



## **Effect of Drinking - Beverages (Alcohol, Caffeine and Soda) Against Stomach Disease UINFAS Bengkulu Students**

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### **Abstrac**

Ulcer disease is a problem often experienced by students because of several factors that influence it. This research aims to determine the effect of drinking (alcohol, caffeine and soda) on ulcer disease among UINFAS Bengkulu students. The method used is a quantitative method where we use prerequisite tests, namely the normality test, linearity test and simple linear regression test with data collection techniques through questionnaire questions using Google Form which are distributed to students at UIN Fatmawati Sukarno Bengkulu which consists of 4 faculties, namely: FTT, FEBI, FUAD and Sharia. The sample used was 40 students. The questions used consisted of 20 questions consisting of 3 categories, namely: (Student knowledge, causal factors and healthy lifestyles against stomach ulcers). The results obtained from the data show that students are of the same size. In conclusion, the influence of drinking (alcohol, caffeine and soda) has a significant influence of 47% on the ulcer disease of UINFAS Bengkulu students. In order to reduce the risk of developing stomach ulcers in students, it is important to increase awareness of the negative impacts of consuming alcohol, caffeine and soda. Students need to be informed about healthier drink alternatives and encourage a balanced lifestyle. In addition, further research needs to be carried out to explore the relationship between consumption of these drinks and stomach ulcers and explore other factors that may influence the risk of stomach ulcers in the student population.

**Keyword : Student Lifestyle, Beverage Consumption, Gastric Disorders, and Gastrointestinal Diseases**



## A. INTRODUCTION

In the last few years there have been so many viral drinks and so many fans amongst scholars such as dalgona and boba, without us knowing the drinks can trigger gastric acid in our bodies and can cause stomach.

Besides, the number of places that provide such drinks makes it very easy for students to find the drinks around the campus. And it's affordable for students. (Yonata et al., 2016) A stomach that is often left empty can trigger excessive production of gastric acid that then appears complaints or stomach symptoms, such as stomach numbness, nausea to vomiting. But stomach pain isn't just caused by a late meal. There are a number of habits and eating patterns that unknowingly can be the cause of the stomach. (Selviana, n.d.)

Gastritis or commonly referred to as stomach disease is an inflammatory process or health disorder caused by irritating factors and infection of the mucous and submucous membranes of the stomach. (Tussakinah, Masrul, & Burhan, 2018). Stomach disease can affect all sections of society at a productive age. Usually stomach disease is caused by some factors such as an irregular diet or poor diet and stress factors. (Ari Kamayani & Made Suindrayasa, 2020)

According to Harper (1986), "Eating is the way a person or a group of people choose food and consume it as a reaction to physiological, psychological, cultural and social influences. According to (Rehan, 2009), "The stomach is a disease that attacks the stomach due to excess gastric acid levels leading to stomach pain, swelling and bruising and a burning sensation in the liver." According to Santoso (1995:112) the frequency is "a continuous occurrence, the number of recurring occurrences". According to (Okviani, 2011) the "frequency of eating is the amount of meals in a day, both qualitative and quantitative". Everyone of all ages and genders can experience this condition. (Wahyudi et al., 2018) However, there are several factors that increase his risk, such as: There are emotional problems, such that anxiety or depression. *Helicobacter pylori* infection. Side effects of non-steroidal anti-inflammatory drugs. (Mahmudah et al., n.d.)

To help the doctor diagnose this condition, you need to explain in detail the symptoms you are experiencing. For example, the location of the pain in the abdomen and describes the pain you're experiencing. The doctor will also find out about your medical history and examine the abdomen. The stomach may be pressed by a doctor in different areas to detect pain when pressed or pain under pressure. (Mudzakkir & Prodi DIII Nursing Faculty of Health Sciences PGRI Kediri, n.d.-a) When doctors suspect a particular medical condition, doctors can arrange a diagnostic test. Some of them are blood tests, endoscopy, tests to diagnose *H. pylori* bacterial infections, liver function



tests, and X-rays. Appellation depends on the cause and severity of symptoms. When the symptoms are mild, lifestyle changes may already ease it. The following are the lifestyles to deal with stomach pain: 1) Reduce fatty and spicy foods, 2) reduce alcoholic and caffeinated beverages, 3) Sleep for at least 7 hours every night can also help alleviate the condition, 4) Exercise regularly and quit smoking. (Kebiasaan Merokok dan Pola Makan Penderita Gastritis di Wilayah Kerja Puskesmas Manahan Kota Surakarta Yeni Ernawati et al., n.d.) Stomach disease is often affected by people who have high activity, especially students who have poor lifestyles, such as not paying attention to the kind of food they eat and eating irregularly.

This study aims to identify what factors influence a person to develop stomach disease other than the influence of drinking. And to give awareness about the dangers of gastrointestinal disease if it is over-populated and not too much attention to its future effects. (Mudzakkir & Prodi DIII Keperawatan Fakultas Ilmu Kesehatan PGRI Kediri, n.d.-b)

## **B. RESEARCH METHODS**

This study uses a quantitative method with a normality test to find out whether the two variables are normal distributed. The method used in this article is an online survey given to UIN student Fatmawati Sukarno Bengkulu. Then it continued with linearity tests and linear regression tests to determine whether or not there was a link between drinking-drinking (alcohol, caffeine, soda) and stomach disease.

The population in the study is the entire UINFAS Students Bengkulu with the determination of sample research using simple random sampling of 40 Students consisting of 10 FTT students, 10 FUAD Students, 10 Fuad Students and 10 Syari'ah Mahasiwa. The method of data analysis used is simple linear regression using SPSS Independent Variable (free variable) in this study is Drinking Consumption Effect containing (alkohol, kafein, soda). The dependent variable in this study is stomach disease.

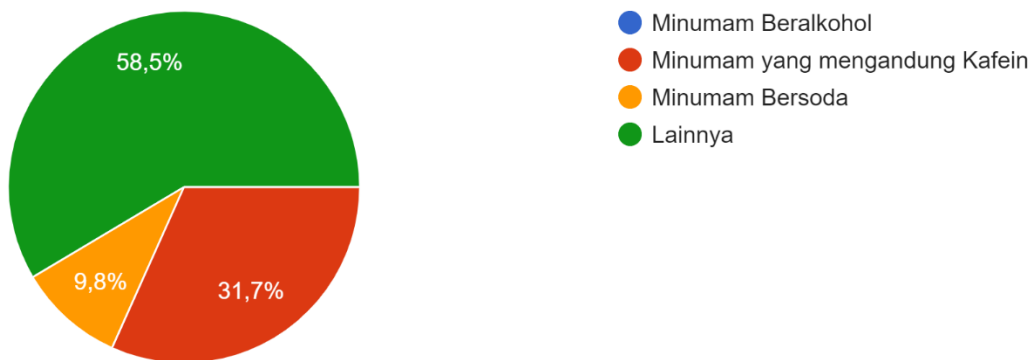
## **C. RESULTS AND DISCUSSION**

### **RESULT**

The data obtained is an instrument of data resulting from the angket. which consists of two types of questions: angket about drinking-drinks (alcohol, caffeine, soda) and angket of stomach disease students of UIN Fatmawati Sukarno. Angket is composed of 27 questions which are divided into 3 categories: 5 about knowledge about stomach diseases, 16 about factors causing it and 6 about healthy lifestyle students. Here's the results of the study:



### Diagram Persentase



As you can see from the diagram, about 40 percent drink drinks that contain caffeine and soda, and the rest use other types or don't drink at all.

### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
minum-minuman(alkohol, kafein, soda)	.153	40	.020	.952	40	.087
penyakit maag	.112	40	.200*	.955	40	.109

Drinks (alcohol, caffeine, soda)  $0.020 > 0.05$  and sig. For student stomach mixer  $0.200 > 0.05$ , both variables are equally distributed normally.

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
penyakit maag * minum-minuman(alkohol, kafein, soda)	Between Groups	(Combined)	170.425	15	11.362	.619	.831
		Linearity	28.752	1	28.752	1.566	.223
		Deviation from Linearity	141.673	14	10.120	.551	.876
	Within Groups		440.550	24	18.356		
Total			610.975	39			

Deviation from Linearity  $0.876 > 0.05$  so it can be concluded that the influence of drinking alcohol (alcohol, caffeine, soda) on stomach disease students have a linear relationship.



### Descriptive Statistics

	Me an	Std. Deviation	N
penyakit maag	32. 2250	3.95803	40
minum- minuman( alkohol.kafein,soda)	33. 6750	4.53696	40

The average score of 40 students for alcohol, caffeine, soda was 33.67 with standard deviation of 4.53696. While the average of students for gastrointestinal disease was 32.22 with standard deviation of 3.95803. A standard deviation is a measure of the data spread in statistical science which is generally also known as the default deviation.

### Correlations

		Penyaki maag	Minum- minuman(alkohol.kafein, soda)
Pearson Correlation	penyakit maag	1.000	.217
	minum- minuman( alkohol.kafein,soda)	.217	1.000
Sig. (1-tailed)	penyakit maag	.	.089
	minum- minuman( alkohol.kafein,soda)	.089	.
N	penyakit maag	40	40
	minum- minuman( alkohol.kafein,soda)	40	40

From the picture can be seen that the large relationship between the variable influence of drink-drinks (alcohol, caffeine, soda) is 0.217 This shows a positive relationship, the greater the use of Drinks (Alcohol, caffein, soda), the higher the likelihood of developing stomach disease.



**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	minum-minuman(alkohol, kafein, soda) <sup>a</sup>	.	Enter

From the picture above shows the variable in the input is the influence of drinking - drinks (alcohol, caffeine, soda) while the variables in the output are none (variables Removed tidak ada)

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.217 <sup>a</sup>	.047	.022	3.91429

a. Predictors: (Constant), minum-minuman(alkohol, kafein, soda)

b. Dependent Variable: penyakit maag

From the picture above, showing that the R square figure is 0.047 means that drinks (alcohol, caffeine, soda) have 47% influence on student stomach disease and the remaining 53% are influenced by other variables that have not been studied.

**ANOVA<sup>b</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	28.752	1	28.752	1.877	.015 <sup>a</sup>
Residual	582.223	38	15.322		
Total	610.975	39			

a. Predictors: (Constant), minum-minuman(alkohol, kafein, soda)

b. Dependent Variable: penyakit maag

From the picture above, you can see the P value (0,015) < (0,0,25) so that H0 is rejected it can be concluded that drinks (alcohol, caffeine, soda) have a significant influence on student stomach disease. As for the rate of severity, by looking at the R Square value of 47% of drinking-in(alcohol, kafein, sodas) can compensate for students stomach. Anova test is a statistical method used to compare the average population of two or more groups. This test is used to determine whether there are significant differences between the average groups based on the data tested.



Coefficients<sup>a</sup>

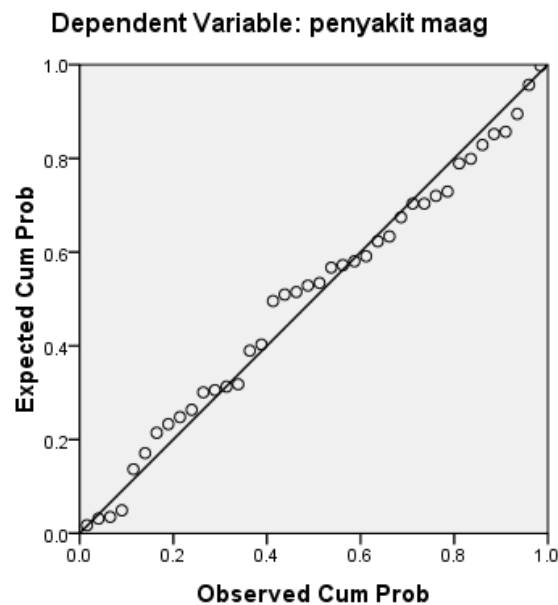
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	25.852	4.693		5.508	.000	16.351	35.353		
	minum minuman	.189	.138	.217	1.370	.179	-.090	.469	1.000	1.000

a. Dependent Variable: penyakit maag

From the above picture, we get the regression equation produced to predict the variable Y:

Drinking-drinking (Alcohol, caffeine, soda) (Y) = 25.852 + 0.189 against the disease of the stomach(X), we can mean when the influence of drinks (alcohol, caffeine, soda) equals zero against student stomach disease equals 25.852. If the number of drinks (alcohol, caffeine, soda) increases by one unit, then the rate of stomach disease in students will increase by 0.189 units.

Normal P-P Plot of Regression Standardized Residual



The above illustration emphasizes that the regression model obtained is a normal distribution, where the data spread is around a diagonal line.

## DISCUSSION



Based on the results of the study, with spss through the Anova test showed that 47% that means drinking-drinks (alcohol, caffeine, soda) have a significant effect on student stomach disease. According to (Tussakinah, Masrul, & Burhan, 2018) Gastritis or commonly referred to as stomach disease is an inflammatory process or health disorder caused by irritating factors and infections in the mucous and submucous membranes of the stomach. In 2013, this gastritis occurrence was ranked 4th out of 50 hospitalized cases in Indonesia with a total of 218,500 cases, one of which was caused by the consumption of high-carbonated and high-caffeinated beverages. (Novitasari et al., 2017). Stomach disease can be experienced in various groups of students, that is, groups of people who have a messy diet and people who frequently smoke, often drunk and for people who are stressed. Most of the previous studies only discussed the common factors that cause stomach disease in students while the causes of particular drinks such as alcohol, caffeine and soda were discussed only generally and not complex. and also reinforced that attention to consumption of any kind of beverage should be given specifically.

#### D. CONCLUSION

Based on the results of the above discussion, it can be concluded that drinks (alcohol, caffeine, and soda) have an influence of 47% on stomach disease students of UIN Fatmawati Sukarno Bengkulu. Other factors, such as dietary patterns, stress levels, and meal frequency, give an influence of 53%, with a linear and significant positive influence for each increase in the drinking unit. Because these students are in the lower category, researchers can learn more about the effects of drinks on stomach or other diseases.

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