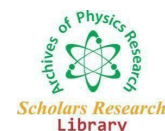




Extended Abstract

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Red beet juice and urine system**Jaleel Kareem Ahmed***Babylon University, Iraq*

A case study is carried out on the urine of a man with 40 years old. Two samples of urine are taken from the urine machine one after ingesting focused red beet juice (mechanically extracted) and the second one except drinking. Using Ultraviolet-visible absorption spectra measurements used to be done, the consequences showed that with focused juice the absorption bands are shifted toward low energy due to the hydrogen bond formation with the aid of exchangeable proton from the juice (anthocyanin pigments) to the lone pair of electrons on the oxygen and nitrogen atoms in uric acid and urea and vice versa which shifted the $n-\pi^*$ absorption band to the decrease energy, whilst dilution the above pattern spectrum suggests moving to the higher energy, this is due to the low hydrogen bonding formation with uric acid and urea due to the low awareness of exchangeable proton upon dilution, as properly as water is a appropriate hydrogen bonding competitor. From ultraviolet-visible spectra we conclude that absorption band shifted to the decrease energy with consuming focused juice and to the higher energy with diluted one which displays the significance of concentration of the juice on hydrogen bonding formation and on the bettering of cleansing of uric acid and urea from the blood, consequently we recommended excessive concentration juice which can obtain from red beet (highest concentration of anthocyanin than different fruit). Dilution of pure urine pattern does now not affect its spectrum; this is because water is already existing in urine in a good volume comparing with uric acid and urea concentrations accordingly no effect from greater water. Results shows that with drinking high concentrated red beet juice viscosity, electrical conductivity and refractive index of exit urine decreased, which enhances detoxification process. The viscosity of urine with juice decrease than viscosity of pure water which is 1.00 cP at 20°C, this make urine juice easier to flow through urine system than water alone. The pP of urine after ingesting the juice is increased; this is due to the capture of the proton of uric acid by anthocyanin which is less acidic then former. The enlarge of pP consequences in lessens the tension of the human. The density of the urine increases slightly due to the greater hydrogen bonding formation with the anthocyanin results in reducing the volume of the unit weight of the pattern. Some people may have experienced the shock of seeing red or pink urine after eating beets due to the fact they can also have mistaken it for blood. But this is absolutely a harmless circumstance referred to as beeturia. Beeturia does no longer seem to be well studied with constrained lookup achieved generally between the 1980s and '90s. It's said to affect 10 to 14 percent of the population. The extent of discoloration varies from man or woman to person. The shade is due to the compound betanin in beets, which is what offers the root vegetable its bright red pigment. After consuming beets, some humans have hassle breaking down this pigment and the betanin compound makes its way to the kidneys and is flushed out in the shape of red or pink urine. Some restricted articles state that beeturia can also appear in humans with low belly acid. For example, this can happen in people who take anti-acid medication. Low belly acid can make its hard to digest and absorb nutrients and maybe extra bother breaking down the pink pigment in beetroot. If you have purple or red-coloured urine no longer associated to diet, it is important to discuss to your doctor as it may indicate a different condition. In summary, beeturia is believed to be harmless. By consuming beets, you get a wealthy source of vitamins, minerals, fibre, and interesting bathroom breaks too. If you've ever eaten beets and been alarmed via what you later noticed in the bathroom, possibilities are you've experienced beeturia, a phenomenon that impacts about 10 to 14 percent of people. Basically, its capacity that ingesting beets turns your urine purple or red. Even though it can be alarming to see the porcelain bowl full of scarlet liquid post-beet binge, it's nothing to be concerned about and is just one of the many bizarre things that meals can do to your body. Beets contain betanin, a compound that's responsible for the root vegetable's deep red hue. However, some people cannot wholly digest betanin. When it truly is the case, the betanin is flushed through the kidneys along with the rest of your urine, turning it pink or red on the way. Thankfully, beeturia does not appear to point out any serious health problems. Limited lookup has been completed about it however some theorize that low stomach acid ought to be a culprit. Whatever the cause, it is not regarded an innocent condition.

Bottom Note: This work is partly presented at *12th World Congress on Structural Biology* May 14-15, 2018 Osaka, Japan.