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Review

Fructose and Sugar: A Major Mediator of Nonalcoholic Fatty Liver Disease

Thomas Jensen, Manal F. Abdelmalek, Shelby Sullivan, Kristen J. Nadeau, Melanie Green, Carlos Roncal, Takahiko Nakagawa, Masanari Kuwabara, Yuka Sato, Duk-Hee Kang, Dean R. Tolan, Laura G Sanchez-Lozada, Hugo R. Rosen, Miguel A. Lanaspa, Anna Mae Diehl, Richard J. Johnson

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# **ACCEPTED MANUSCRIPT**

### Fructose and Sugar: A Major Mediator of Nonalcoholic Fatty Liver Disease

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## **Short Title: Fructose and Nonalcoholic Fatty Liver Disease**

**Abbreviations:** Nonalcoholic Fatty Liver Disease (NAFLD), Nonalcoholic steatohepatitis (NASH), high fructose corn syrup (HFCS), National Health and Nutrition Examination Survey (NHANES), United States Fatty Liver Index(US FLI), fatty acid synthase (FAS), AMP-activated protein kinase, AMP Deaminase 2 (AMPD), NOD-like receptor family pyrin domain containing 3 (NLRP3), aldose reductase (AR), sorbitol dehydrogenase (SDH), patatin-like phospholipase domain-containing protein 3 (PNPLA3), transmembrane 6 superfamily member 2 (TM6SF2), Glucokinase Regulatory Gene (GCKR).

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Authors' Disclosures: RJJ and ML discloses they are inventors on patents related to blocking fructose metabolism as a means to reduce sugar craving and metabolic syndrome. RJJ, LGL, DRT, and ML also have equity in Colorado Research Partners LLC, which is a startup company interested in developing novel fructokinase inhibitors.

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