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### Basic Study

Effects of positive acceleration (+Gz stress) on liver enzymes, energy metabolism, and liver histology in rats

Shi B *et al.* Repeated +Gz stress transiently impairs liver function

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### Abstract

#### BACKGROUND

Exposure to high sustained +Gz (head-to-foot inertial load) is known to have harmful effects on pilot's body in flight. Although clinical data have shown that liver dysfunction occurs in pilots, the precise cause has not been well defined.

#### AIM

To investigate rat liver function changes in response to repeated +Gz exposure.

#### METHODS

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Rank	Source	Words	Similarity
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### (PDF) The Impact Of Positive Acceleration (+Gz) on Antioxidant ...

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Biodynamic **stress** resulting from **positive (+7 Gz) acceleration** resulted in a ... The LPx **levels** were significantly decreased, but the GSH contents and the ... **stress** on pro-oxidative parameters in the **rat liver** (oxidase .... **metabolic** cages to prevent coprophagia. .... photodocumented type of Canon **Power Shot S70** digital .

### Low G preconditioning reduces liver injury induced by high +Gz ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4458764/> - 翻译此页

作者: B Shi - 2015 - 被引用次数: 4 - 相关文章

2015年6月7日 - Keywords: **Positive acceleration (+Gz)**, **Liver** injury, Preconditioning, Animal centrifuge, **Rat** ... protective **effect** on **liver** injury and dysfunction induced by high **+Gz stress**. .... However, the **rats** in LG group showed lower ALT and AST **levels** than .... Low G preconditioning improved **hepatic energy metabolism**.

### Aging and liver disease - NCBI - NIH

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4736713/> - 翻译此页

作者: H Kim - 2015 - 被引用次数: 44 - 相关文章

Aging has been shown to not only enhance vulnerability to acute **liver** injury but .... **stress**, increased inflammatory response, **accelerated** cellular senescence, and .... but its **histological effect** of improving necrotic inflammation in the NASH has ... of alcohol **metabolic enzymes** and the blood ethanol concentration is elevated ...

### Proteomics-Based Identification of the Molecular Signatures of Liver ...

<https://www.hindawi.com/journals/omcl/2016/3269405/> - 翻译此页

作者: F Li - 2016 - 被引用次数: 1 - 相关文章

2016年11月28日 - Whole protein samples of the **liver** were extracted from both groups and ... associated with **energy metabolism** adaptation might be involved in physical fitness [3]. ... of **positive** changes such as increased activity of antioxidant **enzymes** in the ... We selected 8 "EXE" and 8 "CON" **rats** for proteomics analysis.

### [PDF] Effects of Melatonin on Liver Injuries and Diseases - MDPI

[www.mdpi.com/1422-0067/18/4/673/pdf](http://www.mdpi.com/1422-0067/18/4/673/pdf) - 翻译此页

作者: H Li - 2017 - 被引用次数: 22 - 相关文章

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2018年8月1日 - Biodynamic **stress** resulting from **positive** (+7 **Gz**) **acceleration** resulted in a highly ... **stress** on pro-oxidative parameters in the **rat liver** (oxidase ... tents and the activities of other **enzymes** were not signifi - .... **metabolic** cages to prevent coprophagia. .... photodocumented type of Canon **Power Shot S70** digital.

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### Effects of Melatonin on Liver Injuries and Diseases - NCBI - NIH

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5412268/> - 翻译此页

作者: JJ Zhang - 2017 - 被引用次数: 23 - 相关文章

2017年3月23日 - Keywords: melatonin, **effect**, **liver** injuries, steatosis, fatty **liver**, hepatitis ... **effects** on sexual behavior, immune function, **energy metabolism**, the ... roles of melatonin in oxidative **stress**, lipid metabolism, and its potential therapeutic action. .... **levels** in the **liver** and kidneys were higher than those of control **rats**.

### Adropin protects against liver injury in nonalcoholic steatohepatitis via ...

...

<https://www.sciencedirect.com/science/article/pii/S2213231718309236> - 翻译此页

作者: X Chen - 2018

2018年12月6日 - **Mice** lacking adropin (Adropin-KO) exhibited more severe **liver** injury and ... Adropin, a secretory signal peptide, has shown beneficial **effects** on ... In this study, the serum adropin **levels**, **liver** injury and oxidative **stress** .... And TUNEL- **positive hepatic** cells were increased in **mice** fed with MCD or WD (Fig.

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### (PDF) The Impact Of Positive Acceleration (+Gz) on Antioxidant ...

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### Biochemical effects of acute stress on energy metabolism in liver ...

<https://www.ncbi.nlm.nih.gov/pubmed/3039553> - 翻译此页

作者: D Takagi - 1987 - 被引用次数: 2 - 相关文章

Biochemical **effects** of acute **stress** on **energy metabolism** in **liver** damaged **rats**. Takagi D, Takeyama N, Tanaka T. **Rats** having a non-necrotic damaged **liver** or ...

缺少字词: **positive acceleration gz enzymes histology**

### Effects of Melatonin on Liver Injuries and Diseases - NCBI - NIH

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5412268/> - 翻译此页

作者: JJ Zhang - 2017 - 被引用次数: 23 - 相关文章

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