've got to throw in a reminder about having a talk about pregnancy and STDs. And what a great opportunity to start opening the lines of conversation around PCOS! You might say, "I have something called PCOS, which means that getting pregnant may be more difficult for me, and condoms are still a priority for me. Alternatively, you could say, "I'm on birth control because of my PCOS, but we still need to use condoms to protect us both."

If your partner is female or trans, it's still good to have the STD conversation, because no one's exempt; it just changes the conversation a bit. You might say, "Before we go any further, I need to let you know something about my health. I have PCOS." If it's your style to be funny or dramatic, feel free to use a dramatic pause so that they're freaking out thinking you might have a STD; that way PCOS sounds like nothing! If you're afraid that PCOS will scare someone off, and yes, it could, but it's not likely – and wouldn't you rather know now than when you're two years down the line and planning a wedding?

## MORE MATURE RELATIONSHIP: GROOMING, MOOD SWINGS AND MORE

I have a friend who thinks couples should know everything about the other person. Her husband says: "Mystery! Please, maintain a little mystery!" The more time you spend together, the more likely your partner is to notice any discomfort you have



with your body. You can hide your early morning shave for a long time, but eventually a pesky random hair is going to protrude and get noticed. Acne and hair loss are visible no matter what. Most people won't ask. But if you would feel more comfortable bringing attention to it, do so with kindness to yourself, like it's not a big deal, and you've got it covered. Something like, "You might have noticed that my hair is thinning a little. I'm kind of embarrassed, but I'm seeing a good dermatologist, so don't worry that I'm going to end up looking like The Rock." (As you can see, I really like to insert a little humor into painful and uncomfortable situations.)

Deeper subjects, like infertility or PCOS-related depression, anxiety and mood swings, can be approached when you have built trust in your partner. Appropriate timing, respecting your own needs for privacy as well as for self-disclosure, and a little humor will go a long way in easing your new beloved into the subject of PCOS.



### MORE ABOUT GRETCHEN KUBACKY

Gretchen Kubacky, PsyD, "The PCOS Psychologist," is a health psychologist in private practice in Los Angeles, California. She is a Certified PCOS Educator, and the founder of PCOSWellness.com. You can contact Dr. Kubacky at [AskDrGretchen@gmail.com](mailto:AskDrGretchen@gmail.com).

[PCOSWellness.com](http://PCOSWellness.com)



By Gretchen Kubacky, PsyD

## QUICK TIPS FOR MANAGING PCOS-RELATED ANXIETY

**Daily Exercise** is one of the best tools for managing anxiety, increasing a sense of well-being and purging stress from your body. Aim for a minimum of 30 minutes a day, six days per week.

**Journaling** in a notebook or online – dumping all of your stressful, anxious thoughts onto the page – is a great way to remove head trash and redirect destructive thoughts. Do it quickly, without editing, for more benefit. First thing in the morning or last thing at night is ideal.

**Spiritual Practice** may be helpful in calming those vague existential doubts that contribute to your anxiety.

**Grounding Exercises** may be as simple as looking around a room and naming the objects in the room until you calm down. There are many other forms of grounding techniques that you can learn from a therapist or online.

**Distraction Techniques** are similar to grounding exercises. When anxiety flares, try plunging your hands into a bowl of ice water. The shock will reorient your mind away from the anxiety quickly.

**Limit Caffeine**, especially if you know you are sensitive to its effects. Many women can reduce their anxiety just by reducing or eliminating caffeine. Black or green tea, colas, chocolate and, of course, coffee are sources you may want to avoid.

**Practice Acceptance** of your anxiety. The more you try to push it away, the louder it seems to become, right? Say to yourself, “I am feeling anxious now,” but without judgment or pressure to change it. It sounds simple, but it really works.

## QUICK TIPS FOR MANAGING PCOS-RELATED DEPRESSION

### Good Food for a Good Mood

Have you ever noticed how some foods make you feel energetic and some foods make you feel like curling up on the couch for a long nap? What you eat has a powerful effect on your brain as well as your body. Choosing whole foods, like fish, vegetables, fruits, dairy if you can handle it, and healthy fats, with only limited doses of refined carbs and sweets will make your brain a lot happier. Bonus: your body will feel better too.

### Sleep for Repair and Restoration

Poor quality sleep, sleeping too much or sleeping too little are all symptoms of depression. But there's a chicken and egg situation here: depression causes the symptoms, but the symptoms may also contribute to the depression. Regardless, you need a solid seven to nine hours of sleep nightly, so do whatever it takes to alter your schedule.

### Meditate Your Way to Mellow

Meditation has become popular for anxiety, but did you know it also helps with depression? Think of meditation as a tool that you can use to rewire your brain. You don't need to start big, do it all by yourself or do it perfectly. There are a lot of free and low-cost apps you can download. Start with three to five minutes, and gradually increase to reap more benefits.

### Obtain Social Support

The stronger our social networks, the more supported we feel and the less depressed we feel. Women with PCOS have more depression than average, so it's key that we spend time working on our social relationships regularly. It's fun and mood-lifting.

### Let Mother Nature Work Her Magic

You may be a city girl, but your mind and body remember that they come from nature and need to be grounded in nature. Getting outdoors for at least 20 minutes every day gives you a dose of Vitamin D that is necessary for your mood. Seeing nature also serves as a reset button for our overcharged bodies and brains.

### Lose the Booze

Alcohol may help you relax, but ultimately, it's a systemic depressant. If you are already feeling depressed, lay off the booze. You may not feel a lot better, but you won't feel worse either. Alcohol releases inhibitions, which may lead to overeating, (another symptom of depression), and that tendency to overeat is another good reason to limit or eliminate alcohol.



# HIJACKING OF THE MENSTRUAL CYCLE BY POLYCYSTIC OVARY SYNDROME

By Monica Best, MD

**P**olycystic ovary syndrome (PCOS) affects 10 percent of reproductive-age women. Disruption of the menstrual cycle in women with PCOS results in common signs and symptoms of this disorder. For example, insulin resistance and elevated male hormones (called androgens), are responsible for hirsutism, which is increased hair growth on the face and body, in women with PCOS. The irregularity of the menstrual cycle in women with PCOS is one of the most ominous signs of the disorder. It is important to understand the tightly coordinated events involved in the normal menstrual cycle to fully understand how these events are derailed in women with PCOS.

A normal menstrual cycle involves communication between the pituitary gland, an extension of the brain, and the ovaries, resulting in production of one mature egg each month. If the egg that is produced is not fertilized by sperm at the end of the cycle, pregnancy fails to be established, the withdrawal of hormones produced during the menstrual cycle leads to onset of bleeding, and menses ensues. At the beginning of the menstrual cycle, prior to menses, the pituitary gland increases its production of follicle stim-



ulating hormone (FSH). FSH binds to receptors on the ovary and results in the growth of a cohort of follicles. Each ovarian follicle, usually around 10-20 follicles per month, contains an immature egg at the beginning of the menstrual cycle. The growing follicles on the ovary compete for FSH. In response to FSH, the growing follicles secrete estradiol, which stimulates the development of the uterine lining, enhancing the environment for embryo implantation if pregnancy occurs.

Over the course of the menstrual cycle, as FSH levels peak mid-cycle, one of these ovarian follicles ultimately outcompetes the others for FSH and becomes the dominant follicle. The peak in estradiol produced by the dominant follicle triggers the surge of luteinizing hormone (LH) from the pituitary gland. With the LH surge, the egg in the dominant follicle matures, which enables this egg to break free from the wall of the follicle and leads to ovulation.

The events characterizing the normal menstrual cycle are disrupted in women with PCOS. Women with PCOS have insulin resistance, which drives the production of androgens. These male hormones lead to chronically high levels of LH production by the pituitary gland. Obesity, which is present in 50 percent or more of women with PCOS, worsens insulin resistance. These high insulin levels lead to a decrease in the production of an androgen-binding protein, making androgens more bioavailable. Increased availability androgens can wreak havoc, causing acne and hirsutism. Due to the synergistic relationship between high levels of androgens and insulin, women with PCOS have an increased lifetime risk of progressing beyond insulin resistance and developing overt diabetes.

Women with PCOS are more likely to have infertility due to high levels of LH production by the pituitary gland, which prevents FSH-dependent growth of a mature dominant follicle. Without ovulation, there is no withdrawal of hormones produced in the menstrual cycle to enable the onset of menses. Although women with PCOS don't ovulate consistently, there may be random months in which a woman with PCOS is able to ovulate.

Onset of irregular bleeding in most women with PCOS may be due to growth of the uterine lining that can break down and shed at irregular intervals. Oral ovulation-induction agents, such as Clomid or, preferably, Femara, can be used to induce regular ovulatory cycles in women with PCOS who desire pregnancy. Women who are younger than 35 years of age who have been attempting pregnancy without success for one year or in women over 35 years of age who have been attempting pregnancy for at least six months without success should see an infertility specialist for a formal evaluation of infertility.

It is important for women who have been diagnosed with PCOS to take charge of their health due to the increased risk of diabetes, cardiovascular disease, obesity and endometrial cancer.



## MORE ABOUT MONICA BEST, MD

Dr. Monica Best is a fertility specialist with a specific focus on polycystic ovary syndrome, recurrent pregnancy loss, premature ovarian insufficiency, diminished ovarian reserve, endometriosis, fertility preservation and oocyte cryopreservation. She has published in peer reviewed journals, authored book chapters and presented her research nationally. Dr. Best earned her medical degree from the University of Missouri School of Medicine and was awarded the prestigious Fulbright Scholarship where she researched and later published work on the novel rapid non-genomic actions of sex steroids at the University of Pisa in Pisa, Italy. Dr. Best completed her residency in Obstetrics and Gynecology at the University of Chicago School of Medicine and fellowship in Reproductive Endocrinology and Infertility at the Emory University School of Medicine.

[RBAIVF.com](http://RBAIVF.com)



**Sasha Ottey**  
Executive Director  
PCOS Challenge, Inc.



**Rep. "Able" Mable Thomas (D)**  
District 56



# ADVOCACY DAY FOR UTERINE HEALTH

By Danielle DeUrso

**P**olycystic ovary syndrome (PCOS) and uterine fibroids are two of the most pervasive women’s health issues, yet many people have never heard of either condition. Both conditions are underfunded, underdiagnosed and underserved. PCOS Challenge and The White Dress Project are two of the leading organizations raising awareness around these important issues through education and advocacy to help make women’s uterine health a priority.

On March 20, 2017, representatives from PCOS Challenge and The White Dress Project united at

the Georgia State Capitol to make a case for the importance of proper treatment, awareness and education for women’s uterine health. Dressed in teal and white, women--from a variety of backgrounds--came together to support one another and share their stories as advocates. “Incredible things happen when women work together,” said Sasha Ottey, Founder and Executive Director of PCOS Challenge, in a rousing speech at the Advocacy Day. “Any society where women’s health and women’s rights are not treated as a priority will not thrive. Working together unifies our voices and increases our strength. Together, we can move the



**Shelby Eckard**  
PCOS Advocate



**Rep. Erica Thomas (D)**  
District 39



**Laura Colbert**  
Georgians for a  
Healthy Future



# AT THE GEORGIA STATE CAPITOL

needle in improving health outcomes and quality of care for women.”

Georgia State Representative “Able” Mable Thomas (D), District 56, echoed this sentiment: “Women’s health should be a priority. It is imperative that advocates speak out about important issues such as PCOS, fibroids and maternal-fetal health. By working with our Representatives and community organizations like PCOS Challenge and The White Dress Project, we can raise greater awareness and effect positive change.”

When many women are first diagnosed with PCOS

or uterine fibroids, they often feel isolated. Additionally, many healthcare providers are undereducated about both conditions and are unable to give patients the adequate care and support they need. “When I was diagnosed with PCOS, I didn’t know how common it was or even one other person who had it. I felt completely alone,” PCOS Challenge member Shelby Eckard said. “If there was more awareness, there would be far more support, education and resources.” Through the collaborative partnership formed by PCOS Challenge and The White Dress Project to advocate for uterine health, women don’t have to feel alone anymore.



**Tanika Gray Valbrun**  
Executive Director, The White Dress Project



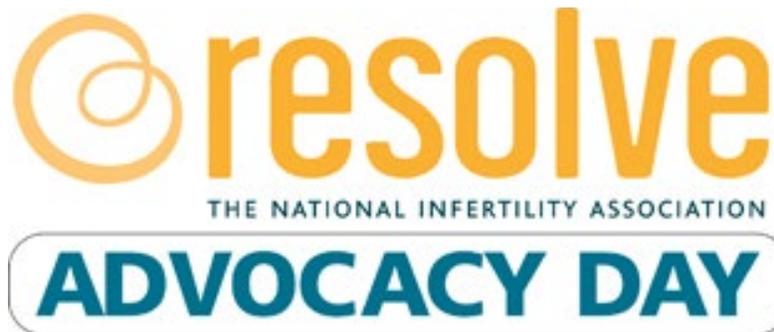
Gabrielle Gaston, another PCOS Challenge member, also attended the Advocacy Day to help spread awareness about PCOS. Gabrielle said, “It is important to educate people so that when they hear the letters PCOS, they are not confused and do not mistake it for other conditions or a sexually transmitted infection. It is also important for them to know that PCOS is very common.” Gabrielle stressed the importance of person-to-person advocacy to help spread awareness. “It can be difficult to tell if a woman has PCOS just from looking at her, and you never know who you may help by sharing your story.”

Shelby Eckard said one of the most impactful aspects of the Advocacy Day for her was raising awareness and showing women that they have support: “It’s important to help other women when they get diagnosed because they’ll feel empow-

ered by knowing they’re not alone. When people feel empowered, they are more inspired to take action, which can lead to advocacy and change.”

Legislators have the power to enable significant change and multiply impact through laws, regulations and funding decisions. “This Advocacy Day shows our legislators that we are our own health advocates,” Tanika Gray, Founder and Executive Director of The White Dress Project, reflected. “We need to make sure that the people who are making decisions for funding and bills for healthcare know how important these issues are.” Both PCOS and fibroids have tremendous effects on women’s health and quality of life, but if government representatives are not made aware, women’s health will not be elevated to a priority. It’s up to women to spread awareness and serve as advocates for themselves and for other women.

# U.S. CAPITOL, WASHINGTON, D.C.



On May 18th, 2017, PCOS Challenge supported RESOLVE's Advocacy Day on Capitol Hill in Washington, D.C. to advocate for resources and support of those building their families through adoption and assisted reproductive technology. The event was held in partnership with the American Society for Reproductive Medicine (ASRM). The day brought together hundreds of leaders and advocates to talk to Members of Congress about legislation impacting the infertility community.



**100 NEW TEAM CAPTAINS**

**2017 BOLT FOR PCOS**



# TEAMS NEEDED FOR THE PCOS 5K RUN/WALK

## HELP END PCOS

Bolt for PCOS is the country's largest event dedicated to raising awareness and funds to help fight polycystic ovary syndrome (PCOS).

You are invited to take a leadership role in the fight against PCOS by becoming a team captain for the 2017 Bolt for PCOS 5K Run/Walk event.

We need your help to make a big difference!

**SIGN UP TO BE A  
TEAM CAPTAIN**

**YOU MAY SERVE AS A  
TEAM CAPTAIN FROM ANY LOCATION**



UPCOMING

# 2017 PCOS EVENTS

ATTEND THE BIGGEST  
PCOS EVENTS OF THE YEAR

**PCOS AWARENESS SYMPOSIUM**

**GEORGIA TECH - ATLANTA, GA**

Saturday, September 16, 2017

**BOLT FOR PCOS 5K RUN/WALK**

**GEORGIA TECH - ATLANTA, GA**

Sunday, September 17, 2017

**BOLT FOR PCOS VIRTUAL WALK**

**WORLDWIDE**

Sunday, September 17, 2017

VISIT [PCOSCHALLENGE.ORG](http://PCOSCHALLENGE.ORG) FOR DETAILS



  
**PCOS Challenge**<sup>®</sup>  
The National Polycystic Ovary Syndrome Association

**OMEGA PHI ALPHA**  
NATIONAL SERVICE SORORITY 



# Stroke in Women

**W**hile you may think of stroke as a man's disease, women are actually at greater risk of suffering from a stroke than men. Stroke is the third leading cause of death for women in America, affecting 425,000 women annually. Surprised? You're not alone. In a recent survey, seven out of 10 women replied that they were not aware that women were more likely than men to have a stroke. Even more concerning, they also had little to no knowledge of its symptoms or risk factors. Additionally, research has found women with PCOS were more likely to have atherosclerotic cardiovascular diseases, with stroke being the most prevalent manifestation.<sup>1</sup>

## WHAT IS A STROKE?

A stroke, also known as a "brain attack," occurs when a blood clot blocks an artery or blood vessel, resulting in a blood flow interruption to an area of the brain. When this happens, the brain cells die and cause brain damage.

A stroke's impact is determined by how much of the brain is damaged. Such damage can affect speech, movement and memory. In some instances, someone with a small stroke might only experience minor problems, such as weakness of an arm or leg; however, in more severe cases, a stroke can cause paralysis on one side of the body or loss of speech.

## WOMEN MAY REPORT UNIQUE STROKE SYMPTOMS:

- Sudden face and limb pain
- Sudden hiccups
- Sudden nausea
- Sudden general weakness
- Sudden chest pain
- Sudden shortness of breath
- Sudden palpitations

Two million brain cells die every minute during a stroke, so recognizing its symptoms and getting immediate medical attention can not only save your life or that of a loved one, it can limit disabilities and risks of permanent disability.

### COMMON STROKE SYMPTOMS SEEN IN BOTH MEN AND WOMEN:

- Sudden numbness or weakness of face, arm or leg especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden severe headache with no known cause

## DO THIS SIMPLE TEST

### IF YOU THINK SOMEONE MAY BE HAVING A STROKE

- F FACE:** Ask the person to smile. Does one side of the face droop?
- A ARMS:** Ask the person to raise both arms. Does one arm drift downward?
- S SPEECH:** Ask the person to repeat a simple phrase. Is their speech slurred or strange?
- T TIME:** If you observe any of these signs, call 9-1-1 immediately.



## NOTE THE TIME WHEN ANY SYMPTOMS FIRST APPEAR

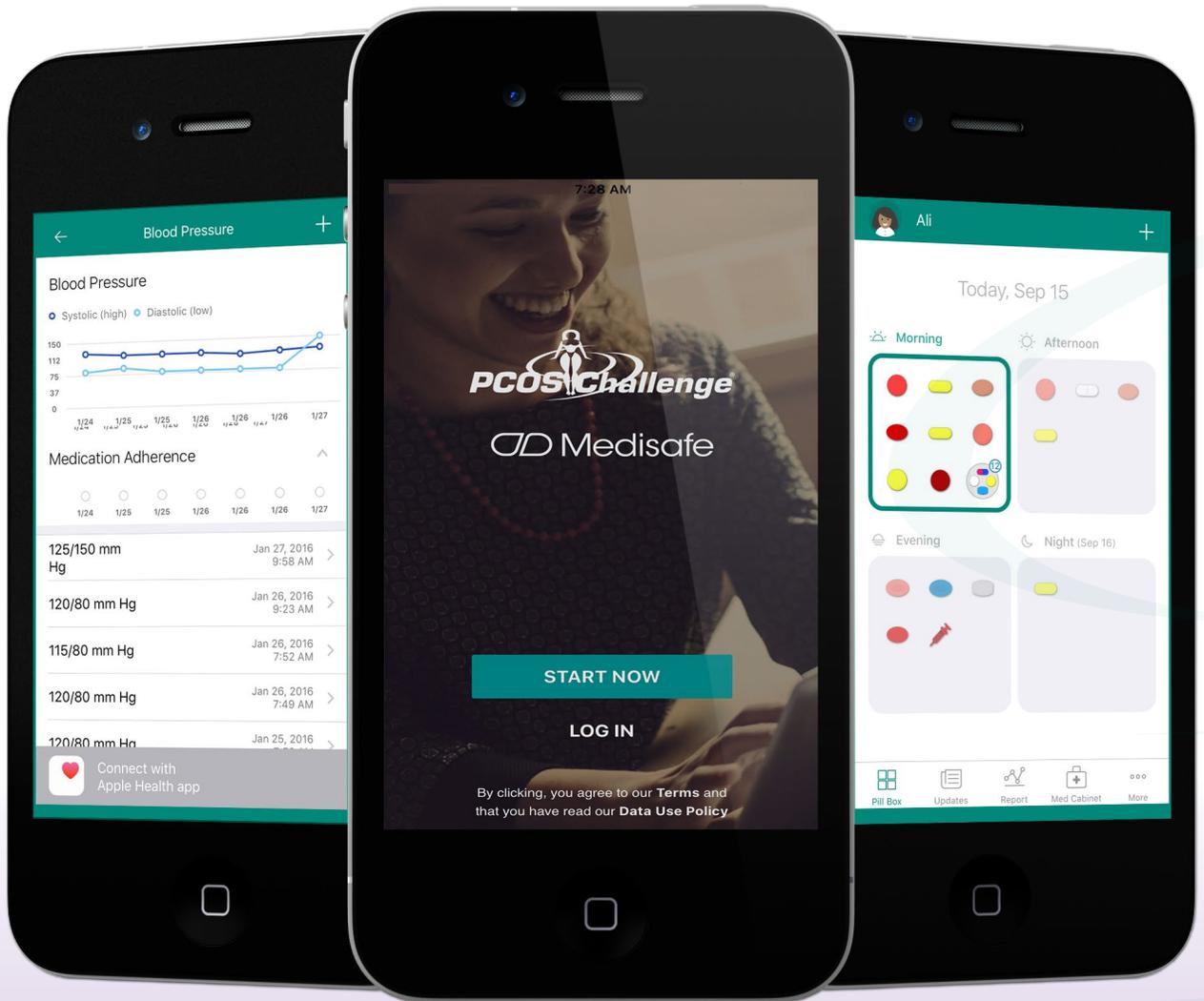
There is an FDA-approved clot-buster medication that reduces long term disability in most common strokes, if given within three hours of the first symptom. However, prevention is always better than waiting to seek a cure. Below is a list of guidelines published by the American Heart Association to prevent stroke in women:

- Women who experience migraines with aura and also smoke, are advised to stop smoking immediately. Smoking cessation is always recommended for overall health.
- Women who are pregnant should monitor their blood pressure during and after pregnancy, to lower the risk of stroke.
- Women over 75 should be screened for Atrial Fibrillation (an irregular heart rhythm that increases the risk of stroke and heart disease).
- Women should be screened for high blood pressure prior to starting a birth control regimen.
- Women with concerns about high blood pressure or stroke should consult a doctor.

**FOR MORE INFORMATION ABOUT STROKE PREVENTION AND TREATMENT, VISIT:**  
[www.stroke.org](http://www.stroke.org), [www.cdc.gov/stroke](http://www.cdc.gov/stroke)

<sup>1</sup>Assessing the intersection of cardiovascular disease, venous thromboembolism, and polycystic ovary syndrome. Okoroh, et al. *Thromb Res.* 2015 Dec;136(6):1165-8.

# DOWNLOAD PCOS CHALLENGE



# PCOSCHALLENGE

# THE FREE PCOS CHALLENGE MOBILE APP

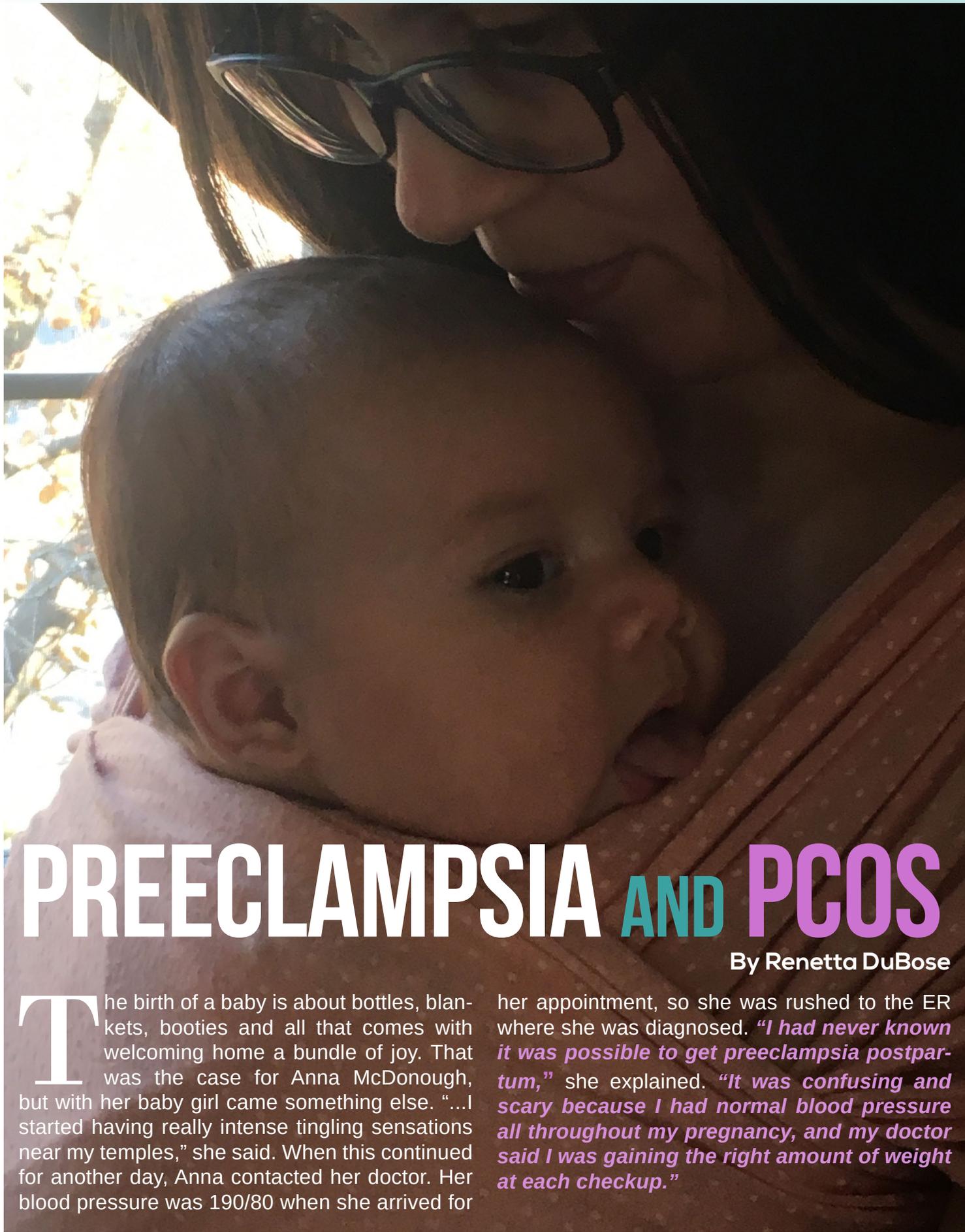
Powered by  
 Medisafe

Never forget to take your meds and supplements again with our “must have” free app.

- Free to PCOS Challenge members!
- PCOS Challenge updates and info in-app
- Easily handles complex dosing schedules and refill reminders
- Ability to track 20+ measurements with full reports
- Can be used anonymously - no email or any personal info required
- Ability to invite a Medfriend to get a notification if you've missed meds
- Ability to manage unlimited family members or friends in your account; Even track pet meds!
- GoodRx Coupons
- Automatically Import Meds (CVS, Walgreens)
- Personalized Med info - pharmacist videos
- Ability to keep all your appointments in one place, with reminders
- Replace paper journaling - now available in-app diary
- Works with iPhone, Android Phones, Apple Watch, Android wearables
- 100% HIPAA compliant and ISO 27001 Secure

[PCOSCHALLENGE.ORG/FREEAPP](https://www.pcoschallenge.org/freeapp)





# PREECLAMPSIA AND PCOS

By Renetta DuBose

**T**he birth of a baby is about bottles, blankets, booties and all that comes with welcoming home a bundle of joy. That was the case for Anna McDonough, but with her baby girl came something else. "...I started having really intense tingling sensations near my temples," she said. When this continued for another day, Anna contacted her doctor. Her blood pressure was 190/80 when she arrived for

her appointment, so she was rushed to the ER where she was diagnosed. *"I had never known it was possible to get preeclampsia postpartum,"* she explained. *"It was confusing and scary because I had normal blood pressure all throughout my pregnancy, and my doctor said I was gaining the right amount of weight at each checkup."*

A spokesperson from the Preeclampsia Foundation told PCOS Challenge, Inc. that polycystic ovary syndrome is a significant risk factor for preeclampsia, a rapidly progressive condition characterized by high blood pressure and the presence of protein in the urine. It is unique to human pregnancy, typically occurring after 20 weeks gestation and up to six weeks postpartum.

According to The National Institutes of Health (NIH), expecting PCOS patients more frequently deal with gestational diabetes, pregnancy-induced hypertension and preeclampsia.

Though Anna has classic PCOS, she told PCOS Challenge that her symptoms — high testosterone, insulin resistance, missed cycles and fertility issues — were subdued during pregnancy.

***Looking back, the only symptom that may have been an indicator of preeclampsia was swelling in my feet that developed that last few weeks of my pregnancy. But that too can be a regular pregnancy symptom, so I didn't worry much about it,*** she said.

In addition to high blood pressure, some of the symptoms of preeclampsia include proteinuria (protein in urine), swelling, headache, nausea, vomiting, abdominal or shoulder pain, lower back pain, sudden weight gain, changes in vision, hyperreflexia, shortness of breath or anxiety. Many

of the signs and symptoms resemble those women experience while pregnant, according to the Preeclampsia Foundation. For some women, there are no symptoms.



***“For me, the biggest thing was knowing my body and knowing what is normal or abnormal for me,”*** Anna said. ***“I knew the headaches I was experiencing were not normal for me; they lasted longer than any I'd ever experienced before.”***

Both PCOS and preeclampsia are global health concerns. Ten million women develop preeclampsia each year, while 76,000 pregnant women worldwide die from

***“Experiencing postpartum preeclampsia definitely taught me to trust my instincts, so if you feel that something is off, don't be afraid to call your doctor to find out more,”*** she told PCOS Challenge. ***I will definitely be buying a blood pressure monitor for my next pregnancy, just in case.”***

the condition and related hypertensive disorders. The number of babies who die from complications related to these disorders is believed to be around 500,000 a year.

Anna gets to enjoy her daughter and continue to fight as a PCOS warrior because she acted quickly when preeclampsia came postpartum. No question was too silly to ask her doctor; this important point is something she reminds women of often.



## STRESS AND WEIGHT GAIN By Candice Rosen, RN

**T**he obesity epidemic is not just about food choices, activity and portion control. Stress plays a significant role in weight gain. Traumatic events, such as death or divorce, can have a dramatic impact on appetite. But more frequently, chronic stress can be taxing on a person's health and affect the ability to lose weight.

I believe in the practice of *self-health*—you are your primary caregiver, and your physician is your secondary caregiver. My hypothesis is that all NCDs (non-communicable diseases) such as high blood pressure, high cholesterol, obesity, type 2 diabetes, polycystic ovary syndrome (PCOS), metabolic syndrome, insulin resistance, low testosterone, renal issues and even some cancers, stem from pancreatic abuse. What is pancreatic abuse? Pancreatic abuse occurs when you raise your blood sugar over 100, 90 minutes after you eat a meal or a snack. When blood sugar levels reach or exceed 100 within this time frame, you are asking for trouble, i.e., man-made illnesses. The goal is to keep your blood sugar between 70 and 100.

How does stress affect health? The body is hard-wired to respond to a threat or demand (think “fight or flight”) by calling on the adrenal glands (located on top of your kidneys) to release a flood of stress hormones, particularly adrenaline and cortisol, to save you by running or fighting. The adrenal glands increase the blood supply to the brain, muscles and limbs when they release adrenaline and/or cortisol; you think less and react instinctively; your blood pressure and pulse increase; coronary arteries dilate; lungs take in more oxygen and release more carbon dioxide; the liver releases extra sugar; muscles tense for action and release extra sugar; digestion, and bladder slow down; even immune responses decrease.

The “crisis” will be over in a matter of seconds or minutes and your body chemistry and physical sensations return to normal. But, if you are in a constant state of anxiety, ruminating on a problem or situation such as job issues, your personal health, caring for a sick loved one, financial problems, even exercise (which can be counter productive if you stress about doing it) then the adrenal glands will respond

with a continuous drip of cortisol. “Chronic elevated cortisol levels can lead to serious issues,” states Dr. Amit Sood of the Mayo Clinic and “contribute to obesity.”

This constant drip causes the body to incorrectly process food and causes the body to store fat. I call this situation Adrenobesity™. Cortisol stimulates the liver and muscles to release glycogen (glucose) for instant energy. Because there is no “fight or flight” issue, no need for excess glucose, the pancreas responds by releasing insulin. Insulin acts as a key, unlocking the cell for glucose entry. If your cells are full, insulin is rendered ineffective and the excess glucose is sent to fat cells for storage. Not good! The excess release of glucose and the overproduction of insulin create an inflammatory state, which makes losing weight difficult, even if you are watching every calorie. For those diagnosed with PCOS, the added excess insulin production by the pancreas results in hyperinsulinemia (too much insulin in your blood stream). Hyperinsulinemia suppresses the production of estrogen by the ovaries, which causes a rise in androgens, i.e. testosterone. This only adds to the symptoms experienced by PCOS patients in response to the flood of glucose.

Weight loss occurs when you take in the correct food/fuel for your body, maintain a blood sugar level between 70 and 100, reduce and control stress and increase your activity. Increased activity forces your body to go into your “storage tanks/fat cells” for the fuel. That, along with stress reduction, is how you begin to lose weight.

Your body speaks to you. There is a cause for every symptom. Before masking symptoms with medication, address the root cause. Only then will you be an active participant in your health, weight and well-being.

## WHAT CAN YOU DO TO IMPROVE THE SITUATION?

### 1. Get Enough Sleep

Try to get at least eight hours of sleep a night.

### 2. Eat to Protect Your Pancreas

Aim to keep your glucose between 70 and 100.

### 3. Practice Deep Breathing

Inhale through your nose (to the count of 1,2,3,4; hold your breath 1,2,3,4 exhale 4,3,2,1). Do this in the morning when you wake up and do this several times a day. Easy ways to practice: Every time you get a text message, take a deep breath before viewing it, or take a deep breath every time you stop at a stoplight. Before you know it, deep breathing becomes muscle memory, and you will automatically find yourself relaxing.

### 4. Increase Activity

I don't believe in strenuous exercise. Yard work, exercising to a Richard Simmons video, lifting weights, or even taking clothes out of the dryer (one piece at a time, before you know it you've done 20 squats!) will help use up excess “fuel.”



## MORE ABOUT CANDICE ROSEN, RN, BS, MSW, CHC

Candice is in private practice in Los Angeles, California. Her company, Candice Rosen Health Counseling, specializes in helping people improve their health through nutrition. Candice's practice focuses on the effects of glucose and insulin on polycystic ovarian syndrome, obesity, high cholesterol, high blood pressure, metabolic syndrome, insulin resistance, diabetes and cancer. Candice is author of *The Pancreatic Oath*, a book for health conscious people searching for improved wellness and weight loss through diet and blood glucose regulation. She is also creator of the Data Driven Diet/Pancreatic Nutritional Program.

[CandiceRosenRN.com](http://CandiceRosenRN.com)

# PCOS CHALLENGE

## ADVISORY BOARDS ANNOUNCEMENTS

PCOS Challenge, Inc. is proud to announce the following individuals have joined the organization's Medical/Scientific Advisory Board (MSAB) and Health Advisory Board (HAB). The advisory boards consist of outstanding researchers and healthcare leaders in the field of polycystic ovary syndrome who help ensure the accuracy of the organization's evidence-based content and advise the PCOS Challenge leadership team on research; grants funded by PCOS Challenge; programs and evaluation measures; and its legislative advocacy efforts.

### PCOS CHALLENGE MEDICAL/SCIENTIFIC ADVISORY BOARD



**Ricardo Azziz, MD, MPH, MBA**

**Chief Officer of Academic Health and Hospital Affairs  
The State University of New York**

Dr. Azziz was the founding President of Georgia Regents University, and CEO of the Georgia Regents Health System, a greater than \$1.2 billion integrated and aligned enterprise. Dr. Azziz is also an internationally recognized clinical translational researcher, developing over the past 25 years an important program in androgen excess disorders research, funded by the NIH since 1988. Dr. Azziz is an internationally renowned leader in the field of polycystic ovary syndrome and reproductive endocrinology. He is the founder of the Androgen Excess and PCOS Society, an international scientific organization dedicated to promoting knowledge and original clinical research in every aspect of androgen excess disorders including PCOS.



**M. Tracy Bekx, MD**

**Faculty, University of Wisconsin School of Medicine and Public Health**

Dr. Tracy Bekx is a pediatric endocrinologist who specializes in adolescent polycystic ovary syndrome (PCOS) and pediatric diabetes care. She is co-founder of the Adolescent Multidisciplinary PCOS Clinic at the University of Wisconsin in Madison. Dr. Bekx received her medical degree from the Medical College of Wisconsin in Milwaukee and completed her pediatric residency at Ohio State University in Columbus, Ohio. She finished her training in pediatric endocrinology at the University of Wisconsin Children's Hospital in Madison. Dr. Bekx is board certified in pediatrics and pediatric endocrinology.



### Tania S. Burgert, MD

**Associate Professor of Pediatrics  
University of Missouri-Kansas City School of Medicine**

Dr. Burgert is board certified in pediatrics and pediatric endocrinology with expertise in polycystic ovary syndrome, obesity and insulin resistance. She is Associate Professor of Pediatrics at the University of Missouri-Kansas City and Director of the Multi-Specialty Adolescent PCOS Program. Previously, she served as Assistant Professor of Pediatrics at Yale University School of Medicine and Director of the multi-specialty PCOS Clinic at Yale-New Haven Children's Hospital.



### Carmina Charles, MD

**Endocrinologist  
Florida Hospital Diabetes and Endocrine Center**

Dr. Charles is board certified in endocrinology, diabetes and metabolism. She is an esteemed member of the medical team at Florida Diabetes & Endocrine Center in Orlando. She established a subspecialty clinic in polycystic ovary syndrome and is currently working on expanding services to include endocrine disorders in pregnancy. Dr. Charles graduated with a Doctorate in Medicine from Ross University. She completed her internal Medicine residency at Orlando Health and Fellowship in Endocrinology, Diabetes and Metabolism, Nutrition and Medical Genetics at Medical University of South Carolina. Dr. Charles is a trilingual provider with fluency in English, Creole and French.



### Andrea E. Dunaif, MD

**Chief, Division of Endocrinology, Diabetes and Bone Disease  
Icahn School of Medicine at Mount Sinai**

Dr. Dunaif is one of the world's most prominent PCOS researchers. Dr. Dunaif's research focuses on the mechanisms linking reproduction and metabolism. Dr. Dunaif's studies have led the way in redefining polycystic ovary syndrome as a major metabolic disorder that is a leading risk factor for type 2 diabetes. She has translated her findings into novel therapies for PCOS with insulin sensitizing drugs. Most recently, her group has mapped the first major susceptibility gene for PCOS.



### Anuja Dokras, MD, PhD

**Director, PENN Polycystic Ovary Syndrome Center  
Medical Director, Reproductive Surgical Facility**

Dr. Dokras is an internationally renowned leader in the field of PCOS. She is the Immediate Past President of the Androgen Excess and PCOS Society. Dr. Dokras directs the PENN PCOS center which offers comprehensive gynecological, reproductive, dermatological, metabolic, nutritional and psychological care to women with PCOS. She received her medical degree from the University of Mumbai, Seth G.S. Medical College and has been in practice for 26 years. Dr. Dokras did her residency and fellowship at New Haven Hospital (Yale University).



## David A. Ehrmann, MD

**Professor of Medicine  
Director, University of Chicago Center for PCOS  
Associate Director, University of Chicago Clinical Research Center**

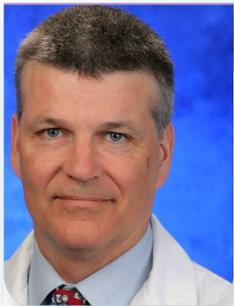
Dr. Ehrmann is a leading specialist in the diagnosis and treatment of PCOS. He is also an expert in type 2 diabetes. His research interests include the role that hereditary factors play in the development of PCOS, the use of insulin-sensitizing agents in the treatment of PCOS, and the relationship between PCOS and obstructive sleep apnea. Dr. Ehrmann has numerous publications—including book chapters, original articles, and abstracts. He has been on national committees and on the editorial boards of the *Journal of Clinical Endocrinology and Metabolism* and the *American Journal of Physiology*.



## Felice L. Gersh, MD

**Medical Director, Integrative Medical Group of Irvine**

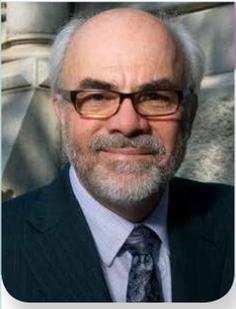
Dr. Gersh is an expert on PCOS and is one of only a small number of fellowship trained integrative gynecologists in the U.S. Dr. Gersh has developed comprehensive programs to treat PCOS, fibroids, endometriosis, menstrual disorders, vaginitis, bladder disorders, pelvic pain, vulvodynia and vulvar diseases, infertility and menopause. She integrates natural and holistic medicine with state of the art functional and allopathic medical treatments to help women maintain and regain their health. Dr. Gersh has a B.A. from Princeton University and a Medical Degree from the University of Southern California School of Medicine where she graduated in the top five percent of her class and as the #1 woman graduate.



## Richard S. Legro, MD, FACOG

**Professor, Department of Obstetrics and Gynecology  
and Public Health Sciences at Penn State College  
of Medicine in Hershey, Pennsylvania**

Dr. Legro established one of the first clinics devoted to the treatment of women with PCOS at the Milton S. Hershey Medical Center. He has been the principal investigator on a number of National Institutes of Health (NIH) grants including the NIH Reproductive Medicine Network since 2000 where he has been the lead investigator of the Pregnancy in Polycystic Ovary Syndrome I and II trials. He has published over 200 peer-reviewed articles in medical journals and multiple books in the field of reproductive endocrinology.



## John E. Nestler, MD

### **William Branch Porter Professor of Medicine Chair, Department of Internal Medicine Virginia Commonwealth University**

Dr. Nestler is Program Director of VCU's U54 SCCPRIR Center on Clinical and Translational Research in Polycystic Ovary Syndrome. He is a distinguished scholar with an international reputation for his research on PCOS and insulin resistance. Dr. Nestler's work was seminal in establishing insulin-sensitizing drugs as a treatment for infertility in women with polycystic ovary syndrome, and has addressed the impact of insulin resistance on long-term health in the disorder. As principal investigator, Dr. Nestler is responsible for two active National Institutes of Health-funded grants studying the role of insulin resistance in PCOS.



## Mark Perloe, MD

### **Medical Director, Georgia Reproductive Specialists**

Dr. Perloe has extensive experience in in vitro fertilization and treating conditions related to infertility including PCOS, recurrent pregnancy loss, menstrual disorders, fibroids, endocrine and other reproductive health problems. Dr. Perloe has served as principal investigator in numerous reproductive health research studies including innovative IVF treatments, ovulation induction, and polycystic ovary syndrome. He has published research in medical journals including *Obstetrics & Gynecology*, *Southern Medical Journal*, *Human Reproduction* and the *International Journal of Obstetrics and Gynecology*. Dr. Perloe is the co-author of *Miracle Babies and Other Happy Endings for Couples with Fertility Problems* and is the creator of IVF.com.



## Katherine Sherif, MD

### **Director, Jefferson Women's Primary Care Professor and Vice Chair, Department of Medicine Thomas Jefferson University**

Dr. Sherif is a leading expert on PCOS. As an internist in the 90's, she was studying insulin resistance when she discovered a special group of women with exaggerated insulin resistance: women with polycystic ovary syndrome. She started prescribing insulin sensitizers in the 90's based upon the work of Italian clinical investigators. In 2000, she co-founded the first academic center for PCOS with Dr. Shahab Minassian. Dr. Sherif is also a top speaker and a writer in a number of areas including menopause, hormone replacement therapy, omega-3 fatty acids, and heart disease in women. She is author of *Women's Health in Clinical Practice: A Handbook for Primary Care and Hormone Therapy: A Clinical Handbook*.

# PCOS CHALLENGE HEALTH ADVISORY BOARD



## Andrea Mechanick Braverman, PhD

**Associate Director of the Educational Core  
Clinical Associate Professor of Psychiatry & Behavioral Medicine  
Thomas Jefferson University**

Dr. Braverman is a Clinical Associate Professor with a joint appointment in the Department of Obstetrics and Gynecology and Psychiatry and Behavioral Medicine at Thomas Jefferson University. Dr. Braverman is the Associate Director for the Educational Core for OB/Gyn. She is a health psychologist with a specialty in medical health management and infertility counseling. She received her MA, MS and PhD in psychology from the University of Pennsylvania. Dr. Braverman has published numerous articles and lectured internationally. Dr. Braverman received the Timothy Jeffries Memorial award in 2011 for outstanding contributions as a health psychologist from the American Psychological Association.



## Angela Grassi, MS, RD, LDN

**Founder, PCOS Nutrition Center**

Angela is an internationally recognized nutrition and health expert on PCOS. She was recently named one of the Top 10 incredible RDs making a difference by *Today's Dietitian*. She is the author of *The Dietitian's Guide to Polycystic Ovary Syndrome*, *The PCOS Workbook* and *The PCOS Nutrition Center Cookbook*. Angela is the owner of PCOS Nutrition Center where she provides nutrition counseling to women with Polycystic Ovary Syndrome. Having PCOS herself, Angela is dedicated to advocacy, education and research of PCOS.



## Gretchen Kubacky, PsyD

**Clinical Psychologist**

Dr. Kubacky is one of the country's leading clinical psychologists specializing in PCOS, infertility, diabetes, and other endocrine disorders. She works with individuals and couples who are struggling with PCOS, related disorders and infertility. Dr. Kubacky has also been diagnosed with PCOS, type II diabetes, hypothyroidism and infertility, which enables her to counsel from a position of understanding and empathy. This allows Dr. Kubacky to better help patients with similar issues learn how to live happier and healthier lives, and achieve a better balance in their mood and functioning.



## Martha McKittrick, RD, CDE

### Registered Dietitian and Certified Diabetes Educator

Martha McKittrick specializes in PCOS, weight control, cardiovascular health, diabetes and preventive nutrition. Martha lectures on a regular basis on PCOS and has been interviewed and written for publications including *The Journal of The American Dietetic Association*, *Dietitian's Edge*, *Nutrition Today*, *Allure*, *Self*, *Family Circle*, *New York Newsday*, and *Cooking Light*. Martha was the nutrition editor for *A Patient's Guide to PCOS - Understanding and Reversing Polycystic Ovarian Syndrome* by Dr. Walter Futterweit. Martha developed the nutrition component for the Cardiac Health Center at The New York Presbyterian Hospital. She believes in giving realistic, practical dietary advice that people will be able to follow.



## Candice Rosen, RN, MSW, CHC

### Founder, Candice Rosen Health Counseling

Candice is in private practice in Los Angeles, California. Her company, Candice Rosen Health Counseling, specializes in helping people improve their health through nutrition. Candice's practice focuses on the effects of glucose and insulin on PCOS, obesity, high cholesterol, high blood pressure, metabolic syndrome, insulin resistance, diabetes and cancer. Candice is author of *The Pancreatic Oath*, a book for health conscious people searching for improved wellness and weight loss through diet and blood glucose regulation. She is also creator of the *Pancreatic Nutritional Program*.



## Hillary M. Wright, MEd, RD, LDN

### Director of Nutrition, Domar Center for Mind/Body Health

Hillary Wright is one of the country's leading registered and licensed dietitians specializing in PCOS and diabetes. She has over 20 years experience counseling clients of all ages on diet and lifestyle change. Hillary is the Director of Nutrition Counseling for the Domar Center for Mind/Body Health at Boston IVF, where she specializes in nutrition and women's health issues. She is the author of *The Pre-Diabetes Diet Plan: How to Reverse Prediabetes and Prevent Diabetes through Healthy Eating and Exercise* and *The PCOS Diet Plan: A Natural Approach to Health for Women with Polycystic Ovary Syndrome*.

# PCOS FAT LOSS TIPS

By Erika Volk

**I**t's not easy to lose weight when you have PCOS. However, there are clear, proven methods for tackling your unwanted pounds. Dedication to a healthy lifestyle, plus a little patience, will get you there. By taking the steps below, you can move the numbers on the scale in the right direction.

## PUT YOUR WORKOUT FIRST

When you make your workout the first thing on your to-do list, it gets done. The number one reason women give me for not working out is their busy schedules. It's a perfectly valid reason! Unfortunately, if you keep putting other things before exercise, your body and your quality of life will pay for it. The easiest way to nip this problem in the bud is to work out first thing in the morning. A morning workout may not seem very appealing to those who are addicted to the snooze button, but here are a few suggestions to make your morning sweat session a cherished ritual:

- 1. Do not check your email when you wake up.** Unless you are a world leader, everybody else's problems can wait until you've finished your workout.
- 2. Work out at home.** Working out at home eliminates commuting time and the need to shower in a locker room – yuck!
- 3. Make a great workout playlist,** pick music that energizes and motivates you.
- 4. Put the most important part of your workout at the beginning.** For example, if your priority is chest and legs, do your squats and push-ups right after your warm-up. This way if you have to cut the workout short, you've still accomplished something.
- 5. Be grateful.** Having the time, resources and physical capability to work out is a privilege. Be grateful for that strong, beating heart and your comfy yoga pants.
- 6. Be realistic.** Setting unrealistic plans for yourself will only leave you feeling overwhelmed and defeated. If you only have time to do 20 minutes of exercise each day, that's ok. Just get in the 20 minutes.



## FOCUS ON STRENGTH

The insulin resistance that is characteristic of PCOS promotes weight gain. The most powerful tool you have for fighting insulin resistance is muscle.

The majority of glucose you ingest from food will be used by and stored in your skeletal muscle. Strength training increases the size of skeletal muscle and enhances those muscles' ability to manage glucose. These adaptations will increase insulin sensitivity. Plus, muscle is metabolically active, which means it burns calories to sustain itself. Every bit of muscle you gain will increase the number of calories you burn each day!

Most women see good results with 2-3 total body strength training sessions each week.

## STICK TO A PLAN AND TRACK YOUR PROGRESS

Many women frequently change their diet and exercise plans because they are not "seeing results." The reality is that they are not properly tracking their progress, and the constant changes to their programs are actually hurting their results.

Humans are notoriously bad at self-assessing, so it is important that individuals gather objective information to make the best decisions possible. Numbers on the scale, personal observations and how your clothes fit are all flawed forms of tracking progress. If you're going to all the trouble of implementing an exercise or nutrition plan, it makes good sense to track and measure your progress.

To properly track your progress, take body circumference measurements, body fat percentage, weight and progress pictures every two weeks. A new exercise program may not cause your scale weight to change right away. So, you need to lookout for other signs of progress. For example, I have seen clients lose inches off their waist circumference while maintaining the same weight. That would indicate they're losing fat and gaining muscle. Thus, their body is changing, but their weight is not.

Taking multiple measures of progress can also give you insights into your hormonal state. If you find that your body fat percentage and weight are dropping, but your girth measurements in certain



## MORE ABOUT ERIKA VOLK

Erika is a certified personal trainer, Nutrition Coach and fitness writer. She holds certifications from the American Council on Exercise (ACE), TRX Suspension Training Systems, Precision Nutrition and is the creator of the *Just Start! Workout Program for Women With PCOS*. She believes that lifestyle modifications are the best treatment for PCOS. Erika lives with her husband in a small beach town somewhere in Costa Rica. Her hobbies include cooking, hiking, learning Spanish and traveling.

To learn more about how exercise can alleviate PCOS symptoms, visit [erikavolkfitness.com](http://erikavolkfitness.com). On her website, you'll find at-home workout plans, healthy cooking tips, and stories about her life in Costa Rica.

[ErikaVolkFitness.com](http://ErikaVolkFitness.com)

areas remain the same, you might have a hormonal imbalance that needs to be addressed. For instance, low thyroid levels can cause fat deposits around the bra area.

## IGNORE QUICK FIXES AND KEEP MAKING HEALTHY CHOICES

When you have PCOS, losing weight is about more than just being thin. It's about protecting yourself from PCOS-related complications like cardiovascular disease and diabetes. Losing your "PCOS weight" and restoring your health can happen with a series of small changes that amount to a new, healthier lifestyle.

It may not be easy or quick, but it will be well worth the hard work! You can then be confident knowing that you are doing everything you can to stay healthy and manage your PCOS. Focus on making small meaningful changes to your life and eventually the numbers on the scale will reflect the healthy choices you're making.

## CYSTER CORNER:

# THE POWER OF PCOS ADVOCACY

Featuring Ashley Levinson

By Amy Nguyen



**H**ow do you introduce such an amazingly strong, inspiring woman like Ashley Levinson? Ashley has worked with various organizations for over 15 years to promote polycystic ovary syndrome awareness. She understands the struggle women with PCOS face, having experienced it firsthand. Like many women, she, even after years of physical indications and symptoms, wasn't given a proper diagnosis. Confused as to what was going on with her body, Ashley felt just as lost as so many other women fighting the battle against PCOS, and longed for an explanation for her condition.

Ashley is constantly reaching out to women of all ages, boldly talking about her experience with PCOS and how it has affected her life. She is determined to empower women and inspire them to use their experiences as catalysts to spark larger conversations. There are stigmas attached to many PCOS symptoms, which can create anxiety in wom-

en, inhibiting them from discussing certain symptoms with their doctors. As a result, feelings of alienation are quite common for women with PCOS. Ashley recognizes the importance of not feeling alone. ***“Just knowing others understand what you’re going through, and being open to sharing your story, encourages you and helps increase awareness for all those battling the condition,”*** she says.

Ashley has no problem discussing the unpleasant-ries of PCOS. Like many women, she has struggled with the anxiety that comes with it, as well as the strain PCOS has put on her life, whether it be work, school or relationships. She was given birth control at the age of 13, with only a brief explana-

tion of why she needed it to control her menstrual cycle. Then fast forward to age 29, when Ashley's husband expressed a desire to expand their family. Rather than becoming excited at the prospect, she remembers how frantic she felt. She wasn't sure what would happen once she stopped taking birth control after so many years. Would she struggle with weight gain, unbearably painful periods, stubborn hair growth or dark skin patches? She remembers feeling insecure talking about those things to anyone, let alone speaking about such matters with her husband.

Once Ashley decided to stop using birth control and start a family, she realized that if she couldn't easily get the answers she needed, she would have to demand them. She came across many physicians who said that her symptoms were not significant, and that there was no mystery to solve. Undeterred by such roadblocks, her quest for solid answers was rewarded when she found a young doctor who took a different approach to her predicament, and was finally able to pinpoint Ashley's disorder and provide help. To this day, Ashley speaks about the frustration that came with trying to get something as simple as a name associated with what was happening to her body.

Motivated by her desire to help other women, Ashley took a leap and exposed her struggles with PCOS nationally when she made an appearance on the Discovery Health Channel television show, *Mystery Diagnosis*. She hoped her story would spread awareness, help others get diagnosed and spark a much needed conversation about PCOS.

Ashley says, ***"It is time to give women with PCOS and their families a strong voice that will inspire change and lead to better health outcomes, treatment and support for those with the condition."*** One of the ways she advocates for PCOS awareness is through an online [PCOS petition](#) to have polycystic ovary syndrome recognized as a significant health concern that demands national attention and government support.

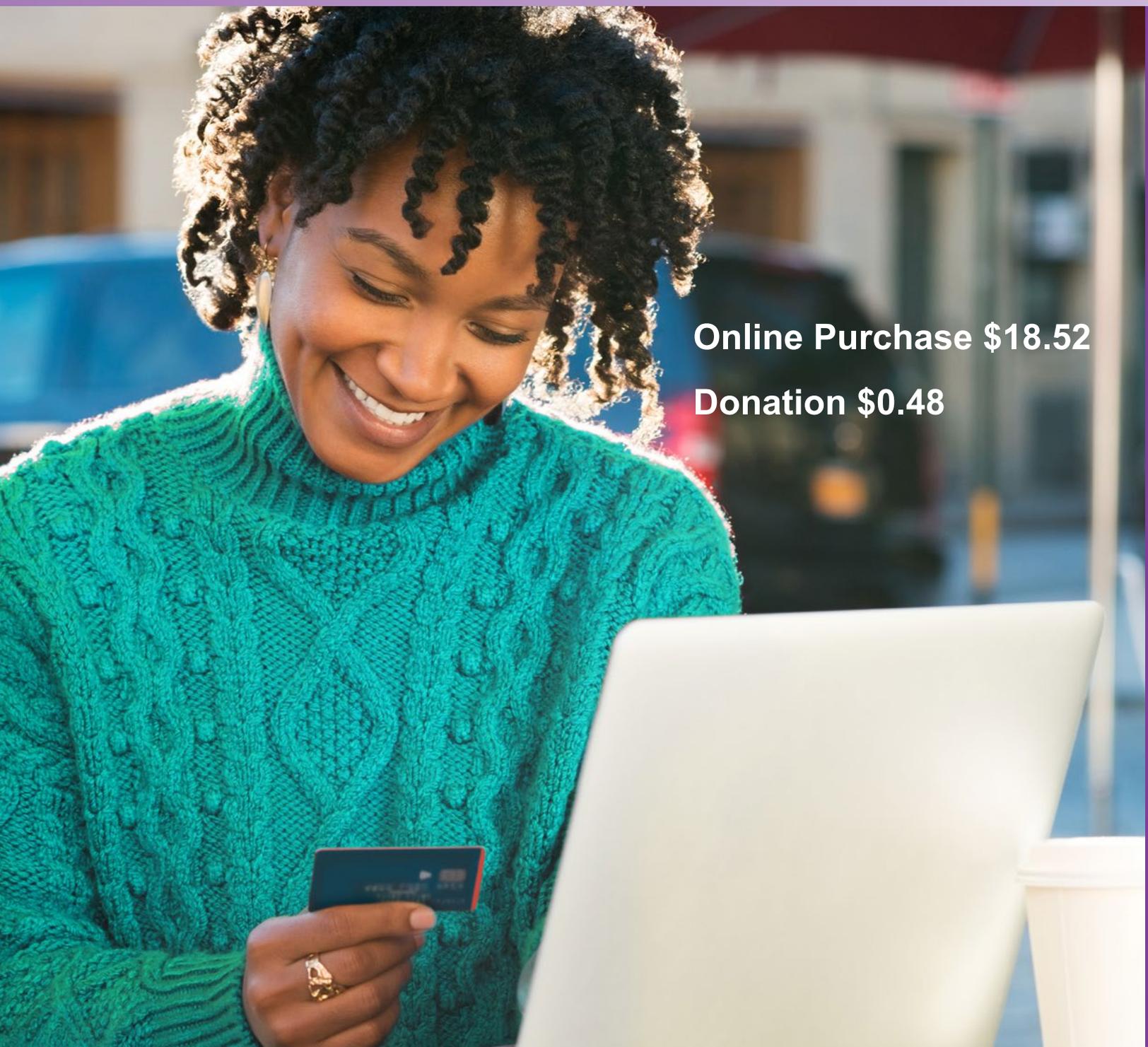
***"There needs to be a change in the healthcare system,"*** Ashley notes. ***"More efficient and ac-***



For over a decade and a half, Ashley Levinson has been advocating for better education and awareness for women and girls with PCOS. Among her numerous initiatives, Ashley has increased public awareness through national media and created the PCOS #LemonFaceChallenge, a viral campaign aimed at raising public awareness about polycystic ovary syndrome. Ashley was the recipient of the 2016 Ricardo Azziz PCOS Challenge Advocacy Leadership Award.

***curate diagnoses can be made if physicians know what to look for. Simply being aware of PCOS and knowing the symptoms can better help physicians see the symptoms of PCOS as a collective entity instead of mistaking them as individual problems."*** Ashley stands for change and believes that change can only occur if we – the women, families and supporters of PCOS – demand that change wholeheartedly.

# USE YOUR CHANGE



Online Purchase \$18.52

Donation \$0.48

Learn more at [PCOSCO](#)

# TO CREATE CHANGE



Use your spare change and the new Coin Up app to help fund PCOS research, health screenings, grants, education and support programs.

## Three easy steps:

1. Download the secure Coin Up mobile app.
2. Set your monthly donation limit.
3. Round up the change from your transactions to support PCOS Challenge and help end PCOS.



[Challenge.org/coinup](https://Challenge.org/coinup)



## PCOS FRIENDLY RECIPE OF THE MONTH

# DARK CHOCOLATE CHIA SEED PUDDING WITH COCONUT WHIPPED CREAM

Angela Grassi, MS, RD, LDN  
PCOS Nutrition Center

Here's a dessert that will satisfy your sweet tooth, but is also filled with PCOS-fighting superfoods! Recipe from the [PCOSNutrition.com](http://PCOSNutrition.com) blog.

Serves 4

### INGREDIENTS

- 2 Cups Unsweetened Almond Milk
- ½ Cup plus 1 tsp Chia Seeds
- 2 TBS Grade B or Grade A Dark Maple Syrup
- 2 TBS Unsweetened Cocoa Powder
- 1/8 Tsp Sea Salt
- 1 15oz can Full Fat Coconut Milk (Refrigerated 4+ hours)



### DIRECTIONS:

1. Combine all ingredients except coconut milk in a medium sized bowl. Mix well.
2. Divide mixture evenly into 4 small bowls or mason jars. Cover and refrigerate for 4-6 hours. (Can stay refrigerated for up to 4 days).
3. While the pudding is setting, place a can of coconut milk in the fridge.
4. Once pudding is set, remove coconut milk. At this point the milk should be solid. Scoop solid coconut milk out of can and place in a chilled mixing bowl. Beat coconut milk with a stand mixer or electric hand mixer for approximately 1 minute or until it turns creamy and forms stiff peaks. You may need to add a tablespoon of coconut liquid if solids are too dense.
5. Remove puddings from fridge and top each with 2 tablespoons of coconut cream.

### NUTRITION FACTS:

|               |        |
|---------------|--------|
| Calories      | 257cal |
| Protein       | 6g     |
| Fiber         | 4g     |
| Carbohydrate  | 22g    |
| Sugars        | 7g     |
| Total Fat     | 15g    |
| Saturated Fat | 5g     |
| Sodium        | 115g.  |



# Why **DONATE** to **PCOS** **CHALLENGE?**

## WE NEED YOUR HELP TO:

- Provide high quality education and support resources for women and girls with PCOS.
- Advance PCOS research.
- Get more women and girls with PCOS screened, diagnosed and access to proper care.
- Provide grants for women and girls with PCOS in medical and financial need to assist with the costs of services not covered by insurance.

Your gift will provide much needed financial support to programs that tens-of-thousands of women with PCOS depend on to help overcome their symptoms and reduce their risk for life-threatening related diseases including type 2 diabetes, cardiovascular disease and cancer.

**DONATE NOW**

**PCOSCHALLENGE.ORG**



**VOLUNTEER**



**BE INFORMED**



**ADVOCATE**

# THE HUGE IMPACT OF YOUR SUPPORT



## SUPPORT PROGRAMS

### PROVIDES ANSWERS, RESOURCES AND ONGOING SUPPORT

- Helps fund online and offline support programs that over 40,000 women and girls depend on to help overcome their symptoms and reduce their risk for life-threatening related diseases.



## LIVE EDUCATION

### ADDRESSES GAPS RELATED TO CARE AND TREATMENT

- Helps provide vital live educational programs for over 1,000 patients and healthcare professionals across the U.S. each year. These programs address seven identified education and healthcare practice gaps adversely impacting millions of women and girls with PCOS.



## HEALTH SCREENINGS

### HELPS SAVE LIVES

- Women with PCOS constitute the largest group of women at risk for type 2 diabetes and cardiovascular disease. Your support helps provide health screenings to identify and reduce PCOS patients' risk of type 2 diabetes, cardiovascular disease and stroke.



## GRANTS & RESEARCH

### IMPROVES ACCESS, CARE AND QUALITY OF LIFE

- Helps PCOS Challenge provide grants for women and girls with PCOS in medical and financial need to assist with the costs of services not covered by insurance such as nutrition counseling, fertility treatments and hair and skin treatments.
- PCOS Challenge is partnered with many of the leading PCOS research centers globally. Your support helps with recruiting and important research efforts.

# SMALL DONATIONS MAKE A BIG DIFFERENCE.

YOUR SUPPORT CAN POSITIVELY IMPACT THE LIVES OF MILLIONS OF WOMEN WITH PCOS.

**HOPE  
FOR  
PCOS**



## BECOME A HOPE FOR PCOS MONTHLY DONOR

For as little as \$5 or \$10 a month, you can make a difference in the fight against polycystic ovary syndrome by supporting PCOS awareness, education, advocacy and research efforts. As a HOPE for PCOS monthly donor, you provide much needed financial support to programs that women with PCOS depend on to help overcome their symptoms and reduce their risk for life-threatening related diseases including cancer, diabetes and cardiovascular disease.

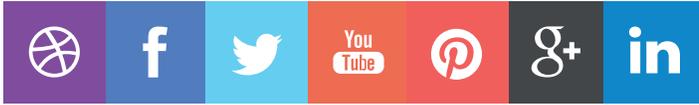
Monthly donations of all sizes are welcome and greatly appreciated!

**PCOS Challenge, Inc. is a 501(c)(3) public charity.**

**Donations are tax deductible to the fullest extent permitted by law.**



The National Polycystic Ovary Syndrome Association



PCOSCHALLENGE.COM • PCOSCHALLENGE.ORG • PCOSCHALLENGE.NET • PCOS.TV



GET SUPPORT • STAY INFORMED • DONATE • VOLUNTEER • ADVOCATE