

Education "Love Immundrink"

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Abstract

The Shofa Marwa Islamic boarding school is a famous Islamic boarding school in the Pakusari Jember sub-district, which has great opportunities for them to gain knowledge related to the health sector. Kombucha drink is a fermented drink that increases the levels of short-chain fatty acid-producing bacteria (SCFAs), reduces the number of gram-negative and pathogenic bacteria, and induces interesting curative effects in diabetic conditions. This activity seeks to improve the level of public health and prevent and overcome health problems independently among teenagers at the Shofa Marwa Islamic boarding school. The problem with the subject here is the lack of knowledge and skills of participants regarding the use and manufacture of health drinks, which can help them implement healthy patterns by starting with simple and high-quality things. Through the method of activity preparation, implementation, and monitoring evaluation stages of this activity, the ability and interest of all participants in the activity are demonstrated, which is demonstrated by the training results of all groups being able to produce prebiotic drink products that are ready for consumption. This is a great opportunity for them to gain knowledge related to the field of health that can be applied to daily life at the cottage.

Keywords: immunomodulator; immunodrink; indonesian medicinal plants

Introduction

The immune system in the body is composed of the cooperation of various organs in the body. The body's immune system is a defense against the entry of foreign objects attacking humans (Aldi, Rasyadi, and Handayani 2015). We can prevent microorganisms from entering the body by washing our hands with soap and running water, using a mask, physical distancing, and the most important thing is to maintain and improve the body's immunity well so that the body becomes stronger and less susceptible to disease. (Dhina Ayu Susanti and Shobayaril Hidayati 2023).

The function of the human body's immunity depends on age, that is, as we get older, the body's immune system's ability to deal with infections, such as infectious diseases, chronic diseases, autoimmune diseases and cancer, decreases. Long-term use of immunosuppressant drugs and chemical immunostimulants can cause side effects on the immune system. Back to nature is a trend issue that is currently emerging to reduce the side effects of chemical drugs. One of the advantages of using herbal medicines is that they contain a variety of active

substances, which are thought to have a synergistic role in producing therapeutic effects(Luhurningtyas, Dyahariesti, and M 2020).

Riskesdas data for 2020 states that as many as 50% of the population in Indonesia use herbal ingredients in the form of spices to improve their level of health.(Sutrisno, MEYulianto, D. Ariwibowo, HDariyanto 2021). The parts of the plant that have medicinal properties are the roots, fruit, seeds, leaves and stem bark according to the highest metabolite levels(Yanti Harjono, Hany Yusmaini 2017). Apart from being used to cure diseases, herbal plants can also be used to increase endurance and freshen the body(Aryani Intan Endah Rahmawati, Dian Hardiyanto, Febri Azhari 2019).

The very varied secondary metabolite content in herbal plants can be used as an immunomodulator. The price of chemical drugs that act as immunomodulators on the market is expensive, so it is necessary to develop alternative immunomodulators that come from herbal ingredients that are easily available in the area (Aldi et al. 2015).

Herbs that are widely used by the public as immunomodulators are the empon-empon family which is included in the zingiberaceae family, such as ginger. Ginger contains zingiberene, bisabolene and camphor. The secondary metabolite content in ginger rhizome is in the form of essential oils in the form of lemonin, camphene, zingiberin, gingerol, shogool and gingeral. The warm feeling that arises after we consume ginger is caused by the presence of gingerol compounds. The ginger plant functions as an immunostimulant. Its use with other herbal ingredients can increase its function to treat various diseases. Several herbal ingredients that are widely used as kitchen spices have many benefits. Some kitchen spices such as cloves, cinnamon, lemongrass, and lime has not been used optimally by the community as an ingredient that can improve the immune system. The right way of processing and composition of herbs will influence the efficacy of herbal medicine(Masniah, Rezi, and Faisal 2021)

The Community Service Program/Program Pelayanan Masyarakat (CSP/PKM) is expected to be able to educate participants to be able to use herbs around the house to make a very delicious Immunodrink concoction for the whole family to consume. Through this activity, it is also hoped that the community can make Immunodrink preparations with the right composition so that the whole family can enjoy them and the benefits can be felt. By

concocting a herbal drink yourself, a housewife who is someone who manages family finances can save money on purchasing medicines.(Kusumawaty, Y., & Khaswarina 2018).

Method

Identify Community Needs: carried out through collecting initial data and information and then analyzing problems and needs.

Community Initial Knowledge Survey: carried out as initial data on the level of public knowledge regarding the benefits of TOGA and how to process it. The survey was conducted through questions and answers with several participants regarding the participants' knowledge of the use of herbal plants to improve the immune system.

Providing Education Through Leaflets: education about medicinal plants that can be used by residents and simple methods of processing natural ingredients to prepare Imunodrink.

Activity Evaluation: measure participants' knowledge regarding herbal plants that are efficacious as immunomodulators and how to process them through a question and answer process for participants. The evaluation activity was also accompanied by the distribution of door prizes to increase participants' interest in answering questions asked by the presenters.

Results and Discussion

PKM activities were carried out on May 28 2023 at the prayer room in Krajan hamlet, Mangli Village, Kaliwates District. The activity participants were prayer room congregations, most of whom were housewives, numbering 19 people.

PKM activities ran very smoothly. The event began with free blood pressure activities, then continued with the educational presentation "Love Imundrink" to PKM participants. The speaker explained several herbal ingredients that can be used to increase body stamina and how to process them. Participants were also distributed leaflets related to "Love Imundrink" so that when they got home they could study and apply them.



Figure 1. PKM activity leaflet distributed to participants

The speaker explained several herbal ingredients that can be used to improve the body's immune system, including lemon, lemongrass, ginger and honey. These plants are often found around us and are easy to process into a delicious drink that is effective in increasing the body's immunity.

Ginger extract can increase natural killer cells and destroy the cell walls of viruses that have infected their hosts in the human body(Nurlita, D., Handayani, N., & Setiyabudi nd).Lemon (Citrus limon) has benefits as an antioxidant because it contains vitamin C, while lemongrass or lemongrass (Cymbopogon nardus L) has citral and geranial compounds which are useful as anti-inflammatory.(JS et al. 2023).The antioxidant activity of honey is known to prevent several diseases such as inflammation, cardiovascular, diabetes and cancer(Khandkar Shaharina Hossain et al, 2020). Honey is a herbal ingredient whose properties are stated in the Koran, Surah An-Nahl verse 69. Honey and dates are considered to help ward off viruses and increase our body's immunity.(Ahmad Raihan Qolbu Attsani, Hidayatul Fikra, Tamami 2022).

Participants were very enthusiastic about this PKM activity, this was indicated by the large number of participants asking questions related to the use of herbal medicine, such as:

1. Do all herbal medicines have to be boiled first?
2. What type of herbal medicine is suitable for increasing the stamina of young children?
3. Is it safe for pregnant and breastfeeding women to consume herbal medicine?
4. Are the plants around us safe for consumption?

All incoming questions were answered well by the presenters so that the participants gained additional knowledge. The answer to the first question is that not all plants need to be boiled, because some plants, which for example contain essential oils, have less efficacy when boiled. The answer to the second question is that plants in terms of taste are suitable for small children's tongues and the dosage must be appropriate for their age. The answer to the third question is that herbal medicines for pregnant and breastfeeding women are relatively safe to use compared to chemical medicines, but you still have to pay attention to the dosage and effects. Herbal medicines also still have side effects if they are not used according to the dosage and time, For example, there are several herbal medicines such as turmeric which are not good to use in early pregnancy because they will stimulate pregnancy contractions so they are more appropriate to use in the final trimester of pregnancy. The answer to the fourth question is that basically herbal plants have good properties, but their use must pay attention to the dosage, the right time, and a good processing process so as to minimize side effects.



Figure 2. Implementation of PKM

Participants were also able to answer well several questions asked by the presenters regarding the material previously presented. At the end of the event, gifts were given to participants who had answered questions well and to participants who had asked questions.



Figure 3. Handing over gifts to participants

The next PKM activity plan is to provide training in making "Love Imundrink" herbal medicine as a continuation of the current community service activities. The hope is that people will be able to make good use of herbal ingredients around the house to maintain the body's immunity of all family members.



Figure 4. Photo with participants

Conclusion

The PKM activity which aims to provide education about several herbs that can be used as immunerinks went well and was attended by 19 participants where at the end of the event based on the Q&A process it was possible to see an increase in participants' knowledge about immunerink herbs.

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