

# BLINKING EXERCISES

**Background:** Poor blinking habits may frequently inhibit the improvement in meibomian gland function. A serious consequence is the obstruction of the Meibomian glands, leading to Meibomian gland dysfunction (MGD) followed by an increasing cascade of dry eye.

Desirable or good blinking requires that a high percentage of blinks are complete, where the upper lid contacts the lower lid. Good blinking must also be adequately frequent.

Causes of poor blinking habits include activities that require moderate concentration, e.g. computer use, video games, reading and stress.

The goals of blinking exercises are to minimize poor blinking habits and to train good blinking habits.

- 1) The upper lid must be taught to contact the lower lid to achieve a complete blink. Partial blinking, where the upper lid during the downward phase of the blink does not touch the lower lid, results in not wetting the ocular surface optimally or promoting secretion.
- 2) The frequency of blinking must be adequate
- 3) Blinking exercises must be performed at regular intervals throughout the day.

## CLOSE - PAUSE 1, 2 - SQUEEZE 1, 2 - OPEN 1, 2

### Blinking Instructions

**Close** to teach the lids to touch

**Pause** for a count of 2 to reinforce the lids touching

**Squeeze** down lightly for a count of 2 to help develop the muscles and to stimulate the neural pathways that control the downward phase of the blink

**Open** for a count of 2 to complete the blinking sequence

### Computer programs to remind blinking PC compatible

#### Free software

<http://www.workrave.org/>

<http://eyeleo.com/>

<http://www.trisunsoft.com/pc-work-break>

<http://regularbreaks.com>

#### Non-free

<http://www.paratec.com>

<http://www.eyeprotectorpro.com/>

Close and Pause for a count of 2



Squeeze for a count of 2



Open for a count of 2



### Reminders for iOS (Apple) Computer

Timeout (Mac only; search in App store)

<http://regularbreaks.com> (PC and Mac)

### iPhone Blinking app

"Korb Blinking exercises" in App Store