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The role of betaine in liver disease-worth revisiting or has the die been cast?

Sandeep Mukherjee

Abstract

Nonalcoholic steatohepatitis (NASH) is an important indication for liver transplantation in many Western countries due to the epidemic of obesity and insulin resistance. Unfortunately, no medication is approved for NASH and risk factor modification is often advised. Over the last decade, several clinical trials on NASH have been conducted with several ongoing and the future looks promising. Although betaine (trimethyl glycine) was evaluated for NASH, results were mixed in the clinical trials in large part due to the quality of the studies. It seems reasonable to re-evaluate betaine in clinical trials for NASH and alcoholic liver disease due to its low cost, tolerability and mechanism of action.

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Eggs and chicken **liver** are excellent sources of choline. Beets are a source of **Betaine** which reduces the requirements for choline and they may be helpful if they fit your macros. Of course, the most important part of getting rid of fatty **liver** is eliminating fructose and using ketosis to de-fat the **liver**.

Alcoholic liver disease: Clinical and translational research

<https://www.sciencedirect.com/science/article/pii/S0014480015001859>

The resulting impairments in several transmethylation reactions **have been** shown to play a causal **role** in the development of alcoholic **liver** injury (Kharbanda et al., 2005, Kharbanda et al., 2007a, Kharbanda et al., 2007b, Kharbanda, 2009, Kharbanda, 2013, Kharbanda et al., 2014).

Cited by: 16

Author: Manuela G. Neuman, Stephen Malnick, ...

Publish Year: 2015

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Non-Alcoholic Fatty Liver Disease and Nutrition

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Non-alcoholic fatty liver disease (NAFLD) has emerged as one of the leading liver diseases worldwide. NAFLD is characterized by hepatic steatosis and may progress to an inflammatory condition termed non-alcoholic steatohepatitis (NASH), liver cirrhosis, and hepatocellular carcinoma. It became evident in the last years that NAFLD pathophysiology is complex and involves diverse immunological and ...

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The liver is a very important organ with a lot of functions for the host to survive. Dietary components are essential for and can be beneficial or detrimental to the healthy or diseased liver. Plants food is an essential part of the human diet and comprises various compounds which are closely related to liver health. Selected food plants can provide nutritional and medicinal support for liver ...



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This report is a summary of a symposium on the **role** of S-adenosylmethionine (SAM), **betaine**, and folate in the treatment of alcoholic **liver** disease (ALD), which was organized by the National ...

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