A guinea pig model of pediatric NASH
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1. Can juvenile guinea pigs model pediatric NASH?

2. Does poor VitC status exacerbate NASH progression?

1a. Juvenile guinea pigs show histopathological hallmarks of pediatric NASH:
- Portal fibrosis
- Portal inflammation

1b. Some juvenile guinea pigs have severe fibrosis with only mild steatosis, which is not the case for adults, where steatosis and fibrosis grade correlates (historical data).

1c. Juvenile guinea pigs have increased lobular inflammation compared to adults.

2. Numerically, low VitC increases lobular inflammation in the control-group.

Conclusions
1. Juvenile guinea pigs develop diet-induced NASH that differs from the adult guinea pig model, while showing histopathological hallmarks of pediatric NASH.

2. Low VitC does not significantly exacerbate NASH progression, but it borderline increases plasma cholesterol and appears to increase inflammation, possibly due to increased oxidative stress. Further investigations are ongoing and include quantification of inflammation.

Low VitC may increase oxidative stress and has been associated with NASH in patients.