

# EFFECTS OF PRENATAL EXPOSURE TO DIESEL PARTICLES IN MICE



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Why?

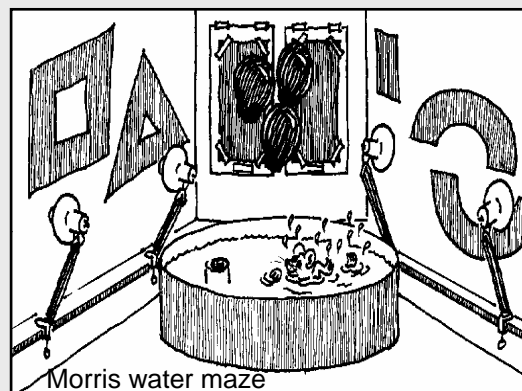
Diesel pollution is ubiquitous and shows hormonal activity *in vitro*. Does it interfere with fetal development?

How?

Pregnant mice were exposed to diesel exhaust particles on gestation day 9-20 (20 mg/m<sup>3</sup>, 1 h/day).

Endpoints

Organ weights; maternal and litter parameters; motor activity; learning and memory in the Morris water maze in adult offspring; thyroid hormone at weaning.



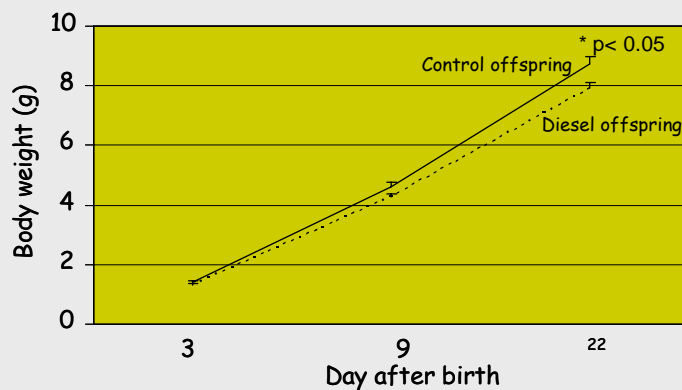
Morris water maze

Results

At birth, body weights of exposed progeny were slightly lower than controls'. However, diesel offspring gained significantly less weight during lactation, so at weaning they weighed significantly less than control progeny.

## CONCLUSION

Lactational weight gain was reduced in diesel exposed progeny. This is an unusual effect, that may well be relevant for humans.



Thyroid hormone (T4) was unchanged in exposed offspring at weaning, hence thyroid hormone depression was not involved in weight suppression. No effects on neurofunction were observed.