

A MINI-SURVEY on VITAMIN USAGE HABITS in ESKİŞEHİR

Mehlika Dilek ALTINTOP , Gözde CANSUNAR, Ahmet ÖZDEMİR*

Anadolu University, Faculty of Pharmacy, Department of Pharmaceutical Chemistry, 26470
Eskişehir, TURKEY

Abstract

In the present study, vitamin usage habits of five hundred people representing four different socio-cultural groups in Eskişehir and the factors affecting these habits were studied.

The participants of the research were chosen by random sampling method and were asked to answer the questionnaire. The data of the investigation were given in percentages and shown in graphs in the view of the evaluation in general and in subgroups.

The results of this study indicate that most people use vitamins for wellness and gaining resistance to certain diseases. Nutrition disorder in daily life and distrust of food are other factors affecting vitamin usage of people. At this point, considering their preferences and their knowledge of vitamins, it is clear that there is a visible distinction between the socio-cultural groups.

Key words: Vitamin, Vitamin usage, Socio-cultural group

Eskişehir’de Vitamin Kullanım Alışkanlıkları Üzerine Dar Kapsamlı Bir Araştırma

Bu çalışmada, Eskişehir’de dört farklı sosyo-kültürel grubu temsil eden 500 kişinin vitamin kullanım alışkanlıkları ve bu alışkanlıkları etkileyen faktörler çalışılmıştır.

Araştırmaya katılan denekler tesadüfi örnekleme yöntemi ile seçilmiş ve konu ile ilgili soruları yanıtlamaları istenmiştir. Araştırmanın verileri, genel olarak ve genel içerisindeki gruplara göre değerlendirilerek, % oran olarak verilmiş ve grafik olarak gösterilmiştir.

Bu çalışmanın sonuçları, çoğu kişinin vitaminleri sağlık ve belirli hastalıklara direnç kazanmak için kullandığını göstermektedir. Günlük yaşamdaki beslenme bozukluğu ve gıdalara karşı oluşan güvensizlik vitamin kullanımını etkileyen diğer faktörler olarak ortaya çıkmaktadır. Bu noktada, vitamin tercihleri ve bilgilerine bakıldığında sosyo-kültürel gruplar arasında belirgin bir farklılık olduğu açıktır.

Anahtar kelimeler: Vitamin, Vitamin kullanımı, Sosyo-kültürel grup

* **Correspondence:** E-mail:ahmeto@anadolu.edu.tr; Tel: +90 222 3350580/3774

INTRODUCTION

Vitamins have been defined as a group of naturally occurring organic compounds required by an organism as a vital nutrient in tiny amounts. They are essential for the normal growth and development of a multicellular organism. The lack of vitamins in the diet leads to deficiency diseases such as xerophthalmia, scurvy, beriberi and pellagra, which are the most common diseases all over the world particularly in the developing countries. Vitamin deficiency is associated with inadequate dietary intake or with certain conditions such as alcoholism and malabsorption syndromes. The use of some medications interferes with the absorption or use of vitamins and causes vitamin deficiency. In order to avoid vitamin deficiency, humans need to take vitamins to remain healthy or improve their health (1-4).

Vitamins can be divided into two groups: water-soluble and fat-soluble vitamins. Thirteen vitamins are present in humans. Vitamins A, D, E, and K are fat-soluble, whereas 8 B vitamins (vitamins B₁, B₂, B₃, B₅, B₆, B₇, B₉, B₁₂) and vitamin C are water-soluble (1).

Water-soluble vitamins dissolve easily following exposure to water and are readily excreted from the body and thus should be taken daily. In contrast, fat-soluble vitamins are not easily excreted in the body and are more likely to accumulate in the body and thus should not be necessarily taken every day (1-6).

Vitamins have attracted a great deal of interest due to their importance in nutrition and health. Considerable research on them in relation to their diverse biochemical functions has been carried out (1-6). In addition, vitamin usage habits in different regions and the factors affecting these preferences have been investigated by many researchers (6-8).

In the present paper, we carried out a research on vitamin usage habits of five hundred people representing four different socio-cultural groups in Eskişehir and the factors affecting these habits.

METHODS

In the present study, the usage of vitamins and the factors affecting the preferences of the participants were determined.

The material of this study was a questionnaire replied by 500 people representing four different socio-cultural groups in Eskişehir (Fig 1).



Figure 1. The chosen research areas in Eskişehir.

The first area: Fevzi Çakmak, Emek, Esentepe, Şirintepe, Gökmeşdan, 71 Evler

The second area: Şair Fuzuli, Kırmızı Toprak, Atatürk Street, Odunpazarı

The third area: Savaş Street, Hasan Polatkan, Batıkent, Vişnelik

The fourth area: Tepebaşı, Kızılıklı Mahmut Pehlivan Street, Bağlar, İsmet İnönü Street, Uluönder.

Each questionnaire form including 18 questions was filled out by face-to-face interviews. Data gained from the questionnaire was collected between September, 2011 and April, 2012 and this data was analyzed with Microsoft Excel program.

RESULTS AND DISCUSSION

A research on vitamin usage habits of five hundred people from four different socio-cultural groups in Eskişehir was carried out and the factors affecting these habits were also evaluated. The participants' education, income and age status are given in Table 1,2 and 3, respectively.

Table 1. The education levels of the participants.

Education Level	1 st Area	2 nd Area	3 rd Area	4 th Area	TOTAL
Illiteracy	2	0	0	0	2
Primary Education	59	2	3	1	65
High School	40	66	22	3	131
University	23	23	70	120	236
Postgraduate education	1	34	30	1	66

Table 2. The income levels of the participants .

Income Level	1 st Area	2 nd Area	3 rd Area	4 th Area	TOTAL
0-660 TL	70	5	15	84	174
661-1200 TL	43	12	4	32	91
1201-2000 TL	6	40	28	3	77
Over 2000 TL	6	68	78	6	158

Table 3. The age range of the participants .

Age Range	1 st Area	2 nd Area	3 rd Area	4 th Area	TOTAL
0-12	1	12	8	0	21
13-18	10	40	17	12	79
19-30	55	23	59	111	248
31-50	49	50	20	1	120
Over 50	10	0	21	1	32

38.60 % of the participants use, whereas 61.40% of the participants do not use vitamins. Participants use vitamins every day or several days in a week. Participants in the fourth area, use vitamins whenever they need. This response can explain student population in this area. Among socio-cultural groups, people with better socio-cultural and economic levels have consciousness about vitamin usage (Fig 2,3).

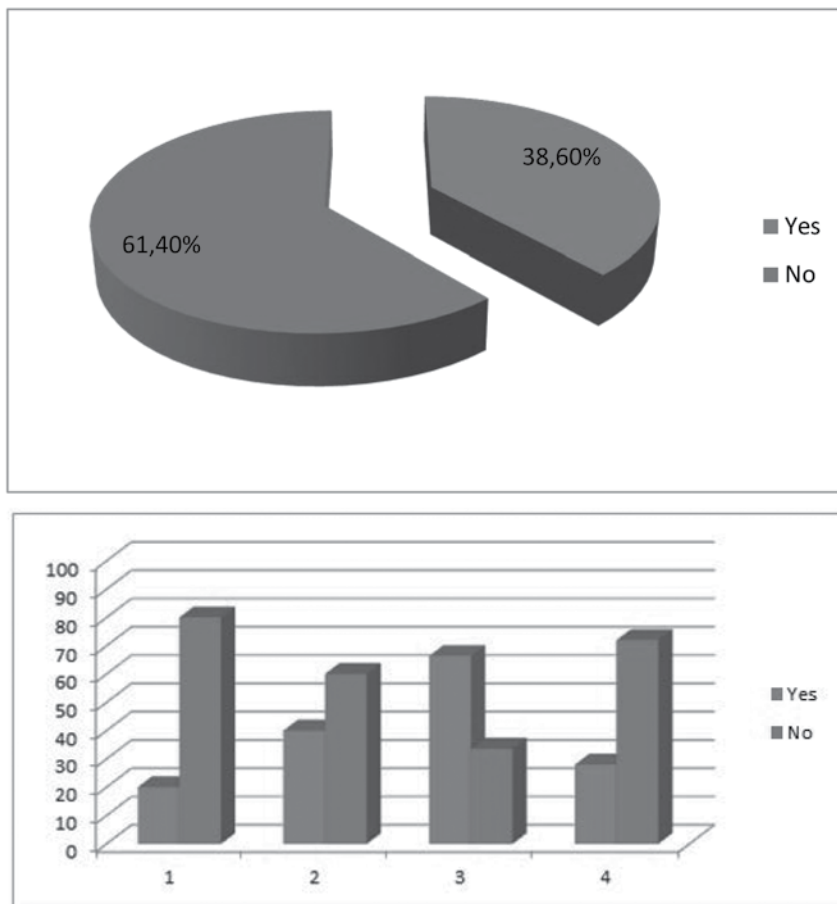
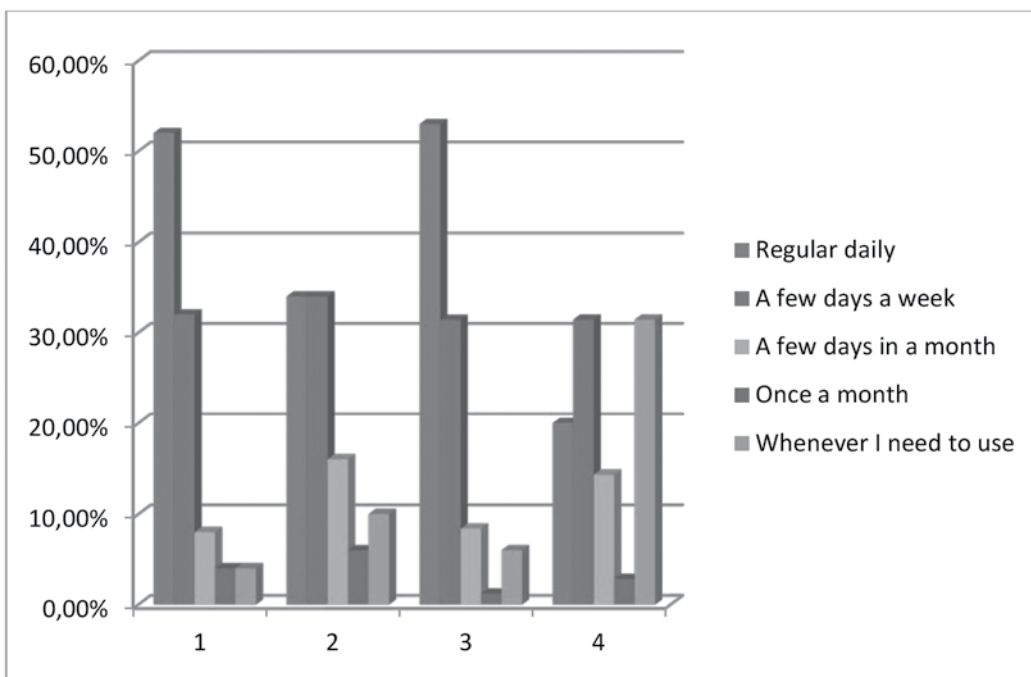
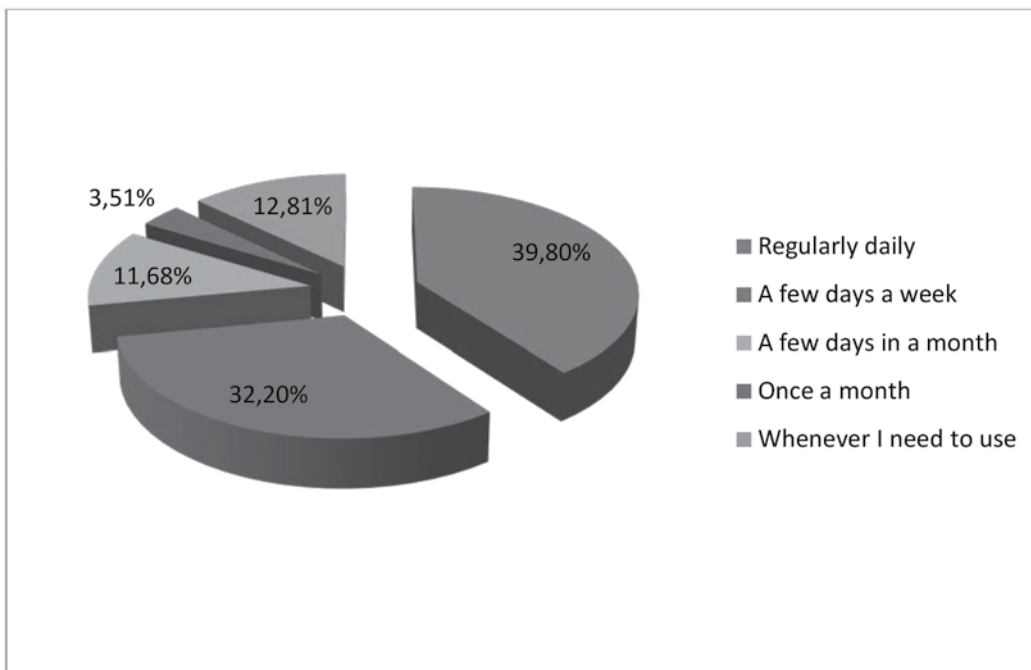


Figure 2. The vitamin usage of participants.



In the first and second areas, people use vitamins due to doctor advice, whilst in the third and fourth areas, people use vitamins in order to relieve tiredness (Fig 4).

According to most participants, vitamin use is unnecessary (Fig 5).

In all groups, most participants certainly consult a doctor in order to take vitamins owing to the confidence to doctors (Fig 6).

According to most participants, vitamins can be harmful. This situation results from the lack of awareness of consumers about vitamins, and can be explained by their skeptical approaches to unknown subjects (Fig 7).

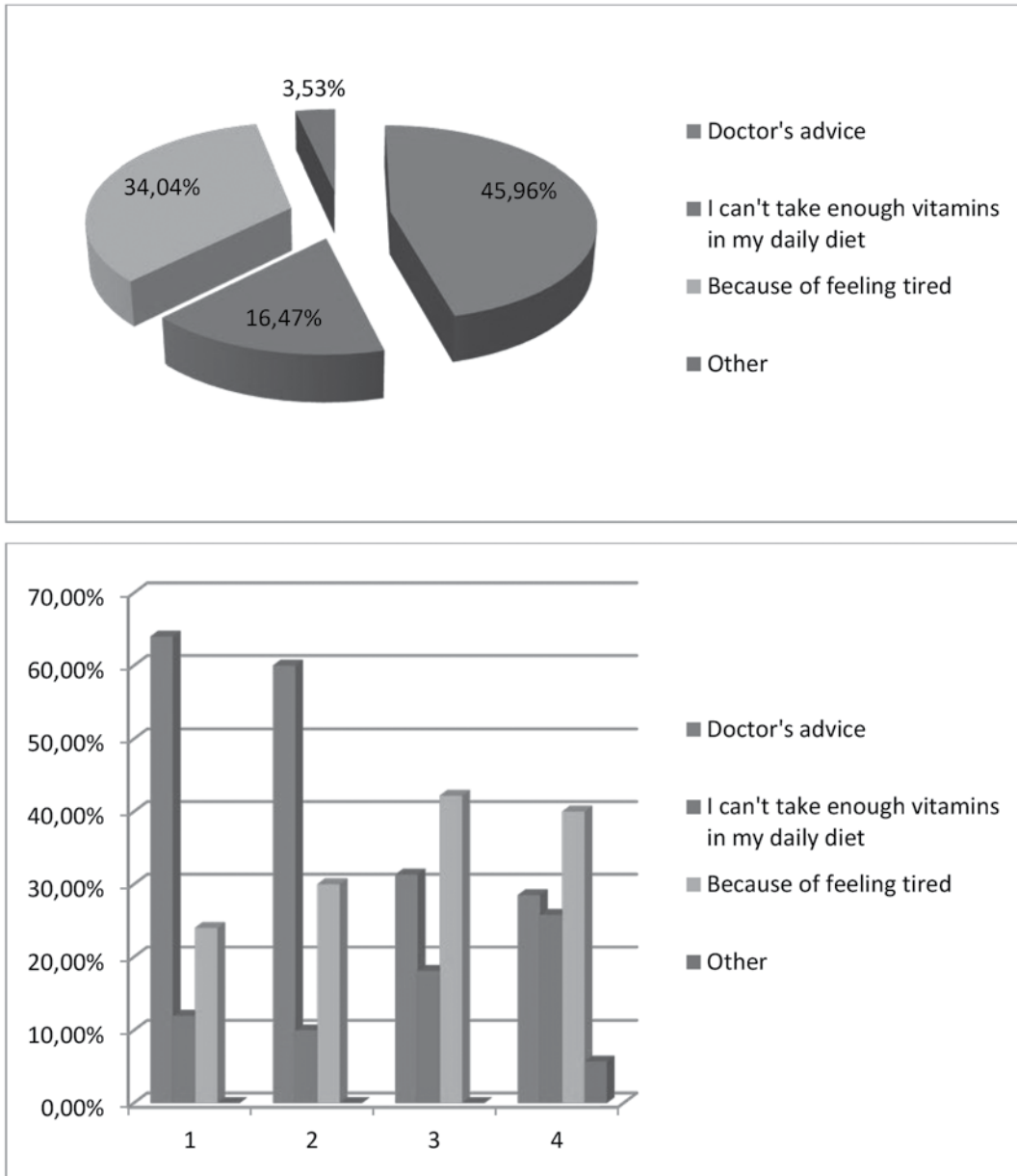


Figure 4. The reasons of the participants for vitamin use.

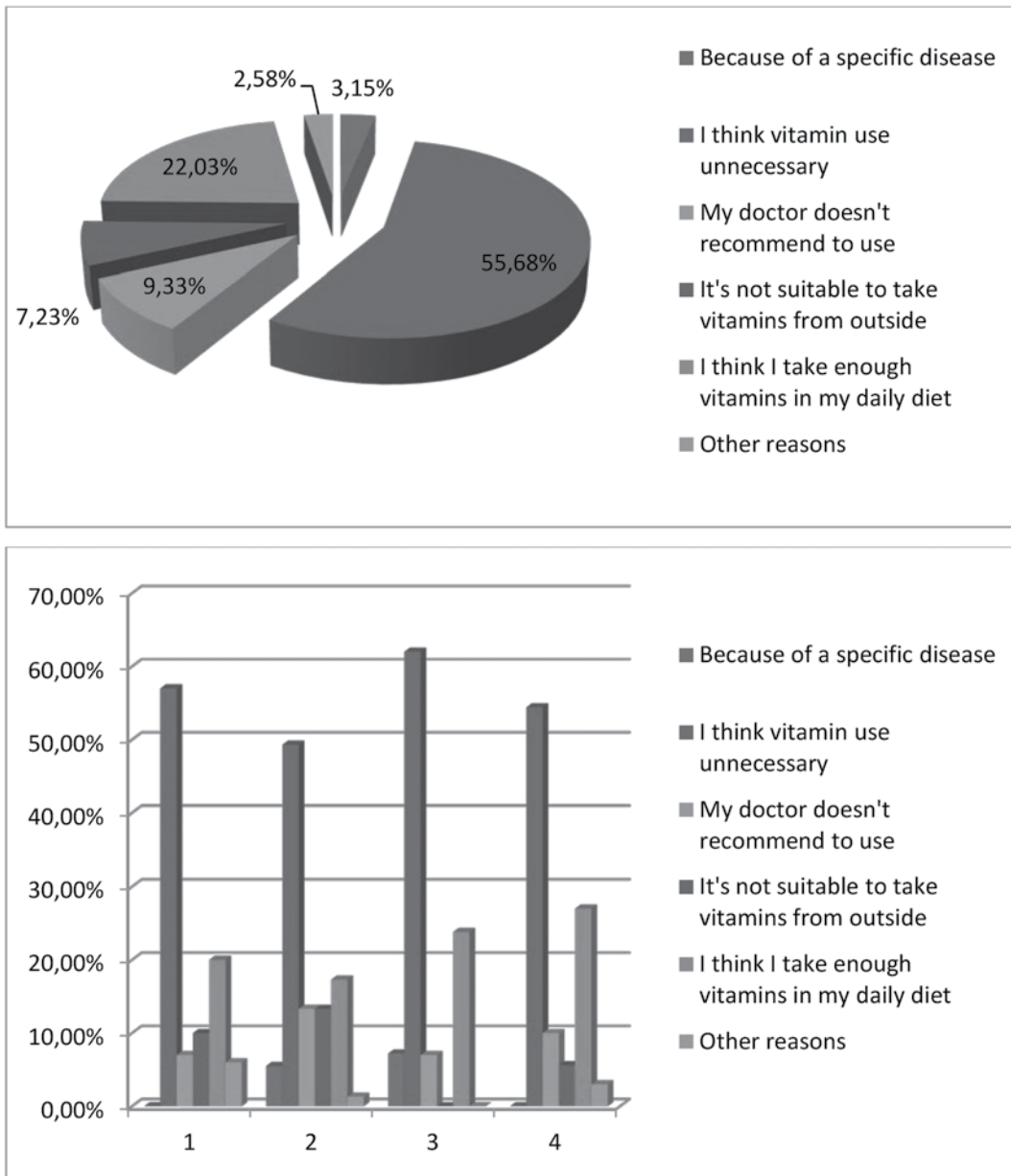


Figure 5. The reasons of the participants for not using vitamins.

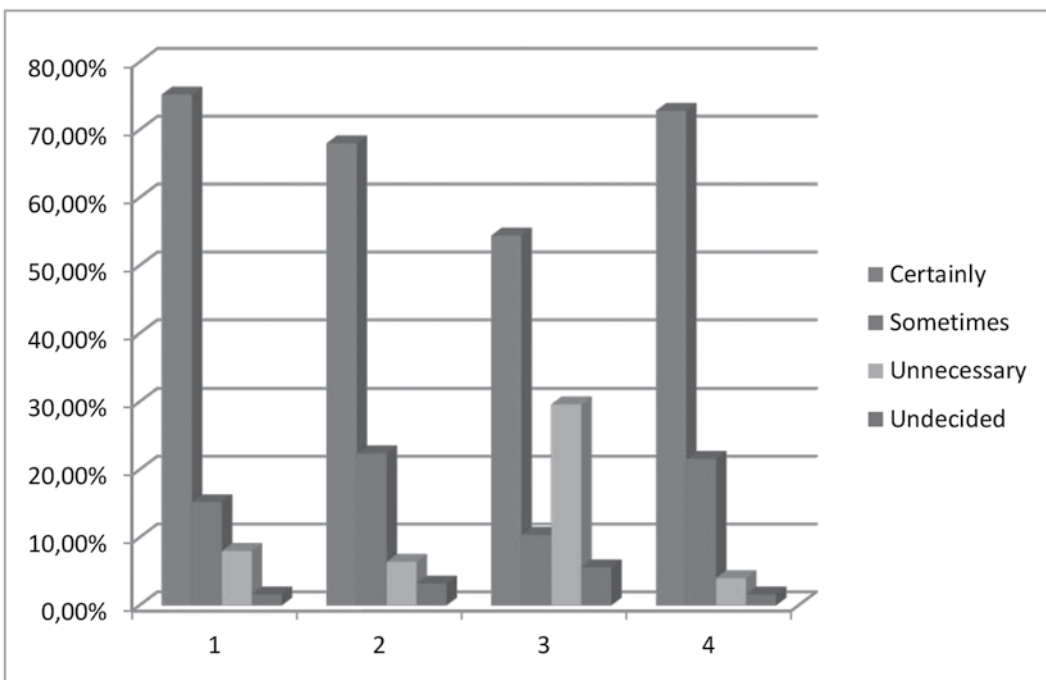
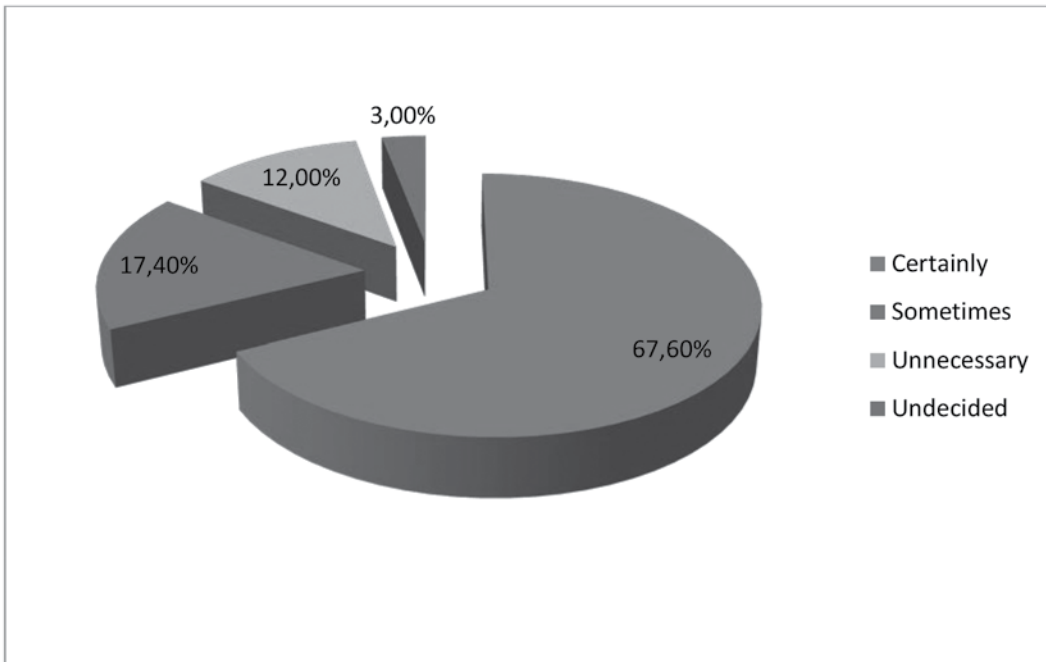


Figure 6. The necessity of taking a doctor's advice while using vitamins .

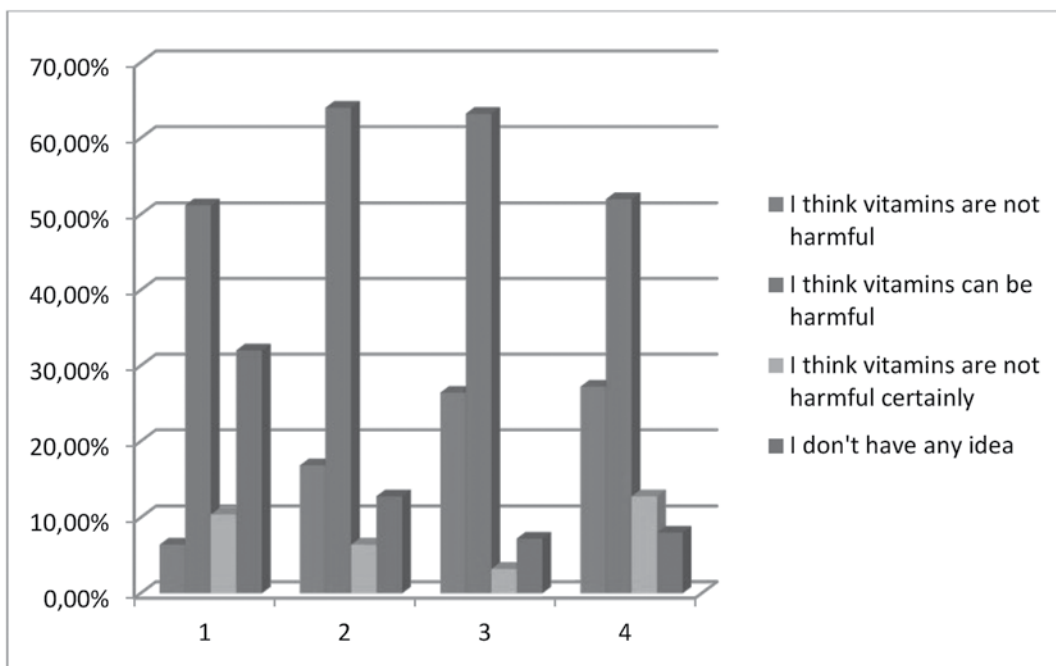
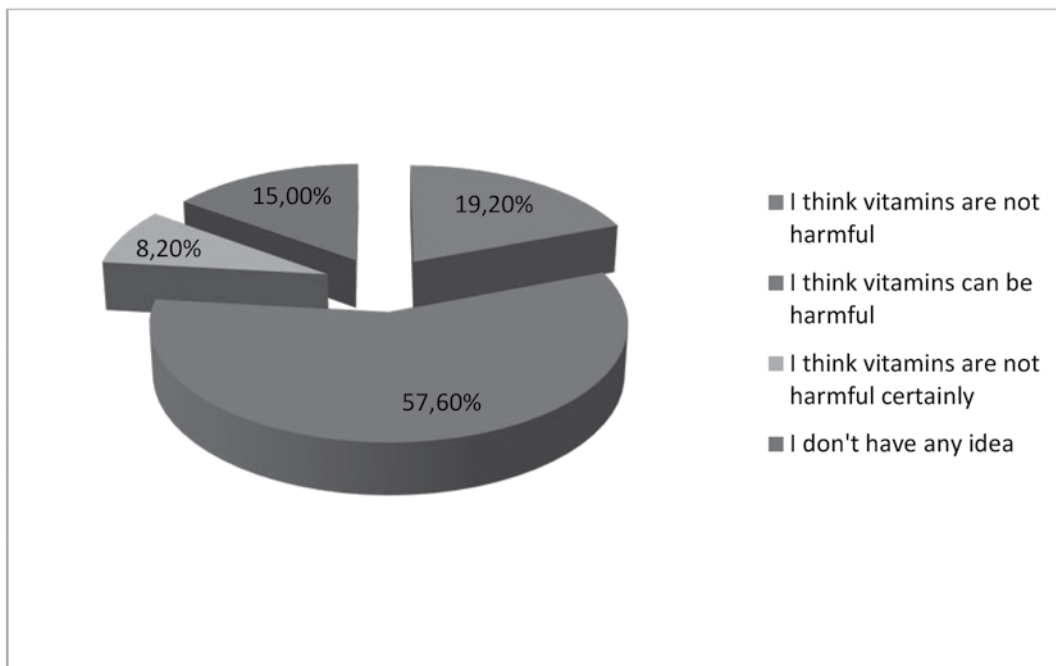


Figure 7. The participants' views about the dangers of vitamins.

All groups think that daily diet partially meets vitamin requirement. This result indicates that all the participants do not trust today's food (Fig 8).

According to the vast majority of participants, the priority in the use of vitamins for children is related to malnutrition and health problems (Fig 9).

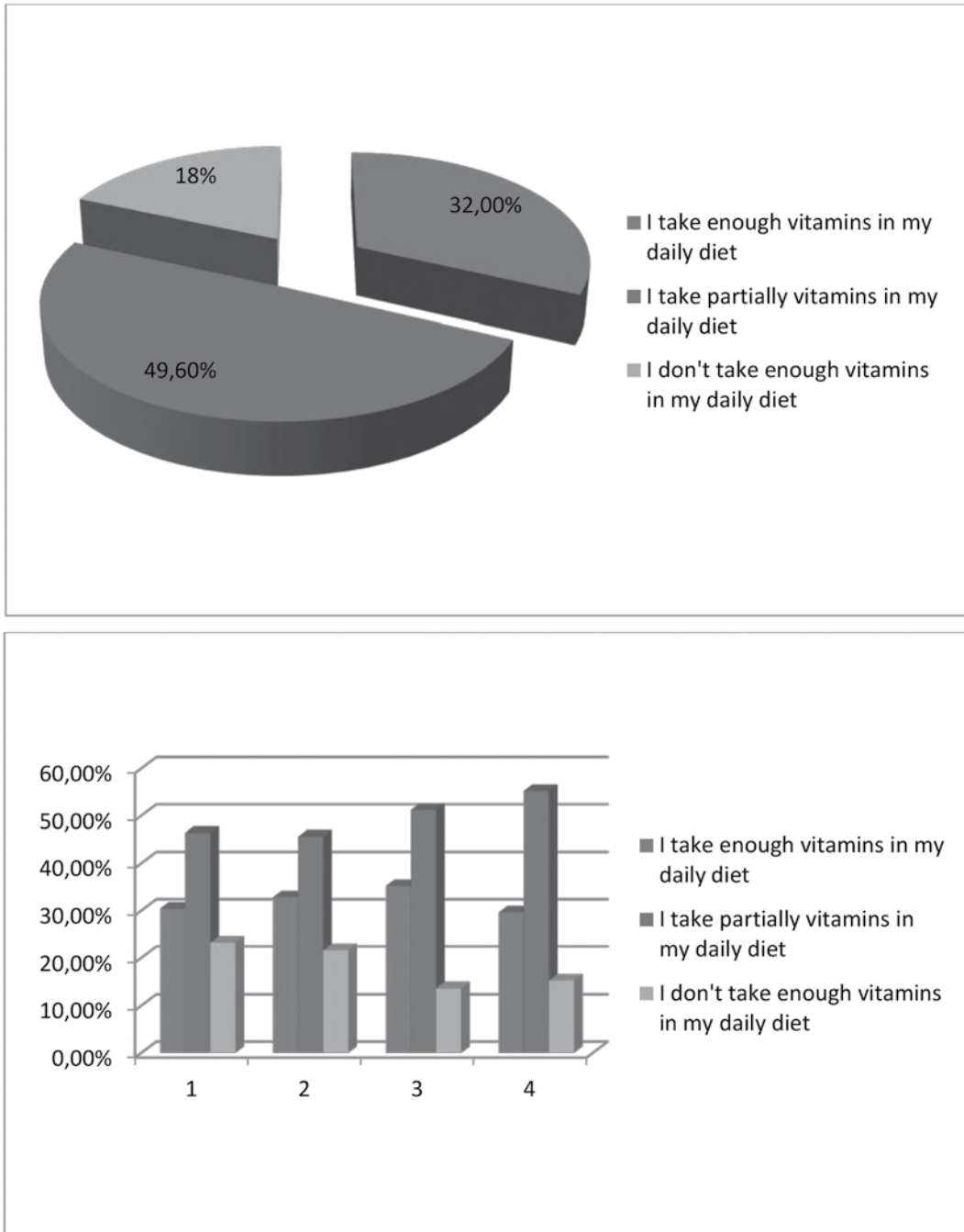


Figure 8. The relationship between daily diet and vitamin usage

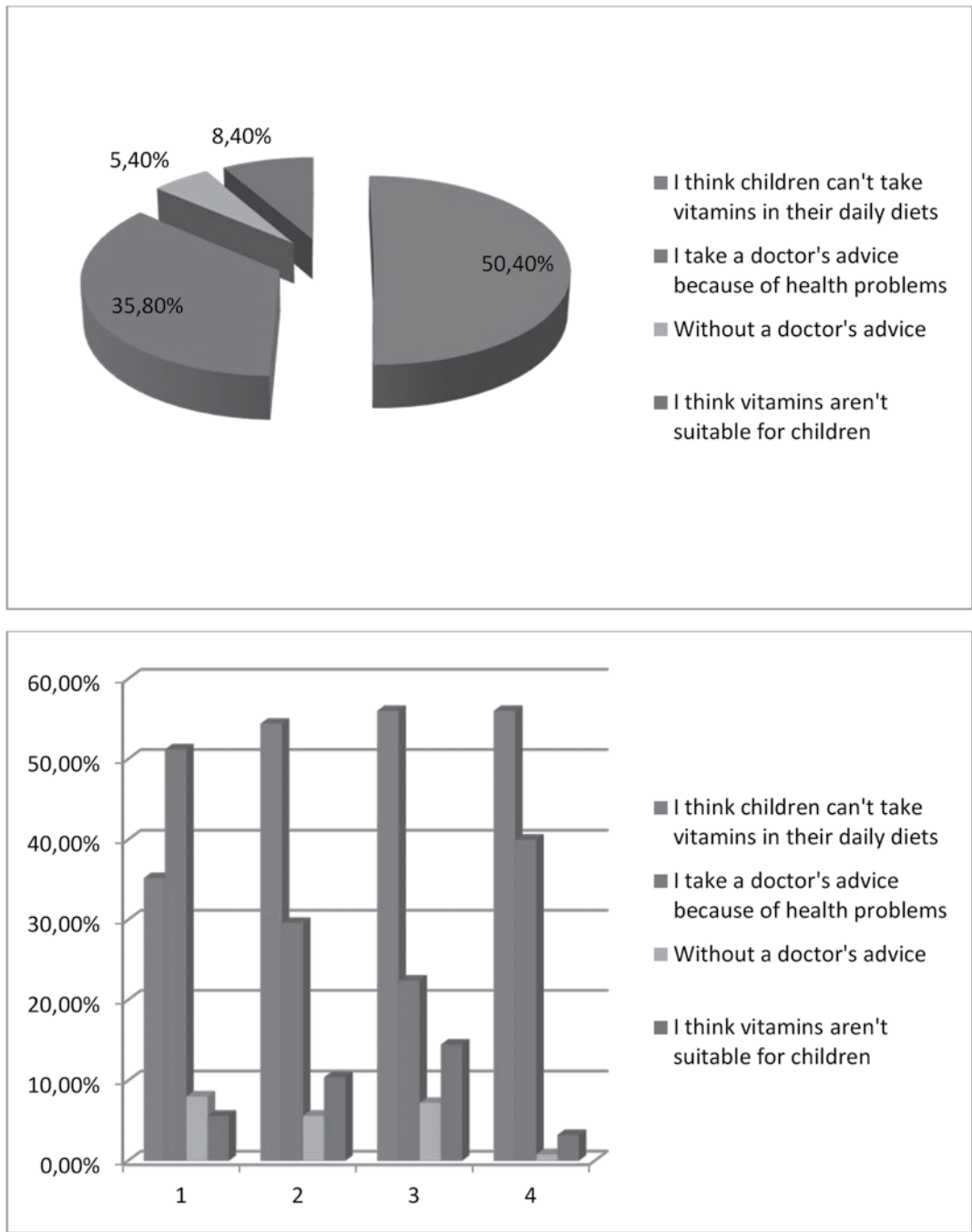


Figure 9. The participants' vitamin preferences for their children

In the 1st and 2nd area; people give importance to doctor's advices, whereas brand is more important for the 3rd area's people. It shows that people with better social-cultural and economic levels give more importance to brand (Fig 10).

The most important criterion for the choice of brand is safety. Awareness and guidance have gained importance after safety for people with better social-cultural and economic levels (Fig 11).

If there is a problem about the usage of vitamins, all the participants apply to a doctor (Fig 12).

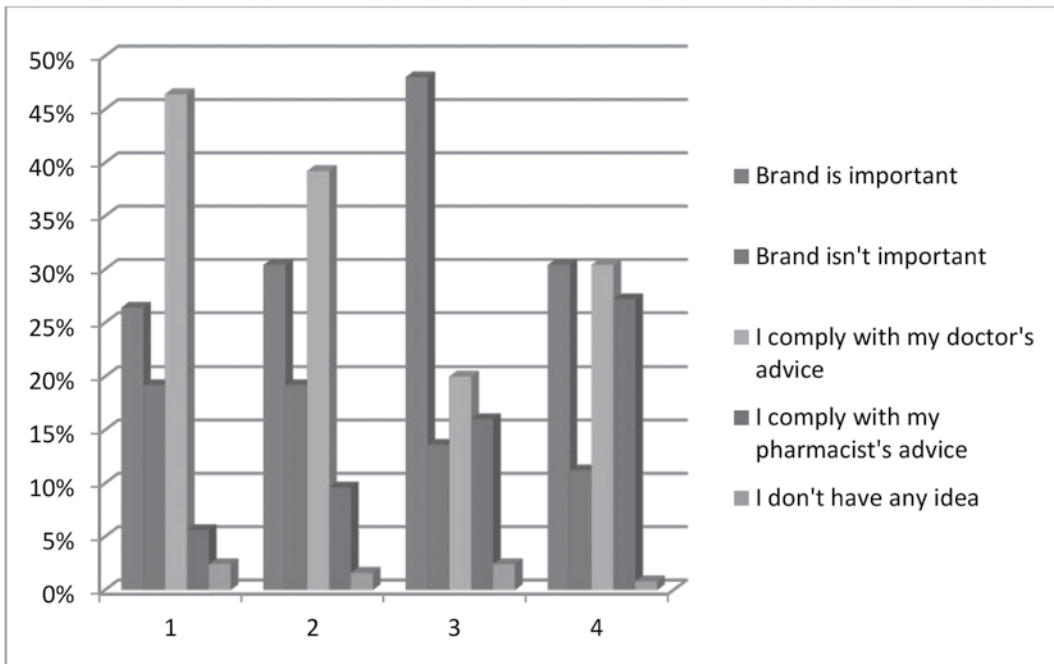
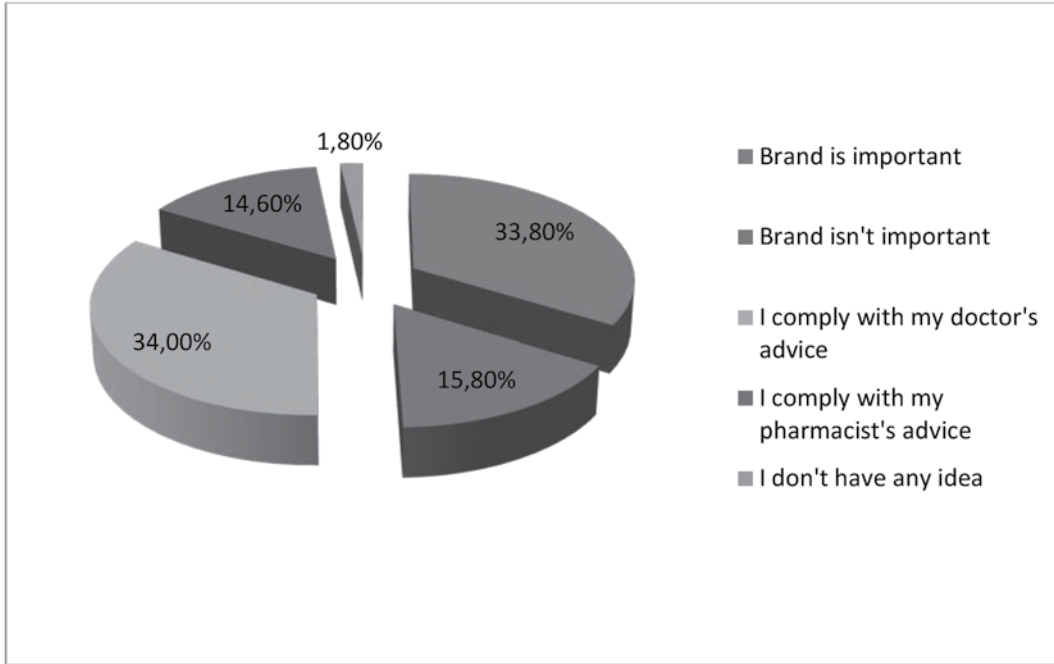


Figure 10. The importance given to brand by the participants .

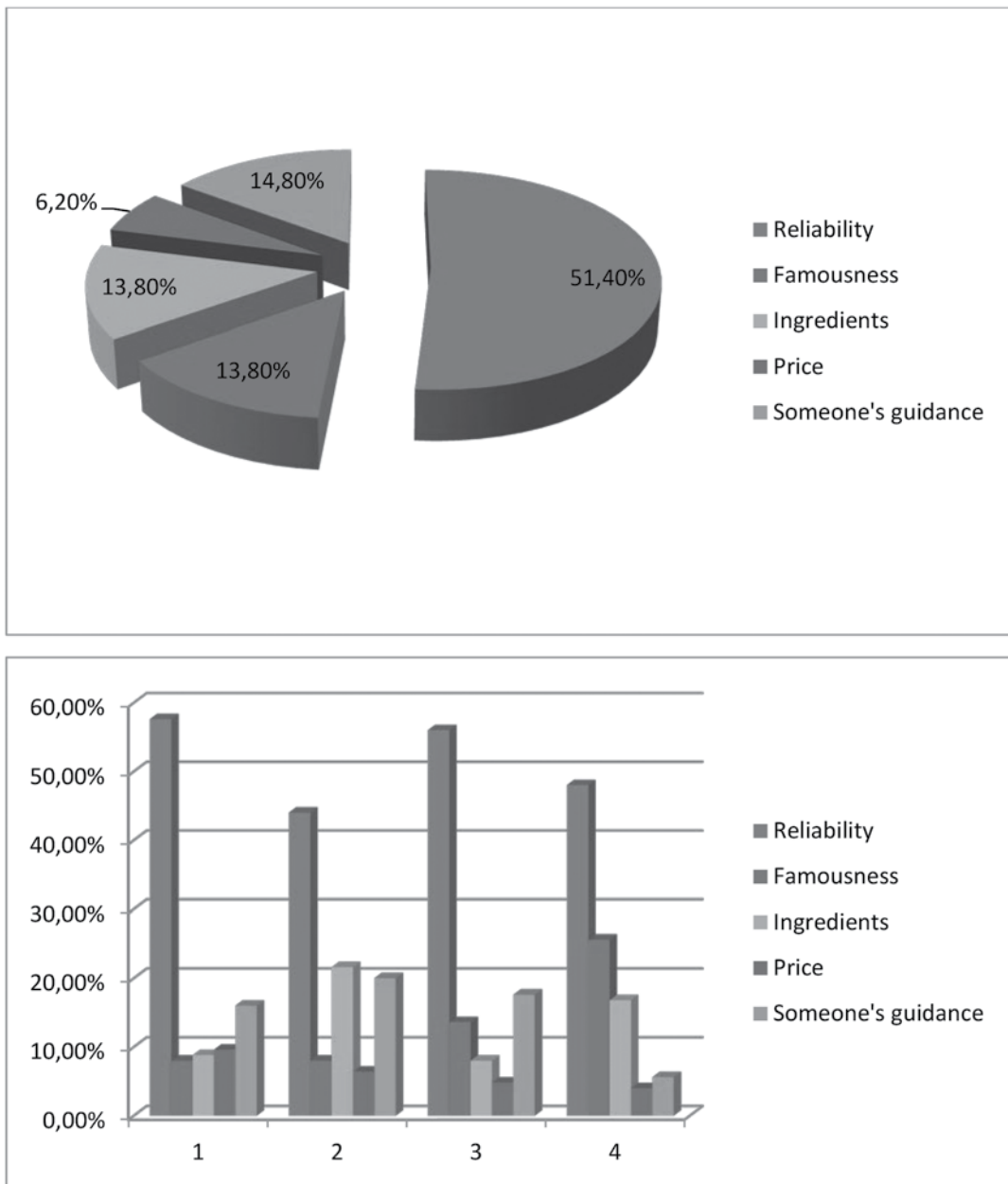


Figure 11. The factors affecting brand preferences.

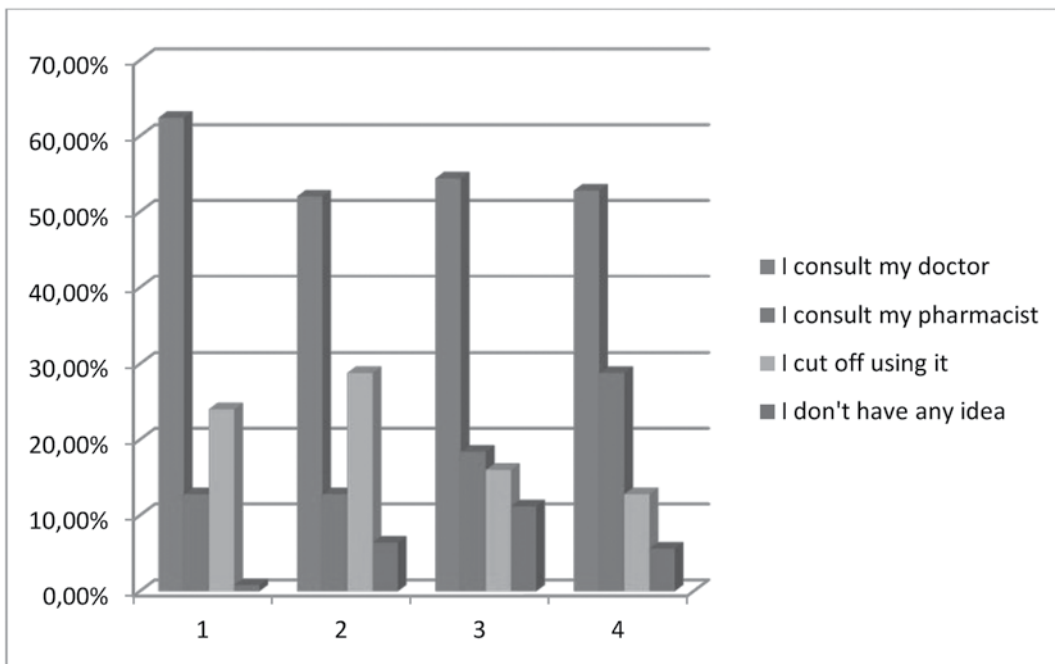
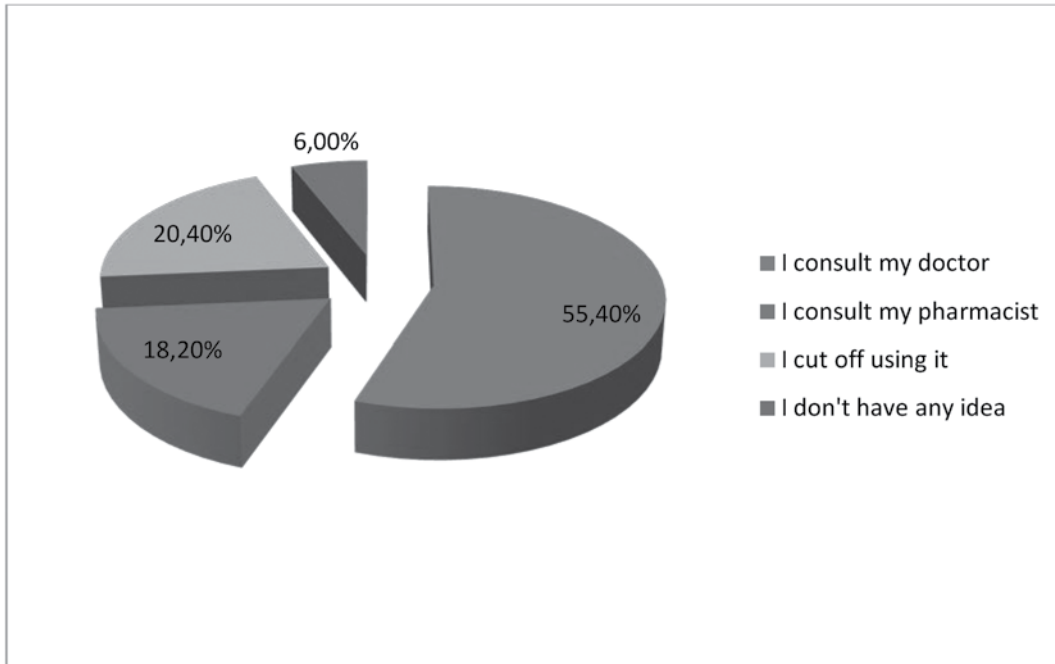


Figure 12. The participants' responses when they become ill after using vitamins.

All groups think that the most important source of knowledge about the use of vitamins is doctor, followed by pharmacist and Internet. This result indicates the confidence to doctors and pharmacists (Fig 13).

According to most participants, the most crucial point is doctor's recommendation while choosing vitamins (Fig 14).

Generally, the most preferred vitamin group is vitamin combinations, followed by B vitamins. The reasons for choosing a combination are costs and the difficulty of drug tracking, whereas the reason for the usage of vitamin B is the treatment of a disease (Fig 15).

The most participants buy vitamins from pharmacy, whilst some people buy vitamins from vitamin stores (Fig 16).

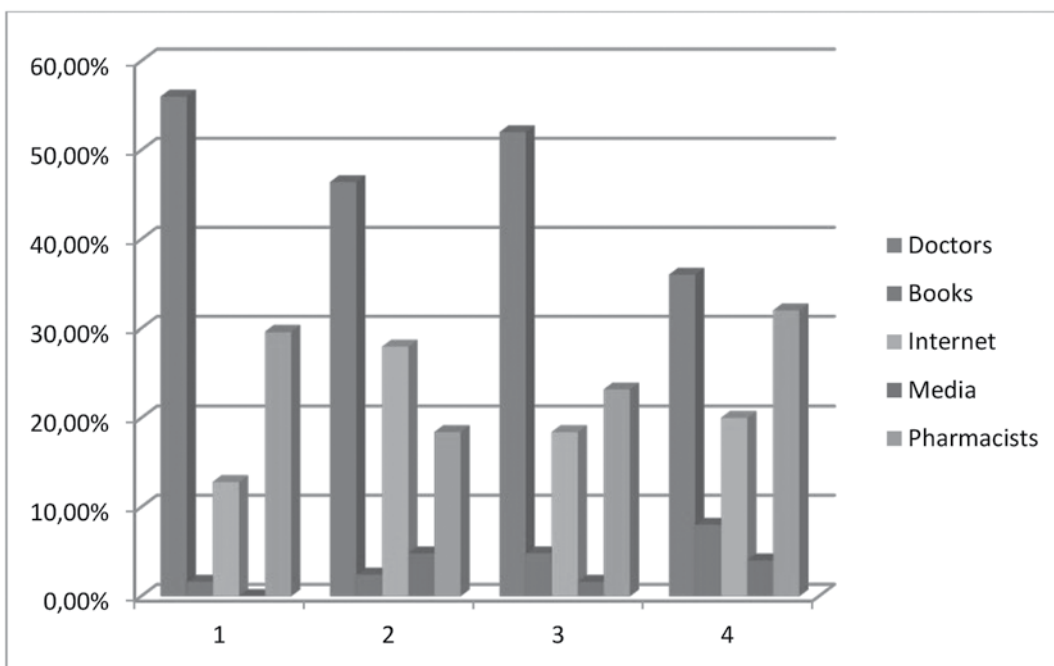
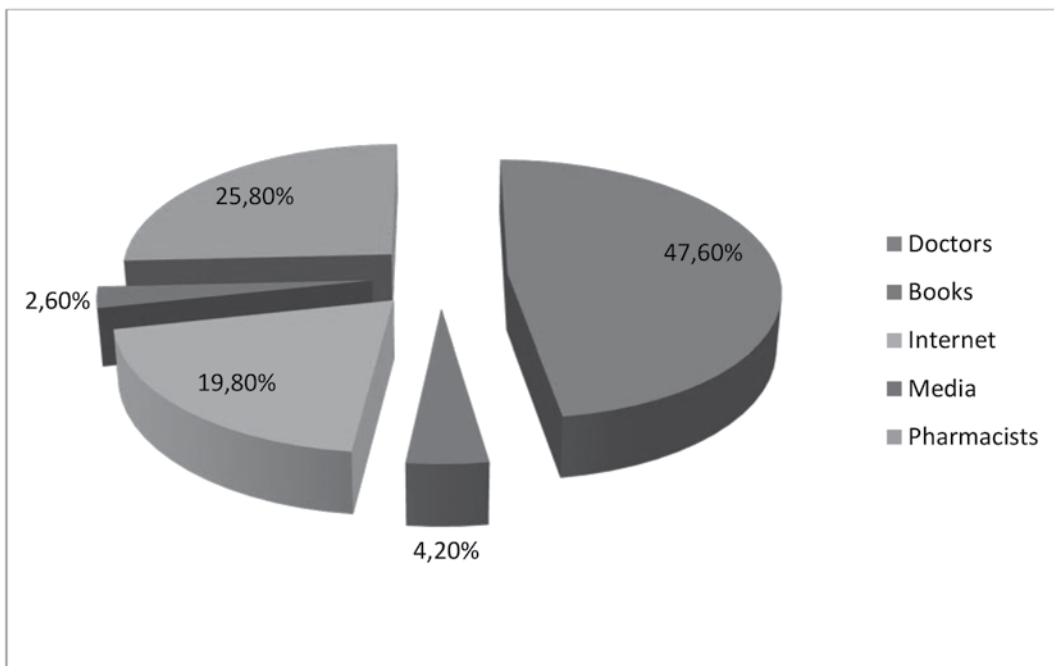


Figure 13. The references to get information about vitamins.

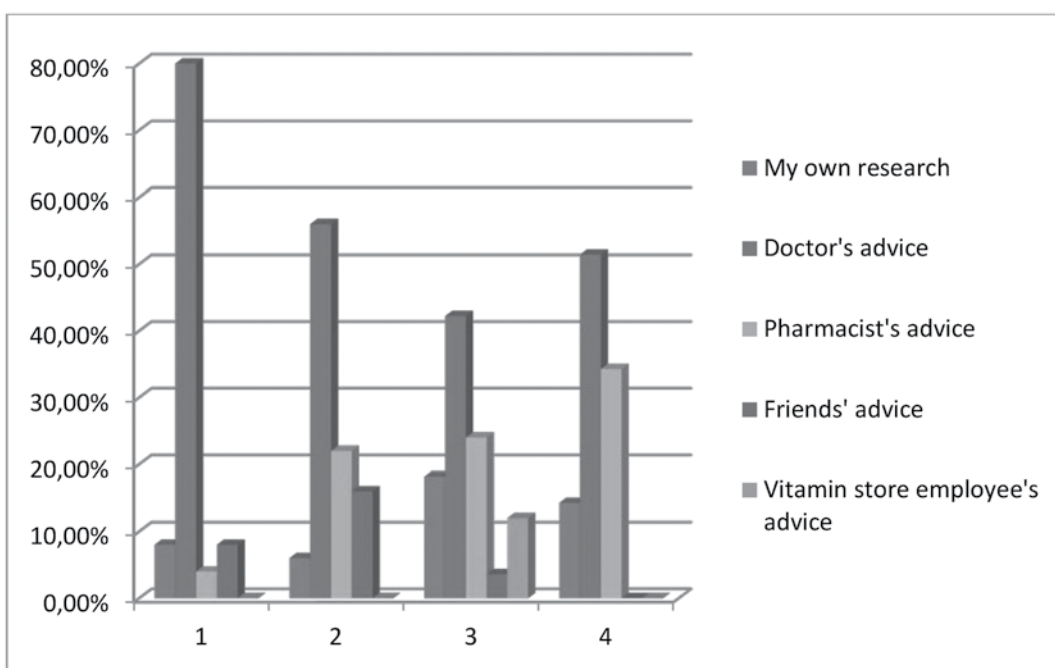
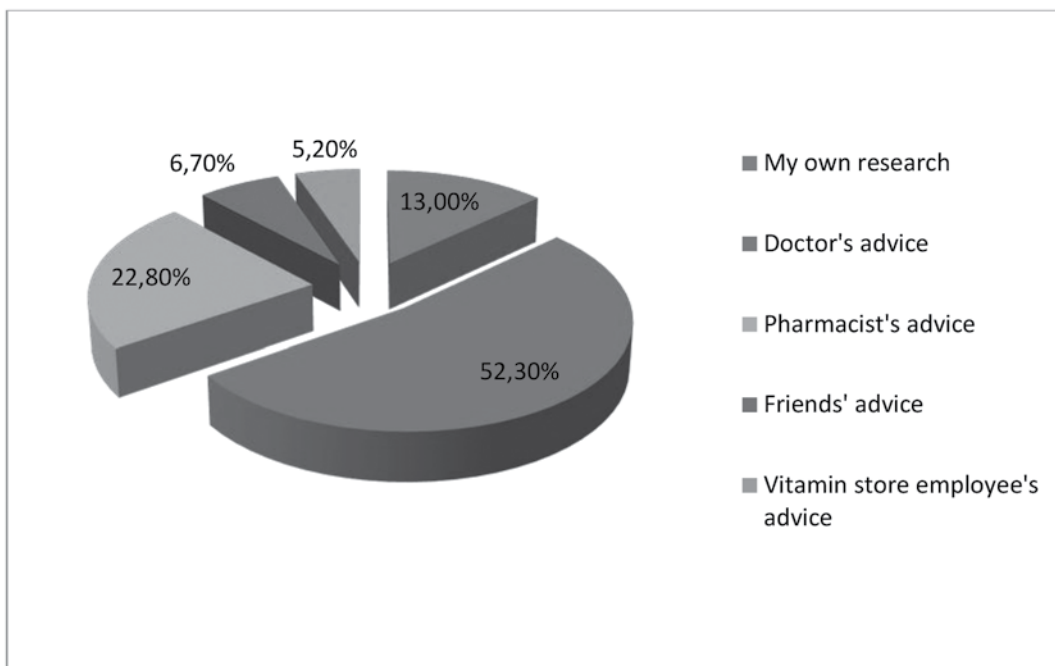


Figure 14. The factors affecting vitamin choice .

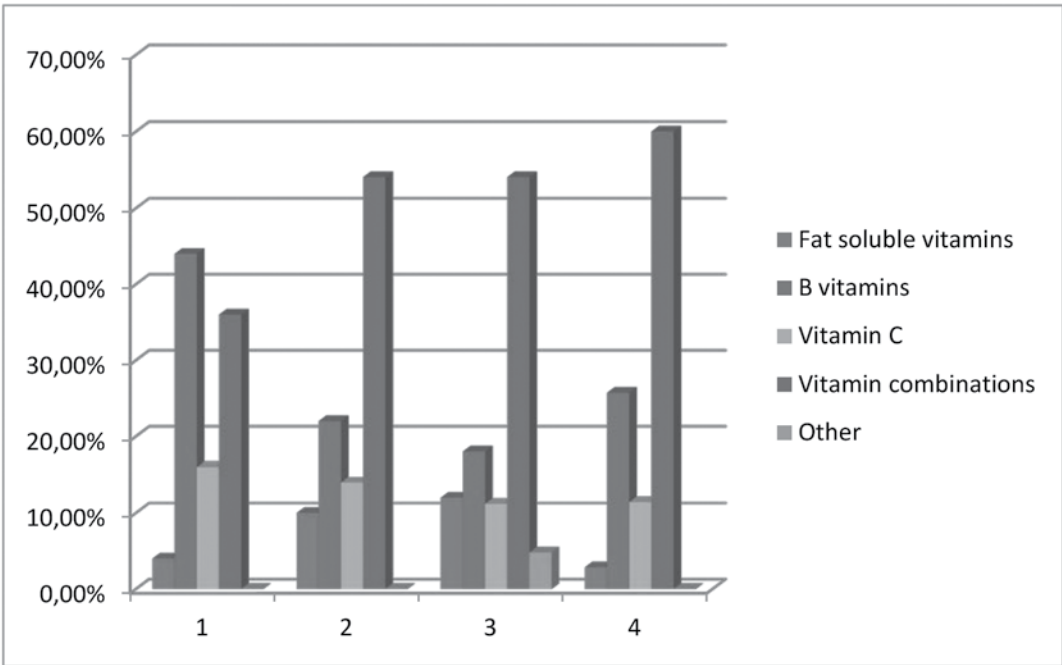
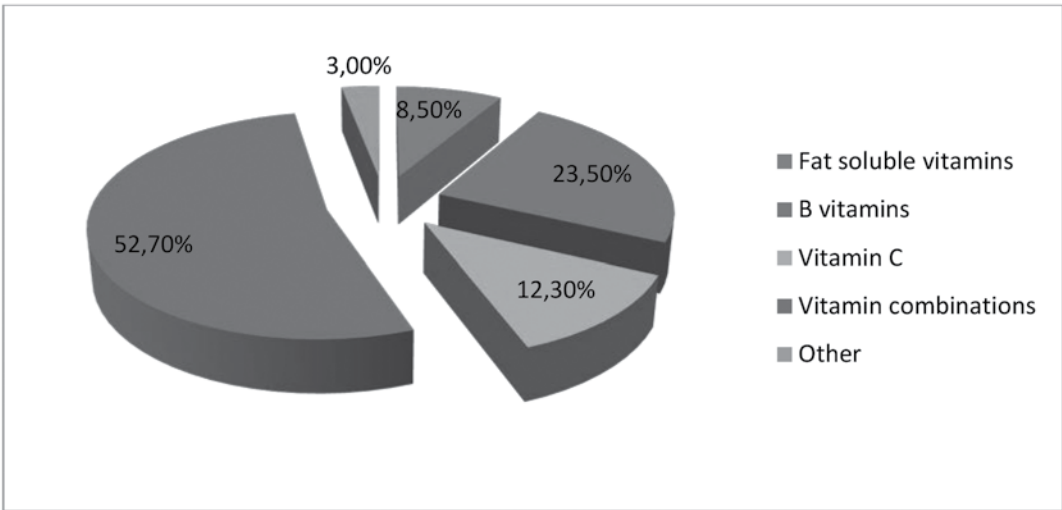


Figure 15. The participants' vitamin preferences.

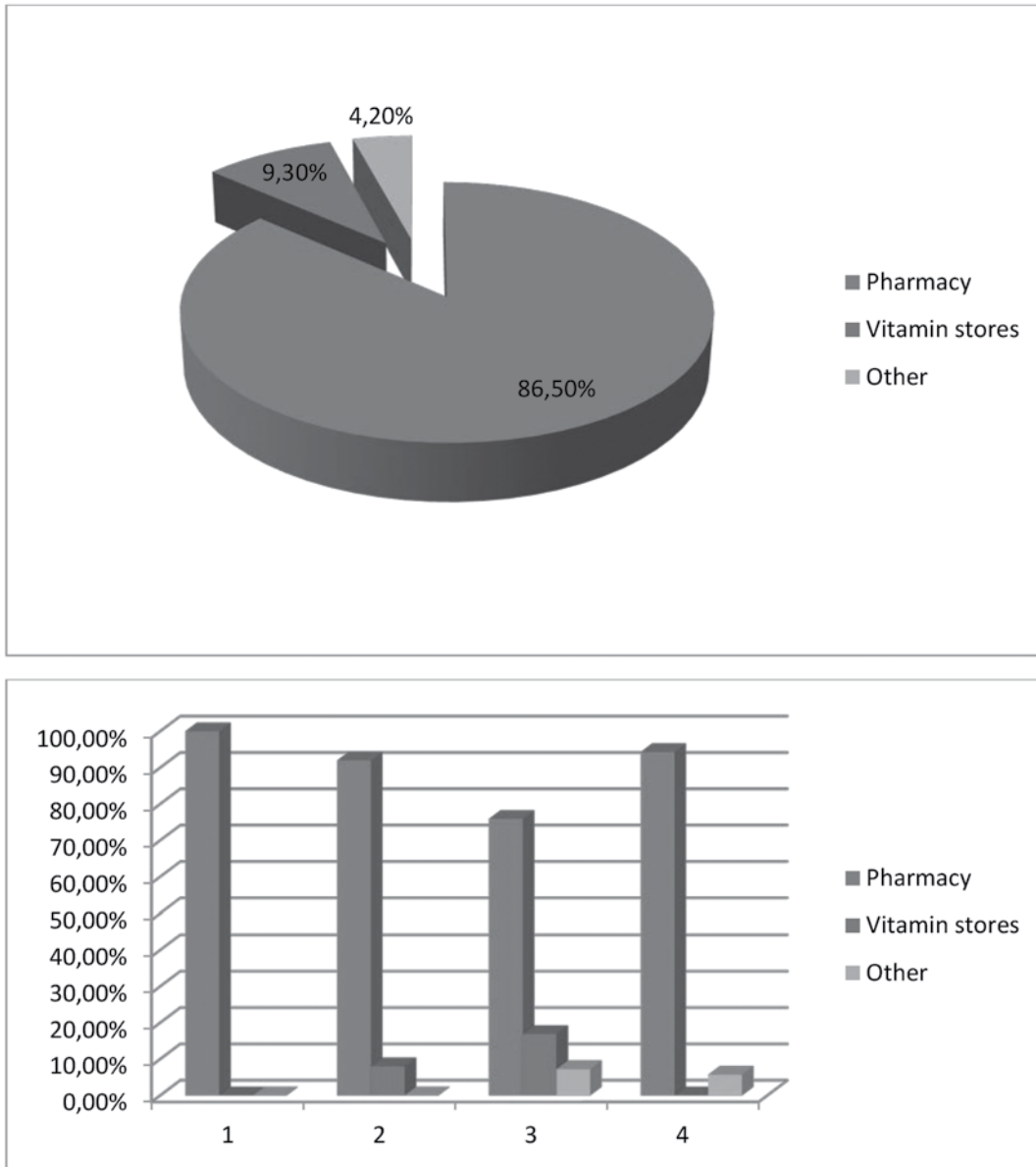


Figure 16. The participants' sales channel preferences .

According to most participants, expectations for vitamin use are to feel good, to gain resistance to some diseases and to solve some health problems (Fig 17).

Advertisements do not affect most participants. But sometimes advertisements can be effective for some participants (Fig 18).

Most participants think that herbalists are unreliable. People take herbalists' advice in some special situations (Fig 19).

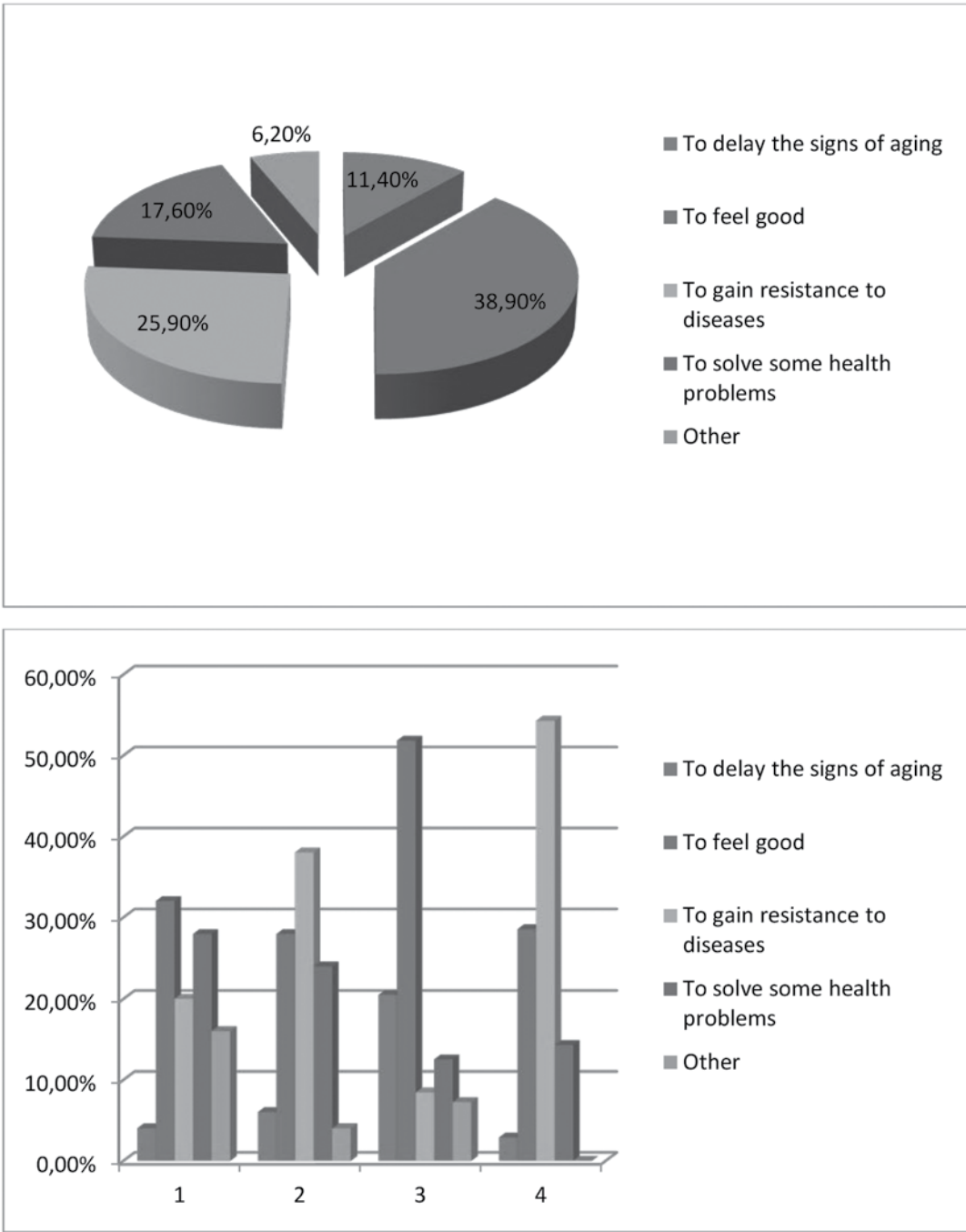


Figure 17. The participants' expectations by using vitamins.

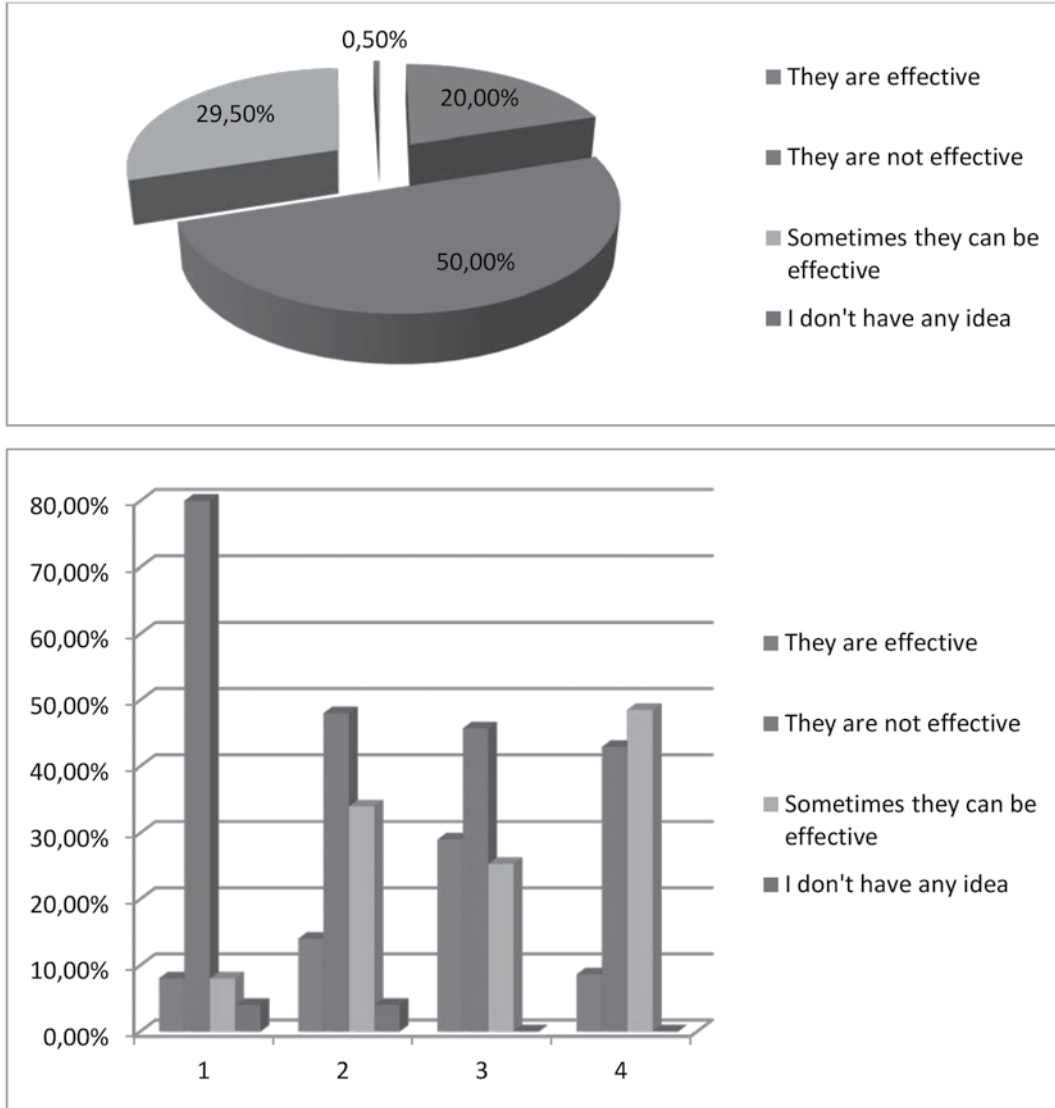


Figure 18. The effectiveness level of participants from vitamin advertisements.

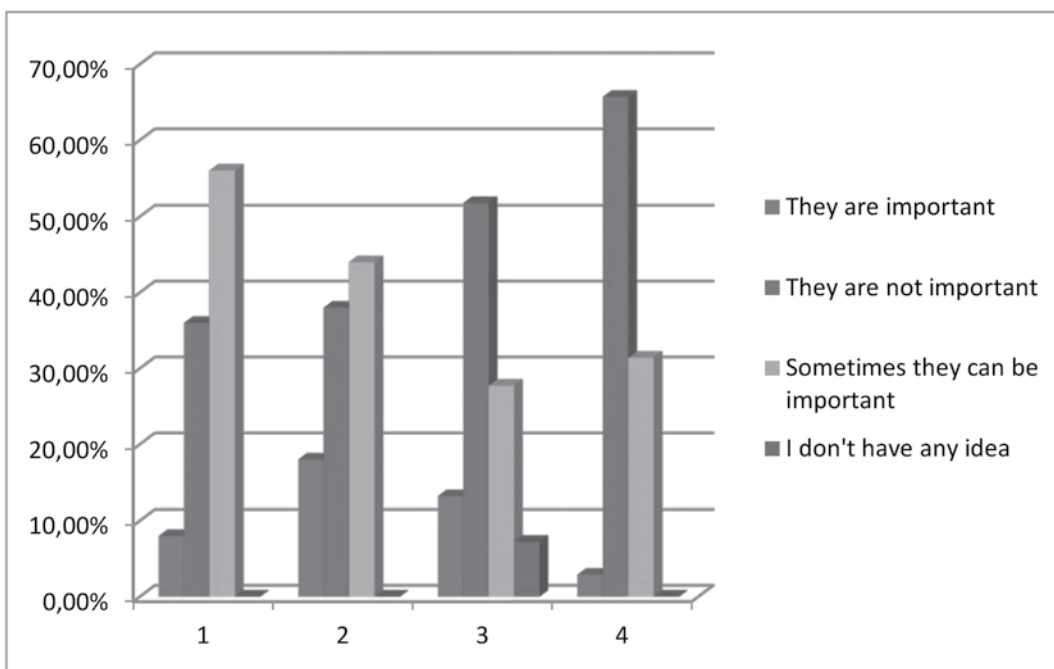
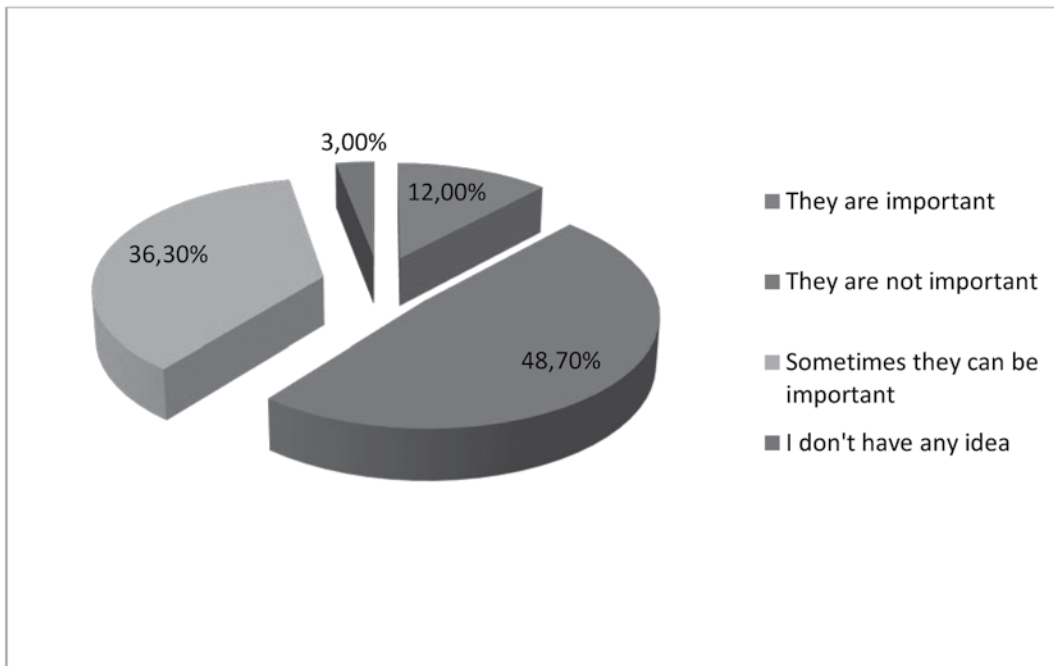


Figure 19. The importance given to herbalist’s advice by the participants.

CONCLUSION

In conclusion, we conducted a survey to collect information about vitamin usage habits in Eskişehir and the factors affecting these habits. Five hundred people representing four different socio-cultural groups in Eskişehir were chosen by random sampling method and were asked to answer the questionnaire.

The research indicates that most people use vitamins for wellness and being resistant to certain diseases. Nutrition disorder and distrust of food are other factors affecting vitamin usage of people. The results indicate that there is a visible distinction between the socio-cultural groups.

REFERENCES

1. World Health Organization, Vitamin and Mineral Requirements in Human Nutrition, World Health Organization and Food and Agriculture Organization of the United Nations, 2004.
2. Manan F, The role of vitamins in human diet I. Vitamin A-Nutrition, *J Islam Acad Sci* 7(4), 221-236, 1994.
3. Huskisson E, Maggini S, Ruf M, The role of vitamins and minerals in energy metabolism and well-being, *J Int Med Res* 35, 277-289, 2007.
4. Farbstein D, Kozak-Blickstein A, Levy AP, Antioxidant Vitamins and Their Use in Preventing Cardiovascular Disease, *Molecules*, 15, 8098-8110, 2010.
5. Kutsky RJ, Handbook of Vitamins and Hormones, Van Nostrand Reinhold, New York, 1973.
6. Fukuwatari T, Shibata K, Urinary water-soluble vitamins and their metabolite contents as nutritional markers for evaluating vitamin intakes in young Japanese women, *J Nutr Sci Vitaminol* 54(3), 223-229, 2008.
7. Beitz R, Mensink GBM, Rams S, Döring A, Vitamin- und Mineralstoffsupplementierung in Deutschland, *Bundesgesundheitsblatt* 47, 1057–1065, 2004.
8. Çoşkun F, Turhan H, İstanbul'da vitamin kullanım alışkanlıkları ve bu alışkanlıkları etkileyen faktörler üzerine bir araştırma, *Marmara Ecza Derg* 14, 21-28, 2010.

Received:12.09.2012

Accepted:31.10.2012