



**Non-alcoholic fatty liver  
disease and erectile  
dysfunction  
in S-nitrosoglutathione  
(GSNOR) deficiency**  
(MP84-18)

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# Introduction and Methods

## FACTS

Non-alcoholic fatty liver disease (NAFLD) is linked to male sexual dysfunction  
 S-nitrosoglutathione reductase (GSNOR) is protective against Western diet (WD)-induced erectile dysfunction (ED)

## GOALS

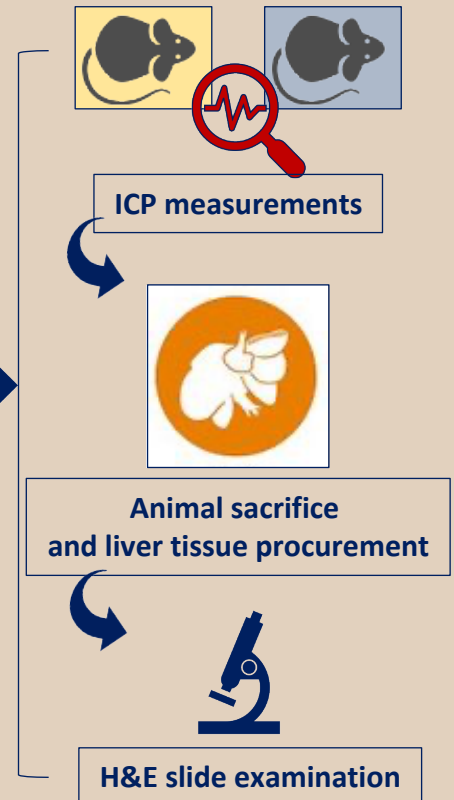
Examine potential effects of GSNOR deficiency on development and progression of ED and NAFLD

METHODS		WK1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
 WT	CD																						
	3WD																						
	6WD																						
	9WD																						
	12WD																						
 GSNOR <sup>-/-</sup>	CD																						
	3WD																						
	6WD																						
	9WD																						
	12WD																						

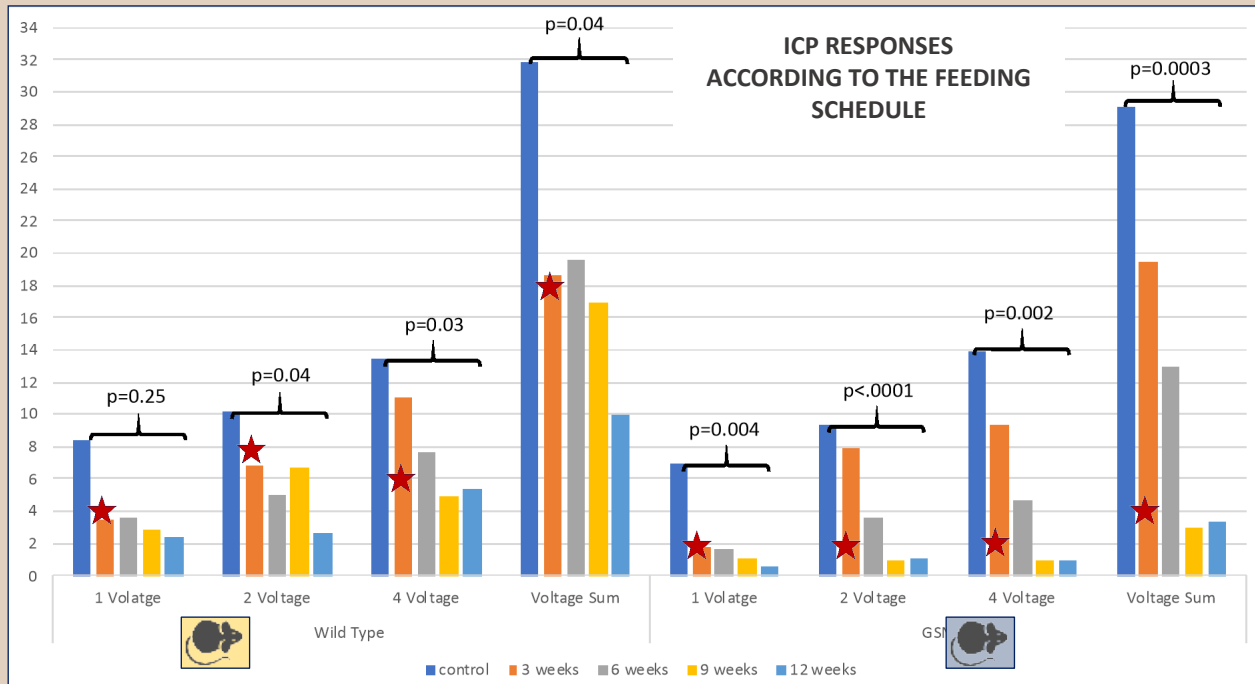
  

CD	CONTROL DIET
WD	WESTERN DIET

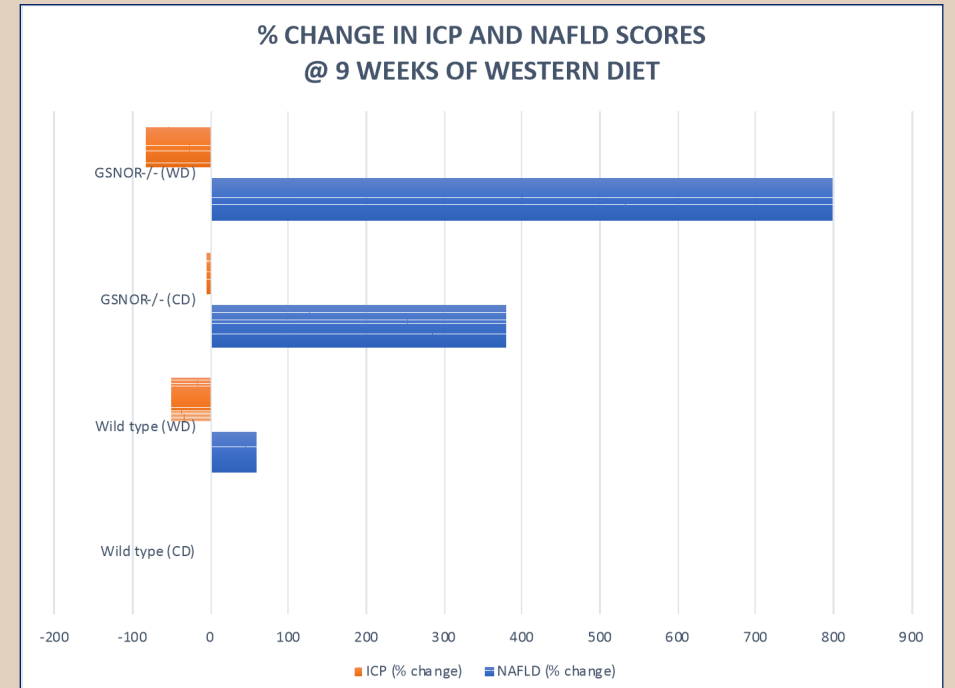
Animal feeding schedule



# Results and Conclusions



ICP responses revealed NO DIFFERENCE in erectile function between WT and GSNOR<sup>-/-</sup> mice fed the CD  
 ★ @ 9 wks of WD ALL ANIMALS DEVELOPED ED  
 Those with GSNOR deficiency had a significantly worsened ICP values (p-value = 0.05)



GSNOR<sup>-/-</sup> mice fed CD had worse liver scores at baseline, when compared to WT mice  
 Liver dysfunction score in GSNOR<sup>-/-</sup> mice doubled following 9 weeks of WD

## CONCLUSIONS

GSNOR deficiency appears to be an important factor predisposing to both liver and erectile dysfunction, regardless of dietary choices.

Additional work is needed to fully examine this likely relationship, development and progression of NAFLD and ED in animals fed Western Diet.



**Thank You**

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