Welcome to the 5th DIETS Thematic Network Newsletter.

It is hard to believe that the second summer of DIETS is here and with it the 5th edition of the DIETS Newsletter. Help with editing this Newsletter from Carola Deitrich of the Irish Nutrition and Dietetic Institute and Ann Wolter from EFAD is greatly appreciated by the Dissemination Group.

In this edition we have contributions from our thematic network partners in Austria where students and teachers of dietetics are participating in the provision of nutritional advice to athletes participating in exciting international athletic events. Our Belgian partners have provided us with articles on pre-school nutrition, on the work of Belgian hospital dietitians and an article on how efforts are being made in Belgium to create an educational system for dietitians that meets their needs in the workplace. Hungary, Slovenia and Spain have also sent us interesting articles on the work that is ongoing in those countries in the areas of public health nutrition, clinical nutrition and research. These highlight the diversity and scope of practice of dietitians working across Europe.

We also include information on the 2nd DIETS Conference which will be held in Frankfurt, Germany on the 25th and 26th September 2008. We hope that as many of you as possible will attend this Conference which hopes to bring HEIs, practicing dietitians and students together to discuss the requirements and aspirations of dietetic education in Europe.

As with previous newsletters, we urge you to disseminate this Newsletter as widely as possible, to all lecturers in dietetics, practicing dietitians, students and ministries for health, education and employment. Although we have presented information from many countries in Europe in the Newsletter, we welcome further contributions which serve to educate us all on the wonderful work being carried out by our professional dietetics colleagues across Europe. Please send your contributions to the Thematic Network Manager, Judith Liddell at network.manager@thematicnetworkdietetics.eu.

Wishing you all an enjoyable and restful summer,

Dissemination Group,
DIETS Thematic Network for Dietetics
**Competency consultation** – the draft European Dietetic Competency Statements and Performance Indicators have been translated into 18 languages by EFAD delegates. Every EFAD member Dietetic Association and all DIETS dietetic association partners have been asked to distribute copies of the questionnaire to their own members. It is hoped that during the 6 weeks of the consultation process (1 May to 14 June 2008) every practicing dietitian in Europe will have the opportunity to register their views on the statements. You can access the statements through your association web site or on

http://www.thematicnetworkdietetics.eu/node/asp frmView.aspx?nbrNodeID=2477&nbrTypeID=5&nbrSubtypeId=0

**DIETS Conference** – Frankfurt, Germany 25 & 26 September. The conference programme is now finalised with many interesting topics and speakers. The theme of the conference: “Ensuring Quality in Practice Placement Learning” is of relevance to all dietitians, present and future. This joint conference for practicing dietitians and dietetic educators aims to identify a shared vision of the future of European Dietetics. The “Early Bird” registration deadline is 30 June. Registration forms and the second announcement are available on the DIETS website. Poster presentations from delegates will be welcomed.

**Visits** – 24 DIETS partners have volunteered to participate in visits this year. Each visit will involve a practice placement trainer and a Higher Education Institute lecturer from the host partner and from the guest partner meeting for at least three days to discuss how they each train students in practice. From the positive feedback received so far we believe that the year 2 visits will be just as successful and enjoyable as the year 1 visits proved to be.

**Data collection** – Dissemination is a vital aspect of the DIETS project. Monitoring the effectiveness of our dissemination activities is equally important. For this reason we plan to use our Key Contacts & the DIETS web site to collect data relating to our dissemination activities. Your help in reporting any changes which have occurred as a result of a DIETS activity would be greatly appreciated.

Please contact Judith Liddell network.manager@thematicnetworkdietetics.eu directly with any information you wish to share.

Judith Liddell
DIETS Network Manager
The paper focuses on issues of relevance to dietitians working in hospitals. A survey was carried out using a questionnaire sent to dietitians in Norwegian and Slovenian hospitals. The results were analysed by means of descriptive and comparative statistics, aiming to determine significant statistical distinctions between dietitians in both countries.

The results obtained highlight that in many Slovenian and Norwegian hospitals, nutrition is considered a part of hospital services. Moreover, the role of the dietitian as a member of a health care team has not yet been recognised and acknowledged. Slovenian dietitians are heavily burdened and, compared to Norwegian colleagues, have more tasks. In Slovenia, the majority of participants mentioned preparation of menus as their primary task at work (84%). In Norway, on the other hand, individual dietary consultations with patients for advice on a healthy nutritional intake or for specific dietary advice (89%) ranked highest. The results of the questionnaires have also drawn attention to the fact that few hospitals in either Norway or Slovenia perform nutritional screening and/or monitoring and the development of team work in the hospitals is still under way. The study also collected data on the formal education of people working as dietitians in the two countries. In Slovenia, those most likely to be undertaking the role of a dietitian were graduate engineers in food science and technology (e.g. university degree of food science and technology) (40%), followed by graduate nurses (16%) and finally, by people who have successfully finished the Secondary Nursing School (12%) or the Secondary Culinary School (8%). In Norway, the work of a dietitian is performed by people with the following qualifications: a clinical dietitian (93%), home economics teacher (4%), and an administrative dietitian (2%). Fifty-two percent of Slovenian, and 22% of Norwegian questionnaire participants, share the opinion that their formal education has not equipped them with an adequate knowledge of nutritional science that would enable them to do their job effectively.

This paper is result of the MSc thesis which was prepared by Simona Music.

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Simona Music
Nutrition Day is a one day audit of nutritional screening of hospital in-patients and nursing home residents designed by the Austrian Enteral and Parenteral Nutrition Society (AKE) that intends to describe the characteristics of different wards, institutions and habits related to nutritional screening of inpatients and residents.

For the first time, Hungary participated in data collection from nursing homes this year which was led by a dietitian. As the questionnaires and data sheets were only available in English, we translated and adapted them for Hungary. These adapted resources will be available on the project website to anybody who wishes to take part in this audit in the future.

Data were collected from around 2500 residents from 20 nursing homes and hospitals. Interestingly, nobody refused to take part in the study. The residents expressed satisfaction that the issue of nutrition was raised. The results will be interesting as staffing levels in Hungarian nursing homes are low.

The data collection was carried out by practicing dietitians, and also students on their final placement before qualifying. It was an excellent opportunity for the students to experience all stages of an international, multicentre study including having to obtain informed consent, the collection of data from institutions and patients and the recording of data.

Due to the positive feedback, it was decided that students will be involved again in next year’s Nutrition Day.

Zsuzsanna Lelovics RD, Reka Kegyes Bozo RD, Prof. Maria Figler MD, University of Pecs

The Education of Dietitians in Belgium

In June 2005, the European Federation of the Associations of Dietitians (EFAD) published the “European Academic and Practitioner Standards for Dietetics”. The document describes the education of dietitians throughout Europe highlighting the common core elements and the differences that exist. It tries to define the professional competencies that need to be developed during the education and training of dietitians.

Taking this Report as a starting point, we investigated if professional requirements are met in the education of dietitians in Belgium, with particular emphasis on determining the competencies necessary for our graduates. One of the aims of our educational institute is to widen the dietitians’ range of professional opportunities in the workplace.

The study questionnaire was developed by two dietitians teaching in the Institut Paul Lambin - ELDV in Brussels (F. Sirjacobs & E. Menne, MSc Nutrition). The questionnaire was sent by post or e-mail to all the members of the Belgian French-speaking dietitians association (UPDLF) during December 2006.

Study Results
The answers to the questionnaire show that dietitians in Belgium are working in a wide range of jobs although the majority works in clinical dietetics. Some have several working commitments and offer private dietetics consultations.

Dietitians’ perception of their role within the workplace
While the dietitians surveyed believe the role of the dietitian is widely accepted in relation to the provision of advice on a balanced diet, obesity, diabetes and hypercholesterolemia, they believe that the role is not well defined in the areas of catering, healthcare education, agribusiness industries and the management of diseases other than those listed above.

Dietitians’ perception of their education
The education of a dietitian was not considered to be sufficient by 75% of the study participants with lack of knowledge in psychology, the study of the eating behaviour, communication skills with patients, finance management and IT identified as the main deficits. Other deficits identified included skills to develop and implement research and development in projects in nutrition, marketing, management, rare diseases, health promotion and health education and working with scientific literature.

Study Conclusions
The fact that the dietitian is an important player in healthcare is well-known
Dietitians are professionals with a particular interest in continuing education
Dietitians are aware of their limits; they regret their lack of skills to manage a professional relationship with their patients and they need communication tools
Last but not least, dietitians are open to new positions within project management and human management or in the food industry. The results of this study will help us to adapt the training and education of dietitians.

Institut Paul Lambin – HELDV – Brussels, Belgium
Slovenia is one of only a few countries with systematically regulated school meals. As part of the child’s daily nourishment, school meals must meet the child’s physiological requirements (Smernice, 2005). Each individual meal must offer an adequate quantity of energy, macro and micronutrients.

This research investigated the nutritional and energy value of snacks and lunches provided in schools. Moreover, we assessed them according to the guidelines and evaluated the relationship between school snacks and lunches and their nutritional and energetic value.

The research was conducted at 96 schools in Slovenia. Nutritional and energy values of snacks and lunches were calculated with the Prehrana 2000 software (Poklar Vatovec sod., 1999), while the food database was elaborated using nutritional tables (Kaić-Rak in Antonić, 1990).

The meals offered met the recommended requirements for most nutrients. In most regions of the country, meals were adequate in dietary fibre, cholesterol, calcium, phosphorus, sodium, potassium, iron, vitamins B₁ and B₂, and niacin. The energy distribution of macronutrients was appropriate, with 13.6% of energy derived from protein, 26.5% from fat and 59.9% from carbohydrate. The energy value of snacks exceeded the recommendations, while the snacks did not provide the recommended levels of vitamins B₆ and C. The recommended value of vitamin C in school snacks was not met in any region, while the energy value of the snack was appropriate in only one region. Eleven regions had adequate protein, dietary fibre and vitamin B₁ in their snacks, 9 regions met the recommended levels of potassium and niacin and only half the regions had snacks with enough cholesterol and vitamin 6.

Compared to snacks, the lunches offered met the requirements for a smaller number of nutrients. They met the recommended requirements for sodium, potassium, vitamin C and niacin. The energy value and the energy distribution of macronutrients in lunches did not meet the recommended values. The energy value amounted to 29.1% of the recommended value, while the energy value of protein and fat exceeded the recommended values by 16.8% and 35.9% respectively. The level of cholesterol in lunches was adequate. The energy derived from carbohydrates was too low, achieving only 47.3% of the recommended value. None of the other nutrients, i.e. dietary fibre, calcium, potassium, phosphorus, iron, vitamin B₁, vitamin B₂ and vitamin B₆ achieved the recommended value.

The recommended levels of only three nutrients, i.e. sodium, potassium and vitamin C, were met in all regions. Lunches in 8 regions provided enough niacin, one half of the regions had adequate levels of cholesterol and vitamin B₆, 3 regions had suitable levels of iron while only 1 region had adequate levels of vitamin B₁. Five regions had satisfactory energy derived from carbohydrate, 4 regions had adequate energy derived from fat, and only 2 regions had suitable energy derived from protein. For as many as 5 nutrients, i.e. energy value, dietary fibre, calcium, phosphorus and vitamin B₂, none of the 12 regions achieved the recommended levels for school lunches.

Tamara Poklar Vatovec, University of Primorska, Slovenia, College of Health Care Izola, Department of Nutritional Counselling – Dietetics
In Slovenian schools, we found out that there is no generally accepted method to express the evaluation of the quality of school snacks. Therefore, a multicriteria mathematical model for classification of snacks according to their nutritional adequacy was proposed (Smernice, 2005), including the price and the sensory evaluation of acceptability, which allows for a critical judgment within a particular region, a rating of regions in regard to quality, and a comparison of the quality of differently composed snacks.

In creating the decision model we considered the key criteria present in planning school meals. When we structured the decision tree, we discovered relationships of interdependence, content and principles of perfection, efficacy, dismantlability, non-redundancy and minimality. We divided the decision problem according to the multicriteria decision-making into four sub-groups and two levels.

We used the created decision tree to compose a questionnaire for each decision level. In this questionnaire we compared all the criteria at a particular level by pairs. The questionnaire was distributed among the professional workers in school kitchens and the heads of canteens. In dual comparisons we looked at the compared criteria and which components were more important for quality and we also considered how big the difference was between the compared criteria. In determining the difference in importance of the compared criteria, our reasoning was based on the premise that there is no absolute quality and the fact that factors influencing quality are so heterogeneous that we cannot evaluate with the current level of knowledge correctly. Therefore our informants expressed the differences, relying on their own professional knowledge of criteria and on the most important known characteristics of the criteria observed.

We gathered the expert opinions with the Delfi method. In the first stage we gathered expert evaluations from 10 professionals and processed them with statistical-mathematical methods. Statistical values were included in the questionnaire and retrieved the data from the same professionals. We processed the obtained data and filtered errors.

On the basis of the analysis of expert opinions we used the AHP method to calculate and define functions of usefulness, with which we determined the rules of shifting from the lowest level of the decision tree upwards to the final evaluation of variant, i.e. the snack. For the criteria at the lowest levels of the decision tree, we defined the entry functions for the entry of data into the model. These entry functions are used to transform the actual values of criteria into nondimensional values, which allow a further processing of the data in the model.

The proposed mathematical model for the classification of snacks according to the chosen criteria of quality is created according to the principles of multicriteria decision-making, which makes it easy to remove or add new criteria to the model, if we find out that the model is over or undersized. If new criteria are added to a particular level of the decision tree, dual comparisons are carried out between the new and old criteria at this level. Using the AHP method we then calculate again the priority factors and correct the usefulness functions of the changed level of the decision tree. There is no need to change the usefulness functions at the other levels.

The model is designed by entering numerical data that are measured for the compared variants in the stage of the calculation of the nutritional and energetic values of snacks, their prices, and the survey of the sensory acceptability of snacks. If it is not possible to directly measure the value for a particular criterion, the AHP method allows us to enter the model also in the form of indirect comparisons and value judgments, as the AHP method can operate also with descriptive variables as well as value judgments.

The mathematical model for the classification of snacks according to their adequacy of quality, allows not only for the calculation of the final evaluation of differences in quality of the observed snacks, but also for the comparison at both sub-levels of the decision tree and therefore for the identification of noticeable advantages or disadvantages of particular snacks from particular regions in comparison to others. The multicriteria decision-making methodology can also be used for the analysis of the sensibility of the final evaluation to the changes of priority factors at whichever decision level. The proposed model therefore enables us to critically assess snacks within regions, to rate concepts of regions and compare snacks. The model for the evaluation of the quality of school meals can thus be used as support in choice and decision-making for those snacks that present the best quality in all the chosen criteria, not only in particular ones.

This model allows for an adequate planning, evaluation and changing of the quality of school meals in the Republic of Slovenia. We thus expect a significant improvement in the quality of school meals and objective assessment, comparison and evaluation of menus.

(Formation of multicriteria model for evaluating school nutrition in Slovenia, doctoral dissertation, tamara.poklar@guest.arnes.si)

Tamara Poklar Vatovec, University of Primorska, Slovenia, College of Health Care Izola, Department of Nutritional Counselling – Dietetics
In order to prevent unhealthy lifestyle patterns from continuing into adulthood, it is important to strive as early in life as possible for a high-quality diet with optimal levels of food and nutrients to help maintain good health.

Therefore, Ghent University started a preschool dietary survey in 2002-2003, the first in the Flanders region. Three-day estimated diet records were used to evaluate nutrient adequacy and compliance with food-based dietary guidelines (FBDG). In total, 696 pre-schoolers, spread over 43 schools in Flanders, were included in the survey.

Although diets in Flemish pre-schoolers were adequate in most nutrients, important deficits were identified in vitamin D, dietary fibre and water intakes. Furthermore, our Flemish pre-schoolers' diets were characterised by excessive saturated fatty acid and sodium intakes while being inadequate in polyunsaturated and monounsaturated fatty acids and potassium.

Comparison with the Flemish FBDG revealed that, except for potatoes and meat products, a substantial number of Flemish pre-schoolers had inadequate marginal daily intakes of all other food groups (beverages, cereals and bread, vegetables, fruit, milk, and spreadable fats).

This survey also revealed that more than 30% of the Flemish preschoolers were using dietary supplements. Although such dietary supplements may contribute to adequate intakes of particular nutrients such as vitamin D, they might also increase the risk of toxic intakes of some nutrients. Therefore, health promoters should inform parents and caregivers about these possible risks and should stress that the intake of a wide variety of foods is preferred over nutrient supplementation and fortification as a method for obtaining adequate vitamin and mineral intakes. Most importantly, the consumption of fruits, vegetables, water and spread on bread should be encouraged to attain the recommended nutritional goals.

In conclusion, the results from this survey revealed that the diet of Flemish pre-schoolers follows a typical Western affluent dietary pattern, increasing the possible risk for cardiovascular diseases and other chronic diseases in later life. Therefore, comprehensive nutrition policies placing emphasis on the first years of life should be developed in order to avert preventable deaths.

Inge Huybrechts, University of Ghent, Belgium

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**Position Statement: Spanish Nutrition and Dietetics Association**

The Spanish Dietitians-Nutritionists Association’s position is that the best qualified professional to provide services related to nutrition and dietetics within the framework of Primary Care is the nutritionist/dietitian. The incorporation of the nutritionist/dietitian into Primary Care will contribute not only to the improvement of population health, but will be useful in optimising health investment, thus improving cost-effectiveness.

The data available show that the food consumption profile in Spain provides an imbalance in macro- and micronutrients, which supports the need for experts in food and nutrition at the Primary Care Centres. Professional nutritionist/dietitians play a key role in health promotion and prevention, treatment and rehabilitation of the most prevalent chronic diseases. The employment of these professionals counteracts the emergence of individuals and organisations with para-scientific or non-scientific ideologies, reduces public health costs and defends the population's interests. The work of such professionals benefits both individual and collective health.
**Summary**

Physical activity and food have an influence on people’s health. In Catalonia, surveys show that most people do not engage in the recommended amount of physical activity, nor do they properly follow healthy eating recommendations. Being aware of the problems caused both by inappropriate eating habits and by the progressive tendency to a sedentary lifestyle and an increase in obesity levels, the Department of Health of the local Catalan government is currently designing and launching a Comprehensive Plan for Promoting Health through Physical Activity and Healthy Eating (PAHE). This plan is to promote partnerships and community actions among different local government authorities, local companies and the public and is in line with the strategy recommendations made by the World Health Organization (WHO 2004: “WHO worldwide strategy on diet, physical activity and health: To promote and protect health through establishing policies and comprehensive plans for promoting healthy eating and the practice of physical activity, with the collaboration of the civilian society, the private sector and the media).

The PAHE hopes to promote partnership and commitment in the areas of education, health, community and labour, which allow the proposed interventions to be harmonised in Catalonia with the Spanish state strategies (NAOS strategy, the Spanish Agency of Food Safety, the Ministry of Health and Consumption), as well as at a European level. In order to tackle the current public health issues, and to commence the different actions of this strategic plan, a multifactor focus is proposed that deals with the burden of disease caused by unhealthy lifestyles. Implementing these strategies is complex, so it is necessary that the multiple sectors, government and local authorities and the public co-operate well.

Gemma Salvador Castell* & Conxa Castell**
*Food and Nutrition Programme Department & **Health Education and Health Programmes Department, Public Health Department of the Catalan Government.

**A Walnut Diet Improves Endothelial Function in Hypercholesterolemic Subjects**

**BACKGROUND:** Epidemiological studies suggest that nut intake decreases coronary artery disease (CAD) risk. Nuts have a cholesterol-lowering effect that partly explains this benefit. Endothelial dysfunction is associated with CAD and its risk factors and is reversed by antioxidants and marine n-3 fatty acids. Walnuts are a rich source of both antioxidants and alpha-linolenic acid, a plant n-3 fatty acid.

**METHODS AND RESULTS:** To test the hypothesis that walnut intake will reverse endothelial dysfunction, we randomised in a crossover design, 21 hypercholesterolemic men and women who were then allocated a cholesterol-lowering Mediterranean diet and a diet of similar energy and fat content in which walnuts replaced approximately 32% of the energy from monounsaturated fat. Participants followed each diet for 4 weeks. After each intervention, we obtained blood samples following fasting and performed ultrasound measurements of brachial artery vasomotor function. Eighteen subjects completing the protocol and had suitable ultrasound studies.

Compared with the Mediterranean diet, the walnut diet improved endothelium-dependent vasodilation and reduced levels of vascular cell adhesion molecule-1 (P<0.05 for both). Endothelium-independend vasodilation and levels of intercellular adhesion molecule-1, C-reactive protein, homocysteine, and oxidation biomarkers were similar after each diet. The walnut diet significantly reduced total cholesterol (-4.4%/7.4%) and LDL cholesterol (-6.4%/10.0%) (P<0.05 for both). Cholesterol reductions correlated with increases of both dietary alpha-linolenic acid and LDL gamma-tocopherol content, and changes of endothelium-dependent vasodilation correlated with those of cholesterol-to-HDL ratios (P<0.05 for all).

**CONCLUSIONS:** Substituting walnuts for monounsaturated fat in a Mediterranean diet improves endothelium-dependent vasodilation in hypercholesterolemic subjects. This finding might explain the cardioprotective effect of nut intake beyond cholesterol lowering.

* A walnut diet improves endothelial function in hypercholesterolemic subjects: a randomised crossover trial.
  Ros E, Núñez I, Pérez-Heras A, Serra M, Gilabert R, Casals E, Deulofeu R.
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ABSTRACT

Aim: The effectiveness and safety of a weight loss programme based on meal replacement products were assessed in 56 overweight or grade 1 obese volunteers through a dietetic intervention market study (8 weeks), with a control group. The individuals were divided into: a group on a hypocaloric diet (control group) and another group on a hypocaloric diet and meal replacement products (intervention group). The guideline diet was based on a Mediterranean type diet. Energy intake ranged between 1,300 and 1,500 calories daily. Biochemical parameters were measured at the beginning of the study, after 4 weeks and after 8 weeks.

Results: The control group lost an average of 4.0 kg, while the intervention group lost 4.4 kg. These differences were not statistically significant. A statistically significant drop (p= 0.041) in triglyceride values was observed, although there were no differences between the groups. No statistically significant differences were found in the other anthropometric or biochemical parameters analysed.

Conclusions: Both the meal replacements and the conventional dietetic treatment were effective for losing weight.

The Effectiveness and Safety of a Weight Loss Programme that Includes Meal Replacements and Biochemical Parameters in Patients that are Overweight or Obese
Julio Basulto, Lucía Bultó, Mónica Chamorro, Cristina Lafuente, Eva Martín, Graciél. La Porta, Spanish Association of Dietitians-Nutritionists.

ACTIVIDAD DIETÉTICA • No 34 • 2007: 13-19.

Dietitians Contribute to Ultra-Endurance Sports Event

The legendary ‘Race Across America’ is one of the most respected and longest running annual endurance events in the world. It is one of the pinnacles of sporting achievement, globally seen as the highest rung on the ultra-endurance sports ladder. Since 1982, RAAM has had a rich history, and ranks as a monument of human physical accomplishment.

The Race Across America is an event so demanding that merely finishing is, for most participants, the accomplishment of a lifetime. RAAM inspires everyone that it touches… and this is how it is laid out: The route is over 3000 miles, touching 14 states and climbing over 100,000 feet. Solo racers finish in 9 to 12 days, averaging 250 to 350 miles per day. Solo racers have the challenge of balancing about two hours of sleep each night against race deadlines.

The cyclist I am working with is Franz Preihs (www.franzpreihs.at), a 30 year-old athlete whose main profession is now cycling. I got to know him about four months ago when we tried to improve his eating habits to have a good basis to work with. Franz now follows a diet which is both rich in carbohydrates and protein with the aim of increasing his muscle mass. With the help of bio electrical impedance analysis, we check on his progress every two weeks. For the race itself, he is supposed to have a very carbohydrate-rich diet, mainly in liquid form. At least once a day, we will have a dish - prepared and packed in Austria - to optimise his nutritional status. These will all be dishes which he tried before and are easy to chew and digest. As the race is so long, it is also a challenge to find sufficiently salty foods or drinks, because all the sport drinks are quite sweet and it is impossible for him to stand the sweet taste for days on end under this extreme effort.

I am really looking forward to this big challenge.

Manuela Konrad, Dietitian, Lecturer, FH JOANNEUM, University of Applied Sciences, A - 8344 Bad Gleichenberg, Kaiser-Franz-Joseph Str. 418
Austrian Student Dietitians Contribute to Volvo Sailing Competition

NUTRITION during the VOLVO OCEAN RACE 2008/2009
Department of Dietetics, FH JOANNEUM, University of Applied Sciences, Graz / Bad Gleichenberg, Austria

The Volvo Ocean Race is a well-known round-the-world sailing competition. The boats start in Alicante (Spain) this October, they then go to Cape Town, Kochi (India), Singapore, Quingdao, Rio, Boston, Galway, Göteborg, Stockholm, and after 9 difficult months they will finish in St. Petersburg.

Dr. Nina Gründler, a Graz-based GP and enthusiastic sailor herself, serves as the consulting physician for one of the crews taking part in the race and will also accompany them. Several months ago, she asked if our department would be interested in providing specialised nutritional counselling. Two of our students have grasped the opportunity and are now writing their bachelor’s theses about nutritional issues related to the race. Here are their reports.

JANE BERGTHALER, Student of Dietetics, FH JOANNEUM, Graz / Bad Gleichenberg
As a part of my project work, I have been asked to provide nutrition and meal plans for the Russian crew taking part in the sailing regatta “Volvo Ocean Race” next Autumn. Being in excellent physical shape is necessary in such a race in order to endure the extreme conditions. Nutrition is an essential aspect of keeping in good physical shape and food is the fuel that makes it possible to withstand the hardship of the competition.

I investigated and sourced suitable products for the crew under the conditions prevailing in the Volvo Ocean Race; products that are easily prepared, have a long shelf-life (more than one year), are compact (low in weight, little package volume), easy to digest and, last but not least, tasty and nutritious. The distribution of nutrient content must conform to the recommendations of the German Nutrition Society, 30% fat, 15% protein and 55% carbohydrates. Most of the foods are freeze-dried, high in energy, contain essential vitamins and minerals, come in a variety of flavours, are low in volume weight and they are prepared only with hot water. At the moment I have two providers of freeze-dried-food – “BeWell”, an English company and “Travellunch”, a German provider.

Of course I have tasted the meals. I must say they taste like real food, only the texture needs getting used to!

Furthermore the sailors get special sports-nutritional products for their remaining daily energy needs including carbohydrate and protein bars and shakes, energy and electrolyte drinks from well-known providers such as Powerbar, Oatsnack, Multipower, and All Stars.

Good hydration is extremely important to minimise the fluid deficits which can occur. Fluid replacement plays a key role in the performance of the crew, and is important for them in order to feel well! To provide their energy and electrolyte requirements, the sailors have powders they can mix with water and, as an alternative, ready-made drinks in 500ml PE-Bottles. These do not have to be prepared, so are easy to use (but are higher in volume weight and generate more waste – which must be taken into consideration).

The main goals of my work? To help the crew to feel and remain fit in the difficult conditions for as long as possible.

ELISABETH PFIELER, Student of Dietetics, FH JOANNEUM, Graz / Bad Gleichenberg
My role in the Volvo Ocean Race, is responsibility for developing tailored nutritional plans for the athletes for the specific training periods before the race. The challenge is to find balanced recipes that provide sufficient amounts of specific nutrients to the individual sailors but also meet their individual tastes.

In addition to endurance and cardiovascular training, the main goal of the participants is to build up muscle mass in the course of the training. Therefore, I have chosen meals that are high in energy and protein. I have attached great importance to top quality food. Finally, I liaised with the chef of the team who put my recommendations and recipes into practice.
by PhD dietitian: Nancy Babio Sánchez

The objectives of the PhD thesis were to evaluate whether different grades of severity of eating disorders (ED) bring about relevant dietary changes with nutritional implications or whether they are behavioural conditions with little repercussion on development from early age until adolescence in boys and girls. It was observed that ED of greater severity were associated with lower energy intake in girls. Calcium, phosphorous, iron and folate were the most susceptible nutrients to deficiency, mainly in adolescence. In both genders and in all age groups the frequency of excess weight and fat mass increased significantly with greater severity of ED. Girls at risk of ED and with greater BMI showed greater Body Dissatisfaction (BD). In the risk group of adolescent girls, socio-cultural and emotional factors were associated with BD. This work was published in the Journal of Public Health in 2007.


Unit of Preventive Medicine and Public Health, Rovira i Virgili University, Carretera Valls s/n, Tarragona, Spain, 43007 & Department of Psychology, Rovira i Virgili University, Carretera Valls s/n, Tarragona, Spain, 43007.

Abstract
Aim To examine factors (individual, familiar and socio-cultural) associated with body dissatisfaction (BD) by gender in non-clinical adolescents at risk of eating disorders (rED) and in a control group (CG).

Subjects and methods A total of 2,967 adolescent students were screened using the Eating Attitudes Test-40 and the Youth’s Inventory-4. Of these, 217 students (161 girls and 56 boys) identified as being at rED were chosen for the study, and 208 students (168 girls and 40 boys) were chosen as the CG. The subjects were given the Body Areas Satisfaction Test, the Youth’s Inventory-4, a questionnaire to evaluate social influences on the “model of thinness” (SI-MT), the Family Environment Scale, and their body mass index (BMI) was determined.

Results BD frequency in at-risk girls (44.6%) was significantly higher than in boys (27.3%). Girls at rED were most dissatisfied with their weight. BMI was significantly higher, and energy intake significantly lower, in dissatisfied girls than in satisfied girls at rED. In girls at rED, multiple linear regression analyses showed that SI-MT factors and dysthymia were associated with BD. In the CG, a higher BMI was associated with BD. These relationships were not found in adolescent boys.

Conclusion Within the at-risk group, adolescents with BD had higher BMI, consumed less energy, were more influenced by socio-cultural factors and had more emotional issues than those who were satisfied. We suggest that although high BMI is associated with BD, the interaction with other social and psychopathological characteristics increases the risk of the development of eating disorders.
THURSDAY 25 SEPTEMBER

9:00 Registration
9:30 WELCOME/ INTRODUCTION TO REFLECTIVE LEARNING EXERCISE
   Anne de Looy, Professor of Dietetics and Network Co-ordinator
10:00 DIETETIC EDUCATION IN EUROPE: WHAT DOES IT LOOK LIKE IN 2008?
   Elke Naumann – Chair, EPG* – HAN University, The Netherlands
10:30 Coffee
11:00 QUALITY INDICATORS AND BEST PRACTICE FOR DIETETIC EDUCATION
   Réka Bozó Kegyes – EPG – National Association of Hungarian Dietitians
11:30 WORKSHOPS: STANDARDS FOR DIETETIC EDUCATION ACROSS EUROPE
13:00 Lunch
   POSTER PRESENTATIONS
   WORKSHOP FEEDBACK
14:00 PREPARING STUDENTS FOR PRACTICE PLACEMENT LEARNING
   Willem de Keyzer – University College Ghent, Belgium
14:30 CRITERIA FOR APPROVING PLACEMENT TRAINING CENTRES
   Val Heath - Associate Dean and Head of Placement Quality Development Division, University of Plymouth
15:00 Coffee
15:30 4 WORKSHOPS: PREPARATIONS FOR PLACEMENT LEARNING
17:00 WORKSHOP FEEDBACK
   POSTER PRESENTATIONS
   KEY CONTACT MEETING

FRIDAY 26 SEPTEMBER

9:00 REFLECTION EXERCISE - continued
   Anne de Looy, Professor of Dietetics and Network Co-ordinator
9:10 COMPETENCY BASED DIETETIC EDUCATION - THE AUSTRALIAN EXPERIENCE
   Prof. Sandra Capra, Chair Board of Directors, ICDA
9:40 PREPARING PRACTICE PLACEMENT EDUCATORS
   Helen Lönnberg, Karolinska Clinic University Sweden
10:10 Coffee
10:30 HOW DO WE MEASURE STUDENT ACHIEVEMENT DURING PLACEMENTS?
   Margaret Fisher, Fellow of Centre for Excellence in Professional Placement Learning, University of Plymouth
11:00 4 WORKSHOPS: GETTING THE BEST FROM PRACTICE PLACEMENT LEARNING
12:30 Lunch
   WORKSHOP FEEDBACK
   POSTER PRESENTATIONS
13:30 DIETETIC COMPETENCIES FOR THE DIETITIAN WORKING IN EUROPE
   Anne de Looy – Professor of Dietetics and DIETS Network Co-ordinator
14:00 DEVELOPING THE ROLE OF DIETITIANS IN EUROPE
   Karin Hådell – Honorary President of EFAD
14:30 Coffee
15:00 4 WORKSHOPS:
   • Dietitians as a brand – what Public Relations do we need?
   • Identifying new opportunities for European dietitians through active participation in the development of EU directives.
   • Where will dietitians be working in 10 years time?
   • What is dietetic (practice) research?
16:30 WORKSHOP FEEDBACK
   CONCLUSION OF REFLECTION EXERCISE
17:00 CLOSE

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