

## Find Your “Caffeine”: Foster Your Better Study Habits

National Institute of Technology, Kumamoto College ,

Yatsushiro Campus

A: Hello, everyone, I'm Maho.

B: I'm Ryuta.

C: I'm Hiro. Today we'd like to discuss life at Kosen in regard to study habits, tests, and caffeine.

B: I drink tea while studying until late at night to get a perfect score. I need caffeine!! I think half of me is British.

A: You don't need to drink tea!

B: Are you serious? I can't concentrate without it, but I'm slightly worried about my health. Do you drink caffeinated beverages?

C: I don't drink so much. How about you, Maho?

A: I sometimes drink coffee or tea in moderation. Depending on the caffeinated beverages, too much is not good for your health. So I think you should drink less and find a new “caffeine”.

C: A new “caffeine”? What's that?

A: It's an alternative to caffeine. Look at this picture. It shows the number of caffeinated beverages my classmates drank during the exam period.

They were drunk only on campus; students also drank at their home or elsewhere.

C: No way. They drank too much.

A: I thought that there were a lot of Kosen students taking caffeine, so I conducted a survey about caffeine.

C: This data shows the quantity of caffeinated beverages by class rank.

B: The results are separated into two periods: during regular scheduled classes and during tests weeks. Look at the relationship between the number of caffeinated beverages and the test grade.

C: When the test day is getting closer, the number of caffeinated beverages doubled. It's interesting how the students who are ranked from 20<sup>th</sup> to 39<sup>th</sup> grade drank four times the number of drinks.

B: It seems students 20<sup>th</sup> to 39<sup>th</sup> place take more caffeinated beverages than the top 20 students. It seems that the students who get bad scores neglect to make plans for studying for tests because of relying on caffeine's power. Is caffeine strong? Why do people take caffeine? To stay awake, like me? I'd like to know that.

A: Actually, I also conducted a survey to find out the reasons.

B: Wow. Tell me about the data. I'm curious.

C: As expected, 37% of the students depend on caffeine for prevention of drowsiness.

B: That's why I drink tea, to avoid getting sleepy. Even if there were no tests, I would like to stay up late.

A: The second reason is taste.

B: I totally understand that. I love the taste of tea.

A: The third reason is enhancing concentration.

C: So, the main reason is to prevent drowsiness. But how does caffeine reduce drowsiness?

A: I just learned about caffeine in my class! I can teach you!

To begin with, caffeine has a structural formula like this. Caffeine has a similar structure to adenosine in this part. So, when there's too much caffeine in the body, it attaches to the adenosine receptors and blocks the calming effects of adenosine, which is why your heart rate increases and you may become agitated.

Effects of caffeine are not just reducing drowsiness.

C: Like what for example?

B: Well, the action to inhibit fatigue, the promotion of blood flow, and the promotion of diuresis.

C: In addition, caffeine enhances concentration and has a fat-burning effect by elevating metabolism!

B: About three cups of coffee a day will give you a nice effect.

C: Wow, I'm learning something new. Caffeine has a weight loss effect. That sounds beneficial!

B: Yes, caffeine has good effects. I will continue drinking tea. It's my "caffeine"!

A: Wait. Remember when you drank caffeinated beverages. Was it really good for you?

B: I often drink coffee and tea when a test is getting closer, but actually my skin has problems, and I feel my heart rate increase, particularly with energy drinks.

A: Yeah. You're right. Caffeine has an arousing effect, and it causes disruption in the rhythm of our lives. And then, caffeine easily causes skin blemishes and skin dryness. In addition, as you said, it causes increased heart rate.

C: I wonder if students feel the effects of caffeine. I don't feel much.

B: I can stay awake with caffeine, so it can help me.

C: Drinking caffeinated beverages can help our study, but drinking too much is not good for our health. Caffeine also negatively affects studying.

B: I want to find better ways to help me study. Please tell me some ways to find my "caffeine". Finding my new "caffeine" sounds good.

A: OK. I'm happy to show you some alternative ways but be careful. If you stop drinking suddenly, you might get headache or become drowsy, so you should reduce it little by little. You can try chewing gum and eating apples.

The action of chewing activates the brain, and apples have substances that help relieve fatigue, so they can help our study.

C: Oh, it's good information. You should try, Ryuta.

B: Hmm.

A: Chewing gum and eating apples isn't all.

C: Taking a walk, drinking cold water, and sunbathing.

A: As for me, I'm trying to live a healthy life because the most important thing for me is to listen in class carefully. I try to go to bed by midnight.

B: Really!? If I didn't study at night, I wouldn't pass the test.

A: Of course, I study hard until the night before tests. When I get sleepy, I eat sweets and listen to my favorite songs to cheer me up! But when I'm too sleepy, I'll just give

up and go back to sleep. How about you, Hiro?

C: In my case, I do some activities. For example, I do some light exercises, I sing my favorite songs, and I play the guitar. By doing things I like to do, I feel refreshed. When I'm refreshed, I feel better motivated to study.

A: That makes perfect sense! It's a fact that dopamine is increased by doing things you like and exercising. Dopamine can motivate us to study harder.

B: I understand now that I don't need to rely on caffeine. I will start finding my new "caffeine" soon. I'm looking forward to getting better study and health habits by trying Hiro and Maho's advice!! Thank you both!

C: We can make a more wonderful study life by adopting these methods. They are your new "caffeine". Foster your better study habits! Find your...

A, B & C: Own "caffeine"!

C: Thank you.