OVERNIGHT CORNEAL RESHAPING (OCR)
EVERYTHING YOU NEED TO KNOW

Overnight Corneal Reshaping does what most people want—permits them to see all day long without the assistance of glasses, contacts, or refractive surgery.
WHAT IS OVERNIGHT CORNEAL RESHAPING?

The human cornea is a clear dome-shaped structure at the very front outer surface of the eye that covers the colored part of the eye known as the iris and the central dark circle called the pupil. It is unique in the body in that it has no blood supply and varies in shape from one person to the other. Depending on what the topography of that shape is largely determines what a person’s refractive correction is, like being nearsighted (myopia), farsighted (hyperopia) or astigmatic (curved differently in each meridian like the shape difference of the back of a spoon vs being spherical like a marble)

The shape of the eye can be altered slightly to change the refractive error. This is done non-surgically by a process we call Overnight Corneal Reshaping—OCR—or by refractive surgery procedures like RK, PRK, or LASIK. OCR works non-surgically practically overnight and is not risky like LASIK, which can never be reversed.

OCR Lenses:
• gently and painlessly mold the soft cornea to achieve a shape that permits clear vision.
• are custom-designed based on the topography of the eye and a diagnostic contact lens evaluation in the office.
• work very precisely while you are sleeping—apply them at bedtime and wake up with clear vision when they are removed in the morning.

While this may sound too good to be true, it really works and has been approved by the FDA since 2002.
How It Works

1. Example: 20/100 Vision. Uncorrected Shape of Cornea Before OCR Lens

2. Apply Prescription OCR Lens at Bedtime

3. OCR Lens Reshapes Cornea Overnight

4. 20/20 Vision: Corrected Shape of Cornea Throughout the Day Without Lens on

**Legend**

A: OCR Lens  
B: Cornea  
C: Pupil  
D: Iris  
E: Human Lens  
F: Vitreous  
G: Retina

Photo of Actual Lens on Eye
WHY HAVEN’T I HEARD OF THIS BEFORE?

Previous versions of OCR have been around since the 1960s. You may have heard of this process called by other names: Orthokeratology (OK), Ortho-K, Corneal Refractive Therapy (CRT), Vision Shaping Treatment (VST), Gentle Molding, Corneal Molding, or other variations. OCR is done by very few eye doctors due to the extra qualifications, certifications, knowledge and equipment necessary to perform the procedure in an acceptable professional manner. Look for a practitioner who has achieved “Fellowship” status in the American Academy of Orthokeratology and Myopia Control, an organization that is international in scope and which sets the standards of care. Dr. Brill was one of its early founders in 2002.

HOW LONG DOES IT TAKE TO ACHIEVE THE FULL CORRECTION?

Generally 1 to 14 days. It can take several weeks and several lens exchanges for stronger powers or very flat or steep corneas.
HOW LONG DOES THE GOOD VISION LAST?
The good vision should last all day, perhaps with some minor fading of the treatment near bedtime. Some people can actually go two days without wearing the lenses if their correction is mild.

WHAT IF I HAVE BIFOCALS OR ASTIGMATISM?
No problem, OCR can still work. Lenses can be created to refine your vision.
IS IT RIGHT FOR ME?

A DAY IN THE LIFE OF AN OCR LENS WEARER!

WHAT WILL YOUR DAY BE LIKE WITH OCR?

You should have 6-8 hours of restful sleep for the reshaping to hold. Since you are no longer looking through glasses or contact lenses during the day, your vision will be clearer than normal in most cases.

You will:
• Apply OCR lenses right before bed
• Wear the lenses for 6-8 hours of restful sleep
• Remove the lenses right after you wake up
• Enjoy good vision all day long
• Repeat the process

IS THERE ANY AGE RESTRICTION?

No. The FDA has not restricted OCR by the age of a patient.

WHY CAN I SLEEP IN THESE LENSES?

Polymer chemistry advancements now allow materials, called fluoro-siliconeacrylates, to permit more than a sufficient amount of oxygen to transfer through the lenses and still maintain excellent corneal health after sleeping in them. Rigid lens materials used to be made of PMMA (polymethylmethacrylate) material, but these never allowed the cornea to breathe properly and are no longer used. We refer to them as “hard” lenses. Corneal mapping topography, coupled with computer-aided designs (CAD) and computer numeric controlled (CNC) lathing techniques, allow for lenses to be made to exacting and reproducible standards. Sub-micron level accuracy necessary to achieve precise refractive error correction.
WHAT DO PEOPLE SAY ABOUT OCR?

"As a mom I felt bad my kids got my blurry vision, but daytime glasses, contacts, or surgery are no longer necessary thanks to overnight reshaping."

"I worry about my kids glasses getting stronger and stronger. OCR can prevent my child's myopia from getting worse! I wish we knew about this option earlier."

"I'm really happy we found out about OCR. I was surprised that there is a reversible and affordable option to correct my son's vision. Plus, it's a lot less than what I paid for my child's braces!"
HOW MUCH DOES IT COST?
Costs will vary by the experience of the practitioner and the difficulty of the patient’s case. Expect to pay about half of what LASIK averages in your area, or between $1600 and $3500.

WHY DO PEOPLE CHOOSE OCR OVER LASIK?
While LASIK complications are fewer today than they were with earlier techniques, outcomes will vary and cannot be guaranteed. Besides, your eyes are still subject to changing with every year that passes. LASIK does not stand up to the test of time and aging. It also weakens the front of the eye in response to potential injuries. Optical glare and dry eyes are the most common complications of LASIK. OCR, on the other hand is totally reversible.

IS IT PERMANENT?
The changes made by OCR are totally reversible, so you can change your mind about the process at any time and get right back to your original visual state. Or, you still have all of your options open if improved procedures are developed in the future.
TELL ME ABOUT THE LENSES (AND THIS PROCESS)

HOW LONG DO THE LENSES LAST?
The lenses on average will last a year before replacement, longer if they are taken care of well. Be sure to have your doctor analyze the lenses at least every 6 months.

CAN I MIX WEARING THE LENSES AND MY GLASSES?
Generally not. The lenses need consistency of wear to remain effective.

WHAT HAPPENS IF I LOSE A LENS?
You will have to obtain a replacement or have a spare pair on hand. Lens loss is rare because you are only wearing them at night while you’re sleeping.
WHERE DOES THE DOCTOR GET THE LENSES?

The doctor will either have an inventory of lenses or have them manufactured custom for you by the labs certified to do so. There are less than a dozen such labs in the U.S.

CAN I GET THEM ONLINE?

No, they are custom made for your eyes with ocular topography mapping. This is important. The lenses can only be sold to doctors that are certified to prescribe each FDA-approved product. They cannot be diverted from a manufacturer directly to the patient.