

Babies born late preterm may be at risk of cardiovascular diseases

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Babies born late preterm at 35 weeks are at a higher risk of cardiovascular disease in adult life than those born at full term, according to research published in *Experimental Physiology*.

Researchers from Hudson Institute of Medical Research and Monash University, Australia found that lambs born preterm were more likely to show altered control of the heart by the part of our nervous system under subconscious control (sympathetic and parasympathetic nervous system).

Young adult females of late preterm birth were more likely to have decreased sympathetic nervous system activation of the heart. This is an early marker of [cardiovascular disease](#), and it occurred in otherwise healthy lambs. In males, the results were different; adult premature males didn't have the innate reflexes that normally bring their blood pressure back to normal when it gets too low or too high.

Researchers looked at a pre-clinical model of late preterm birth using sheep. The sheep were given

drugs to induce early labour (or allowed to give birth naturally). Sheep were followed for up to a year and then underwent extensive testing for cardiovascular and metabolic function.

Further research into the organs of these animals is being carried out to see if changes to these could have contributed to the results observed.

Corresponding author Dr Beth Allison said:

"Importantly, these lambs were not born very premature; they were the equivalent of 35 week human babies. Infants born at this time are generally considered very low risk for morbidity and mortality after [birth](#)."

More information: Beth J. Allison et al, The effect of sex and prematurity on the cardiovascular baroreflex response in sheep, *Experimental Physiology* (2017). DOI: [10.1113/EP086494](https://doi.org/10.1113/EP086494) onlinelibrary.wiley.com/doi/10.1113/EP086494/full

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