# Article information:

US Backscatter for Liver Fat Quantification: An AIUM-RSNA QIBA Pulse-Echo Quantitative Ultrasound Initiative | Radiology
[https://pubs.rsna.org/doi/10.1148/radiol.220606?url\_ver=Z39.88-2003=ori%3Arid%3Acrossref.org=cr\_pub++0pubmed](https://pubs.rsna.org/doi/10.1148/radiol.220606?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub++0pubmed)

# Article summary:

1. US backscatter shows promise in noninvasive assessment of liver fat content.

2. Quantitative backscatter parameters are being investigated to improve US-based characterization of NAFLD.

3. The American Institute of Ultrasound in Medicine and Radiological Society of North America Quantitative Imaging Biomarkers Alliance are working to standardize US acquisition protocols and data analysis methods to improve the diagnostic performance of the backscatter coefficient in liver fat assessment.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

该文章是一篇关于使用US backscatter进行肝脏脂肪定量的综述文章。文章指出，非酒精性脂肪性肝病（NAFLD）是影响美国成年人三分之一的疾病，而定量US backscatter有望在非侵入性评估NAFLD方面发挥作用。然而，在广泛应用于临床护理和研究之前，需要进一步标准化和验证其协议。

该文章没有明显的偏见或宣传内容，但存在一些缺失和未探索的反驳点。首先，虽然文章提到了NAFLD对B-mode US回声强度的定性影响，但并没有详细讨论这种方法的局限性和不足之处。其次，虽然文章提到了标准化数据收集以减少技术和生物变量引起的混淆效应，但并没有探讨如何解决患者个体差异带来的影响。

此外，该文章也没有提供足够的证据支持使用US backscatter进行肝脏脂肪定量。虽然该方法有潜力成为一种非侵入性评估NAFLD的工具，但目前仍需要更多大规模、多中心、随机对照试验来验证其准确性和可靠性。

总之，该文章提供了有关使用US backscatter进行肝脏脂肪定量的综述，但需要更多的探讨和证据来支持其在临床实践中的应用。同时，需要注意到可能存在的风险和局限性，并平等地呈现双方观点。

# Topics for further research:

* Limitations and drawbacks of using B-mode US for NAFLD diagnosis
* Individual differences and their impact on US backscatter results
* Lack of sufficient evidence to support the use of US backscatter for liver fat quantification
* Need for further large-scale
* multi-center
* randomized controlled trials
* Potential risks and limitations of US backscatter for NAFLD assessment
* Importance of presenting both sides of the argument in an unbiased manner.

# Report location:

<https://www.fullpicture.app/item/57bea9c5415150ac20c9ff5fcf3fc9f9>