

CONSUMPTION OF SELECTED BEVERAGES AND TEENAGERS' PERCEPTION OF OWN HEALTH

KONSUMPCJA WYBRANYCH NAPOJÓW A POSTRZEGANIE ZDROWIA PRZEZ MŁODZIEŻ

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Wkład autorów:

- A. Study design/planning
zaplanowanie badań
- B. Data collection/entry
zebranie danych
- C. Data analysis/statistics
dane – analiza i statystyki
- D. Data interpretation
interpretacja danych
- E. Preparation of manuscript
przygotowanie artykułu
- F. Literature analysis/search
wyszukiwanie i analiza literatury
- G. Funds collection
zebranie funduszy

Summary

Background. Health can be perceived as a set of individual determinants that enable a person to develop in various areas. Some people view their health subjectively to realise their own goals. The following study aims to investigate health- and eating-related behaviours in young people with regard to selected alcoholic beverages.

Material and methods. The group of people involved in the study consisted of 77 teenagers from a high school aged 17 to 18 years. The mean age of the entire group was 17.1 years (SD = 0.8 years). As for gender, the sample was dominated by women, who accounted for 58.4% (n = 45) of all the respondents, while men – 41.6% (n = 32).

Results. When asked about the significance of good health and proper nutrition for teens, a large number of the girls participating in this survey, i.e. 51.9%, declared that health was important to them, whereas 29.9% claimed that it was very important. Furthermore, the teenagers involved in the study often claimed that they eat healthily (rho = 0.42; p < 0.01) and 40.3% perceived their diet as healthy. Only 2.6% of the respondents viewed their diet as improper.

Conclusions. Particular attention should be paid to building a sense of personal responsibility for health in young people. Health promotion programmes targeting young people should be aimed at developing their personality features which are indirectly associated with increasing awareness and responsibility for their own health, encouraging the individual to make right choices with regard to food products, including the type and quantity of beverages available on the market.

Keywords: health promotion, teenagers, nutrition, energy drinks

Streszczenie

Wprowadzenie. Zdrowie można postrzegać jako zbiór indywidualnych uwarunkowań, które umożliwiają rozwój człowieka w różnych obszarach. Niektórzy ludzie subiektywnie postrzegają swoje zdrowie, aby zrealizować swoje własne cele. Celem poniższego badania było zbadanie zachowań zdrowotnych i żywieniowych związanych ludzi młodych w odniesieniu do wybranych napojów alkoholowych.

Materiał i metody. Grupę osób biorących udział w badaniu stanowiło 77 nastolatków ze szkoły średniej w wieku od 17 do 18 lat. Średnia wieku całej grupy osób badanych wynosiła 17,1 lat (SD=0,8 lat). Pod względem płci, w badanej próbie dominowały kobiety, które stanowiły 58,4% (n=45) ogółu badanych, natomiast mężczyźni – 41,6% (n=32).

Wyniki. Jeśli chodzi o znaczenie dobrego zdrowia i prawidłowego odżywiania nastolatków, duża liczba dziewcząt uczestniczących w tym badaniu, tj. 51,9%, zadeklarowała, że zdrowie jest dla nich ważne, podczas gdy 29,9% twierdziło, że było to bardzo ważne.

Ponadto nastolatki biorące udział w badaniu często twierdziły, że zdrowo odżywiają się (rho = 0,42; p < 0,01), a 40,3% postrzega dietę jako zdrową. Tylko 2,6% respondentów uważa swoją dietę za niewłaściwą.

Wnioski. Szczególną uwagę należy zwrócić na budowanie poczucia osobistej odpowiedzialności za zdrowie u osób młodych. Programy promocji zdrowia skierowane do młodych ludzi powinny mieć na celu rozwijanie ich cech osobowości, które są pośrednio związane ze wzrostem świadomości i odpowiedzialności za własne zdrowie, zachęcanie jednostki do dokonywania właściwych wyborów w odniesieniu do produktów spożywczych i ilości napojów dostępnych na rynku.

Słowa kluczowe: promocja zdrowia, młodzież, żywienie, napoje energetyczne

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Introduction

The World Health Organization (WHO) emphasises that health stands for something more than merely the absence of disease. Thus, a multi-dimensional approach to this issue should be adopted, and health itself should be treated as a “state of complete physical, mental and social well-being” [1]. In this context, individual and subjective perceptions of health, not only physical but also mental, social and spiritual, seem vitally important [2]. Health is also an individual set of determinants, which enable one to develop individually at a particular pace and in the chosen area [3]. Thus, increased awareness of health may contribute to better social well-being [4].

In developmental psychology, the development of the individual is observed at various stages, throughout the course of their life, with particular attention paid to factors affecting development (the so-called developmental changes). Therefore, depending on their age and stage of development, people may differ from one another regarding their approach to health. There are those who perceive their health subjectively through the perspective of the set goals [5,6]. As the developmental psychology indicates, persuading individuals to take control over their own health seems crucial (locus of control- LOC) [7]. However, people understand controlling their lives differently. Some, advocating an internal locus of control, believe that they can direct their own lives, whereas others, with an external locus of control, assume that they have no influence over their own health. Individuals with an internal locus will show a higher awareness of the impact their behaviour may have on their health. Those with an external locus of control attribute the current state of their own health to external factors, such as environment, medical care, genetics, etc. Persons of this type will be convinced that their health is independent of any activities undertaken by them and it derives from outside factors [7]. Accordingly, the individuals who attribute the state of their health to external factors may adopt inappropriate defence mechanisms when taking responsibility for their own health [8]. Defence mechanisms are defined as unconscious, automatic thoughts and behaviours that are intended to counteract a negative emotional state, e.g. fear, and overcome low self-esteem [9].

One of the major unhealthy types of behaviour in terms of health risk, particularly in young people, is the growing trend of using alcoholic beverages as well as sugary drinks. These beverages contain large amounts of sucrose which, when consumed at excessive amounts, can be an essential factor contributing to an increase in body weight, consequently leading to obesity [6]. In the American studies conducted that 42% of young people drank energy drinks [10]. These results were confirmed by subsequent studies conducted [11], according to which 48% of young people also consumed energy drinks once a month. 10.4% of the surveyed group of young people declared that they consumed such beverages on a daily basis. In the category of younger teenagers (12 year-olds) [12], 28% regularly used energy drinks, but the percentage in 17 year-olds was higher and amounted to 31% [13]. One of the main reasons for purchasing such beverages was to reduce sleepiness (45%) and enhance mental performance (24%).

Another type of behaviour observed amongst young people, which poses a significant health-risk, is the consumption of alcohol. Alcoholic beverages are the most widely used psychoactive substances in adolescents. According to ESPAD, 87 % of the respondents consumed alcohol at least once in their lifetime. The most popular alcoholic beverage among young people is beer and the least – wine. One of the reasons for alcohol use amongst young people are poor relationships with peers (55%) [14].

The following study aimed at characterising teenagers’ views on health and whether they regard health as a valid and valuable component in their lives. Next, it intended to examine dietary behaviours associated with the consumption of selected types of beverages. The present study was also an attempt to identify new ways in which health could be promoted in adolescents.

The following research questions were formulated:

1. Is health a vital value in young people’s lives?
2. Is there any relationship between the subjectively declared frequency of making health-oriented dietary decisions, the consumption of selected beverages and the perception of individual’s health?

Material and methods

The group of people involved in the study consisted of 77 teenagers from a high school aged 17 to 18 years. The mean age of the entire group was 17.1 years (SD = 0.8 years). As for gender, the sample was dominated by women, who accounted for 58.4% (n = 45) of all the respondents, while men – 41.6% (n = 32). The questionnaire method was used in the form of a survey which included, among others, inquiries about the frequency of using selected beverages. The study analysed the following groups of beverages:

1. energy drinks,
2. sweet soft drinks,
3. alcoholic beverages such as beer, wine and hard alcohol and liqueurs, e.g. vodka.

To assess the degree of subjectivity of how health is perceived in the teenagers' lives, the following statement was used: "For me, health is" The respondents' task was to choose an item on a five-scale, where 1 meant "completely unimportant", 2 "unimportant", 3 – "of average importance", 4 – "important", and 5 – "very important". To assess the degree of compliance with a proper diet in teenagers, the following statement was used: "I try to eat healthy food." Again, the task of the respondents was to choose one item from those indicated on the five-response scale, where 1 meant "very rarely", 2 – "rarely", 3 – "on average, often", 4 – "often", 5 – "very often." To evaluate the frequency of consumption, the following question was formulated: "How often have you consumed the following types of drinks during the last 12 months?" On the five-response scale, 1 stood for "never", 2 – for "once a month or less frequently", 3 – "a couple of times a month", 4 – "several times a week", and 5 – "on a daily basis". The remainder of the survey checked how frequently the respondents drank alcoholic beverages together with energy drinks, sweetened carbonated drinks, cola drinks, coffee, tea or smoked cigarettes. For this purpose, the question: "How often, during the last 12 months, have you consumed alcohol together with other drinks or smoked cigarettes". The five-response scale was provided, where 1 stood for "never", 2 – "once a month or less frequently", 3 – "several times a month", 4 – "several times a week", 5 – "on a daily basis".

The statistical analysis was performed using the SPSS 21 statistical programme. The Spearman correlation coefficient (ρ) was used for the evaluation of compounds used between variables. In the presented statistical analysis, the statistical significance was accepted at $p < 0.05$.

Results

As for the importance of good health and proper nutrition for teens, a large number of the girls participating in this survey, i.e. 51.9%, declared that health was important to them, whereas 29.9% claimed that it was very important.

Furthermore, the teenagers involved in the study often claimed that they eat healthily ($\rho = 0.42$; $p < 0.01$) and 40.3% perceived their diet as healthy. Only 2.6% of the respondents viewed their diet as improper.

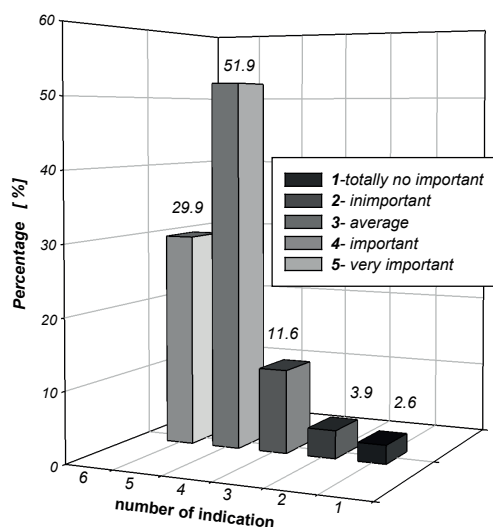


Figure 1. Significance of health amongst the youth

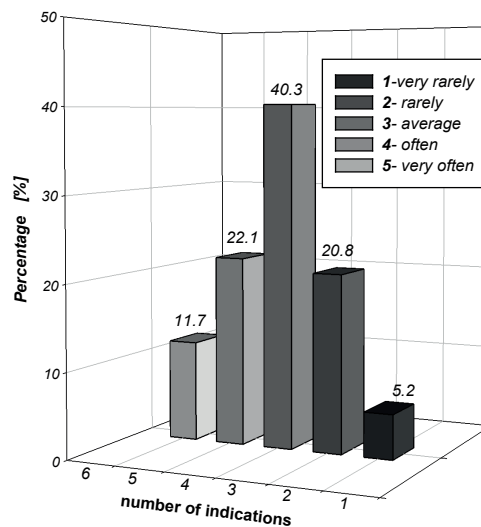


Figure 2. Proper diet followed by young people

Types of beverages and frequency of their consumption

The study showed that a high number of young people consumed energy drinks. While analysing the responses to the survey's inquiries, it was noted that 61% of the adolescents consumed energy drinks (Figure 3), and as many as 73% consumed sugary drinks. As for the percentage of those who consumed alcoholic drinks, it was shown that 53% of the respondents drank beer, 39% – wine, and – 45% indulged in spirit drinks, such as vodka 45% (Figure 3).

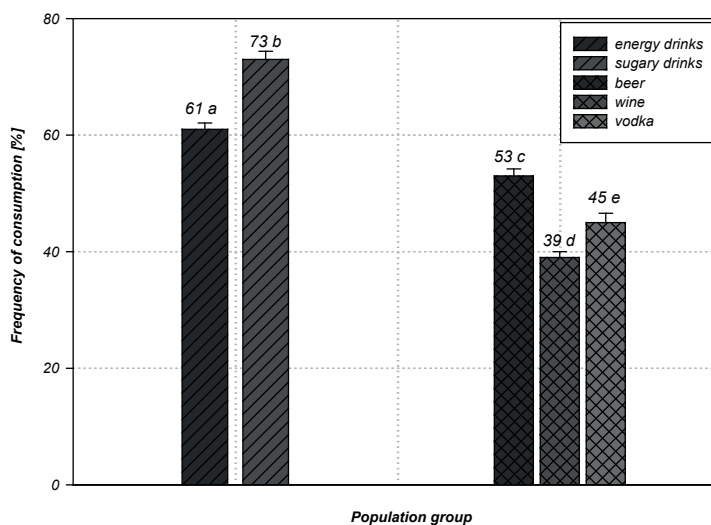


Figure 3. Consumption of energy, sugary and alcoholic drinks among young people

Perception of own health and the consumption of selected drinks

Health was an important aspect of lifestyle for the teens involved in the study. Still, the declared frequency of consumption of carbonated soft drinks amounted to ($\rho = -0.23, P < 0.05$), beer ($\rho = -0.35, P < 0.01$) wine ($\rho = -0.35, p < 0.01$) and vodka ($\rho = -0.38, p < 0.01$). There was no relationship between the frequency of consumption of energy drinks and the way one’s own health was perceived ($\rho = -0.20, p > 0.05$) (Table 1).

Table 1. Level of subjective understanding of health and the consumption of energy drinks

		energy drinks	carbonated soft drinks	beer	wine	vodka and alcoholic drinks and liqueur
Level of subjective understanding of health	rho	-0.20	-0.23	-0.35	-0.35	-0.38
	p	0.08	0.04	0.01	0.01	0.01
	N	77	77	77	77	77

It turned out that health was more important for the teens participating in the study as they were less likely to consume alcohol together with energy drinks ($\rho = -0.23, P < 0.05$), carbonated sweetened drinks ($\rho = -0.30; p < 0.01$), coffee ($\rho = -0.24, p < 0.05$) and smoking ($\rho = -0.28, p < 0.05$). No significant relationship between was found between the frequency of consuming alcoholic drinks such as cola and drinking tea (Table 2).

Table 2. Frequency of consuming combined drinks by young people

		Frequency of combining drinks					
energy		kind of drink					
		sugary	Coca cola	coffee	tea	cigarettes	
Level of subjective understanding of health	rho	-0.23	-0.30	-0.21	-0.24	-0.18	-0.28
	p	0.04	0.01	0.06	0.04	0.11	0.02
	N	77	77	77	77	77	77

Healthy eating and the consumption of selected drinks among teenagers

Teenagers seek to ensure that they follow a proper way of eating and what they declare is negatively correlated with how frequently they consume selected drinks. The findings for sugary carbonated drinks amounted to ($\rho = -0.28, p < 0.05$), beer ($\rho = -0.36; p < 0.01$) and consumption of vodka and alcoholic beverages ($\rho = -0.30; p < 0.01$) (Table 3).

Table 3. Eating habits amongst the sampled group and the rate of consuming drinks

		energy drinks	carbonated soft drinks	beer	wine	vodka and alcoholic drinks and liqueur
I eat healthily	rho	-0.08	-0.28	-0.36	-0.22	-0.30
	p	0.52	0.01	0.01	0.06	0.01
	N	77	77	77	77	77

The more often teenagers declared that they eat healthily, the less often they declared that they drank alcohol together with carbonated sugary drinks ($\rho = -0.31$, $P < 0.01$), cola drinks ($\rho = -0.24$; $p < 0.05$), coffee ($\rho = -0.36$; $p < 0.01$) and tea ($\rho = -0.29$, $p < 0.01$). There was no significant relationship between cigarette smoking and the consumption of energy drinks amongst the sampled group of young people (Table 4).

Table 4. Frequency of combining drinks and smoking cigarettes with regard to healthy eating

Frequency of combining drinks							
energy		kind of drink					
		sugary	Coca cola	coffee	tea	cigarettes	
I eat healthily	rho	-0.13	-0.31	-0.24	-0.36	-0.29	-0.21
	p	0.24	0.01	0.03	0.01	0.01	0.07
	N	77	77	77	77	77	77

Discussion

The presented results of the study showed that health is an essential value in teenagers' life. Therefore, a critical area of activity should be to support young people in maintaining proper health by encouraging adequate health-promoting behaviours.

In the case of adolescents participating in the study, 29.9% declared that their health was very important for them. 19.7% of the high school students recognised that health was very important for them [3]. Also, it should be noted that around 40% of the youngsters involved in the studied group perceived their diet as normal, and only 2.6% of the respondents said they did not engage in healthy eating. The presented research differed from other authors [3], who showed that about 26% of the young people aged 17-19 years had never followed any diet, and as many as about 40% of the respondents were aware of their unhealthy eating habits. The presented difference may be associated with the ongoing social changes, which emphasise the need to properly control food intake for health benefits. Currently, people have easy access to the knowledge on nutrition and how different diets are used. Media and press abound in publications focusing on topics related to dietetics. This can lead to a greater awareness of own healthy behaviour and an increased interest in the subject of nutrition also among teenagers. In this context, the use of proven and reliable sources of nutritional knowledge becomes essential. One of the most popular forms of acquiring knowledge, including expertise on dietetics, is the Internet.

One of the harmful eating habits observed among young people is the frequency of consumption of energy, isotonic and sugary drinks. The consumption of energy drinks is a significant part of people's diet [15], as 45% of young person's regularly use energy drinks. The percentage of such beverage consumption amongst young people aged between 12-17 years was slightly lower at 31%. The present study shows that many young people admit that they consume energy drinks [13].

As scientific publications stress, the use of energy drinks is propelled not only to advertising but also their popularity due to the high amount of caffeine. Another reason for purchasing such beverages is taste. In addition, it is emphasized that more boys than girls are turning to energy drinks. These relationships are confirmed by the data obtained from the report prepared by NSW (2013) [16], according to which the consumption of energy drinks by young people aged 16-17 was higher in boys by 0.6% when compared to girls. Furthermore, getting involved in sports, consuming energising and sweet, or fizzy drinks was significantly higher in boys than girls, i.e. 1.5%, 1.3% and 0.9% respectively [12,17]. The study showed that a significant proportion of respondents admitted to consuming sweetened beverages. The obtained data are consistent with the findings by other researchers. Sugary drinks were frequently consumed 2-4 times a week, mainly by girls, (28% of the studied population) [3].

Further, the combination of alcohol and energy drinks was the subject of the research [18]. The consumption of these drinks with vodka resulted in reducing the symptoms of alcohol poisoning. A report prepared by the NSW (2013) [16] shows that 37.7% of the respondents consumed energy drinks in combination with alcohol at least once a month. What seemed disturbing though was the fact that also young people between 16 and 17 years (26.1%) would drink alcohol together with energy drinks. Besides, as the study [19] showed, 19% of the young people consuming energy, isotonic or carbonated drinks did not show any desire to eat any solid food. There is, therefore, a dangerous dependence of avoiding meals while consuming fluids. It can be assumed that such behaviour is the result of various types of diets followed by young people.

An important aspect of the research was finding out whether the use of alcohol is combined with various drinks and stimulants, and how it relates to proper nutrition. As it was shown, the more teenagers declared that they eat healthily, the less often they drank alcohol together with consuming sweetened carbonated drinks, cola, coffee and tea [14,20].

Presently, many health programmes targeting teenagers are introduced as there is a growing fear of the negative consequences of drinking alcohol and the harm it can cause to one's health. In contrast, the conducted research shows that a good way of promoting health in adolescents might be strengthening the feeling of how important health is in youngsters' lives. Such an attitude involves identifying health-promoting behaviours that are conducive to maintaining proper health, rather than focusing on spreading fears amongst teenagers, for example, through highlighting the negative consequences of improper diets.

Conclusions

Particular attention should be paid to building a sense of personal responsibility for health in young people. Health promotion programmes targeting young people should be aimed at developing their personality features which are indirectly associated with increasing awareness and responsibility for their own health, encouraging the individual to make right choices with regard to food products, including the type and quantity of beverages available on the market.

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