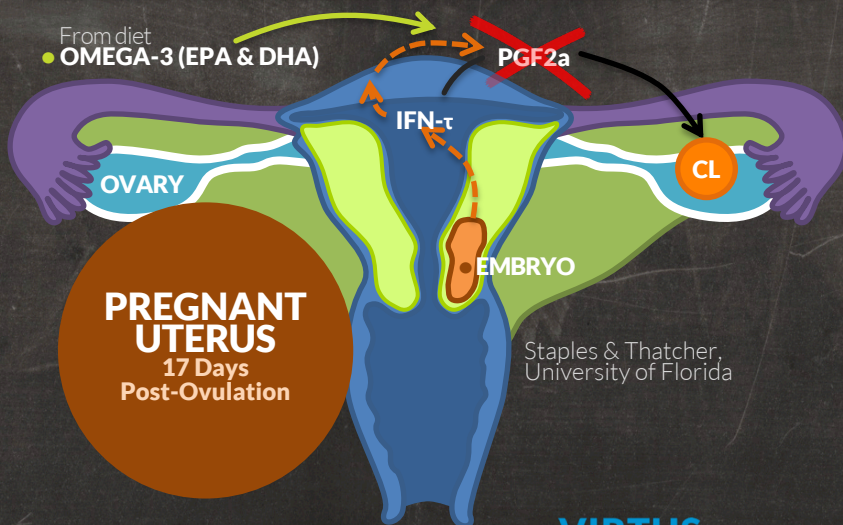


OMEGA IMPACT ON REPRODUCTION MAINTAINING PREGNANCIES

Two Primary Pathways for Early Embryo Recognition

- **Reproductive Signal:** A larger embryo produces a stronger signal to maintain pregnancy (more Interferon tau [IFN- τ] that blocks PGF2a) – thus allowing the corpus luteum (CL) to stay.
- **Immune Signal from Diet:** EPA/DHA Omega-3s balance her immune response, reducing PGF2a, thus positively impacting embryo viability and maintenance.



Impact of Omega-6 to Omega-3 Ratio on Prostaglandin Response Mattos, et. al. 2002

Prostaglandin levels were measured after an oxytocin treatment to determine responses to different levels of omega fatty acids.

Cows fed a **more balanced omega 6:3 diet** with added omega-3s had a lower spike in prostaglandin release, **improving environment for the uterus to maintain embryo**.

