

Name of Journal: *World Journal of Gastroenterology*

Manuscript NO: 47970

Manuscript Type: ORIGINAL ARTICLE

Basic Study

Allyl isothiocyanate ameliorates lipid accumulation and inflammation in nonalcoholic fatty liver disease *via* the Sirt1/AMPK and NF- κ B signaling pathways

Li CX *et al.* Allyl isothiocyanate ameliorates NAFLD

Chun-Xiao Li, Jian-Guo Gao, Xing-Yong Wan, Yi Chen, Cheng-Fu Xu, Ze-Min Feng, Hang Zeng, Yi-Ming Lin, Han Ma, Ping Xu, Chao-Hui Yu, You-Ming Li

Abstract

BACKGROUND

Allyl isothiocyanate (AITC), a classic anti-inflammatory and antitumorigenic agent, was recently identified as a potential treatment for obesity and insulin

Match Overview

1	Crossref 34 words Ya-Wei Xing, Guang-Tao Lei, Qing-Hua Wu, Yu Jiang, Ma n-Xiang Huang. " Procyanidin B2 protects against diet-ind	1%
2	Internet 30 words crawled on 15-Dec-2014 www.science.gov	1%
3	Crossref 18 words González-Rodríguez, Águeda, Beatriz Santamaría, José Antonio Mas-Gutierrez, Patricia Rada, Elisa Fernández-M	<1%
4	Crossref 18 words E. Bugianesi. "Insulin Resistance in Nonalcoholic Fatty Li ver Disease", Current Pharmaceutical Design, 06/01/2010	<1%
5	Crossref 17 words "Abstracts of the 26th Annual Conference of APASL, Fe... uary 15–19, 2017, Shanghai, China", Hepatology Internati	<1%
6	Internet 16 words crawled on 12-Feb-2013 www.ncbi.nlm.nih.gov	<1%
7	Crossref 16 words Na Shen, Peng Wang, Weiming Yan. "Sleep Duration a... the Risk of Fatty Liver Disease: A Systematic Review and	<1%
8	Crossref 15 words Keisuke Akagi, Masashi Sano, Kumiko Ogawa, Masao Hi rose, Hideo Goshima, Tomoyuki Shirai. "Involvement of T	<1%
9	Internet 15 words crawled on 05-Oct-2017 real.mtak.hu	<1%
10	Crossref 14 words Wooyoung Jang, Hyun-Hee Park, Kyu-Yong Lee, Young J oo Lee, Hee-Tae Kim, Seong-Ho Koh. "1,25-dihydroxyv ...	<1%
11	Internet 14 words crawled on 15-Apr-2019 dea.lib.unideb.hu	<1%
	Internet 12 words	

[全部](#)[图片](#)[新闻](#)[购物](#)[地图](#)[更多](#)[设置](#)[工具](#)

找到约 2,790 条结果 (用时 0.55 秒)

小提示: 仅限搜索简体中文结果。您可以在[设置](#)中指定搜索语言

Gastrodin Ameliorates Oxidative Stress and Proinflammatory ... - NCBI

<https://www.ncbi.nlm.nih.gov/pubmed/26634892> ▾ [翻译此页](#)作者: LL Qu - 2016 - 被引用次数: 26 - [相关文章](#)

2015年12月4日 - Gastrodin **Ameliorates** Oxidative Stress and Proinflammatory Response in **Nonalcoholic Fatty Liver Disease** through the **AMPK/Nrf2 Pathway**. ... a high-fat or high-fat and high-cholesterol diet was used to induce NAFLD in mice and rats. ... Animals; Anti-**Inflammatory** Agents/pharmacology; Anti-**Inflammatory** ...

Inhibition of TREM-1 attenuates inflammation and lipid accumulation ...

<https://www.ncbi.nlm.nih.gov/pubmed/30805986> - [翻译此页](#)

作者: S Rao - 2019

2019年2月25日 - On the other hand, **nonalcoholic fatty liver disease** (NAFLD), characterized by excess **lipid accumulation**, and **inflammatory** injury in liver, is becoming an epidemic ... and **lipid accumulation**-related genes, which was **ameliorated** by ... of NAFLD mice **through** inactivation of the nuclear factor- κ B (**NF- κ B**) and ...

Antioxidant dietary approach in treatment of fatty liver: New insights ...

<https://www.wjgnet.com/1007-9327/full/v23/i23/4146.htm> ▾ [翻译此页](#)作者: A Ferramosca - 2017 - 被引用次数: 26 - [相关文章](#)

2017年6月21日 - **Non-alcoholic fatty liver disease** (NAFLD) is a common ... sinigrin and **allyl-isothiocyanate**), on the reversion of fatty liver. ... Liver **lipid accumulation** is, therefore, the result of prolonged positive energy reduced energy uptake could activate the **AMPK signalling pathway**, Sass DA, Chang P, Chopra KB.

第七届全国脂肪性肝病学术会议暨2017 CSH-AASLD 脂肪性肝病联合 ...

www.medmeeting.org/Home/Program/4976?uid=788953 ▾

Allyl isothiocyanate ameliorates lipid accumulation and inflammation in non- alcoholic fatty liver disease via activating Sirt1/AMPK and inhibiting NF κ B signaling ...

Hyunjung Lee's research works | Korea Food Research Institute ...

https://www.researchgate.net/scientific.../14054909_Hyunjung_Lee - [翻译此页](#)

Zerumbone additionally induced **AMPK** activation and phosphorylation of ... mechanisms involved **AMPK** and the microRNA-146b/**SIRT1 pathway**. ... **Allyl isothiocyanate ameliorates** insulin resistance **through** the regulation of **Non- alcoholic fatty liver disease** (NAFLD) is characterized by hepatic **fat accumulation** and is ...

Garlic Essential Oil Protects against Obesity-Triggered Nonalcoholic ...

https://www.researchgate.net/.../262609563_Garlic_Essential_Oil_Protects_a... - [翻译此页](#)

2019年1月4日 - Garlic can reduce body weight and **fat** mass among subjects [120]; meanwhile 20 mg/kg diallyl disulfide was effective in preventing **nonalcoholic fatty liver disease** **RAGE-MAPK Signaling** and **NF- κ B** Activation in High-Fat-Diet Rats and Obesity **through Sirt1-AMPK** and **PPAR γ Pathway** in High Fat ...

Chinese Medicine in the Battle Against Obesity and Metabolic Diseases



Allyl isothiocyanate ameliorates lipid accumulation and inflammation in nonalcoholic



All

Images

Videos

翻译成中文

关闭取词

1,070 Results

Any time ▼

Allyl Isothiocyanate Ameliorates Obesity by Inhibiting ...

https://www.researchgate.net/publication/322590859_Allyl_Isothiocyanate_Ameliorates...

Allyl isothiocyanate (AITC) reduced the expression of galectin-12 and could reduce the body weight of **high-fat- diet-fed** mice, further **reducing** the **accumulation of lipid droplets** in the **liver**, and ...

Celastrol attenuates mitochondrial dysfunction and ...

<https://www.sciencedirect.com/science/article/pii/S0014299917300535>

Mar 15, 2017 - Furthermore, high **fat diet-induced** oxidative stress has been known to **cause inflammation and insulin resistance** in **liver** by promoting the expression **activity of NF-κB** and JNK with increased level of **pro-inflammatory** cytokines in diabetic mice (Yan et al., 2014).

Cited by: 10

Author: Mohamad Hafizi Abu Bakar, Mohamad R...

Publish Year: 2017

Mechanisms Linking Inflammation to Insulin Resistance

<https://www.hindawi.com/journals/ije/2015/508409> ▼

The state of **low-grade inflammation** is caused by overnutrition which leads to **lipid accumulation** in **adipocytes**. Obesity might increase the expression of some **inflammatory cytokines** and activate several signaling pathways, both of which are involved in the pathogenesis of **insulin** resistance by interfering with insulin signaling and action.

Cited by: 156

Author: Li Chen, Rui Chen, Hua Wang, Fengxia L...

Publish Year: 2015

Anti-inflammatory potential of allyl-isothiocyanate - role ...

https://www.researchgate.net/publication/51238174_Anti-inflammatory_potential_of_allyl...

In addition, it has been shown that **allyl isothiocyanate** has an **anti-inflammatory po- tential** in cultured macrophages, which may be mediated by Nrf2 and nuclear factor κB signaling pathways, but ...

Dietary cholesterol, rather than liver steatosis, leads to ...

<https://aasldnpubs.onlinelibrary.wiley.com/doi/abs/10.1002/hep.22363>



Allyl isothiocyanate ameliorates lipid accumulation and inflammation in nonalcoholic



All

Images

Videos

翻译成中文

关闭取词

1,070 Results

Any time ▾

Allyl Isothiocyanate Ameliorates Obesity by Inhibiting ...

https://www.researchgate.net/publication/322590859_Allyl_Isothiocyanate_Ameliorates...

Allyl isothiocyanate (AITC) reduced the expression of galectin-12 and could reduce the body weight of **high-fat- diet-fed** mice, further **reducing** the **accumulation of lipid droplets** in the **liver**, and ...

Celastrol attenuates mitochondrial dysfunction and ...

<https://www.sciencedirect.com/science/article/pii/S0014299917300535>

Mar 15, 2017 - Furthermore, high **fat diet-induced** oxidative stress has been known to **cause inflammation and insulin resistance** in **liver** by promoting the expression **activity of NF-κB** and JNK with increased level of **pro-inflammatory** cytokines in diabetic mice (Yan et al., 2014).

Cited by: 10

Author: Mohamad Hafizi Abu Bakar, Mohamad R...

Publish Year: 2017

Mechanisms Linking Inflammation to Insulin Resistance

<https://www.hindawi.com/journals/ije/2015/508409> ▾

The state of **low-grade inflammation** is caused by overnutrition which leads to **lipid accumulation** in **adipocytes**. Obesity might increase the expression of some **inflammatory cytokines** and activate several signaling pathways, both of which are involved in the pathogenesis of **insulin** resistance by interfering with insulin signaling and action.

Cited by: 156

Author: Li Chen, Rui Chen, Hua Wang, Fengxia L...

Publish Year: 2015

Anti-inflammatory potential of allyl-isothiocyanate - role ...

https://www.researchgate.net/publication/51238174_Anti-inflammatory_potential_of_allyl...

In addition, it has been shown that **allyl isothiocyanate** has an **anti-inflammatory po- tential** in cultured macrophages, which may be mediated by Nrf2 and nuclear factor κB signaling pathways, but ...

Dietary cholesterol, rather than liver steatosis, leads to ...

<https://aasldnpubs.onlinelibrary.wiley.com/doi/abs/10.1002/hep.22363>