



Bringing  
Clarity to  
**DIABETIC  
MACULAR  
EDEMA**



## WHAT IS DIABETIC MACULAR EDEMA?

If you have type 1 or type 2 diabetes, excess fluid can build up in the back part of your eye (the macula) eventually causing changes in vision. The macula is in the center of the retina, and it enables your eye to focus and see details.

### VISUAL SYMPTOMS MAY INCLUDE:

- Blurry vision
- Double vision
- Dull, washed-out colors
- Floaters
- Wavy lines
- Vision loss

### A HEALTHY RETINA (NO DME)

#### Müller Cells

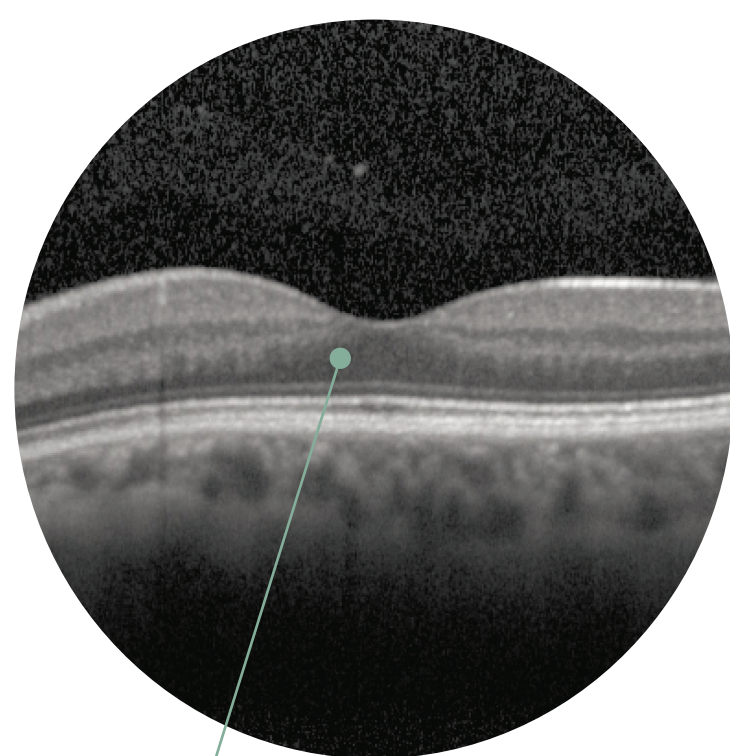
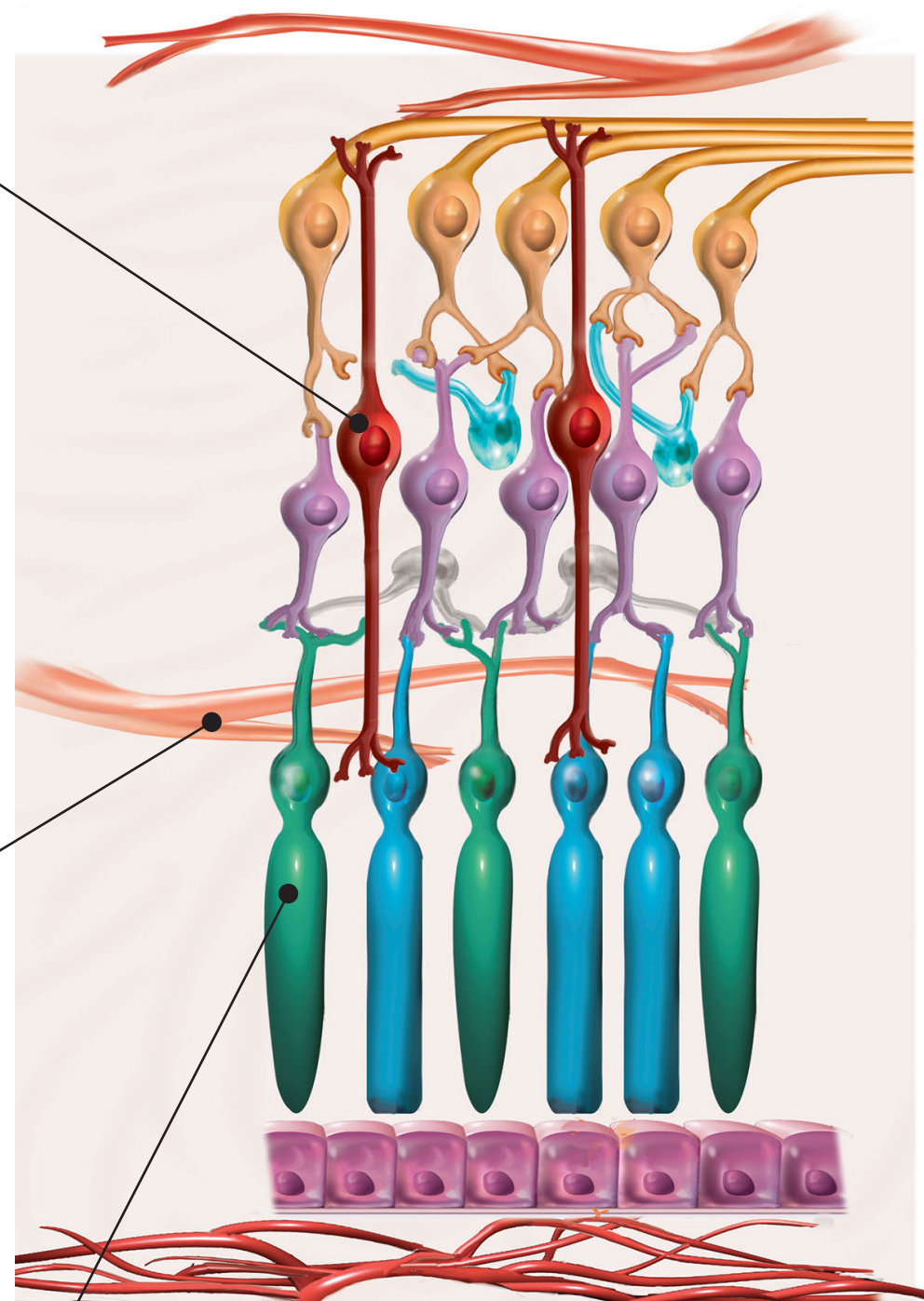
A unique cell type that spans the width of the retina and interacts with all other retinal cell types is called the Müller cell. Müller cells have many roles within the retina that are imperative to retinal health and function, such as regulating water balance, recycling neurotransmitters, and maintaining structural integrity.

#### Retinal Vasculature

This layer of blood vessels is located within the retina and supplies oxygen and other essential nutrients to retinal cells found in the inner portion of the retina. These blood vessels maintain the inner blood retinal barrier to control what goes in and out of the retina.

#### Photoreceptors

A photoreceptor is a light-sensitive cell type located in the outer portion of the retina. This type of neuron is responsible for converting light into an electrochemical message that is transmitted to the brain to create a visual image.



The **macula** enables you to focus and see details.

### A DAMAGED RETINA (WITH DME)

*Top of retina illustration points toward the front of the eye*

#### Müller Cell Swelling

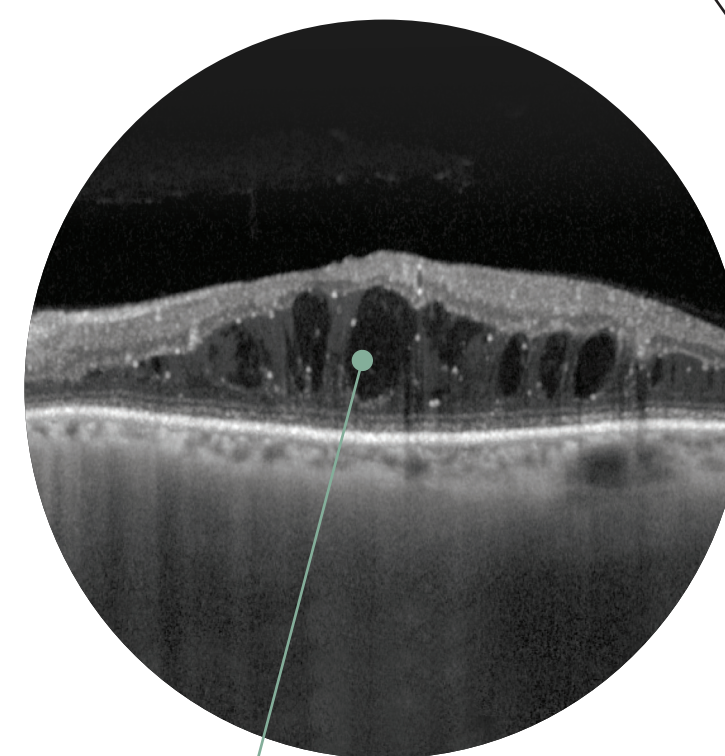
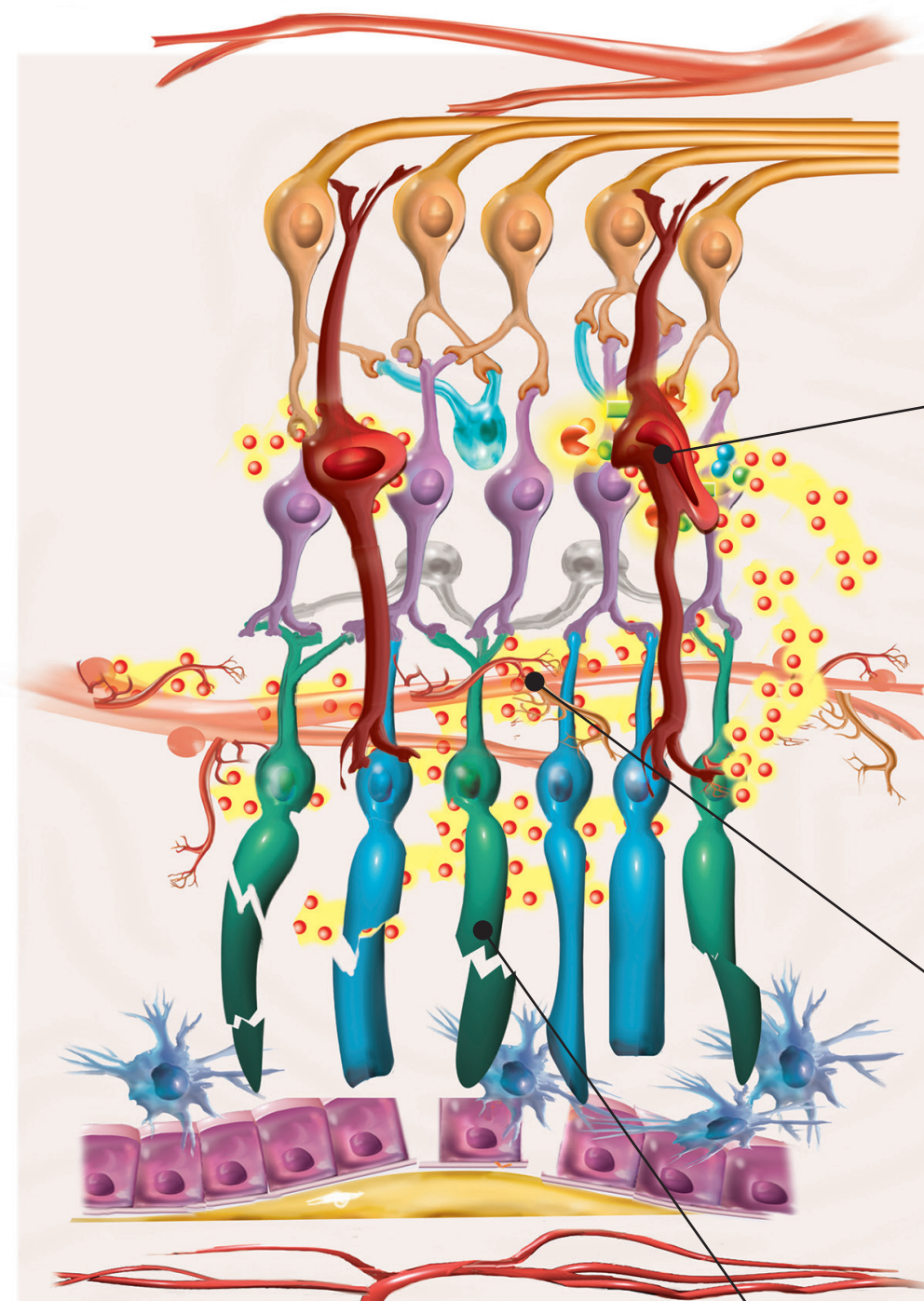
In response to hyperglycemia (elevated blood sugar), Müller cells become activated and initiate a series of chronic inflammatory events. As a consequence, Müller cells can become dysfunctional and negatively impact vision.

#### Retinal Artery Damage

Hyperglycemia-induced chronic inflammation leads to the break down of the blood retinal barrier and leakage of excess fluid into the retina. This accumulation of fluid causes disorganization of the retina and can negatively impact vision.

#### Photoreceptor Damage

Over time, hyperglycemia-induced chronic inflammation can promote the breakdown of neurons, such as photoreceptors, and eventually lead to cell death.



When excess fluid builds up in the macula, it can lead to vision loss or blindness, if left untreated.

Learn more about available treatments and questions  
to ask your doctor at **DMEandMe.com**

