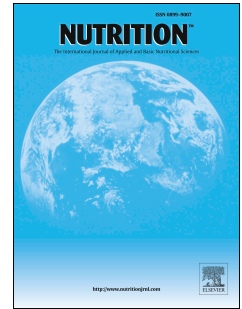


# Accepted Manuscript

Fat Burner Induced Acute Liver Injury: Case Series of 4 Patients

Aleksandar Gavric, MD, Marija Ribnikar, MD, Lojze Šmid, MD, PhD, Boštjan Luzar, MD, PhD, Borut Stabuc, MD, PhD



PII: S0899-9007(17)30218-6

DOI: [10.1016/j.nut.2017.10.002](https://doi.org/10.1016/j.nut.2017.10.002)

Reference: NUT 10051

To appear in: *Nutrition*

Received Date: 9 November 2016

Revised Date: 22 August 2017

Accepted Date: 8 October 2017

Please cite this article as: Gavric A, Ribnikar M, Šmid L, Luzar B, Stabuc B, Fat Burner Induced Acute Liver Injury: Case Series of 4 Patients, *Nutrition* (2017), doi: 10.1016/j.nut.2017.10.002.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**1 FAT BURNER INDUCED ACUTE LIVER INJURY: CASE SERIES OF 4 PATIENTS****2 Aleksandar Gavric, MD; Marija Ribnikar, MD; Lojze Šmid, MD, PhD; Boštjan  
3 Luzar, MD, PhD; Borut Stabuc, MD, PhD****4 Abstract**

5 Fat burners are dietary supplements claimed to increase energy expenditure through  
6 alterations of the fat metabolism. They are marketed as natural products and their  
7 use is thus perceived as a safe body weight reduction strategy. We report on five  
8 episodes of liver injury in four patients, associated with consumption of different  
9 commercially available fat burners: green tea extract (*Camellia sinensis*), Garcinia  
10 gummi-gutta, green coffee beans and spirulina (blue-green algae). The patients were  
11 admitted to our department from May 2010 to July 2015. The first patient developed  
12 acute liver failure and had to be treated by liver transplantation, while another patient  
13 required multiple surgical procedures due to severe hemorrhage following liver  
14 biopsy. The last patient was treated for two separate episodes of fat-burner-induced  
15 liver injury after ingesting two different products, in 2010 and in 2015 Liver biopsy  
16 was performed in all patients and histopathological examination revealed no other  
17 cause of liver injury. Viral, autoimmune and metabolic liver diseases were excluded,  
18 making unsupervised consumption of fat burners the most likely causative agent.

19 **Key Words:** hepatotoxicity, dietary supplements, acute liver injury, liver  
20 transplantation

21

**22 INTRODUCTION**

23 Awareness of the health risks and social implications posed by overweight and  
24 obesity has generated a demand for solutions that do not require regular exercise  
25 and a healthy diet to achieve adequate control of body weight (1). Fat burners are  
26 popular dietary supplements claimed to alter fat metabolism and cause increased  
27 energy expenditure (2). These products are not regulated and their popularity is  
28 based on marketing rather than their questionable efficacy and safety. Inherently  
29 unrestricted internet-based advertising and sales have helped increase both demand  
30 for them and their availability (3).

---

Download English Version:

<https://daneshyari.com/en/article/8723881>

Download Persian Version:

<https://daneshyari.com/article/8723881>

[Daneshyari.com](https://daneshyari.com)