



# Ecotoxicology TP Course

Concepts, Tests & Biomarkers

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# TP6 Lipid Peroxidation



**Control**



**10 ug/L Glifosato**



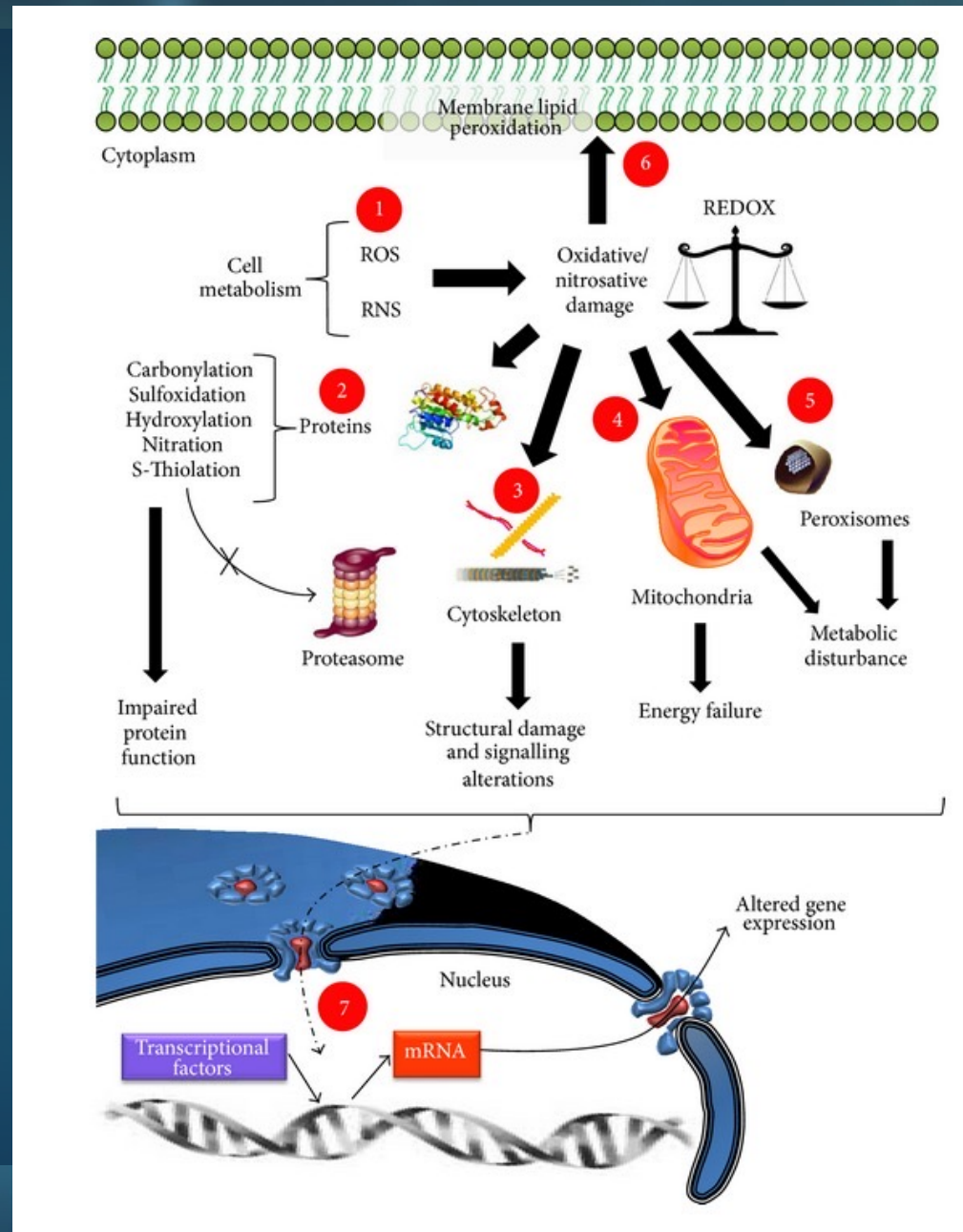
**250 ug/L Glifosato**



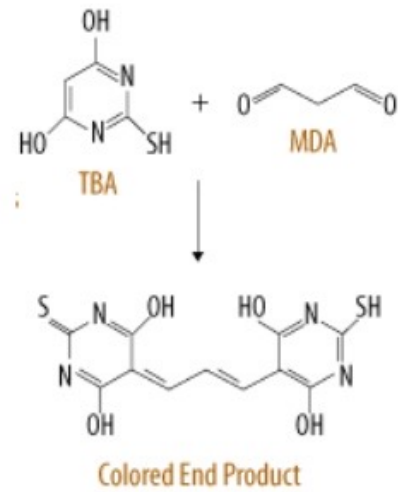
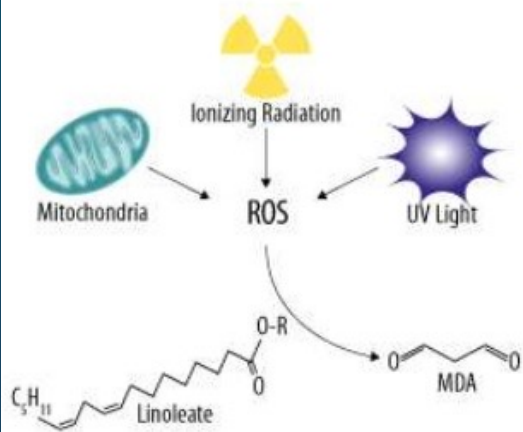
**500 ug/L Glifosato**

- Add 1.5 mL TCA 20% (w/v) to the pellet.
- Heat the sample for 20 min at 100 °C.
- Take 1 mL of the TCA sample and add it to 1 mL TBA 0.5 %.
- Heat the sample for an additional 20 min at 100 °C.
- Read the absorbance at 532 nm e 600 nm ( $\epsilon$  [MDA] = 155 mM<sup>-1</sup> cm<sup>-1</sup>):

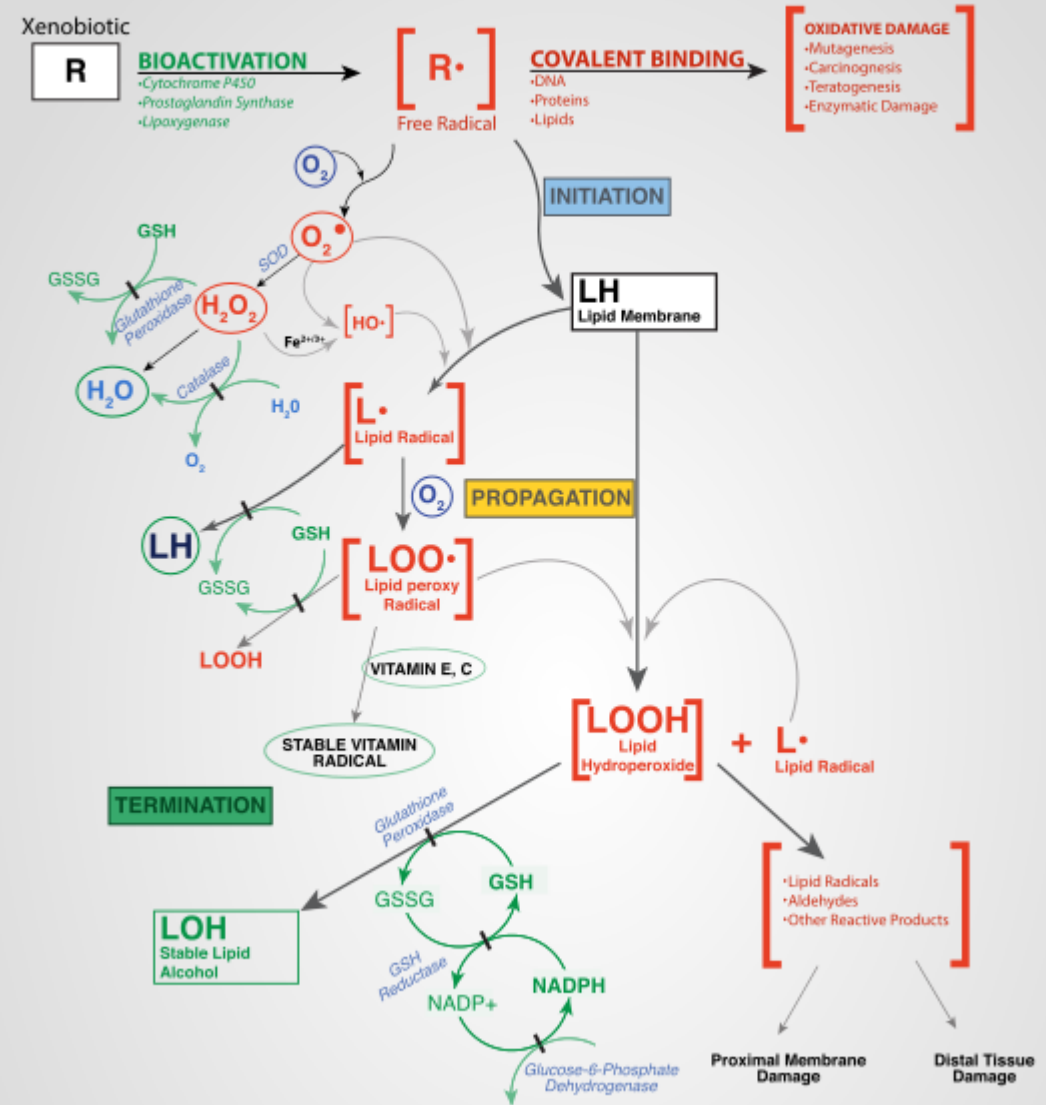
$$A_{532 \text{ nm}} - A_{600 \text{ nm}} = [\text{MDA}]_{\text{mM}} \times \epsilon_{\text{MDA}}$$

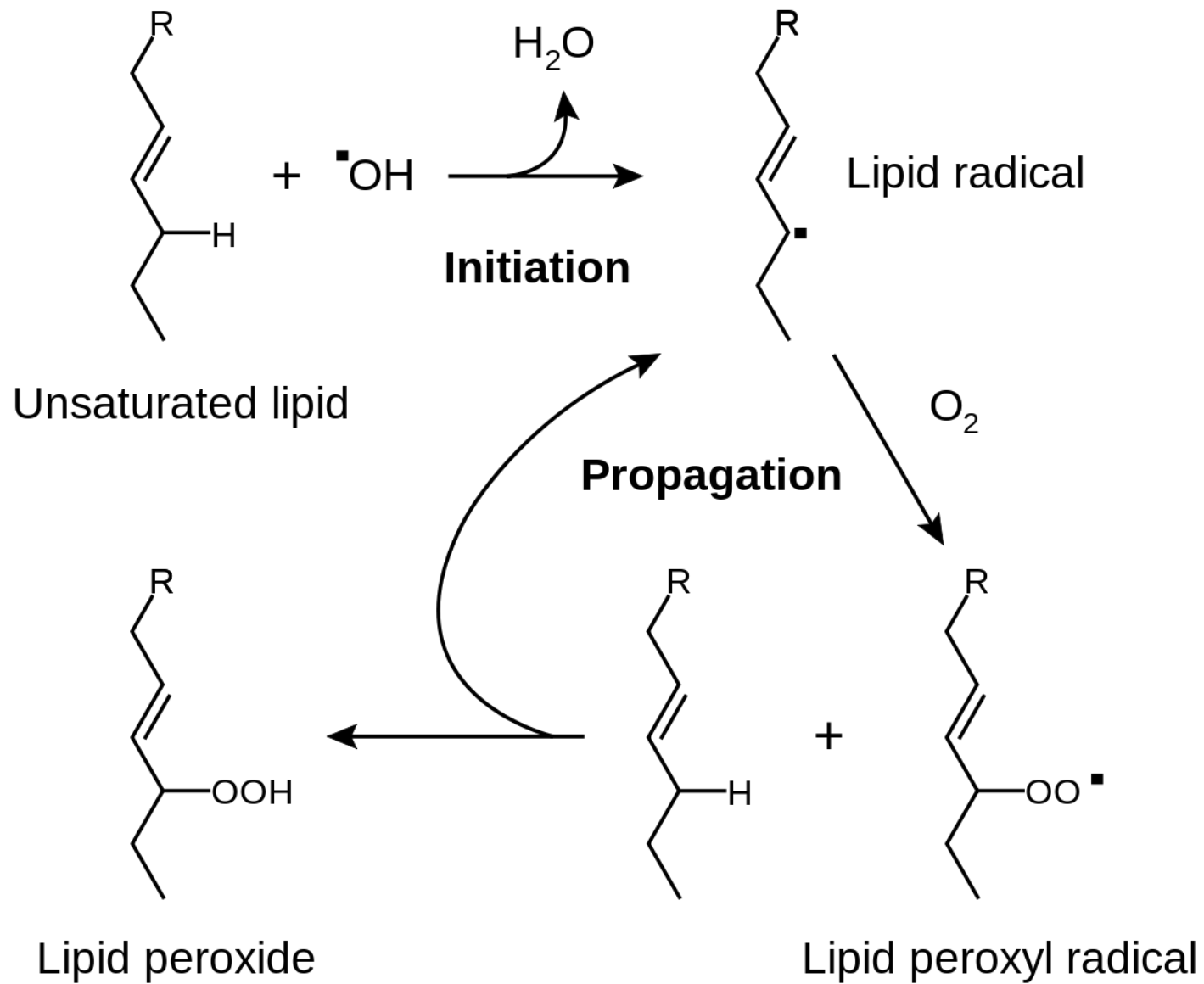


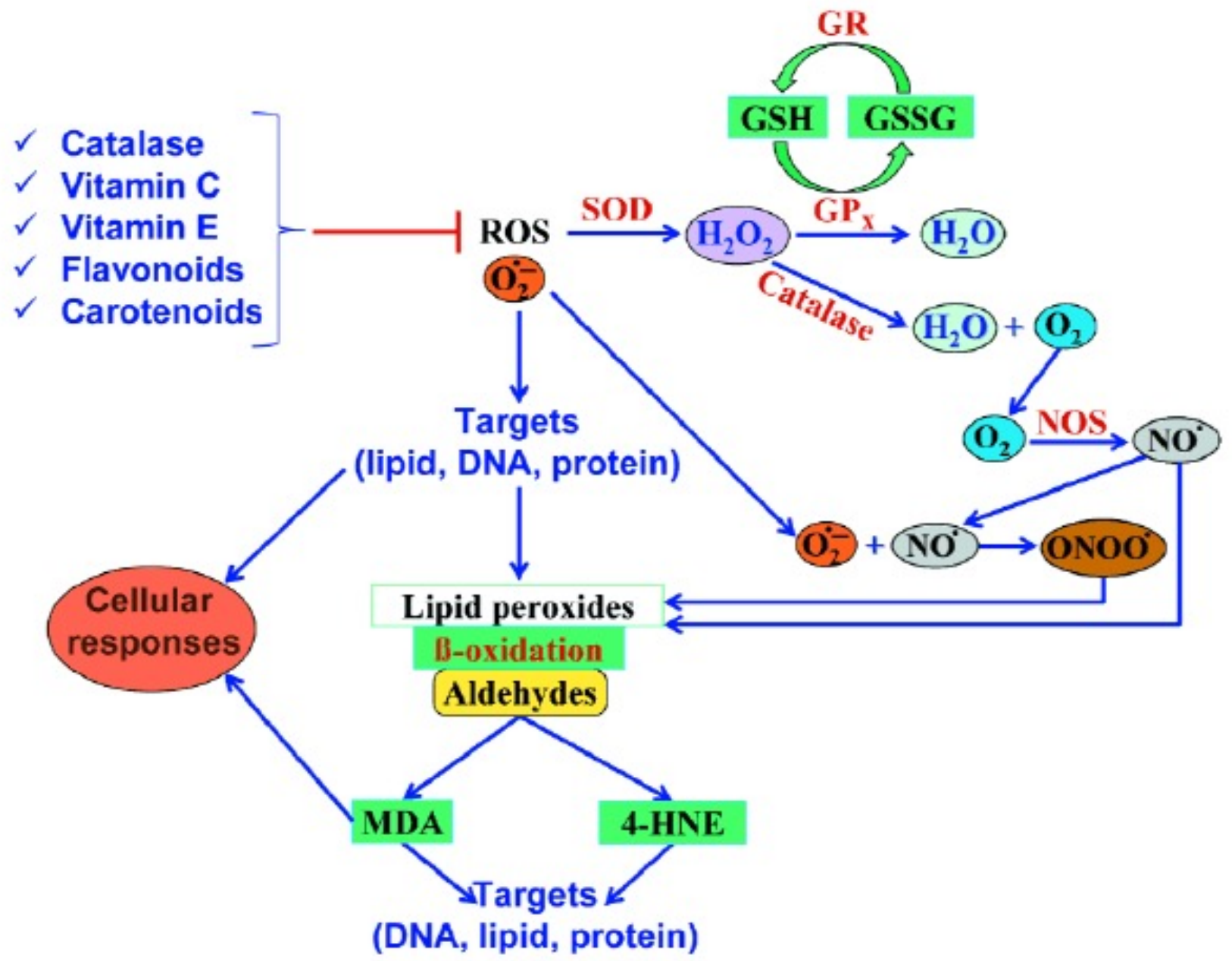
## Lipid peroxidation (Malonyldialdehyde, MDA)



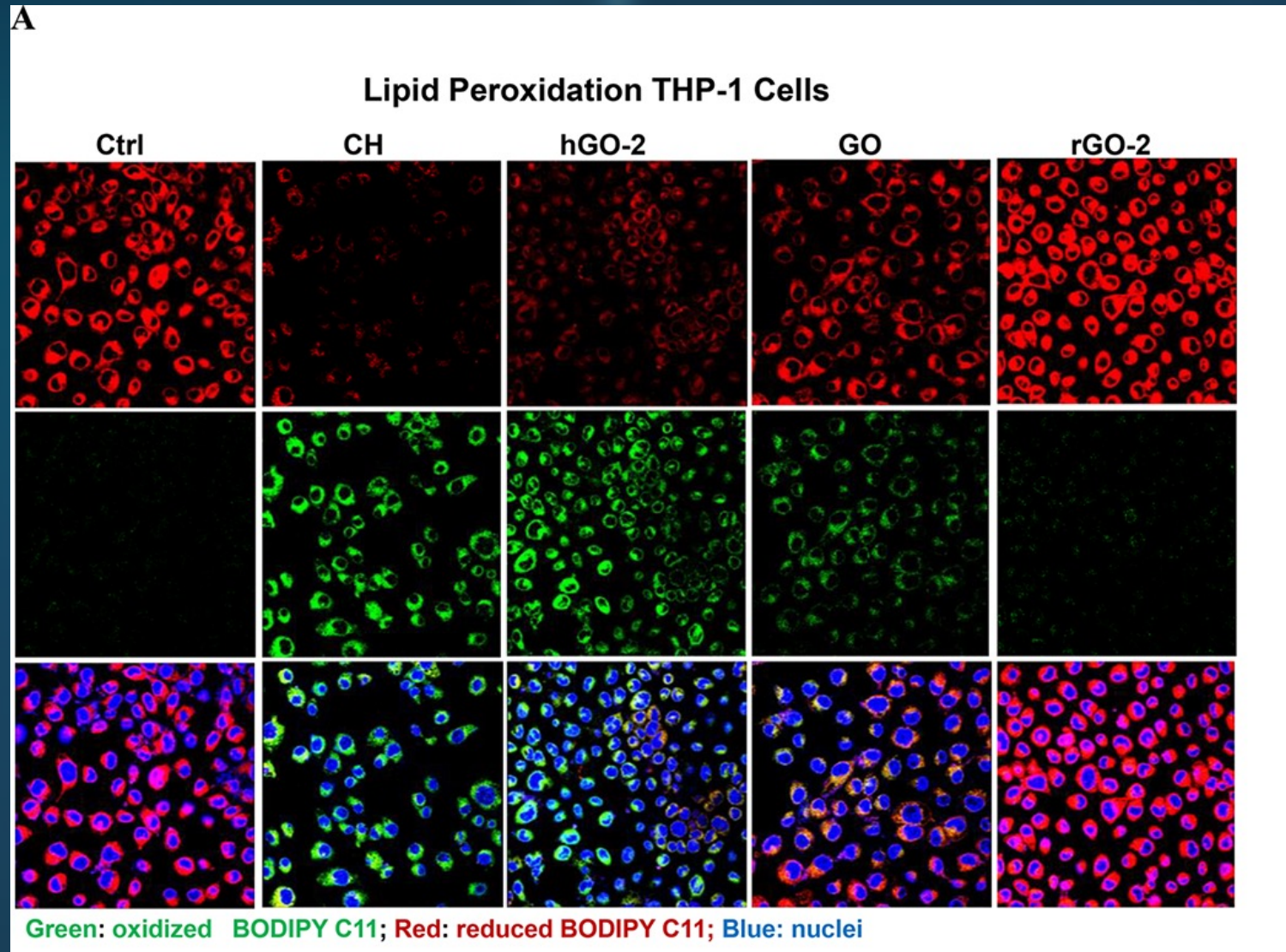
## FREE RADICAL TOXICITY

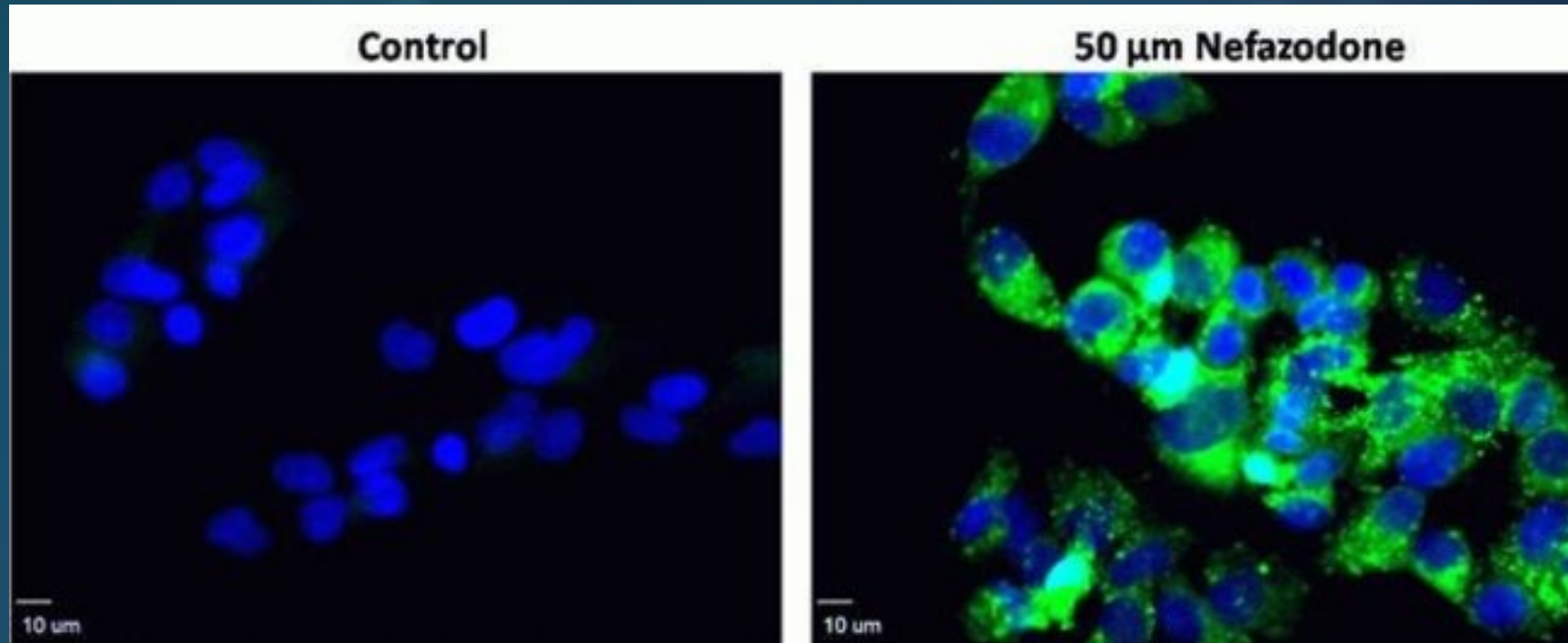


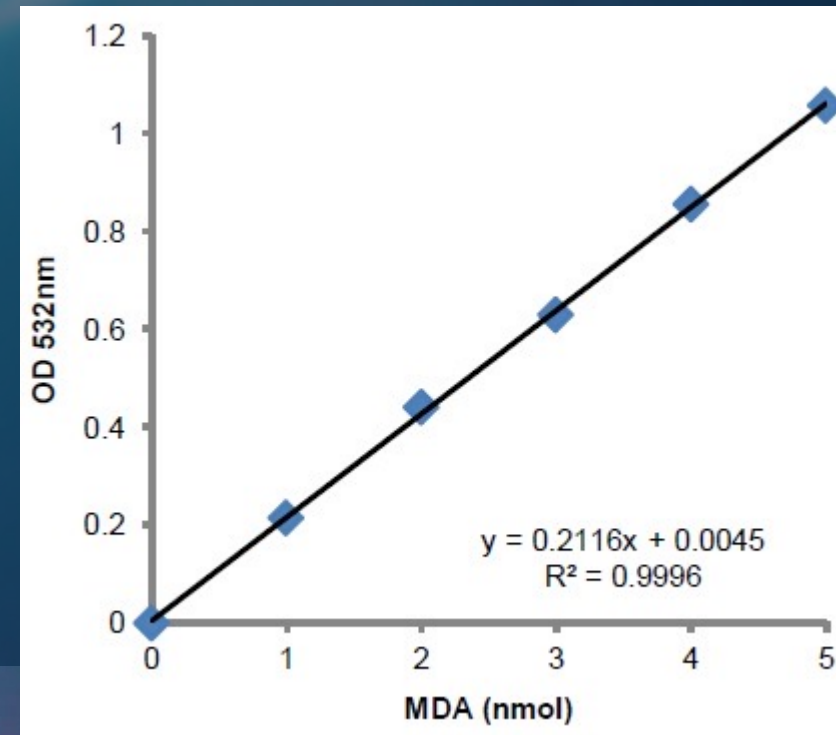
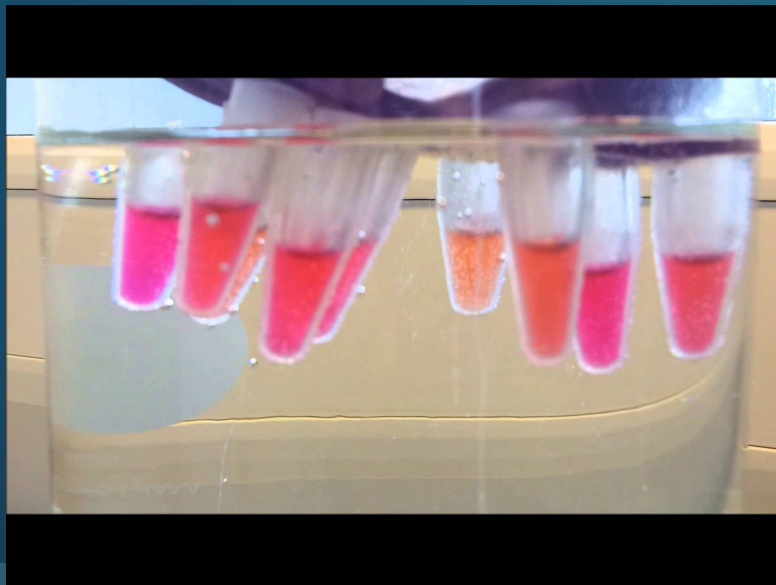
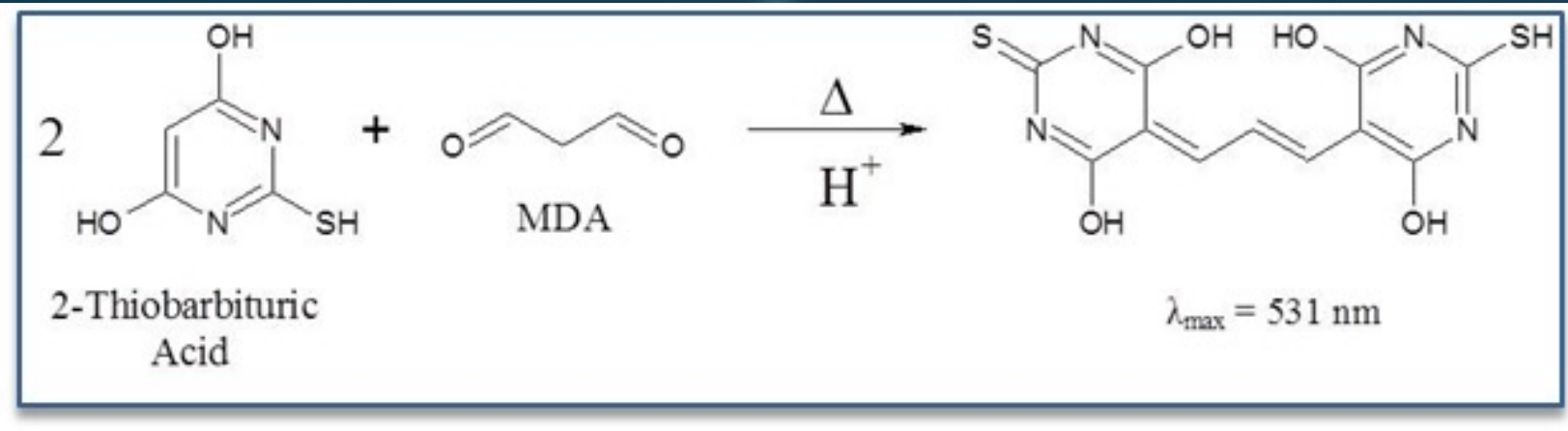












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$$A_{532 \text{ nm}} - A_{600 \text{ nm}} = [\text{MDA}]_{\text{mM}} \times \epsilon_{\text{MDA}}$$