



Of mice and men (and sheep, swine etc.): The intriguing hemodynamic and metabolic effects of hydrogen sulfide (H₂S)

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Titre	Of mice and men (and sheep, swine etc.): The intriguing hemodynamic and metabolic effects of hydrogen sulfide (H ₂ S)
Type de publication	Article de revue
Auteur	Wagner, Katja [1], Georgieff, Michael [2], Asfar, Pierre [3], Calzia, Enrico [4], Knöferl, Markus-W. [5], Radermacher, Peter [6]
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Année	2011
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Résumé en anglais	Whether the hydrogen sulfide (H ₂ S)-induced metabolic depression observed in awake rodents exists in larger species is controversial. Therefore, Derwall and colleagues exposed anesthetized and ventilated sheep to incremental H ₂ S concentrations by means of an extracorporeal membrane oxygenator. H ₂ S caused pulmonary vasoconstriction and metabolic acidosis at the highest concentration studied. Oxygen uptake and carbon dioxide production remained in the physiological range. The authors concluded that, beyond the effect of temperature, H ₂ S hardly modifies metabolism at all. Since the highest H ₂ S concentration caused toxic side effects (possibly due to an inhibition of mitochondrial respiration), the therapeutic use of inhaled H ₂ S should be cautioned.
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Liens

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