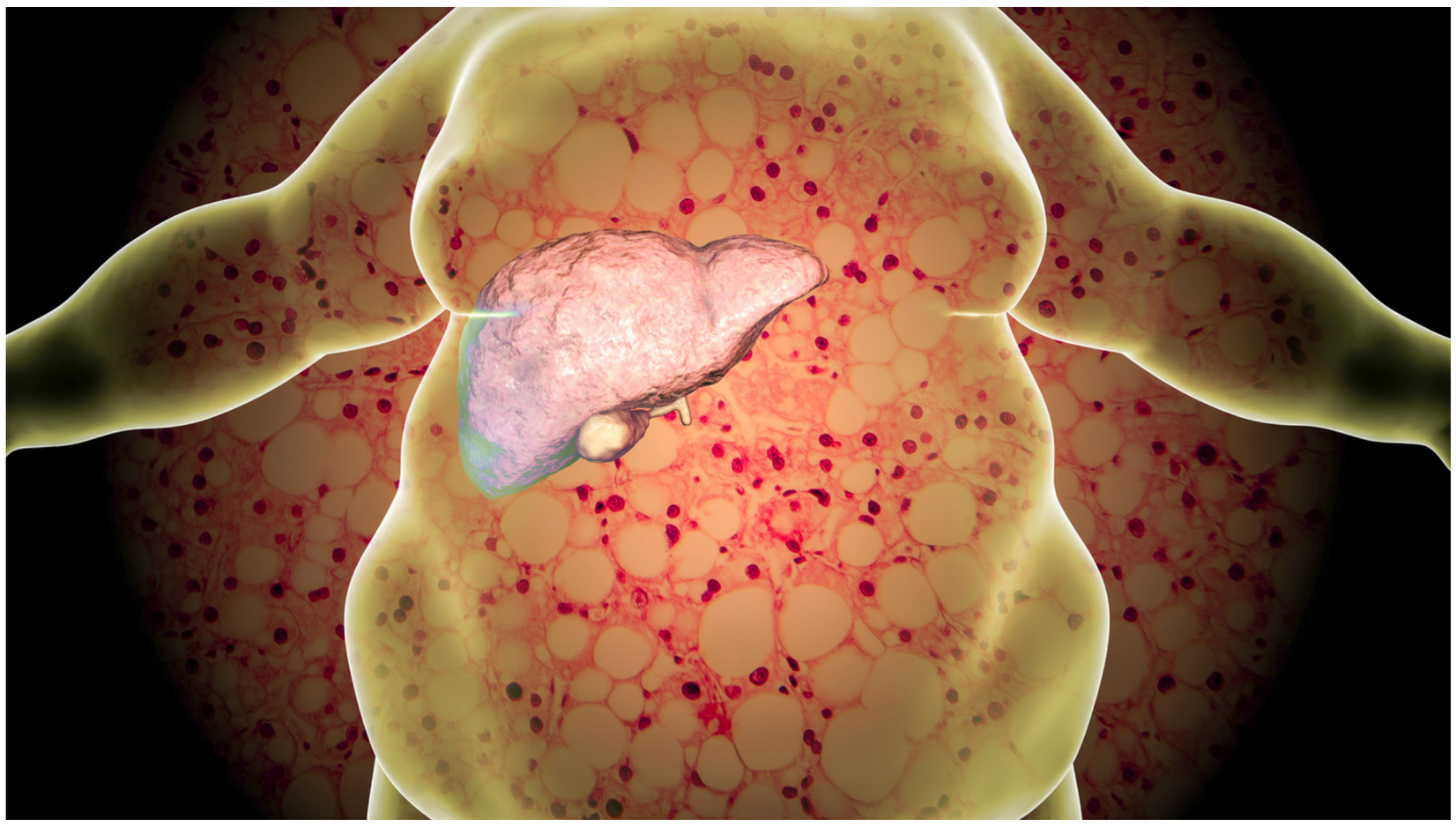
Non Alcoholic Fatty Liver



EFFECTS OF PERIODIC FASTING ON FATTY LIVER INDEX-A PROSPECTIVE OBSERVATIONAL STUDY

Drinda, S, Grundler, F, Neumann, T, Lehmann, T, Steckhan, N, Michalsen, A, Wilhelmi de Toledo, F

Nutrients. 2019;11(11)

Non-alcoholic fatty liver disease (NAFLD) is thought to have a prevalence of 20% in industrialised countries. NAFLD has been associated with dietary excess of saturated fatty acids, refined carbohydrates and fructose. This prospective observational study evaluated the effects of periodic fasting on the fatty liver index (FLI), a combination of waist circumference, body mass index (BMI) and biochemical characteristics, which has been shown to closely correlate to magnetic resonance imaging (MRI) results, the gold standard for NAFLD diagnosis. 697 subjects fasted for 6-38 days (mean 8.5 days) in a clinical setting, whilst also engaging in an exercise programme, mindfulness and relaxation. Study subjects included both non-diabetics and type 2 diabetics. There were significant decreases in FLI, weight, BMI and waist circumference, as well as improvements in a number of metabolic blood parameters, in both diabetics and non-diabetics. There were no serious side effects and the intervention was well tolerated. The authors conclude that periodic fasting is an easily realisable, well-tolerated, non-pharmaceutical intervention, which effectively reduces the FLI.

ROLE OF PROBIOTICS IN NON-ALCOHOLIC FATTY LIVER DISEASE: DOES GUT MICROBIOTA MATTER?

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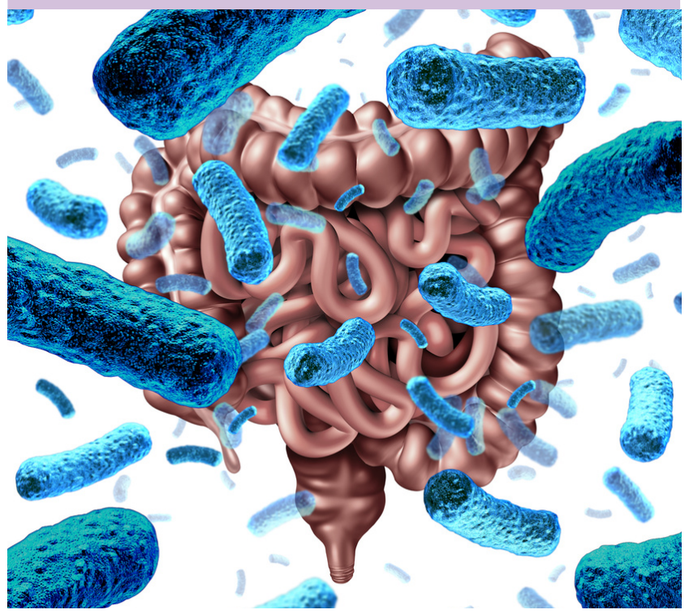
Nutrients. 2019;11(11)

Non-alcoholic fatty liver disease (NAFLD) is characterised by an excessive accumulation of fat in the liver tissue, without excessive alcohol consumption, and appears to be related to metabolic syndrome.

It is thought to have a prevalence of 25% globally and there are no pharmacological treatments available. This review discusses the connection between the gut microbiota and NAFLD, reviewing 26 randomised controlled trials (RCTs) of probiotics and/or prebiotics in the treatment of NAFLD, as well as five meta-analyses.

The authors found that, overall, there is strong evidence that probiotics and/or prebiotics can lower ALT and AST (markers of NAFLD), although results for other biochemical markers were mixed.



ASSOCIATION BETWEEN SLEEP DISTURBANCES AND LIVER STATUS IN OBESE SUBJECTS WITH NON ALCOHOLIC FATTY LIVER DISEASE: A COMPARISON WITH HEALTHY CONTROLS.

Marin-Alejandre, BA, Abete, I, Cantero, I, Riezu-Boj, JI, Milagro, FI, Monreal, JI, Elorz, M, Herrero, JI, Benito-Boillos, A, Quiroga, J, et al

Inadequate sleep has been associated with poor health outcomes such as obesity and type 2 diabetes. The relevance of sleep patterns in the onset or progression of non-alcoholic fatty liver disease (NAFLD) is poorly understood.

The aim of this cross-sectional study was to investigate the association between sleep characteristics and liver health in obese people with NAFLD compared to normal weight people without NAFLD. 94 overweight or obese patients with NAFLD and 40 normal weight people without NAFLD were enrolled in the study.

Measures of liver health such as liver stiffness and levels of liver enzymes were assessed, along with sleep features evaluated using a Sleep Quality Index (SQI). A higher prevalence of short sleep duration and poor sleep quality were found in people with NAFLD. The authors of the study suggest that sleep disruption may be contributing to the development of NAFLD, and/or the alteration of the liver may be affecting sleep patterns. Consequently, sleep may be a modifiable behaviour to consider in the prevention and management of NAFLD.