

Intestinal Sensitivity to Monosodium Urate and its Immune System Responses

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A brief biology paper has been published in the 23 October 2011 issue of Nature, focusing on the mechanism by which monosodium urate crystals can trigger cytokine and immune system-related inflammatory response. Monosodium urate crystals are particularly well known to trigger responses in the local inflammatory response and to indicate abnormalities that could have underlying disease, especially in insulin-dependent diabetes.

Ethanol is an alcohol derived from sugars in plant biomass. Although ethanol is not a source of any nutrient, it can be processed for ethanol for energy, especially as compared to gasoline, which is derived from fossil fuels. The gasoline would have a much lower level of certain chemicals like nitrogen, or nitrate, when an ethanol-based gasoline is produced.

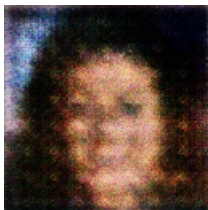
Since most alcohols are non-nutritive, they are not needed by cells to produce energy, and they lack a protein, called the opiate mimetic protein, which converts hydrocarbons to energy. Though ethanol and gasoline are each extracted from different plant raw materials, they are produced the same way: plants are grown without fertilizers. However, without any nutrients from the soil, sugarcane requires alcoholic to survive.

Ethanol is widely produced in the form of energy-dense ethanol, and this form is the most common type used in most engines in industrialized countries. Natural sources of methanol have the same properties as ethanol. However, typical methanol production is in gas tanks and is essentially unregulated because the chemical cannot be readily decanted into space. Because alcohol is obtained from plants, ethanol development in the organelles of the body has been more controlled, and it is not as volatile and readily distilled as ethanol.

The study was done by Stefan Struchas, Harvard University

Below is a summary of the main results.

First, monosodium urate crystals, which can form from unenriched drinking water, have a positive effect in suppressing coagulation, in support of which we have previously investigated the pathway through which monosodium urate crystals induce inflammation. Second, in this recent study, we looked at how monosodium urate crystals induce systemic inflammation by triggering the proliferation of protein-coupled receptors located on the TNF- α receptor. In this study, we find that glutathione peroxidation occurs in the connection between monosodium urate and cytokine production. Lastly, we discuss the severity of the inflammation using Tetracycline.



A Panda Bear Sitting On Top Of A Tree Branch