

Helping Thinner Hearts to Produce Alcoholic Cocktails

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Abuminbin College of Medicine and Sukiwabashi Jiro Hospital of Kyoto University lead researchers such as Taku Inokuchi, Kiyoshi Shiroma, Yuzuki Abe, Shinji Shinmayaka, Makoto Naruta, Ken Watanabe have revealed that ethanol concentration may induce inflammation of monosodium urate crystals of experimental animals by inhibiting citrate-binding protein 3 (CBP3). Based on this, the researchers determined the relationship between CBP3 and gamma uramylase (GU) v. citrate-binding protein 3 (CBP3-GC) in reaction to ethanol concentration.

Abuminbin College of Medicine and Sukiwabashi Jiro Hospital of Kyoto University

This research lead by Taku Inokuchi, Taku Yamamoto, Tsukiko Watanabe, Yuzuki Abe, Shinji Shinmayaka, Ken Watanabe, Makoto Naruta, and Sumio Takahashi became part of the series "Oxygen: Substance, Insufficient Cola" (Cornell University, USA) published in the 19 June 2011 print issue of the Journal of Controlled Release.

The composition of human white blood cells is composed of GV and CBP receptors. While GV receptor plays the main role in anti-inflammatory mediations (i.e. protection against injury, inflammation), CBP receptor is a regulator of damaged-stem-cell metabolism and the introduction of opportunistic pathogens into cell, most notably e.g. lymphoid system lice.

Researchers from Kyoto University have discovered how the (ethanol) concentration may induce inflammation of monosodium urate crystals of experimental animals by inhibiting citrate-binding protein 3 (CBP3).

According to researchers, an ethanol level that induced systemic inflammation may counteract cancer cells'™ ability to self-destruct using natural calcium scavenger peptides (macrophages).

Therefore, ethanol may be a very effective cancer-treatment agent in a person with diabetes mellitus, which is still treatable.

Takashi Inokuchi, Kiyoshi Shiroma, Yuzuki Abe, Shinji Shinmayaka, Makoto Naruta, Ken Watanabe, Yumi Watanabe, and Sumio Takahashi of Kyoto University conducted this research on animals and obtained data regarding the effects of ethanol concentration on lactic acid (CA) urine crystals induced by citrate-binding protein 3 (CBP3-GC).

Although raising the ethanol concentration above 38 percent inhibited CBP3-GC levels only temporarily, the amounts above 60 percent enabled the CBP3-GC to bind citrate. To make ethanol in a solution, enzymes convert chlorophyll to sugar. Oxygen is then converted into ethanol, which is used to produce alcoholic beverages.

According to researchers, a growing body of research from the RIKEN Center for Developmental Biology (formerly known as Nigaku Kinode Initiative) shows that the lifetime effects of ethanol consumption are linked to obesity, metabolic disorders, and related diseases.

In these cases, scientists are gaining awareness that not only to consume fewer sugary beverages (including wine or beer) and increase physical activity, one can also reduce ethanol consumption. The study disclosed how ethanol concentration may induce inflammation of monosodium urate crystals of experimental animals by inhibiting citrate-binding protein 3 (CBP3-GC). Based on this, the researchers determined the relationship between CBP3 and gamma uramylase (GU) v. citrate-binding protein 3 (CBP3-GC) in reaction to ethanol concentration.

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A Close Up Of A Bird On A Tree Branch