

Biomechanism of Coffee Consumption for Maintaining Teeth Health Benefit

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ABSTRACT

There are many cases and diseases related to teeth. All of us understand, that the first way for eating is from digestion. Teeth are one of the decay way for digestion. So, we have to take care of our teeth health benefit for getting good and healthy teeth always in our life for avoiding teeth problems and diseases.

Coffee is one the most favorable drinking in this world that we always love for drinking in all of the condition and situation in our life and modern life style. Coffee has many healthy benefit. So many researchs and studies proved that coffee has many health benefit for our healthy body. But, we have no clearly proving and understanding related to the biomechanism of coffee for getting our healthy teeth benefit that influence our healthy body, too in obes and non obes. So the aim of this manuscript is to discuss the biomechanism of coffee for maintaining health teeth benefit.

Keywords: Biomechanism, coffee, teeth, healthy, benefit. pair and improve our teet problems for getting normal condition anymore like usually condition especially in the obesity condition.

Introduction

Teeth is the first way related to digestion for getting food that content of nutrition for our healthy body. Teeth is one of our part of our body that very important and has relationship with our digestion. Mouth is the part of our body which has teeth as the first way for getting food. If there is something trouble in our mouth, so it will get so many healthy problems and troubles at least we will feel discomfort feeling in our mouth. Finally, we will get so many problems or diseases if we have never tried to re- Obesity is one of global burden in this world. Coffee has antiobesity which has anti-inflammatory activity for protecting the gingiva and the others environment of the mouth. Coffee has antioxidant activity, too for preventing reactive oxidative in the mouth cause of coffee has so many component like polyphenol and caffeic acid and the others component that has healthy benefit. Coffee as one of favorite drink in this world. Coffee al-

ways be as the favorite food and beverage in our modern life. The component of coffee will influence our mouth and teeth as the part of our mouth. Few of part studies proved that coffee has healthy benefit for our teeth. (1-3)

But, many people have unclear understanding related to the biomechanism of coffee for getting healthy teeth benefit. So, the aim of this study to discuss related to the biomechanism of coffee for getting healthy teeth for our body health benefit.

Finally, the coffee component has healthy benefit to avoid dental problem so the body will get so many healthy body condition.

Method: Systematic review that has done for getting at about more than 5 articles related to the coffee, dental problem, healthy benefit. The keywords were searched by google search. PubMed is one of the choice of this google search for getting the credible inclusion criteria for these research study related to systematic review.

Results :
Coffee has many components. Each of coffee component has activity for many healthy benefits. Coffee has many antioxidant. One of antioxidant that include and content of the coffee powder is polyphenol. Polyphenol as antioxidant will attack the free radical as oxidant and will neutralize the free radical oxidative damage for being the normal condition. Cause of the free radical condition has no couple as well as the normal condition. The others coffee's component is caffeic acid which has nuclear factor kappa beta/nfkb activity as proinflammatory activity in all of inflammatory condition in our body and also in our teeth inflammatory condition when our teeth get dental healthy problem condition. The others component is caffeine. Caffeine as one of coffee's component has healthy benefit as diuretic. Diuretic will help our body for getting normal condition in our water health balance when too much water in our body. Teeth as one of part of mouth in our body will get the healthy benefit if we

drink so much water with coffee cause of the diuretic in caffeine will help the water healthy balance in our body when too much intake water.

Sugar and milk has carbohydrate component will influence our teeth for getting trouble like caries dentist. If we drink coffee without sugar and without milk, so it is the important thing too for avoiding dental problem at least like dental carried disease (3). The benefit of coffee cause of coffee components has activity as antibiotic activity, too. Roasting of coffee has effect for coffee as antioxidant activity.

Discussion :

Teeth is one of part of our body for getting digestion when we eat or drink everything for getting nutrition in the food component like coffee. Teeth has many detail part like enamel, pulp and the environment for growing the teeth like gingiva. When coffee meet the teeth there are many healthy biomechanism.

Coffee is powder when we find in the brand mark that have been sailed in the market of all of Indonesian's market. But, a part of them are in the bean condition of coffee. Powder coffee is the roasting form of coffee that has been ready for drinking in the water with hot or cold temperature condition.

We can blend and shake the coffee powder with milk or sugar only or without sugar and without milk and with or without the others component that can make our coffee drinking really has good taste and favour for getting nice and enjoyable taste of coffee in our day, afternoon or night.

When we blend and shake our coffee powder, we will get so many interaction between coffee powder and the water. If we choice the hot water, we will find the difference levels of activity healthy component like antioxidant in polyphenol that content of coffee powder. If we

choice the cold water, we will find the low level antioxidant component of coffee worse than in the hot water.

We will get the difference level antioxidant if we choice of the difference kind of Robusta and Arabica coffee, too. Robusta coffee has the higher level antioxidant polyphenol than Arabica level (4-6). Robusta coffee powder has the lower level caffeine more than Arabica coffee powder(4-6) so the level of diuretic activity in Robusta coffee is lower more than Arabica coffee powder, too.

Coffee component has many health activities as antibiotic, coffee activity as anti-inflammatory from IL-10 and coffee as antihyperuricemia (4-10) and also as anti syndrome metabolik (7), and also coffee activity as anti heart attack. The NO activity of coffee (8) has conclusion that coffee really like Nitrit tablet sublingual in the coffee activity that tend to anti heart attack.

All of the coffee activities influence our body and the first part of our body that gets health effect of coffee drinking is our teeth. So, then all of the coffee activities have health impact effect to our teeth first and finally the coffee drinking will influence our health body.

There was previous study in 2014 that has result study, coffee habitual consumption influence severe periodontitis but could prevent the progression of periodontitis. (1)

But no information in this study if the coffee consumption added sugar and milk or without sugar and milk cause of sugar and milk has really influence the dental problem.

There was previous study related to coffee consumption does not influence the colour of enamel of tooth.(2) Coffee drinkers have whiter teeth and healthy teeth or teeth free of carried better than the non coffee drinkers. Trigonelline in coffee's content has potentiaty as anti

adhesive action. Melanoidin has antiadhesive activity, too(3) The case study of coffee consumption only without sugar or without milk since February 2012- February 2014 has result study that coffee did not impact on the dental problem (8).

The case study of coffee consumption habitual 1 cup daily without sugar and without milk in the afternoon and tomato consumption without sugar in the morning for 5 years since March 2014 – March 2019 had result study that coffee did not impact on dental problem. Coffee has antiobesity. (9,10). No dental problems in obes and non obes rats in the results study that has been done since March-April 2015 on the rat teeth.(8-9)

The case study of coffee consumption habitual 1 cup daily with tomato but without blend of carrot 1 glass daily without sugar for 2 years from February 2019 – February 2022 has result study that coffee (coffee consumption habitual 1 cup of coffee without sugar or without milk and without carrot/ daily in the afternoon and tomato consumption without sugar in the morning) does not impact on dental problem if the drinker of coffee does teethbrush twice daily or morethan twice daily for cleaning and for getting the healthy teeth.(11).

Conclusions:

Coffee has many components that has healthy benefit biomechanism for getting healthy teeth.

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