BECOME THE STEPHEN CURRY OF YOUR OR

Fall into exercise and nutrition routines to maximize your potential when it matters most.

BY DAVID EHMANN, MD

In his book *Outliers*, Malcolm Gladwell proposed that the key to mastering a skill is to practice it in the correct manner for 10,000 hours. Regardless of the actual time required, the point is that to master a skill takes dedication, repetition, and routine.

No one knows this better than professional athletes. Look at professional basketball player Stephen Curry for example. His pregame routine has become a spectacle in itself. Ninety minutes before each game you can find him executing his pregame routine, from two-ball dribbling drills, to left-handed floaters from the elbow, to more than 100 shots from various locations and footings, not to mention his famous hallway shot. Why does an NBA champion and two-time MVP need to do this? Simple: to replicate game-time situations that ultimately prepare him with the confidence and rhythm required to ensure that his "A" game is with him every time he steps onto the court.

Now, although we retina surgeons may never acquire the fame, fortune, and accomplishments of Stephen Curry, our approach to our surgical patients should be no different from his approach to a game. We too know the hard work, time, and sacrifice it has taken to acquire the knowledge and skills necessary to allow us the privilege of sitting in our own OR with a list of patients expecting and deserving our absolute best.

As a young retina surgeon entering a busy and exciting year of operating, I thought it would be interesting to ask my attendings what their OR pregame routines are. In addition, as one who is always hungry, particularly in the OR, I spoke with Lisa Hark, a registered dietitian, to find out what meals or snacks are best to keep your energy up and focus where it needs to be on a day in the OR.

> **"Look at professional basketball player Stephen Curry. His pregame routine has become a spectacle in itself.**

ALLEN CHIANG, MD

My pregame preparation includes the following:

No. 1. Plan: I review examination and clinic notes to solidify my intraoperative strategy even for so-called routine cases. For example, even for a routine macular hole case, I make notes on how I might need to position the patient due to kyphosis or whether we should use general anesthesia due to restless leg syndrome and obstructive sleep apnea. I make sure the hard drive connected to my microscope has free space for recording.

No. 2. Sleep: Get a good 7 hours of shuteye.

No. 3. Coffee: I usually like a big cup of coffee in the morning, but I do only half a cup on the morning of a day in the OR to avoid tremors.

No. 4. Nutrition: I hydrate well the night before and the morning of surgery. I usually have some coconut milk or coconut water to hydrate some more. Lately I have shifted to the cold-pressed watermelon juice Wtrmln Wtr. Both are tasty, are high in potassium, and hydrate very well. A good breakfast, high in protein and complex carbohydrates (eg, Greek yogurt with granola, multigrain sprouted bread with almond butter), carries me through the morning. Instead of lunch, I usually have a couple of high-protein snacks between cases with fruit (eg, almonds or peanut butter with Fuji apple slices).

No. 5. Body: I do 30 minutes of yoga before bed and 10 minutes of stretches in the morning to help maintain core posture.

The attendings I interviewed expressed a wide array of choices and preferences regarding nutrition on OR day. To look deeper into good OR day nutrition, I spoke to Lisa Hark, PhD, Director of Research at Wills Eye Hospital and a registered dietitian. I asked what she recommends to make sure we keep our machines well-oiled.
Here is what she suggested:

PROTEIN

Peanut butter or almond butter on whole wheat bread or crackers as a snack is high in protein, fiber, magnesium, and monounsaturated fat.

Hard-boiled eggs provide a high protein snack and are transported easily. They serve as a good source of vitamin B12, folate, selenium, vitamin A, and vitamin D.

Trail mix with raisins and nuts provides protein, magnesium, vitamin E, and monounsaturated fat. This makes a great snacking or grazing food between cases.

Carrots with hummus are another high-protein snack option, providing beta carotene and antioxidants.

ON THE GO

Low fat cheese sticks are a good source of calcium and fit easily into one's pocket.

Energy bars. But which one is the best? She suggested looking for low-sugar bars such as Kind Bars and thinkThin, with more than 10 g protein, less than 6 g sugar, and less than 220 calories per bar.

Make your own smoothie at home and bring it to the OR or drink it on the drive in. You can use frozen kale, berries, skim milk or yogurt, and add a scoop of protein powder.

Fresh or dried fruits provide plenty of choices, and they are packed with antioxidants. She suggested bringing two per day.

Dr. Hark also suggested taking a daily vitamin B-complex supplement for energy. And finally, because many retina surgeons start early and operate all day, she emphasized that we should not skip breakfast and should stay hydrated with water rather than coffee during the day.

No. 6. Music: I usually listen to classical music on the commute in to the OR; this clears my mind and stimulates concentration.

ALLEN C. HO, MD

I didn't think I had a routine, but actually I guess I do. I typically review the surgical case list and electronic health record notes the night before surgery and email the notes to my fellows.

I also do a cardio workout the day before and/or the morning of surgery to help me feel fresh throughout the day. A good night's sleep is key. I like to see my patients and their companions preoperatively, and I try to report to companions postoperatively.

For nutrition, I like apple slices, dark chocolate peanut butter cups, and coffee before and between cases. For music, I like to listen to modern rock on Philadelphia's Radio 104.5, one of the best radio stations in the country.

I always buy lunch for myself and my fellows (typically at Jimmy John's Sandwiches) for a break and to keep them fueled up to do their best work for patients.

JASON HSU, MD

Here are my thoughts:

No. 1. Make sure you bring lunch and eat it—at least parts of it in between cases. I recall as a fellow making the mistake of scrounging around for snacks rather than bringing my own lunch. I was always happy when Dr. Ho bought lunch, but do not depend on the attendings for food. (Sorry, guys). Jefferson Hospital for Neuroscience, where I sometimes performed cases as a fellow, had broken graham crackers and stale oatmeal cookies stocked in the break room. Lovely memories.

Honestly, though, you do not want to be operating in a ketotic and/or hypoglycemic state. It is not good for your well-being, ability to learn and master new skills, or patient care. Plus, as a fellow, when you are shaky or making poor decisions due to lack of sleep or nutrition, you are less likely to have cases passed to you.

I am a big fan of eating parts of my lunch between cases, so I am still able to get things done (signing preoperative paperwork, talking to patients before and family after cases, preparing for the next case, etc.) without taking a long lunch. I remember, when I was a fellow, how hard it was to pack a lunch in the morning. Try to do it the night before, especially if you are not a morning person and tend to jump out of bed and run to the OR.

No. 2. I always bring my water bottle and stay well hydrated throughout the day. I am not a coffee drinker.

No. 3. A good breakfast to start the day is key, although a surgery day is honestly no different from any other day for me. I typically eat whole grain cereal with almond milk, a handful of unsalted nuts (almonds, cashews, walnuts, pistachios), and some Greek yogurt with fruit. Protein tends to ward off the stomach growling and keeps you satisfied for longer. The last thing you want to be thinking of while facing a complex tractional retinal detachment is how hungry you are, wondering how soon you will be done so you can eat.

No. 4. I agree that sleep is crucial. I think everyone functions with different levels of sleep, but 6 hours is a minimum. We all know that sleep deprivation can be equivalent in impairment to alcohol consumption. You do not want to be driving the microscope drunk, so don't stay up late playing Pokémon Go!

No. 5. For snacks in the OR, I avoid sugary foods and drinks. I am a fan of hummus or guacamole packs with whole grain chips. I tend to pack an apple or other seasonal fruit that I can just bite into. I also bring a couple of protein bars in case I have a late day and need some extra oomph.

No. 6. I tend to work out in the evenings rather than mornings. I will have to try stretching and yoga someday.

JAMES F. VANDER, MD

This is an interesting and important subject. I avoid any exercise the morning of the OR. (The early start makes that unlikely anyway!) I avoid lifting weights or other vigorous exercise the day before, especially with my arms. I find the postworkout tremor can last until the next day. I avoid caffeine on OR day and always try for a good night's rest.

It is very important to have breakfast (not too large) of one's personal preference. What is more important for me is to bring along a bunch of things so I can graze between cases: granola bar, yogurt, fruit, nuts, sandwich. I start nibbling after the second or third case and tend to grab one thing almost between every case. I do not do well when I am hungry. It is tough to stay patient and cool when there are membranes everywhere, the machine malfunctions, and your stomach is growling!

> "You do not want to be driving the microscope drunk, so don't stay up late playing Pokémon Go!
>
> —Jason Hsu, MD

JOSEPH I. MAGUIRE, MD

For breakfast I do the carbohydrate-fructose thing with bagel and fruit while driving in. I tend not to have the radio news or music on while driving in. I find it helps clear my head. If I have tough cases scheduled for the day, I plan the steps beforehand and review them in my head. In addition I do a literature review the night before for newer techniques. I do not do any special pre-OR exercises, but I do standard weekly core exercises, with an emphasis on all limbs close in and well supported.

RICHARD S. KAISER, MD

Retina surgeons are susceptible to back and neck issues. It is important to stay in shape, with special attention paid to building up one's core. Also, concentrating on posture in the OR and while seeing patients is key. I consistently try to think about keeping my back and neck in good alignment throughout the day. I adjust the height of the OR stretcher to match my height. On my OR day, I usually do not do a heavy workout before operating, but instead I find that I enjoy an intense workout after my surgical cases are complete.

For nutrition, I tend to bring a series of healthy snacks to eat throughout a busy OR day. I prefer lots of grazing but no heavy meals. The last thing I want to be thinking about while operating is food and hunger, and I certainly do not want to have any postprandial dip in energy.

CARL D. REGILLO, MD

My OR day and preop routine is like many others and is as follows:

No 1. I get a good night sleep the night before surgery.

No. 2. In the morning, I like one good cup of coffee to start the day with a light, nutritious breakfast such as a bowl of granola-based cereal. I like a midmorning snack such as a belVita Breakfast Biscuit and a small, high-protein quick-to-eat lunch such as Greek yogurt, nuts, and a protein bar. A Diet Coke at lunch provides a little extra caffeine for the afternoon.

JULIA A. HALLER, MD

Having a good OR routine is a great idea. I do not drink coffee the day of the OR, and I always try to get a good sleep the night before.

SUNIR J. GARG, MD

I try to get at least 7 hours of sleep the night before the OR; it makes me more efficient during the OR day. I try to do 30 minutes of yoga before the OR as well. Going into the day with a clear mind and flexible body makes the surgery day go more smoothly for me.

For lunch, I bring food that is easy to eat on the go, and I start eating parts of it between cases starting around 10:30 a.m. I bring a banana, an apple, a piece of chocolate, almonds, some quick-to-eat entrée that we made at home, and some other fruit. I also have a 40-oz jug of water that I try to finish every day. Most of it is consumed on the ride home.

CONCLUSION

As you can see, established retinal surgeons think and plan for their OR days. All my attendings agreed that a good rest the night before and minimal light or no exercise on the OR day are important.

If you have not already, it is important to establish and maintain healthy OR pregame and game day routines so that you can be at your best and provide the best possible care for your patients. Good sleep, preoperative planning, nutrition, and exercise can ensure that you bring your "A" game each and every time you sit down to your next case. I thank all the attendings quoted above for taking the time to share these important tips. ■

Section Editor Murtaza Adam, MD
- second-year retina fellow at Wills Eye Hospital in Philadelphia, Pa.
- madam@midatlanticretina.com

Section Editor David Ehmann, MD
- second-year retina fellow at Wills Eye Hospital in Philadelphia, Pa.
- dehmann@midatlanticretina.com

Section Editor Sundeep Kasi, MD
- second-year retina fellow at Wills Eye Hospital in Philadelphia, Pa.
- skasi@midatlanticretina.com

Allen Chiang, MD
- attending surgeon, Wills Eye Hospital retina service; physician, Mid Atlantic Retina; assistant clinical professor of ophthalmology, Thomas Jefferson University, all in Philadelphia, Pa.
- @achiangMD; achiang@midatlanticretina.com

Allen C. Ho, MD
- director of retina research, Wills Eye Hospital; surgeon, Mid Atlantic Retina; professor of ophthalmology, Thomas Jefferson University, all in Philadelphia, Pa.
- chief medical editor, *Retina Today*
- achomd@gmail.com

Jason Hsu, MD
- faculty member of the Wills Eye Hospital retina service; managing partner, Mid Atlantic Retina; assistant professor of ophthalmology, Thomas Jefferson University, all in Philadelphia, Pa.

James F. Vander, MD
- president, Mid Atlantic Retina; clinical professor of ophthalmology, Thomas Jefferson University, both in Philadelphia, Pa.

Joseph I. Maguire, MD
- associate professor at Sidney Kimmel Medical College, Thomas Jefferson University Hospital; attending surgeon at Wills Eye Hospital, both in Philadelphia, Pa.

Richard S. Kaiser, MD
- professor of ophthalmology, Sidney Kimmel Medical College, Thomas Jefferson University; associate surgeon at Wills Eye Hospital; co-director of the Wills Eye Hospital retina fellowship program, all in Philadelphia, Pa.

Carl D. Regillo, MD
- director of the Wills Eye Hospital retina service; professor of ophthalmology, Thomas Jefferson University, both in Philadelphia, Pa.
- cregillo@aol.com

Julia A. Haller, MD
- professor and chair of ophthalmology, Thomas Jefferson University; ophthalmologist-in-chief, Wills Eye Hospital, both in Philadelphia, Pa.
- @JuliaHallerMD; jhaller@willseye.org

Sunir J. Garg, MD
- associate professor of ophthalmology at the retina service, Wills Eye Hospital and Thomas Jefferson University; partner, Mid Atlantic Retina, both in Philadelphia, Pa.
- sunirgarg@yahoo.com