## Late night cup of coffee: bad for sleep

Food & Diet, Coffee



Late Night Cup of Coffee: Bad for Sleep Sleep is very important to human beings especially because it allows both our minds and body to rest. It sorts out and arranges our memory and it is necessary for our body to function well. In fact about 40% of a person's day is allocated to sleep throughout adolescence. However, adolescents who are people aged 12 to 18 years need 9 hours of sleep but on average most teens get 7 hours only (Mindell and Owens 30). A variety of factors contributes to the tendency of staying up late among adolescents this includes academic life, social life, and electronic media such as computers, televisions and cellphones. Adolescents particularly college students nowadays are most likely to stay up late because of homework or next day's long exam. In the case of the Computer Science Sophomore Students of the University of the Philippines, generating codes for machine problems and laboratories keeps them stay up all night thus getting less sleep. To keep them going, some drink a cup of coffee to avoid drowsiness. Coffee contains caffeine which serves as a stimulant. It keeps one stay awake but it disrupts sleep. That is why to avoid sleeping difficulties; it is recommended that coffee should not be taken within four to six hours before bedtime. Gasapo 2 Coffee is a beverage which contains caffeine-a widely used stimulant. Caffeine can indeed bring mental alertness but disturbs sleep. In a recent interview of selected UP Computer Science students, some complain that after coffee consumption they had a hard time falling asleep. Furthermore, they said that they usually wake up in the middle of the night and have trouble falling back to sleep. Lynne Lamberg, author of the Encyclopedia of Psychoactive Drugs: Drugs and Sleep said that"the need to sleep is an organizing force for living creatures" (21). The

importance of sleep to one's health is often overlooked by many people; furthermore not getting enough sleep could greatly affect every aspect of our health, thinking and behavior. Generally, every aspect of one's physical, emotional, cognitive and social development is affected by sleep (Mindell and Owens 6). However, life's demands on teens as well as their competing priorities such as their social and academic lives often lead them to sleep deprivation. Most adolescents take a cup of coffee to avoid drowsiness and to stay alert during the night. In fact during adolescence, the initial exposure to caffeine takes place (Wagman 213). This is usually in the form of coffee and other caffeinated drinks such as soda and tea. Sheryl Laudito, in her article Staying Healthy with a Cup of Coffee said that "Coffee is a social binder, a warmer of tongues, a soberer of minds and a stimulant of wit" (3). This is a possible reason why people Gasapo 3 are more inclined to drinking coffee than any other beverage. As author of The Encyclopedia of Psychoactive Drugs: Caffeine- the Most Popular Stimulant, Dr. Gilbert Richard notes that findings of a recent study showed that coffee drinkers prefer coffee because of the following reasons: It gives one a feeling of well-being; It calms; It orients and helps one think; It makes one less irritable; It gets one going and wakes one up. These are also the same reasons for those coffee drinkers from the interview conducted. The following could also be possible reasons why more people are inclined to drinking coffee these are as follows: inherited coffee drinking habits, and influence of fast-paced lifestyle and work (Placido B3). Coffee, as defined by Stunning in Encyclopedia Americana, is the "seeds or beans of any of a group of tropical evergreen shrubs of the genus caffea, in the Madder family (Rubiaceae)". Even though large

quantities of coffee are used in flavors and extracts, coffee in the form of beverage is mostly consumed (187). The major component found in coffee is caffeine. It is found naturally in coffee and tea as well as in carbonated beverages and medications (Wagman 213). Caffeine has a lot of effects to human health, it is widely used as a stimulant and many people especially those who stay up late and work at night depend on coffee. In order to stay alert, people rely mostly on coffee (Reyes E1). Gasapo 4 According to a psychologist and caffeine investigator Harris Lieberman, " Coffee improves alertness and reaction time in people, whether they're habitual consumers of coffee or not" (qtd. in Reyes E1). People like to drink coffee because they know that the chemical caffeine which is found in coffee prevents them from getting drowsy and helps them gain alertness and improve their reaction time. In addition, studies show that caffeine consumption could further improve reading speed, performance in mathematical as well as verbal tests and generally increase intellectual capacity (Reyes B3). Indeed, drinking coffee could provide mental alertness and could help one's mental functions to work well. However as a consequence of staying awake and alert all night, sleep is compromised. People will have a hard time falling asleep, would wake up during the night and would get less sleep than what their body requires. In the conducted interview, many complained that they had difficulties waking up in the morning; have headaches; feel sleepy during the day and would usually doze off in class. " Coffee nerves" are developed from too much caffeine consumption. It is usually characterized by trembling, nervousness, muscle tension, irritability, headaches, disorientation and most probably insomnia (Reyes B3). " No sleep" is the literal meaning the term

insomnia. It is now used to define a condition where people tend to have trouble falling or staying asleep, and not being able to function as Gasapo 5 usual the next day as a consequence (Lamberg 25). Based on the indications mentioned above, the coffee drinkers from the group of sophomore Computer Science students of UPV from the interview conducted experience insomnia. This is mainly due to their intake of coffee few hours before going to bed. According to caffeine expert Roland Griffiths, people tend to report increased alertness and energy after consuming anywhere from 20 to 200 mg of caffeine (qtd. in Reyes E1). A cup of coffee contains about 50 mg of caffeine. Caffeine being a mild stimulant is used as a psychoactive drug worldwide. Prolonged times of falling asleep and awakening during the night are some effects of caffeine when taken near bedtime. This is because caffeine could remain for several hours and continue to have stimulating effect in the bloodstream (Lamberg 30). The peak of caffeine level in our body is one hour after consumption. In three to seven hours later, only more than one half of the ingested caffeine is broken down and considered inactive (Reyes M7). This is the reason why it is difficult to fall asleep because by the time you are about to sleep after gaining mental alertness and wakefulness during the night, caffeine would still be present in the bloodstream and would still continue its stimulating effect for as long as seven hours after the time it was consumed. Moreover, Tim Roehrs, a director of research at the Sleep Disorder Center of the Henry Ford Hospital in Detroit explained that caffeine interferes with Gasapo 6 adenosine, the brain's sleep regulator (gtd. in Reyes E1). Caffeine's major effect, insomnia or having difficulty falling asleep has a very serious impact to one's health. If

sleep is lesser than what the body requires, it will not be able to function well and accordingly. As adolescents we must be aware of the real price that we pay for not getting enough sleep. Consider the costs such as depression, poor grades, poor school performance, mood issues and many more. Sleep deprivation affects the way we think and the way we make decisions when we are stressed emotionally. Being unable to perform well in class and having low attention span and less interest to the lesson are manifested by the sleep deprived sophomore Computer Science students. According to Owens and Mindel, research shows that the skills most compromised by loss of sleep are the skills for organization and time management, the skill to multitask, prioritize, sort through a lot of information accurately, and the skill to think creatively (229). If someone is sleep deprived or experiences insomnia, he or she may have a difficult time waking up in the morning. Sleep deprivation would eventually cause higher incidences of tardiness, increased rates of absenteeism to catch up on sleep, and if these incidences continue, there will obviously be a higher tendency of dropout rates. Attitude and motivation may Gasapo 7 also suffer if a student is sleep deprived. Studies show that well rested students are more responsive to teachers and would participate well in class compared to sleepier ones (Owens, Mindel 230). Behavior may also be affected if a person is sleep deprived. Frustration tolerance becomes lower as well as emotional control. Moreover, sleep deprived teens may be poor rested and overtired and would not be able to cope with problems around them, moodiness and irritability may also be an effect of not getting the enough sleep that your body actually requires. Table 1 shows the effects of lack of sleep according to Dr. Owens and Mindell (28).

Lack of Sleep | Lack of sleep affects mood. A sleepy child is more: \* irritable \* cranky \* moody \* whiny | Lack of sleep affects learning. A sleepy child has \* a shorter attention span \* difficulty focusing \* a harder time remembering things \* difficulty solving problems. | Lack of sleep affects behavior: A sleepy person is more likely to: \* misbehave \* be aggressive \* be hyperactive \* be uncooperative. | lack of sleep affects health in that it: \* lowers immune function( a child is more likely to get colds) \* increase accidental injuries \* affect growth hormone secretion | Gasapo 8 An adolescents' life especially as a student is very demanding. They have competing priorities which includes school and social demands. In case of the sophomore Computer Science students of UPV, examples of these demands are finishing machine problems, after-school jobs and social activities as well. These are the reasons why they stay up late. Coffee, the most available stimulant is a big help for these students to achieve mental alertness and wakefulness. Coffee may come in different forms wherein students would enjoy drinking them depending on their preference. But whatever form it is, aside from decaffeinated ones, coffee still contains caffeine. Although caffeine may be effective for mental functions, it can greatly disturb sleep. So if one desires to drink coffee in order to achieve wakefulness and mental alertness at night without compromising sleep, coffee should be consumed four to six hours before bedtime. Restricting oneself to two cups of coffee a day can already give the maximum benefits of alertness by having one cup first in the morning and the other in the midafternoon (Lamberg 33). If one considers drinking coffee to be very essential and could boost up performance, there is no reason to deprive oneself of its benefits. Just take into consideration that

to avoid putting one's health at risk, coffee should be taken at a considerable amount and at the right time. Gasapo 9 Works Cited Dona Mae Monsale. Personal Interview. 1. March. 2012 Gilbert, Richard M. D. The Encyclopedia of Psychoactive Drugs: Caffeine- the Most Popular Stimulant. New York. Chelsea House Publishers. 1986. Jayvee Unlayao. Personal Interview. 1 March, 2012. Lamberg, Lynne. The Encyclopedia of Psycoactive drugs: Drugs and Sleep. USA. Chelsea House Publishers. 1988. Laudito, Sheryl. "Staying Health with a Cup of Coffee". Manila Bulletin. 21. October, 2007 p. 3 Owens, Judy, Jodi Mindell. Take Charge of Your Child's Sleep. New York. Marlowe & Company. 2005. Placido, Josephine. "How Filipinos 'take' their coffee". Philippine Daily Inquirer. 18, May, 2008. p. B-3 Reyes, Tyrone. "Coffee: Grounds for Concern?. "Philippine Star. 1, March 1998, p. M-7 Reyes, Tyrone. " Coffee: The Good, The Bad and the Maybe. "Philippine Star. 14 April, 2009, p. E-1 " Sleep and Diet". Foods that Harm, Foods that Heal. Australia. Reader's Digest. Pty Limited. 2007: 331 Gasapo 10 Stunning, William. Encyclopedia Americana. USA. Groiler International, Inc. 1985 Wagman, Richard. The New International Standard Medical and Health Encyclopedia. Vol. I. USA. Trident Reference Publishing. 2006.