Title:	Does chronic inflammation cause acute inflammation to spiral into hyper-inflammation in a manner modulated by diet and the gut microbiome, in severe Covid-19?
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Abstract:	We propose that hyper-inflammation (HYPi) is a ‘‘runaway’’ consequence of acute inflammation (ACUi) that arises more easily (and also abates less easily) in those who host a pre-existing chronic inflammation (CHRi), because (i) most factors involved in generating an ACUi to limit viral proliferation are already present when there is an underlying CHRi, and also because (ii) anti-inflammatory (AI) mechanisms for the abatement of ACUi (following containment of viral proliferation) are suppressed and desensitized where there is an underlying CHRi, with this causing the ACUi to spiral into a HYPi. Stress, pollution, diet, and gut microbiomes (alterable in weeks through dietary changes) have an intimate and bidirectional cause-effect relationship with CHRi. We propose that avoidance of CHRi-promoting foods and adoption of CHRi-suppressing foods could reduce susceptibility to HYPi, in Covid-19 and in other viral diseases, such as influenza, which are characterized by episodic and unpredictable HYPi. Exposure to viruses is a fait accompli for much of the planet's population. With SARS-CoV-2, successive waves of infection by new mutants and variants suggest that everyone is at risk of being exposed to a greater or lesser degree, either sooner or later. It is important to identify those with the highest probability of developing severe disease, in order to focus efforts at mitigation or prevention. This article discusses factors that might predispose individuals to developing severe Covid-19. It argues that more attention must be paid to the possibility of diet-derived chronic inflammation (CHRi) being the most important, and fundamental, of all predisposing factors.
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