



A Survey of Knowledge Level of Fitness Members in Consuming Muscle-building Supplements in Semarang

Original Article

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Abstract

The consumption of supplements to increase muscle mass is considered a necessity for some fitness members. However, there is lack studies which evaluate the level of fitness members' knowledge about supplements. This research is a type of quantitative descriptive research. 15% of the sample has very good knowledge (very knowledgeable), and 45% of the sample has sufficient knowledge (knowing), unfortunately there are still many respondents (consumers) as much as 40% do not know about the supplements they are taking. Researcher conclude the knowledge levels of fitness member in supplement consumption is still low, and we assume that the factor of education level had a significant effect on the knowledge level of fitness members in consuming supplements.

Keywords: *fitness and health, supplement, muscle health*

INTRODUCTION

Nowadays, the consumption of supplements to increase muscle mass is considered a necessity for some fitness members. to gain muscle mass fast. Practicality is the main reason, so that muscle mass enhancing supplements are a mainstay solution by members to meet nutritional needs instantly without having to bother managing time and consuming natural foods. This causes muscle mass-enhancing supplement products to be very saleable in the market. Almost all fitness members are familiar with additional food or better known as muscle supplements (1).

Indonesian Centre for Food and Drug Administration (BPOM) stated that a muscle mass supplements are products intended to complement the nutritional needs of muscles, containing one or more of the following ingredients: in the form of vitamins, minerals, amino acids or other materials (derived from plants or non-plants) which have nutritional value and physiological effects in concentrated amounts. Muscle mass supplements can be in the form of solid products including tablets, lozenges, chewable tablets, powders, capsules or liquid products in the form of drops, syrups, solutions, to complement certain body needs. Supplements are widely consumed by both men and women. Supplements that are currently popular with men are supplements to increase muscle mass, while women prefer dietary supplements (2).

Some supplements that are known to help build muscle mass are: protein powder, amino acids, weigh gainers, creatine powder, ZMA (Zinc. Monomethionine Aspartan), Prohormones, and steroids. From the seven muscle building supplements, only steroids are not good for consumption (3). The use of steroids has been classified as an unlawful act, although it is prohibited to use, but the rapid effects of steroids in building muscle mass often make people forget the side effects they cause. Some of the negative side effects of steroids are: 1) Baldness, 2) Decreased testicular size, 3) Decreased sperm count, 4) Breast enlargement, 5) Risk for infertility, impotence, and prostate disorders (4).

Here are the positive impacts if members understand about the supplements they are taking and negative impacts if members do not understand about the supplements they are taking, the positive impacts are: 1) Increase muscle mass, 2) Reduce muscle soreness after exercise, 3) Help lose weight (5). Whereas the negative impacts are: 1) Protein which is usually found in supplements when consumed by certain people can cause allergic effects, 2) Excessive consumption of iron is not good for people with blood disorders such as thalassemia, even though the use of muscle supplements is beneficial for muscle development, but if used incorrectly, it will endanger one's health (6).

With the increasing sales of muscle mass-enhancing supplements, fitness members must have sufficient knowledge so that they are not wrong in consuming supplements, due to the lack of socialization about supplements by producers and the marketing department which focuses on sales figures without paying attention to consumer knowledge about these supplements. Knowledge is the result of knowing from humans, who simply answer the statements, what, why, when, and, how, for example, what is meant by supplements, why do you take supplements, and when? proper consumption of supplements, how the effects of supplements, and so on, knowledge is the most basic aspect in Bloom's taxonomy, often called memory aspect, This, of course, cannot be separated from the level of member knowledge about the ins and outs of supplements and the mechanism of consuming them (7).

In this study, the researcher wanted to know the level of fitness members' knowledge about supplements, about what supplements are, reasons for taking supplements, types of supplements, the benefits of supplements, and the side effects of taking supplements, to fitness members at Joyfit Gym, Manifesto Gym, which is in Semarang Regency, the pion Gym, and the hart Gym, which is located in Semarang City.

MATERIAL AND METHODS

This research is a type of quantitative descriptive research, a research method based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, quantitative/statistical data analysis (8). Cognitive indicators contain behavior that emphasizes intellectual aspects, such as knowledge, understanding, and thinking skills (9).

Data analysis is an effort or method of processing data into information so that the characteristics of the data can be understood to solve problems, especially problems related to research. In this study, the frequency distribution which is known as non-parametric analysis is being used. The SPSS version 20.0 was used to find the mean, median, mode, and percentile.

RESULTS

This study took a sample of 40 members who took supplements. There are 4 fitness places that are used as objects of research, namely Joyfit Gym and Manifesto Gym located in Semarang Regency, Pion Gym and Hart Gym located in Semarang City. Researchers took 10 samples of members who took supplements who were in every fitness center that was used as the object of research. According to table 1, it is known that the mean or average value of 40 samples is 7.3. It is included in the category of knowing it is obtained from (N mean: N questions = 182.50: 25 = 7.3). It is known that the median value or mean value of 40 samples is 7, 6 is included in the

knowing category obtained from (N median: N questions = 190.00: 25 = 7.6). It is known that the mode value or the value that often appears from 40 samples is 7.6 which is included in the category of knowing it is obtained from (N mode: N questions = 190.00: 25 = 7.6).

Table 1. Table of Measurement of Central Tendency

	Score
N respondents	40
mean	7.3
median	7.6
Mode	7.6
Std. Deviation	1.3

In this study the researchers determined 3 categories to determine the level of member knowledge, namely, very knowing with a value range of 8.6 - 100 obtained from (mean + std.deviation), knowing with a value range of 7.2 - 8.5 obtained from (between mean + std.deviation and mean - std.deviation), less aware with a range of values 6 - 7.1 obtained from (mean - std.deviation). Based on the figure 1, the distribution of data in three categories can be seen, 15% of the sample has very good knowledge (very knowledgeable), and 45% of the sample has sufficient knowledge (knowing), unfortunately there are still many respondents (consumers) as much as 40% do not know about the supplements they are taking.

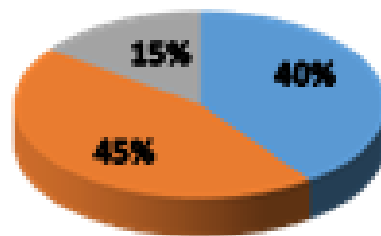


Figure 1. Distribution of knowledge level

DISCUSSION

A person's level of knowledge is influenced by several factors, namely age, gender, education level, income level, exposure to information, and socio-cultural(10). Extensive knowledge is very important for humans as social beings, both to communicate or to understand something that will be lived. In addition, extensive knowledge is also needed in public speaking. However, many people do not have extensive knowledge, and it is very important for us to know how to hone knowledge, namely by reading, looking for information on social media or mass media to expand knowledge (11).

A high level of knowledge is needed when we decide to take supplements, at least we ask people who are experienced in the supplement field if doing research is considered too difficult, so that we understand which supplements are good for consumption, understand the effects or effects of these supplements and buy supplements. at a trusted store or salesperson. Consumption of supplements has a positive impact that is beneficial to the body but also has a negative impact that cannot be underestimated if you take it wrong.the positive impacts are:1) Increase muscle mass, 2) Reduce muscle soreness after exercise, 3) Help lose weight (5).

WhereasThe negative impacts are: 1) Protein which is usually found in supplements when consumed by certain people can cause allergic effects, 2) Excessive consumption of iron is not good for people with blood disorders such as thalassemia, even though the use of muscle supplements is beneficial for muscle development, but if used incorrectly, it will would endanger a person's health (6). In this study, it was found that the education level factor had a significant effect on the knowledge level of fitness members in consuming supplements.

CONCLUSION

Researcher conclude the knowledge levels of fitness member in supplement consumption is still low, and we assume that the factor of education level had a significant effect on the knowledge level of fitness members in consuming supplements. For the general public who like the world of sports, especially those who are active in fitness and taking supplements, it is recommended that they consider the risks that will occur, the positive and negative impacts, the benefits of taking supplements, because the impact that will occur on our bodies is not something that can be taken lightly if we do not know the procedure for consuming supplements that are good and right, it would be nice to do a survey through any media that can be accounted for before consuming supplements.

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CONFLICTS OF INTEREST

Conflict of interest : Author state no conflict of interest.

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