

Anti-viral Essential Oils (EO)

- **Tea tree** (*Melaleuca Alternifolia*) EO inhibits influenza during the early stages by preventing intracellular processing of the viral particle
- When introduced into cell culture media, **tea tree oil** prevented viral uncoating by interfering with the acidification of the endosomes and membrane fusion
- The ability to prevent endosome acidification was ascribed to the **tea tree oil** constituents terpinen-4-ol, α -terpineol and terpinolene
- **Tea tree** EO, when actively diffused with a nebulizer for two seconds, cleared nearly all airborne influenza viruses at 10 minutes, and showed zero virus at 15 minutes post nebulizer treatment
- **Eucalyptus** EO showed zero virus at 15 minutes following a 15 second period of active diffusion with a nebulizer