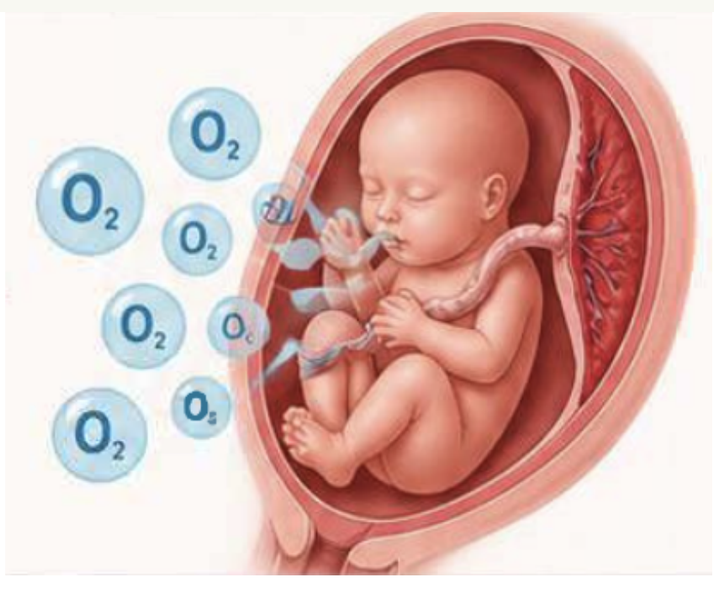
THE PLACENTAL OXYGEN MYTH

Why More Oxygen Doesn't Help in Labor *(unless Mom needs it!)*

WHAT WE THINK



- **More oxygen = more fetal oxygen**
- **Fixes Category II tracings**



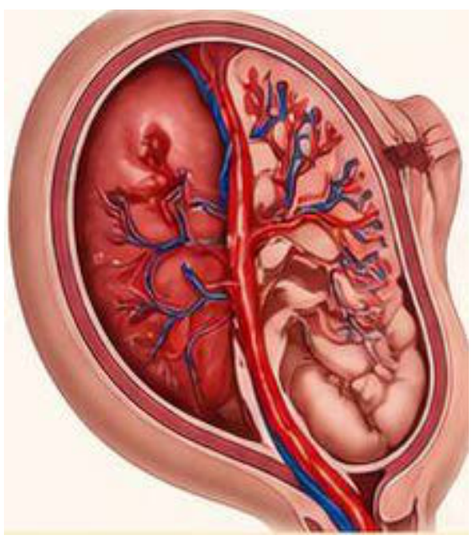
Simple idea. Wrong.

Oxygen applied to mom does not guarantee more oxygen reaches baby.

WHAT ACTUALLY HAPPENS

1.MATERNAL BLOOD FLOW

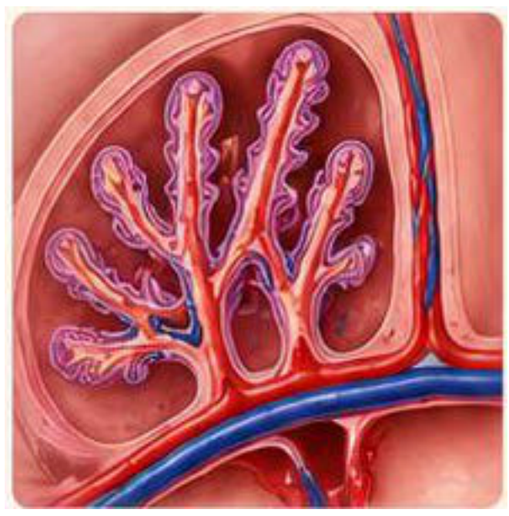
Uterine blood flow varies and is often compromised in labor.



Reduced uterine blood flow (contractions, hypotension, tachysystole, etc.)

2.PLACENTAL EXCHANGE

The placenta is flow-limited and structure-dependent.



Placental architecture limits exchange (vilious density, infarcts, malperfusion)

3. FETAL CELLULAR UTILIZATION

Fetal hemoglobin is efficient and already near maximal.



Diffusion plateau (increasing maternal oxygen does not increase delivery)

OXYGEN IS ONLY HELPFUL IF EVERY STEP IN THIS CHAIN IS WORKING.
IN LABOR, IT OFTEN ISN'T.

THE REALITY

NO IMPROVEMENT IN OUTCOMES

RCTs and meta-analyses show no improvement in acidemia, Apgar scores, or NICU admission.



NO REDUCTION IN CESAREAN

Oxygen does not reduce cesarean or operative delivery rates.



POTENTIAL HARM

Hyperoxygenation can cause oxidative stress and may impair placental perfusion and oxygen delivery.



FOCUS ON WHAT ACTUALLY WORKS

Improve uteroplacental perfusion, reduce uterine activity, and support fetal oxygen delivery.

Position Change | **Stop Pitocin** | **IV Fluids** | **Reduce Uterine Activity**

THE FETUS DOESN'T NEED MORE OXYGEN.
THE FETUS NEEDS BETTER BLOOD FLOW.