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# FLATUS: Beware!

**F**latus is the gas generated in, or expelled from, the digestive tract, especially the stomach and intestines. More than 99% of human flatus comprises nitrogen, oxygen, hydrogen (hydrogen-consuming bacteria in the digestive tract may consume some of this to produce methane and other gases), carbon dioxide, and methane.

During World War II, US fighter pilots flew at increasing altitudes. The associated reduction in the (external) atmospheric pressure allowed the digestive gases trapped in

their intestines to expand (Boyle's law), causing very painful cramps. Foods known for their ability to produce flatus – dried beans and peas, vegetables of the cabbage family, carbonated drinks, and beer – were therefore removed from pilots' menus.



Methane is a combustible gas (e.g. a good fuel for Bunsen

burners), although it is produced by only about one-third of people in the Western world. In the early days of the space race, there was some concern that the methane emitted by astronauts, if accidentally ignited, could cause an explosion within the spacecraft. No such incidents have occurred to date. However, exploding flatus has caused the accidental death of at least one surgical patient. An electrode touched to the patient's colon ignited the hydrogen and methane it contained, also causing the surgeon to be blown back to the wall of the room.

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