



Article

**SOCIALIZATION OF THE CHARACTERISTICS OF OIL THAT IS USED  
REPEATEDLY FOR THE PEOPLE OF RANAH BATAHAN DISTRICT**

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Article Information	Abstract
Received : 2023-09-03 Revised : 2023-09-27 Accepted : 2023-10-05 Published : 2023-10-23	In this activity, food safety outreach was carried out regarding the use of cooking oil for repeated frying. Cooking oil is a triglyceride compound which has a high boiling point. The use of cooking oil in society is often used repeatedly. This means that the chemical content in cooking oil can undergo oxidation and hydrolysis processes so that the quality of the oil becomes damaged. The formation of peroxide compounds means that oil will become a precursor to the formation of an unhealthy condition for those who consume it. Therefore, this socialization was carried out to increase public knowledge. The socialization activities were carried out during real-work lecture activities for Andalas University students for the 2023 period. The socialization was carried out using the lecture and question and answer method. As a result of this activity, it is known that there has been an increase in community knowledge, which is indicated by the establishment of very good communication activities between the community and the real-work lecture team from Andalas University. It is hoped that this activity will be carried out again with a different food safety topic
<b>Keywords</b>  Keyword: <i>food safety, oil, peroxide, quality, sustainability</i>	
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**INTRODUCTION**

Cooking oil is a very important basic need for humans in everyday life to process various kinds of food ingredients. Where the process of refining cooking oil includes degumming (removing gum/impurities), neutralization, bleaching, deodorization (odor removal), and continues with the fractionation stage (Riwayati & Kurniasari, 2011; Elma, Suhendra, & Wahyuddin, 2016)).

Cooking oil can usually only be used for frying 3 – 4 times. If used repeatedly, the oil will change color. After frying many times, the fatty acids contained in the oil will become more saturated. In this way, the oil can be said to have been damaged or can be called used cooking oil, where used cooking oil can be categorized as household waste. Used cooking oil is used cooking oil that can come from types of cooking oil such as palm oil, corn oil, ghee, and the like which have been used repeatedly and can produce peroxide compounds (free radicals which are toxic to the body) (Suroso, 2013 ).

In practice, in life in society, the information above is not conveyed. Therefore, there needs to be intense outreach to the community to raise awareness for this. Andalas University students, in 2023,

will carry out Real Work Lecture activities which are integrated with community service activities in the Batahan sub-district. One of the performances proposed in this activity is socializing the dangers of using used cooking oil. It is hoped that with this outreach, public knowledge of the dangers of using used cooking oil can be further increased so that efforts towards a healthier and more prosperous society will be easier to realize.

## METHOD

1. Activity Method The method used in implementing this community service activity in the group of mothers in the Batahan sub-district environment is to use several methods: lectures, dialogue, and discussions related to mothers' awareness of the habits of using used oil which is often used. many times in cooking and the impact of using this oil on health. This activity will be filled with providing material regarding knowledge regarding the habit of using used cooking oil and its impact on health through the lecture method. This will then be followed by dialogue and discussion from the activity participants based on the presentation of the material previously presented.
2. Steps for this community service activity begin with a survey of the environment first. This was done to see the conditions and needs of the women's group in the area. Where people have the habit of using cooking oil many times. According to the results of our research, used goreng oil is dangerous to health. So we decided to carry out community service with the theme "Dissemination of the characteristics of oil that is used repeatedly for the community". After the survey, the team made a proposal for community service activities with the theme of used cooking oil and its use in the household. Then, the team takes care of the permit documents. After making a proposal and arranging permits for community service, the Abdimas team created outreach materials. The socialization material consists of several problems

## RESULT AND DISCUSSION

Figure 1 is a documentation of the socialization activities that have been carried out. This activity was attended by the community around the Ranah Batahan sub-district and was directly directed by Nagari officials. This activity was attended directly by the Mayor of Nagari and his staff. Based on the opening remarks from Mr. Wali Nagari, he appreciated this activity and hoped that this activity could be carried out periodically so that its impact could be seen and monitored periodically by the government.



### Fig 1. Socialization activity for food safety program

Students from the Andalas University Padang Community Service Program (KKN), West Sumatra are educating the people of Batahan village, Ranah Batahan District, West Pasaman Regency to be wary of repeatedly using cooking oil, also known as used cooking oil, because it is dangerous for health. "The public must understand that used cooking oil is not good for health. We are providing this information in a series of community service," said one of the students who was a resource person from the Department of Food Technology and Agricultural Products, Widia Sepnita, in Simpang Empat, Monday. According to him, his party held outreach to 20 sub-district, Jorong or hamlet officials, Nagari guardians, and related parties. It is hoped that later participants will be able to convey this to the wider community. He said that using cooking oil repeatedly or when it has turned black is very dangerous to health. The danger of used cooking oil, he said, is that it can cause cancer, obesity, infections, and botulism bacteria. "Frequently heating cooking oil repeatedly is very dangerous for health (Kahar, 20024; Ningsih, 2018; ). This danger must be conveyed so that people understand it and avoid it," he said. Another student from the Rayhand Medical Education Department said that this activity was a form of community service aimed at providing education to the public regarding the dangers of using cooking oil. According to him, based on observations in the environment around the Ranah Batahan community, especially the Silaping Batahan area, many business actors were found to use cooking oil as the main ingredient to process their food. However, problems arise because the oil used is oil that has been used repeatedly until it turns black. His party provides education to increase public knowledge about the dangers of using used cooking oil, which includes the meaning of used cooking oil, the content of used cooking oil, the characteristics of oil that are not suitable for consumption, the impact of consuming used cooking oil in the short and long term and how to deal with used cooking oil. Students also distributed leaflets as a media for socialization which contained material about the meaning of used cooking oil and its dangers. "Hopefully the activities we carry out can be useful for the community in maintaining health," he hoped.

Figure 2 is documentation containing all parties involved in this activity. This activity received good support and reception from the Nagari and the community and created enthusiasm for students who carried out real work-study activities.



Fig.2 Documentation of all participants of socialization activity.

## CONCLUSION

This activity is one of the Real Work Lecture work programs which is integrated with community service. By raising the theme of food safety which is a basic problem in almost all communities, it is hoped that this activity can have a good impact on society. Activities like this must be carried out periodically and evaluated to ensure that the output from this activity is acceptable to the community.

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## REFERENCES

- Elma, M., Suhendra, S. A., & Wahyuddin. (2016). *Process for Making Biodiesel from a Mixture of Coconut Oil and Used Cooking Oil*, 5(1), 8–17. Retrieved from <https://media.neliti.com/media/publications/107518-ID-produk-pembuatan-biodieseldaricampuran.pdf>
- Force majeure. (2004). *Response of Used Cooking Oil to the Application of Rice Husks*. Semarang University, Semarang.
- Ningsih, Y. F. (2018). *Don't Store Cooking Oil in the Refrigerator, It Can Trigger Cancer*. Retrieved from <https://cantik.tempo.co/read/1083167/jangan-simpan-minyak-goreng-di-kulkasbisa-picukanker/full&view=ok>
- Riwayati, I., & Kurniasari, L. (2011). *Study of Enzymatic Hydrolysis of Used Cooking Oil Using Microwave Activation*, 45–50.
- Suroso, A. S. (2013). *The quality of consumable cooking oil is seen from the peroxide number, acid number, and water content*.