Rev Recent Clin Trials. 2016;11(3):191-5. doi: 10.2174/1574887111666160815103251.

The Effect of Alcohol on Gastrointestinal Motility

Simona Grad, Ludovico Abenavoli, Dan L Dumitrascu [1]

Affiliations expand

PMID: 27527893 DOI: 10.2174/1574887111666160815103251

Abstract

The Gastrointestinal (GI) tract is one of the most affected systems by alcohol consumption. Alcohol can affect the esophagus in several ways: induces mucosal inflammation, increases the risk for Barrett esophagus and esophageal cancer, and also impairs the esophageal motility. Numerous studies have reported an increased prevalence of Gastroesophageal Reflux Disease (GERD) or erosive esophagitis in alcoholics. Some alcoholics exhibit an abnormality of esophageal motility known as a "nutcracker esophagus". Alcohol effect on gastric motility depends on the alcohol concentration. In general, beverages with high alcohol concentrations (i.e., above 15 percent) appear to inhibit gastric motility and low alcohol doses (wine and beer) accelerate gastric emptying. Also, acute administration of ethanol inhibits the gastric emptying, while chronic administration of a large dose of alcohol accelerates gastric motility. The effect of alcohol on small bowel motility differs according to the type of consumption (acute or chronic). Acute administration of alcohol has been found to inhibit small bowel transit and chronic administration of a large dose of alcohol accelerates small bowel transit. This article reviews some of the below findings.

Similar articles

The effects of alcohol consumption upon the gastrointestinal tract.

Bujanda L.

Am J Gastroenterol. 2000 Dec;95(12):3374-82. doi: 10.1111/j.1572-0241.2000.03347.x.

PMID: 11151864 Review.

Sluggish gallbladder emptying and gastrointestinal transit after intake of common alcoholic beverages.

Kasicka-Jonderko A, Jonderko K, Gajek E, Piekielniak A, Zawislan R.

J Physiol Pharmacol. 2014 Feb;65(1):55-66.

PMID: 24622830 Clinical Trial.

Potent inhibitory effect of alcoholic beverages upon gastrointestinal passage of food and gallbladder emptying.

Kasicka-Jonderko A, Jonderko K, Bożek M, Kamińska M, Mgłosiek P.

J Gastroenterol. 2013 Dec;48(12):1311-23. doi: 10.1007/s00535-013-0752-y. Epub 2013 Feb 19.

PMID: 23420574 **Free PMC article.** Clinical Trial.

Effect of ethanol and some alcoholic beverages on gastric emptying in humans.

Franke A, Teyssen S, Harder H, Singer MV.

Scand J Gastroenterol. 2004 Jul;39(7):638-44. doi: 10.1080/00365520410005009.

PMID: 15370684 Clinical Trial.

[Ethanol and the gastrointestinal tract].

Mincis M, Chebli JM, Khouri ST, Mincis R.

Arq Gastroenterol. 1995 Jul-Sep;32(3):131-9.

PMID: 8728788 Review. Portuguese.

See all similar articles

Cited by

Enterolithiasis in a Patient With Prior Bowel Resection.

Willis MP, Dorn MC.

Cureus. 2024 Aug 27;16(8):e67894. doi: 10.7759/cureus.67894.

eCollection 2024 Aug.

PMID: 39328628 **Free PMC article.**

Comparison of Gastric Emptying Time after the Ingestion of Whisky with Isocalorically Adjusted Glucose Solution.

Okabe T, Terashima H, Sakamoto A.

J Nutr Metab. 2022 Jun 13;2022:6137230. doi: 10.1155/2022/6137230.

eCollection 2022.

PMID: 35734752 **Free PMC article.**

Intraoperative Endoscopy in Transient Adult Jejunojejunal Intussusception.

Okamoto T, Suzuki H, Fukuda K.

Case Rep Gastrointest Med. 2021 Jul 12;2021:3718089. doi: 10.1155/2021/3718089. eCollection 2021.

PMID: 34336311 **Free PMC article.**

Alcohol accumulation promotes esophagitis via pyroptosis activation.

Wang F, Li G, Ning J, Chen L, Xu H, Kong X, Bu J, Zhao W, Li Z, Wang X, Li X, Ma J.

Int J Biol Sci. 2018 Jul 13;14(10):1245-1255. doi: 10.7150/ijbs.24347. eCollection 2018.

PMID: 30123073 **Free PMC article.**

Associations between obstructive sleep apnea severity and endoscopically proven gastroesophageal reflux disease.

Kim Y, Lee YJ, Park JS, Cho YJ, Yoon HI, Lee JH, Lee CT, Kim SJ.

Sleep Breath. 2018 Mar;22(1):85-90. doi: 10.1007/s11325-017-1533-2. Epub 2017 Jul 7.

PMID: 28687968