# ANNALES UNIVERSITATIS MARIAE CURIE-SKŁODOWSKA LUBLIN - POLONIA

VOL.LX, SUPPL. XVI, 394

SECTIO D

2005

- \* Zakład Biologii Stosowanej i Eksperymentalnej, Uniwersytet Opolski, Opole
- \* Department of Molecular and Experimental Biology, Opole University, Opole \*\* Zakład Antropologii Pedagogiki, Akademia Świętokrzyska, Kielce
- \*\*Department of Anthropology of Pedagogics, Świetokrzyska Academy, Kielce \*\*\* Zakład Antropologii, Uniwersytet Jagielloński, Kraków
  - \*\*\* Department of Anthropology, Jagiellonian University, Kraków

ROMANA PAWLIŃSKA-CHMARA\*, EDYTA SULIGA \*\*, IWONA WRONKA \*\*\*

# Evaluation of health behavior and eating habits of female students

### Ocena zachowań zdrowotnych studentek

Life style and eating habits are the basic factors affecting health condition. Intensive cultural transformations taking place in Polish society bring about changes of life style, including the average Pole's diet [3]. Simultaneously, the incidence of diseases closely correlated with improper nutrition, lack of physical exercise or smoking - increases. Therefore, it is necessary to monitor the life style of people of various age, in order to record the most frequent mistakes, and further, to develop programs on health education. This is particularly important in young people whose eating and life style habits may be corrected relatively without difficulties.

The purpose of this paper was to study the health behaviors and eating habits of female students, including the preliminary evaluation of their nutrition manners.

## MATERIAL AND METHODS

The study were conducted between November, 2003 and March, 2004 at three universities of southern Poland: Jagiellonian University, Opole University and Świętokrzyska Academy, on 733 students at the age of 19-24. In all the three cities where the tests were carried out, the persons coming from places located far from the city they currently studied represented a significant number. Data on physical activity, smoking and frequency of drinking alcohol were collected with the use of a questionnaire. The manner of nutrition was evaluated basing on the consumption of products for the last 24 hours. The survey was carried out for a working day.

#### RESULTS

#### Physical activity

41,8 % of the surveyed students participate in sports activities regularly, of which 12,16% at least twice a week, 29,64% once a week. 46,17% state that they do any sports very rarely and 12,03 % - never. The questioned students most frequently participate in aerobics activities (34,76%) or go to a swimming-pool (30,25%). The time of one training activity is 45 minutes to 1 hour (48,67%) or 1,5 to two hours (24,9%). Season sports are also popular: cycling, skiing or mountaineering. They are taken up by 10% of the surveyed. It should be noted that some of the students do not participate in sports activities at their own initiative, but within the physical education classes, compulsory at their studies.

#### **Consumption of stimulants**

The negative health behaviors include smoking tobacco and drinking alcohol. 22,06% of the students questioned smoke, of which 9,41% 10 –20 cigarettes a day, and 7,06% more than 20 cigarettes a day. The results of the paper presented indicate the high level of occasional drinking of alcohol. 61, 94% of the surveyed drink beer sporadically, 7,32% once a week and 7,37% two or three times a week. 81,10% of the examined drink wine and vodka sporadically, 4,79% once a week, 2,61% more frequently - more than once a week.

## **Eating habits**

Human health condition is largely affected by the manner of nutrition and the quality of food consumed. Evaluation of the nutrition is difficult from the methodological point of view, particularly is we encounter people with irregular life style [1]. In case of students their time-table is highly varied, one day may be filled with lectures and classes from early morning until late night, another - absolutely off Therefore, this paper analyses the consumption of products during one whole day preceding the test. With the group of respondents so large this allows for the development of an average students' menu and may serve as a pilot examination, outlining the most important problems related to the students' nutritional ways [1]. The results indicate that the products most frequently consumed by the female students were: bread, cheeses, ham, bacon and sausages, vegetables, sweets and fruit (table 1). The products that may be stored for a few days are popular, then, ones a meal may be prepared of easy and fast. Sandwiches were the most popular snack in the students' menu. Hot meals (such as soups, meats, potatoes, rice, pasta, pancakes or stuffed dumplings) were eaten less frequently. A low percentage of the questioned informed that their menu of the previous day had included fish, cereals and beans or peas (Table 1). The consumption of beverages suggests that tea (71,9%) and coffee (31, 76%) are the most popular ones, while the consumption of juices (17, 65%) and mineral water was low (14,12%).

As far as the daily schedule of meals is concerned, a large number of people is noted who ate their first meal after 10.00 a.m. (19,54%) and a large number of people who ate their last meal late at night, after 8.00 p.m. Breakfast was eaten by most of the respondents, only 7,77 % did not eat it. In 15,14 %, however, it was a very poor meal, consisting of a bar, scone or fruit only. Just 12,41% of the respondents ate a warm dinner consisting of two courses, 51,98% ate a warm single-course dinner, in 22,38% the dinner consisted of sandwiches or fast food, while in 13,23% the meals were restricted to dinner and supper only. In most cases the meals were prepared by the respondents themselves or in case of students living with their parents - by their mothers. Just 7,26% of the respondents used the students' canteen, 20,59% ate their meals in diners.

The percentage (19,51%) of persons being on diets aimed at keeping a slim figure is relatively high. 9,69% are on slimming diets, 3,82% - are on other diets, most of all low-fat, low-sugar or the Diamonds' diet. 5,73% respondents declare to be vegetarian. The percentage of people enriching their diets with vitamin-mineral preparations is high as well. 59,10% respondents apply them. The detailed results are listed in table 1

## DISCUSSION OF THE RESULTS

For years has the reference literature included works pointing out numerous irregularities occurring in the life style and nutrition habits of children and young people [2, 3, 4, 5, 6]. Despite the extensive media campaign promoting the healthy life style, the situation does not seem to improve. Both our tests and other authors' results, published recently indicate the same problems. First is the low level of physical activity and preference of passive spending of leisure time [1, 4, 5]. Another is the high smokers percentage [2, 5, 6]. The recent distinguishable incorrect unhealthy behaviors are the numerous nutrition mistakes. Frequently skipped breakfasts, high consumption of white bread and sweets with the simultaneous low consumption of brown bread, cereals and fish [2, 3, 5, 6] should be mentioned here most of all.

The presented study also indicate one more problem, the main dish frequently skipped during the day or replaced with a cold meal mainly consisting of white bread. One may presume that this is mainly conditioned by the students' life styles. The classes at universities the classes are held from early mornings until late night and the breaks between the classes are too short for them to go home and prepare a hot meal. The prices of meals in canteens and diners also have grown significantly,

which forces a lot of people to resign from them. The nutrition style surveillance results not only indicate the necessity of education thereon among the students, but also the necessity to provide more accessibility to canteens and diners, e.g. by restoring the subsidies for such places.

#### **CONCLUSIONS**

- The responding students present numerous unhealthy behaviors. They include low level of physical activity and smoking.
- The respondents showed several deviations from the rational nutrition principles.
- The results indicate the necessity to promote healthy life style among the students.

#### REFERENCES

- Gronowska-Senger A.: Ocena wyżywienia. [w:] Żywienia człowieka (red.) J. Gawęcki, L. Hryniewiecki. Wydawnictwo Naukowe PWN, Warszawa 2002, 469-479.
- Mięsowicz I., Palus D.: Zachowania prozdrowotne studentów Akademii Pedagogiki Specjalnej. [w:] Ontogeneza i promocja zdrowia w aspekcie medycyny, antropologii i wychowania fizycznego (red.) A. Malinowski i wsp. Uniwersytet Zielonogórski, Zielona Góra 2002, 182-189.
- Narojek L.: Społeczno-kulturowe uwarunkowania żywienia. Żywienie Człowieka i Metabolizm, 1992, 19, 1, 26-39
- Rodziewicz-Gruhn J. i wsp.: Ocena zachowań pro i antyzdrowotnych kobiet w różnym wieku.
  [w:] Uwarunkowania rozwoju sprawności i zdrowia (red.) J. Rodziewicz-Gruhn, J. Wojtyna.
  Wyższa Szkoła Pedagogiczna w Częstochowie, Częstochowa 1999, 392-397.
- Skorupka E.: Zachowania zdrowotne i postrzeganie zdrowia przez młodzież akademicką Wyższej Szkoły Pedagogicznej w Zielonej Górze. [w:] Ontogeneza i promocja zdrowia w aspekcie medycyny, antropologii i wychowania fizycznego (red.) A. Malinowski i wsp. Uniwersytet Zielonogórski, Zielona Góra 2002, 228-232.
- Suliga E.: Zachowania zdrowotne studentów i uczniów. Wydawnictwo Akademii Świętokrzyskiej, Kielce 2004.

## STRESZCZENIE

Celem prezentowanej pracy było poznanie zachowań zdrowotnych studentek, w tym wstępna ocena ich nawyków żywieniowych. Badaniami objęto 733 osoby, w wieku 19 – 24 lata. Ankietowane studentki prezentują wiele zachowań anty-zdrowotnych. Należą do nich: niski poziom aktywności fizycznej oraz palenia papierosów. Regularnie uprawia sport tylko 41,8% respondentów, papierosy pali 22,6%. Analiza nawyków żywieniowych wykazała wysokie spożycie jasnego pieczywa i słodyczy, niska konsumpcje ciemnego pieczywa, kaszy, ryb i warzyw strączkowych. Rozkład posiłków w ciągu dnia pokazuje, że często powtarzającym się błędem jest brak ciepłego obiadu. Wyniki wskazują na konieczność promowania wśród studentów pro-zdrowotnego stylu życia.

## ABSTRACT

The purpose of the paper was to study the health behaviors of female students, including the preliminary evaluation of their nutrition habits. The surveys comprised 733 persons at the age of 19 – 24. The responding students present a number of unhealthy behaviors. These included low level of physical activity and smoking. Only 41,8% respondents do sport regularly, 22,6% smoke. The analysis of nutrition habits showed high consumption of white bread and sweets, low consumption of brown bread, cereals, fish and leguminous vegetables. The daily distribution of meals indicates that the lack of hot dinner is a frequent mistake. The results suggest the necessity to promote a healthy life style among the students.

Table 1 - Food consumption data

| BREAD                             | N   | %     | FRUIT                   | N   | %             |
|-----------------------------------|-----|-------|-------------------------|-----|---------------|
|                                   | 644 | 87,86 |                         | 295 | 40,25         |
| White bread                       | 551 | 75,17 | Domestic fruits         | 232 | 31,05         |
| Brown bread                       | 133 | 18,15 | Tropical fruits         | 141 | 19,24         |
| PRETZEL                           | 45  | 6,14  | SOUPS                   | 232 | 31,65         |
| SCONES                            | 170 | 23,19 | Freshly cooked soups    | 186 | 25,38         |
| BREAKFAST FLAKES                  | 85  | 11,6  | Powdered soups          | 53  | 7,23          |
| CHEESE                            | 438 | 59,75 | POTATOES                | 189 | 25,78         |
| Cottage cheese                    | 227 | 30,97 | PANCAKES AND STUFFED    | 146 | 19,92         |
| Cheddar, etc.                     | 265 | 36,15 | DUMPLINGS               |     |               |
| Creamed cheese                    | 114 | 15,55 | RICE                    | 78  | 10,64         |
| YOGHURT                           | 200 | 27,29 | PASTA                   | 57  | 7,78          |
| HAM, SMOKED SAUSAGES, BACON, etc. | 370 | 50,48 | CEREALS                 | 22  | 3             |
| MEAT                              | 303 | 41,34 | SOY                     | 17  | 2,32          |
| poultry                           | 95  | 12,96 | BEANS AND PEAS          | 16  | 2,18          |
| Red meat                          | 213 | 29,06 | FAST-FOOD               | 57  | 7,78          |
| EGGS                              | 119 | 16,23 | CHIPS                   | 50  | 6,82          |
| FISH                              | 48  | 6,55  | CRISPS, PEANUTS, SALTED | 56  | 7,64          |
| Fresh fish                        | 14  | 1,91  | STICKS                  | 30  | 7,04          |
| Smoked fish                       | 10  | 1,36  | SWEETS                  | 314 | 42,84         |
| Canned fish                       | 30  | 4,09  | HONEY AND JAM           | 111 | 15 14         |
| FRUIT OF THE SEA                  | 3   | 0,41  | JELLIES, CUSTARD        | 29  | 15,14<br>3,96 |
| VEGETABLES                        | 434 | 50,21 |                         | 29  | 3,90          |
| Fresh vegetables                  | 273 | 37,24 |                         |     |               |
| Cooked vegetables                 | 158 | 21,56 |                         |     |               |
| Canned vegetables                 | 150 | 20,46 |                         | ·   |               |

N - number of people who ate particular food products, % - percentage of persons who ate certain food products