

EATING HABITS AND BODY WEIGHT

IDENTIFYING BEHAVIOURAL RISK FACTORS FOR THE DEVELOPMENT OF OVERWEIGHT AND OBESITY IN PRESCHOOLERS; A LITERATURE REVIEW AND PRACTICAL IMPLICATIONS FOR INTERVENTION (133)

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There are few studies in which behavioural determinants have been identified for overweight and obesity in preschoolers. The significance of these determinants has not as yet been studied extensively. In this literature review the predictive value of risk factors for overweight and obesity in children with emphasis on behavioural factors, are bundled and offer the opportunity to tailor preventive approaches and can also serve as a source of information for the much needed preventive campaigns in the Netherlands.

In this literature review studies are included with children from birth to four years of age. Behavioural factors presumed to predict healthy relatively normal weight as well as those presumed to predict childhood overweight and obesity are included.

Included factors are: parental weight, early weight gain of the mother during pregnancy, child's birth weight and weight chart measures. Behavioural factors potentially influencing the later development of overweight are: stress during pregnancy, parent's body perception of the child, maternal feeding style, low parental concern about their child's thinness, persistent child tantrums over food and less sleep time during the day in childhood. Furthermore, parental knowledge, feeding habits and child rearing practices will be reflected on. Other factors will be: demographic factors, prematurity and growth in the first 6 months, physical activity, sedentary behaviour and dietary factors. The mechanisms by which behaviour might disturb energy balance might get clearer.

Because many of these risk factors might be related, and may operate on the same causal pathways, it can be difficult to disentangle relationships. The approach of focussing on behavioural factors which are amenable to intervention however, can facilitate prevention.

Results of the literature review as well as suggestions for prevention, based on the study: "Primary prevention of being overweight and becoming obese in preschool children: a study on behavioural determinants will be presented.

Key words: obesity

EATING DISORDERS AMONG FEMALE STUDENTS OF UNIVERSITY OF NOVI SAD - DIRECTIONS FOR PREVENTION (27)

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INTRODUCTION: University of Novi Sad (Vojvodina) has 30, 000 student and about 7,000 new ones every school year. Institute for Students Health Protection offers medical services to all of them. Counselling service for mental health is a part of it. As eating disorders become more frequent in our every day practice we made a research which for the main purpose had to identify frequency of eating disorders in the population of female students in the Novi Sad University and to identify specific eating behaviours which can indicate the existence of eating disorders.

Practical aim was to identify parameters which can be helpful in creating effective preventive strategies and activities in this field.

SUBJECTS: The sample was made of 188 female students of the first and the third academic year of different faculties of the University.

METHODOLOGY: A clinical questionnaire for diagnosing eating disorders (Garner/ Garfinkel, 1979) was used as well as few questions about eating habits in their families and to whom they will first refer for help. The questionnaire consists of 38 items and can be answered on Likerts scale (always, frequently, sometimes and never).

RESULTS: Main result is that 7% of female students can be diagnosed as having eating disorders. In our sample 3 of the students show that their eating habits indicate anorexia and 11 of them can be ranked as bulimia.

Half of the students will ask for a help of a doctor (general practice) which indicates the necessity for extended education and forming a teams for treating this disorder.

DISCUSSION AND CONCLUSION: All results indicate that female students are under a high risk for developing eating disorders and that the students way of life and problems they deal with during these years can lead to different modes of non healthy eating behaviours.(Especially in the first academic year and if they have separation problems and problems with self confidence).

Key words: eating disorders, students

EATING DISORDER FREQUENCY AMONG UNIVERSITY STUDENTS IN 2000 AND 2004 (49)

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In Finland there has been made a health survey by questionnaire method among university students in 2000 and 2004. The number of those who answered to the survey were 3174 (1224 men and 1959 women) and 3153 (1132 men and 2021 women); the reply percentages were 63.1 and 62.7. The frequency of eating disorders was questioned by asking, had a doctor or psychologist diagnosed an eating disorder with symptoms during the last year. There were further questions about the students' attitude to eating, dieting that had turned uncontrollable and own estimate of weight.

In 2000 an eating disorder had been diagnosed in 1.14 % of women and 0.43 % of men; in 2004 the same figures were 1.5 % and 0.1 %. In 2000 attitude to eating was not normal among 9.2 % of women and 2.5 % of men; in 2004 the same figures were 10.2 % and 3.5 %. In 2000 dieting had turned uncontrollable in 7.5 % of women and 0.83 % of men and in 2004 9.3 % of women and 1.2 % of men.

During the four years the number of diagnosed eating disorders had risen as well as behaviour indicating it. The number of diagnosed eating disorders is remarkably smaller than that of indicating behaviour, so it can be assumed that a great deal of eating disorders stays undiagnosed.

A nurse or a general practitioner is in the key position in the early diagnosing of eating disorders.

Key words: eating disorder, university student

FOOD MARKETING TO CHILDREN (35)

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Thinking about the obesity epidemic has switched from a focus on the individual to a focus on the “obesogenic” environment. One of the apparently important elements in this environment is, at least for children, television viewing. Several studies found a relationship between amount of TV viewing and weight in children. While the role of physical inactivity while watching is debated, there is growing evidence for the role of exposure to food advertisement via TV to explain this effect. In this presentation (1) results from a European comparative study on food advertisement to children, initiated by the European Health Network, will be summarised and (2) results will be presented of our own study in which we are currently collecting data on Flemish children’s exposure to food marketing via TV. Specifically we will examine the amount of exposure to advertisement in general; the amount of exposure to advertisement for food in comparison with advertisement for other goods; the proportion of advertisement for “healthy” versus “unhealthy” foods; and characteristics of marketing strategies used in advertisement for food.

Key words: nutrition, obesity, TV, children

THE BODY AND THE AESTHETIC CONFLICT IN EATING DISORDERS (24)

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A psychodynamic developmental object-relation approach is suggested by the author as an attempt to link clinical risk factors of stressful life events, low tolerance of conflicts and anxiety as predisposing factors in eating disorders (ED) in adolescents. According to the approach the developmental tasks in adolescence are seen to trigger an overwhelming anxiety in individuals already vulnerable to conflicting experiences in their early important relationships.

Fantasy in its earliest level of organization seems to be associated with early mental experiences of the body (Gaddini 1982). The sensuous gratifications ones experienced of needs of nutrition and closeness can be expressed by bodily means or "imitative fusion" reactions– the baby sucking its thumb. It is this imitative fusion fantasy the infant restores to when its need has arisen and before it is met by the real feed. Gaddini observed that an infant could develop "mericism" and "rumination" when its relation to its caretaker had been disturbed. In eating disorders the adolescent can be seen to protect a sense of "going on being" with the help of "imitative fusion" fantasies or eating, vomiting and excessive exercising, and at the same time defending against anxieties and conflicting desires. The use of the earliest mode of symbol process expresses a disturbance in symbol functioning and the capacity to integrate, which develop only in a secure frame of object relating.

The struggle for "having" or "controlling" an idealized body or object-relations, the flight from pain inherent in the conflicting adolescent development to gradual apprehension of the complexities of the beauty of the adolescent's own body and self and her object-relations is presented for discussion.

Key words: eating disorders, stressful life events, anxiety, symbol function, body-image, beauty

INDIVIDUAL AND GROUP TREATMENT FOR STUDENTS WITH EATING DISORDERS, A MULTIDISCIPLINARY APPROACH (59)

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Eating disorders are a serious cause of morbidity and mortality in adolescents and young adults. We will present our clinical experience in organizing multidisciplinary individual and group treatments for students with eating disorders, in the Medical and Psychotherapeutic centre for students, embedded in K.U.Leuven Student Services.

We will address the following issues : cooperation between physician and psychotherapist, physical examination, physical follow-up, weight monitoring, psychodiagnosis, motivation for behavioural change, co-morbidity of eating disorders with other psychosocial problems, drop out, stepped care, theoretical background, role of parents and partners, limits in therapy,...

Not all students with an eating disorder are aware of their problem or want to be helped. Motivating students with eating disorders to change their destructive behaviour is a slow process and in every stage of treatment there can occur a problem of drop-out. However, we are convinced that due to the impact on physical, psychological and social wellbeing of students, treatment is necessary and useful. The nature of the eating disorder (anorexia nervosa or bulimia nervosa) isn't relevant in treatment because of common underlying psychopathological mechanisms and persisting processes. Nevertheless the treatments we offer, have to be individualized. An intensive cooperation between physician and psychotherapist is a necessity to insure a high standard, relevant treatment. Eating disorders and 'guilt and shame' seem to be a package deal.... We are serious advocates for group treatment.

Organising structures to reach more students with eating disorders and to organize low threshold group treatment remain challenges for the future.

Key words: eating disorder, multidisciplinary approach

DIETING AMONG ADOLESCENTS-RELATION BETWEEN MEASURED WEIGHT AND BODY IMAGE (233)

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INTRODUCTION: Dieting has been identified as a risk factor for eating disorders and the trend toward adolescents dieting at a younger age is found. Dieting to lose weight among adolescents of normal weight is a big concern.

OBJECTIVES: We examined the prevalence of dieting and negative eating attitudes among adolescents. Weight loss behaviours among students with different BMI (Body mass index) are compared. **METHODS:** Eight grade elementary school students from Bjelovarsko-bilogorska County, Croatia participated in the study. The sample consisted of 571 adolescents, 274 females and 297 males, aged 14-15 years. Participants completed anonymous questionnaires assessing eating attitudes, eating behaviour, dieting practices and body image. Anthropometric data (weight and height) were collected on each of these adolescents during regular physical examination by their school doctors.

RESULTS: In our study, after calculating for BMI, 22,1% of adolescents (23% females and 21,2% males) are overweight or obese and 19,3% are underweight. We found that 17,9% of female students and 13,1% of male students perceived themselves as more overweight than their peers. At the same time 28,8% of the females and 18,9% of the males stated they are currently trying to lose weight.

21,2% of students of normal weight and 21,5% of teens who considered themselves to be appropriate weight, still were dieting. 22,7% of underweight and 18,3% of those who considered themselves as more thin than peers were on diet. 30,1% of overweight and obese and 39,7% of those who considered themselves as more overweight than peers were on diet.

Most of the students (68,6%) think diets are not healthy.

Among those feeling "just about right" 11,3% is underweight. Among adolescents feeling "too thin" 40% is normal weight.

Majority of the students (56,2%) is informed on dieting from magazines.

DISCUSSION/CONCLUSION: Adolescents' report of whether they considered themselves overweight or normal correlated poorly with medical definition of overweight. Therefore many adolescents of normal weight are unhealthy dieting.

Our study reports that unhealthy dieting behaviour is reported in early adolescent age, among boys and girls. It stresses the need for primary prevention efforts to begin at the elementary school level.

Key words: dieting, body image, BMI, eating disorders

EUROPEAN GUIDELINES FOR SCHOOL HEALTH CARE: A CO-OPERATION PROJECT FOR THE PREVENTION AND EARLY DETECTION OF OVERWEIGHT AND OBESITY DURING CHILDHOOD (252)

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The presence of overweight and obesity among children appears to be rising rapidly in many countries around the world including countries in Europe.

Obesity is linked to serious complications in childhood and an obese child is at risk of becoming an obese adult with an associated raised likelihood of ill health and premature death.

In order to combat this emerging epidemic the indicators for overweight and obesity need to be monitored systematically during childhood and adolescence. In many European countries a network of school health services is in place, in which the health of nearly all children is regularly checked at school age. Therefore, these services are not only key-players in the primary prevention but also in the early detection of ill health and developmental problems in general, and of overweight and obesity during childhood in particular.

Such monitoring, in turn, needs to be conducted on the basis of agreed standardized definitions of terms such as obese, overweight and normal weight for specified genders and ages. In addition, in order to elaborate an effective and efficacious school-based programme for the prevention, early detection and guidance of overweight and obesity, one has to strive for scientific evidence for all the components of the programme. Amongst others, cost-effectiveness, applicability in daily practice, uniformity of screening- and follow-up procedures with respect for individual variety, are key issues to be taken into consideration when outlining a preventive programme.

The methodology for the development of guidelines for school health care which is actually being used in Flanders, was derived from the Dutch example, and might therefore be the best available approach for the development of European guidelines for school health care.

In the framework of a co-operation programme between Flanders and a number of Central and Eastern European countries, the Flemish Government supported two co-operation projects aiming at the application of the Flemish methodology for guideline development to the school health care practice in Croatia and Slovenia respectively. Partners in the projects are the Croatian, Slovenian, and Flemish medical associations of School and Student Health Care, the Universities of Leuven, Zagreb and Ljubljana, the Croatian Institute of Public health, and EUSUHM.

Both projects started in January 2005, and should by the end of December 2006 result in an harmonized prevention and screening practice for overweight and obesity in children and youngsters in the three countries, which might in a later phase be used as a basis for a first European guideline for school health care regarding this important health problem.

The outline and first results of these projects, and the stepwise approach of the guideline development, will be highlighted during the presentation.

Keywords: guidelines, evidence-based, school health services, obesity

DIETARY HABITS OF UNIVERSITY STUDENTS IN TAMPERE/FINLAND (42)

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INTRODUCTION: The Finnish Student Health Service was founded in 1954. It covers all university students in 16 cities. Tampere FSHS health centre was established in 1960. There are two universities in Tampere and the number of students altogether is 20 000. During their first or second year in university the students get a free of charge dental check up performed by FSHS dentist.

The aim of the study was to reveal the dietary habits of the students, including the use of xylitol-products. The students were also asked about receiving information concerning oral health and diet issues.

SUBJECTS AND METHODS: During October 2004 and February 2005 a questionnaire was given to the students coming for their first dental check up at FSHS. Completed questionnaires were returned by 437 students (of which 64, 3% female and 35, 7% male). The questionnaire included questions concerning dietary habits of a student. Sum total of meals and snacks per day and also in detail the use of some particularly cariogenic products such as sweets and soft drinks.

After the check up the DMF- (decayed/missing/filled teeth) and D-index of each student were counted.

RESULTS: 80% of the students eat and/or drink 4-6 times per day. Only 5% of them eat 7 or more times per day. On the other hand the regular users of xylitol-products were surprisingly few in number. Not more than 20% of the students use xylitol products at least twice a day.

64% of the students told they have received personal information and instructions concerning oral health issues and 59% of the students thought they had received sufficient amount of information.

The average DMF-index was 4, 3. 17% of the students had DMF-index nil and in 22% of the cases this index was more than 7. The average D-index was 1, 6 and 43% of the students had D-index nil.

DISCUSSION: It has been shown that xylitol, when used at least 2-3 times per day, prevents tooth decay by increasing saliva secretion and reducing bacterial growth (str.mutans). This being the case, a clear dietary improvement would be increasing the use of xylitol-products (chewing gum, pastilles).

CONCLUSION: It appears that in general the students have quite healthy eating habits.

Key words: diet, DMF-index, xylitol

EVALUATION OF NUTRITIONAL STATUS AND ASSOCIATED RISK FACTORS OF ADOLESCENTS (70)

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INTRODUCTION: The aim of our study is prevention and manages overweight and adiposity in adolescence and identification of risk factors associated with chronic condition and diseases.

MATERIAL AND METHODS: Were used and analysed data of evident lists for nutritional status at 4968 adolescents filled up in the period of regular systematic examination during 5 years period Examinations based on 8 anthropometric parameters and 5 biometric indexes has been carried out in 565 overweight and adiposity adolescents. Anthropometric measuring were realized with standard anthropometric techniques.

RESULTS: In recent five years the prevalence of overweight among the adolescents has risen dramatically at 7.4% to 22.1%. BMI – based classification system for adolescents overweight (24.4%) and adiposity (13.3%) are highly specific but less sensitive for fatness (16.8%) as well for metabolic risk. Appearance of hypertension - 6.9%, hypothyroidism - 2.3%, polycystic ovary syndrome - 7.8%, hypercorticism - 1.6%, hepatic steatosis - 1.1%, flat feet – 30.4% are common in our obese adolescents.

CONCLUSION: Health care providers are focusing increased attention on preventing and managing overweight in adolescence. Optimal approaches to prevention need to combine dietary and physical activity interventions.

Key words: nutrition, adolescents, risk factors

NUTRITION AND FOOD HABITS AMONG SCHOOL CHILDREN IN BRODSKO- POSAVSKA COUNTY (95)

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Overweight and obesity are risk factors in development many chronicle diseases.

The purpose of this work is to present prevalence of overweight among schoolchildren from school year 1998/99 to 2003/04 in this part of Slavonia and to detect variations in food habits, physical activity and blood pressure between group of overweight children and control group (with normal weight).

Pupils of 5th and 8th grade in primary school were on systematic check up.

Body weight and height have been measured. Criteria for overweight were body weight /height over 90th centile curve for age and gender (Prebeg, 1988). BMI for age and gender were estimated (NHANES 2000) for both groups and they fulfilled the questionnaires about food habits and physical activity.

In year 2003/2004 were 12,09 % overweight children, (12,64 % in 1st grade of primary school, 12,63 % in 5th , 12,25 % in 8th ,10,69 % in 1st grade of high school and 11,25 % students). 303 pupils were questioned in 5th (161 overweight, 142 in control group) and 283 in 8th grade (157 overweight, 126 in control group). In 5th grade, in overweight group were 44,09 % over 85th c.c. for BMI, in 8th gr.50,31%, and 55,90% were over 95th c.c.in 5th gr, in 8th 49,68%. Mean blood pressure, in 5th grade were 120,12 /75,91 mmHg in overweight group, in control 113,91/71,05 mm Hg. More often were higher only systolic pressure. In 8th gr. mean blood pressure were 128,15 / 80,10 mmHg in overweight group, in control 118,62/76,10 mmHg. In 8th gr. 40,76 % overweight pupils had working mother and 28,5% in control (in 5th grade there was no difference). 78,26% overweight pupils were not satisfied with their body weight in 5th gr (17,55% control pupils), 82,16% in 8th (25,39% in control group). The best mark in 5th gr. gave themselves 16,77% overweight pupils, in 8th grade 9,55% .In control 25,24% pupils from 5th and 19,04% from 8th grade gave themselves the best mark. Active in sport were 27,32% overweight pupils in 5th gr. 22,92% in 8th gr. and in control 33,54% in 5th and 19,84% in 8th gr. On a diet were 31,05% overweight pupils in 5th grade, 26,11% in 8th gr. In control were 7,08% on a diet in 5th gr.,5,55% in 8th grade. Data about food habits will be presented on a poster.

Overweight and obesity are risk factors in development many chronicle diseases in adult. Preventive actions must include parents, teachers and children where School medicine have great role.

Key words: nutrition, school children

THE LEVEL OF NOURISHMENT AND EATING HABITS OF SCHOOLCHILDREN IN THE POŽEŠKO-SLAVONSKA COUNTY (109)

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INTRODUCTION: Improper nourishment, undernourishment and overnourishment are important but preventable risk factors for the development of the current health problems such as caries, anaemia, undergrowth, overweight and obesity, but also for the development of chronic diseases in cardiovascular, endocrinological, locomotor and gastrointestinal system as well as malignant diseases. The aim of this study was to determine eating habits and the level of nourishment of the fifth and the seventh-grade students of elementary schools and the first-grade students of secondary schools.

SUBJECTS: The survey encompassed 892 students (483 females and 402 males) at the age of 11, 13 and 15 from the area of the Požeško-slavonska County.

METHODS: Eating habits were surveyed by an anonymous questioner, with the questions made accordingly to survey Health Behaviour of School-aged Children (HBSC).

The level of nourishment was defined by a body mass index (BMI) depending on the age and sex according to the CDC reference value. Undernourishment was defined as BMI under 5 percentile and overnourishment above 85 percentile.

RESULTS AND DISCUSSION: According to the results, 12,7%M and 18,9%F never has breakfast at working days, and 5,9%M and 7,5%F not even at weekends. The majority of children who do not have breakfast at weekends are at the age of 15. 65,7%M and 54,1%F has breakfast five days a week. 82,3%M and 73,5%F has breakfast on Saturday and Sunday, but this number decreases with the age for both sexes. Fruit and vegetables are consumed the least at age of 15, while the consumption of sweets increases with the age for both sexes. Sweet drinks are drunk several times daily by 14,2%M and 13,1%F. An increase in the consumption of sweet drinks with the age has been noticed, especially with females (increase of 8,6% between the ages 11 and 13). At the age of 11, 20,1%M and 13,7%F is overweight, at the age of 13, 17,6%M and 11,3%F is overweight and at the age of 15, 17,9%M and 6,0%F is overweight.

CONCLUSION: Although the majority of children are well nourished, the results show that the frequency of irregular and unhealthy nourishment increases with the age.

On the basis of the obtained results, we are going to plan further health-educational activities for students.

Key word: undernourishment, overnourishment, eating habits, body mass index

PRIMARY PREVENTION OF BEING OVERWEIGHT AND BECOMING OBESE IN PRESCHOOL CHILDREN: A STUDY ON BEHAVIOURAL DETERMINANTS (129)

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INTRODUCTION: The prevalence of obesity in children is increasing in many countries. Dutch preschool children have gained a higher body mass index during the last decades. It is known that obesity in children persists into adulthood and increases the risk of obesity related morbidity in later life. Effective interventions for treatment of obese children are not available. Therefore, primary prevention is indicated.

OBJECTIVE: To gain insight into the determinants of behaviour, related to being overweight, in families with preschool children. The study was performed within the context of a project to develop an intervention program for the primary prevention of overweight and obesity.

METHODS: Seven focus group meetings with 2-11 parents of preschool children (Dutch, Turkish, Moroccan, Hindustani) and three meetings with professionals (from health care, day-care, and those working with ethnic minorities) were organised in youth health care or community centres. Subsequently, 390 parents answered a questionnaire on determinants of overweight extracted from both literature and the focus group results.

RESULTS: It was found that 15% of the children above the age of 2 years were overweight. Of the mothers and fathers respectively 37% and 53% were overweight. Independent risk factors for being overweight in a child were: having a mother who was overweight or on social security benefits, or having a father with a non-western background. Several behavioural variables showed a significant relation with the child being overweight. They appear to be related to: inappropriate handling of necessary amounts of food, not eating at the dinner table as a family, and compensating eating sweets with offering less food at meal time. Finally, the study provided data on the occurrence of behaviour related to being overweight as published in current literature.

CONCLUSION: Lack of knowledge (e.g. sweetened fruity milk drinks are healthy), inappropriate feeding habits (skipping breakfast, properly dealing with children with eating problems) and (too) permissive child rearing practices have to be taken into consideration in the development of an intervention to prevent overweight and obesity.

Key words: overweight, obesity, preschool children, determinants

INFLUENCE OF THE EXTRASCOLAR SPORT ACTIVITIES ON THE BMI OF THE ELEMENTARY SCHOOL PUPILS (190)

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Sport activity is an important factor in the body mass regulation. We assumed that the children who practice an extrascolar sport activity, have normal body mass index.

Measurements were done during systematic examination of the 8th grade pupils of elementary school (age 14-15). Pupils who came to the examination were submitted to measurements of body weight and height, and an inquiry was done to find out if they practised an extrascolar sport activity.

Total number of examined pupils is $N=227$, that is 111 girls, and 106 boys. Out of a total of 111 girls, 48 (43.2%) of them practice extrascolar sport activities, whereas 37 (34.9%) boys out of a total of 106 practice extrascolar sport activities.

The results of the study show that the children who practice an extrascolar activity have normal body mass index (BMI 18.5 kg/m² – 25 kg/m²).

Therefore we think that it is important to include and systematically motivate pupils to practice extrascolar sport activities.

Key words: sport activity, body mass regulation, elementary school pupils

CORRELATION BETWEEN ACTUAL BODY WEIGHT AND BODY PERCEPTION AMONG CROATIAN ADOLESCENTS (191)

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INTRODUCTION: Social and behavioural factors could moderate the relation between actual body weight (BW) and body perception among adolescents.

SUBJECT AND METHODS: The analysis of data obtained from adolescents from Trogir, Croatia (328 females and 137 males, average age 16.16±1.27 years) by a questionnaire and body measurements.

RESULTS: Among the females the mean body mass index (BMI) was 20.59± 2.26 kg/m², BW was 59.01± 7.49 kg and desired body weight (DBW) was 56.31± 5.75 kg. The mean BMI was 22.03± 2.32 kg/m², BW was 72.16± 8.99 kg, DBW was 73.57 ±7.96 kg among the males. We found 38.4% females and 60.1% males pleased with their BW (p<0.001) and 17.1% females and 4.6% males were on a diet (p<0.001). There were differences in BW, DBW, BMI values between dieting females/males and non-dieting ones (p<0.001). Females and males satisfied with their BW had lower BMI values than those who were dissatisfied. There were differences in BMI and BW values between female/males breakfast skippers and breakfast consumers (p<0.001). Female and male dinner consumers had lower BMI values than the subjects who were dinner skippers (p<0.001).

DISCUSSION: Our data demonstrate a general tendency among females to decrease and among males to increase their BW. Body dissatisfaction is more extreme in females but also occurs in males. The subjects with a higher BMI evidenced greater body dissatisfaction and more weight loss strategies.

CONCLUSION: Although Trogir is a part of Croatia with Mediterranean alimentary habits, only 38.4% adolescent females and 60.6% males are pleased with their BW. Furthermore, 17% females and 4.6% males are on diet. The habit of skipping daily meals had significant influence on BW and body perception.

Key words: adolescent, body mass index, body image, lifestyle

ESSENTIAL FATTY ACIDS AND COD LIVER OIL - CRITICAL NUTRIENTS FOR CHILDHOOD GROWTH, DEVELOPMENT AND NEURONAL FUNCTION (244)

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Sponsored by Twinlab

Historically, Cod Liver Oil is the world's original and most widely used "dietary supplement". More parents from more cultures and countries around the world have given their children Cod Liver Oil, than any other single nutritional supplement. This tradition was based on the observation and experience that children grew healthier and smarter when raised with Cod Liver Oil.

Today's medical research confirms precisely why this is true, by fully understanding the functions and critical requirements for the fatty acids contained in Cod Liver Oil, that the growing bodies and minds of children need. The childhood incidence of ADD, ADHD, Autism and other behavioural disorders have increased exponentially through-out the world over the past ten to fifteen years. The latest statistics from America, show an average of 300- 500% increase in these disorders over the past fifteen years (Clinical Pediatrics, 2000). This pattern of increase is occurring within all growing and industrialized cities of the world. As these disorders are affecting more children, parents are seeking for solutions that address and are able to correct the underlying and organic causes of these maladies. The practical application of the "essential fatty acids" found in Cod Liver Oil is an essential part of these solutions.

Key words: essential fatty acids