



The Effect of Black Tea Consumption On Teeth Coloring In the Community

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Abstract

Tea is a type of plant that is popular as a drink. In general, based on the processing method, tea can be classified into three types, namely green tea, olong tea and black tea. The aim of this research is to find out whether there is an effect of tooth coloring on people who consume black tea. The method used is literature study to find theoretical references that are relevant to the cases or problems found. The data used comes from journals, scientific literature, rivew, which contains tooth coloring sheets in people who consume black tea. The results of the research show that there is a relationship between public knowledge and tooth coloring. The conclusion is that the effect of tooth coloring on people who consume black tea is due to the lack of public knowledge about the content of black tea which contains a lot of tannins, which can cause teeth to change color from brown to black.

Keywords: Influence, Consumption, Black Tea, Teeth Coloring, Society

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1. Introduction





Indonesian people have long known and utilized nutritious plants which are made by factories into various types of food or drinks that are beneficial for health. Along with the development of the back to nature trend, people's tendency to consume drinks that are beneficial for health has caused tea to become the drink that many people choose. Apart from being able to be consumed by all levels of society regardless of social or economic status, tea also contains compounds that can provide satisfaction to the drinker by giving the impression of a distinctive color, aroma and taste.

Tea is a type of plant that is popular as a drink. In general, based on the processing method, tea can be classified into three types, namely green tea, olong tea and black tea (Rohdiana, 2009).

Tea is a natural drink that is very popular among the public. Tea contains bioactive components called polyphenols. In general, polyphenols in plants consist of flavonoids and phenolic acids. Flavonoids are the largest group of polyphenols which are also very effective as antioxidants (Astawan and Kasih 2008).

Tea contains several secondary metabolite compounds, especially the leaves. The chemical content of tea leaves varies greatly depending on the season, soil conditions, technical culture treatment, age of the leaves, and the amount of sunlight received (Tea and Quinine Research Center (PPTK), 2008).

Tea contains non-alcoholic drinks made from tea leaves that have undergone certain processing processes. Tea contains many compounds that are beneficial for health, currently tea products have experienced many developments (Mei Ambar Sari 2015).

Based on the processing process, there are several types of tea, one of which is black tea. Black tea is a type of tea that is made through a process of serving, milling, oximatic drying. Black tea has a higher caffeine content than green tea (Rohdiana, 2015).

Tea has become a popular drink in the world (Monirul and Han, 2012). After mineral water (Thiyam et al.2015). The domestic tea market only absorbs 40% of national tea production and the remainder is still exported to other countries, this indicates that Indonesian tea farmers are still export-oriented (Shobayar, 2015) and some





of the volume of Indonesian tea exports is still in bulk (Suprihatini 2005). Black tea is generally for relaxation, and 2 green teas are chosen by consumers who believe they have health benefits (Ditjen PEN, 2015).

Stain is a pigmented deposit on the surface of a tooth. Stains are an esthetic problem and do not cause visible gingiva. The use of tobacco products, tea, coffee, certain mouthwashes and pigments in food causes stains to form. Stains resulting from the use of certain products produce a rough surface that is easy for food residue and germs to stick to, which ultimately forms plaque. If it is not cleaned, plaque will harden and form tartar or calculus which can spread to the roots of the teeth, resulting in gums bleeding easily, teeth becoming loose and falling out easily. (Putri, MH., et al., 2010).

According to (GROSSMAN, 1995) stain is a color change found on the outer surface of teeth and usually originates locally, for example tobacco stains which cause dark colored teeth. Stain on teeth can occur in 3 ways: stain adheres directly to the surface, stain settles in calculus and soft deposits, and stain combines with the tooth structure or restorative material (Putri, MH, et al, 2010).

Tooth staining is an aesthetic matter and does not cause inflammation of the gingiva. Using tobacco products, tea, coffee, certain mouthwashes and pigments in food causes stains to form. Stains resulting from the use of these products produce a rough surface that is easily adhered to by food residue and germs which ultimately form plaque. If it is not cleaned, plaque will harden and form tartar or calculus which can spread to the roots of the teeth, resulting in gums bleeding easily and teeth becoming loose easily. and easy to date.

According to National Association 2008, tooth stain is a color that sticks to the surface of the teeth, usually due to the adhesion of food color, drink or nicotine content, which is a substance that produces tooth stain. Stain has an impact on dental health. Stain can also cause brown to black teeth on the neck of the teeth.

According to Grossman, tooth discoloration can be classified as extrinsic and intrinsic, extrinsic discoloration is found on the outer surface of the teeth and usually originates locally, for example tobacco stains which cause the color of the teeth to





become yellowish brown to black. Meanwhile, intrinsic discoloration is the resulting tooth coloration. by stains contained in the enamel and dentin, the cause is the accumulation or combination of materials in the tooth structure (Munadira, Nurwiyana Abdullah 2020).

1) Extrinsic coloration

According to Mangoen Prasodjo (2009), stain is a color that sticks to the surface of the teeth, usually due to the adhesion of colored food, drinks or cigarettes which leaves a brownish tar on the teeth, which occurs slowly over a long period of time.

According to Grossman (1995), stain is a discoloration found on the outer surface of teeth and usually originates locally, for example tobacco stains which cause dark colored teeth.

According to Suryo (1992, Cit, Widyana, 2005). Extrinsic staining is a color change that occurs from the outside, because the agent that causes the color change penetrates into the tooth tissue.

2) Intrinsic coloring.

According to Mangoen Prasodjo (2009), stain is a color that sticks to the surface of the teeth, usually due to the adhesion of colored food, drinks or cigarettes which leaves a brownish tar on the teeth, which occurs slowly over a long period of time. Color changes can occur during or after the formation of enamel and dentin. The causes of tooth discoloration can be divided into two groups, namely due to natural stains and iatrogenic staining. The cause of natural stains is tooth discoloration caused by a number of stains on the surface of the teeth after the teeth erupt. Natural stains, may be on the surface or embedded within the tooth structure, sometimes due to the effects of enamel or due to traumatic injury Walton (1996).

2. Research methods

The type of research used in this research is literature study, how to find theoretical references that are relevant to the cases or problems found. The reference contains about. "A picture of tooth coloring in people who consume black tea." In collecting the data used, it comes from journals, scientific literature, reviews, which





contain tooth coloring sheets in people who consume black tea. At the data analysis stage, the results of the data experience will be analyzed in more detail so as to obtain results from the research carried out at the discussion stage. At this stage the results of the data analysis and data processing that have been carried out will be discussed in more detail so that data conclusions can be produced that will prove the success or failure of the proposed hypothesis.

3. Results and Discussion

Tooth staining is a pigmented deposit on the surface of the teeth. Tooth staining is an aesthetic matter and does not cause inflammation of the gingiva. The use of tobacco products, tea, coffee, certain mouthwashes and pigments in food causes the formation of tooth staining. Tooth staining due to the use of these products produces a rough surface that is easy for food residue and germs to stick to, which ultimately forms plaque. If it is not cleaned, plaque will harden and form tartar or calculus which can spread to the roots of the teeth, resulting in gums bleeding easily, teeth becoming loose and falling out easily (putri, MH, 2010).

According to (Grossman., 1195) stain is a color change found on the outer surface of teeth and usually comes from local sources, for example tobacco stains which cause dark colored teeth. Stains on teeth can occur in 3 ways : stains adhere directly to the surface, stains settle in calculus and soft deposits, and stains join the tooth structure or restorative material. (daughter, MH, 2010).

The disturbance caused by stains is primarily an aesthetic problem. Thickened stain deposits can roughen the surface of the teeth, which in turn will cause plaque to build up, irritating the nearby gums. Certain stains indicate that oral hygiene evaluation and care related to oral hygiene have been carried out. (daughter. MH, et al. 2010).

However, people who are addicted to caffeine products, such as tea, may get tea stains on their teeth over a long period of time, which are more difficult to remove. People who have had tooth colored restorations performed, especially on their front teeth, are at greater risk of developing stains (anonymous, 2009, cit Rindi, 2013).





Black tea is a tea that is rich in tannin, therefore this drink is quite aggressive and can cause stains, more than coffee which is chromogenic but low in tannin. It is said that green tea, herbal tea and white tea are not as aggressive as black tea in staining teeth (mark S, cit Rindi 2013).

People who consume black tea every day, cause coloration in black tea consumers. The coloring of teeth is not only influenced by when you consume black tea, but is also influenced by the content in black tea which has aggressive properties because it has a very high tannin content that exceeds the content in other teas. Then, from the packaging used by people who consume black tea, it turns out that the dip and powder packaging that is often used results in a more intense coloring, although there is no clear research regarding the effect of consuming tea in terms of the packaging used, and in addition People's own way of cleaning their teeth and mouth makes the coloring more clearly visible in people who consume black tea.

Based on Recca's research, it shows that there is a relationship between public knowledge and tooth coloring (stain). This is because a person's knowledge is not only obtained through education but occurs through the application of what is known in everyday life. Lack of public knowledge about staining teeth, which can cause cavities to turn brown to black, some people are not aware of maintaining oral hygiene, especially the bad effects of staining teeth, but others ignore the effects of teeth staining. The bad impact of staining teeth, however, knowledge about the bad effects of smoking consuming coffee and tea on tooth staining is not a reason for some people to stop smoking and consuming coffee and tea.

This research is in line with the results of research conducted by Basumi et al in 2014 on the Guntung Edge village community which stated that the level of knowledge influences the status of dental and oral hygiene¹¹. Good knowledge about dental health, if accompanied by patience in caring for dental health, you will get perfect results. Likewise, on the contrary, poor knowledge, if accompanied by patience in caring for dental and oral health, you will get imperfect results.

4. Conclusion





Based on several studies that have been studied and analyzed, it was concluded that the effect of tooth coloring on people who consume black tea is due to the lack of public knowledge about the content of black tea which contains a lot of tannins, which can cause teeth to change color from brown to black. Teeth coloring is not only influenced by when consuming black tea, which has aggressive properties because the tannin content is very high, exceeding the content in other teas, and also by cleaning people's own teeth and mouth, which makes tooth coloring more clearly visible in people who consume it. black tea and if not treated will result in tartar.

5. Compliance with ethical standards

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Disclosure of conflict of interest

This research collaboration is a positive thing for all researchers so that conflicts, problems and others are absolutely no problem for all writers.

Statement of informed consent

Every action we take as authors is a mutual agreement or consent.

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