

Natural things and drug metabolism

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Natural things and Drug Metabolism How Natural things affect Drug Metabolism? This paper aims to explain the effects of natural products on drug metabolism which is a process through which medicines are metabolized so that they can be easily absorbed in the blood stream. Natural products do not have harmful body effects and they have been proven beneficial in facilitating drug metabolism. Key words Inhibition: It is a medical terminology used to explain things which blocks certain harmful processes and metabolisms. Metabolism: It includes various processes such as reduction, hydration, oxidation, hydrolysis, etc. These processes are helpful in breaking down medications in to small and soluble chemical substances (G. GORDON GIBSON et al., 2001). Natural Products: It includes all the unique chemical substances that are found in nature. Natural products are highly beneficial which are used for medication purposes (AMELIA PILAR RAUTER, 2002). Description Natural products include chemical extractions from plants, herbs, animals, fungi, algae and under water living organisms. They have significant potential of metabolizing drugs apart from reducing the risks of several fatal diseases. They contain huge amounts of proteins which metabolize the activities of ant parasitic drugs (ROSE KHAVOGOI HAYESHI, 2012). Natural products act as a drug and therefore the combination of two drugs (chemical components of natural things and chemical composition of medicines) might lead to adverse consequences. For instance, the grapefruit juice is the latest example in this regard. In an experiment, grapefruit juice was found to augment the oral bioavailability of a calcium channel blocker i. e. felodipine through reserving its metabolism by an intestinal chemical component. Research indicates that the grapefruit juice is responsible for enhancing the bioavailability of several

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drugs and few of its constituents are supposed to have furanocoumarins bergamottin (ROSE KHAVOGOI HAYESHI, 2012). There are a number of natural products extracted from different natural things. For instance, genistein, curcumin, ellagic, geshoidin, kaempferol etc. Research indicates that natural products such as polyphenolic compounds of plants, particularly flavonoids, in addition of two other plants' chemical compounds, namely geshoidin and diospyrin, have substantial affects over the inhibition of glutathione-S-transferase (GST). The setback of GST through the use of natural products is a substantial way of enhancing the resistance of multi drugs (ROSE KHAVOGOI HAYESHI, 2012). Natural products are commonly used for different medication purposes. However, their advantages on drug metabolism are not yet recognized. Natural products such as herbs are a significant source of enhancing the activity of metabolizing enzymes in addition to reducing the concentration of several drugs which might be harmful for normal body functions. Nevertheless, if the chemical composition of natural products does not correlate with the drug composition then they can negatively affect the drug metabolizing activity which might lead to fatal consequences (ROMMEL G. TIRONA et al., 2006). Therefore researchers have put forward the following recommendation for the use of natural products (ROMMEL G. TIRONA et al., 2006): Natural products must be used as per the prescription of medical professionals who have a sound knowledge about the pros and cons of using a particular natural product and its effects on the drug metabolism. Patients who are suggested to use natural products must be kept under serious consideration so as to administer their potential adverse effects. Medical professionals must be attentive to take immediate action if the persistent impulsiveness in the efficiency of medication arises

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due to the use of natural products. In order to identify the effects of natural products on drug metabolism consider an example of Ginger. It has been used as a key food ingredient since the beginning of this world. Research indicates that Ginger is an effective natural product to metabolize the drug activity as it significantly reduces the concentration of different drugs hence leading to easy absorption of chemical substances in a drug (KIM IS et al., 2012). Milk is also a natural product which significantly represses the cytochrome enzyme and gives rise to glucuronosyl transferase process. This indicates that milk is a useful substance that can metabolize drugs through direct interference in the process of biotransformation (KIM IS et al., 2012).

Conclusion Natural products are the extracted chemical compositions from plants and animals. These compositions are exceptionally helpful in drug metabolizing since they have the ability of reducing concentration and increasing the solubility of different medicines prescribed by medical professionals. However, if these natural products are consumed without the prescription of doctor then they might result in serious consequences due to the mismatch of chemical components present in natural products as well as in the medicines. The paper has discussed different natural products in addition to their adverse effects over the health of patients. Considering this fact, medical researchers and professionals recommended that the use of natural products should be highly administered by the prescribers, and in case if they identify unnecessary symptoms after the use of natural products in combination with drugs then they must take an immediate action.

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