



Supplementary Figure 2.

Left column: Comparison of biometric parameters **at the end of the experiment** among guinea pigs fed with **routine diet (blank bars)**, **retinoic acid (+RA, lined bars)** or **citral (+Ci, dotted bars)** reared under **white light**. Mean± SEM values in (A) refractive error (D), (B) vitreous chamber depth (mm), and (C) axial length (mm) of treated and fellow eyes in guinea pigs wearing monocular **-5D lenses (treated)** reared under white light conditions.

Middle column: Comparison of biometric parameters at the end of the experiment among guinea pigs fed with **routine diet (blank bars)**, **retinoic acid (+RA, lined bars)** or **citral (+Ci, dotted bars)** reared under **short-wavelength light**. Mean± SEM values in (D) refractive error (D), (E) vitreous chamber depth (mm), and (F) axial length (mm) of treated and fellow eyes in guinea pigs wearing monocular **-5D lenses (treated)** reared under short-wavelength light conditions.

Right column: Comparison of **interocular differences** (IOD, mean ± SEM; treated-fellow) in (G) refractive error (IOD of RE, D), (H) vitreous chamber depth (IOD of VCD, mm), and (I) axial length (IOD of AL, mm) among guinea pigs fed with retinoic acid (+RA, lined bars), routine diet (blank bars) or citral (+Ci, dotted bars) and subjected to the following monocular lens treatments reared under either short-wavelength light (SL, blue bars) or white light (WL, black bars).

* p<0.05, ** p<0.01, *** p<0.001.