ESPEN

THE EUROPEAN SOCIETY FOR CLINICAL NUTRITION AND METABOLISM

Education and Culture DG

Lifelong Learning Programme

Lifelong Learning Programme in Clinical Nutrition and Metabolism

LLL

Regina Komsa, Rémy Meier
Alastair Forbes

Project No. BG-03-B-F- PP-166 039

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Joint effort of ESPEN and EU Education and Culture DG Leonardo da Vinci Programme

www.espen.org

www.lll-nutrition.com

www.lll-nutrition.com/tLLL

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Lifelong Learning Programme

- **Semi-virtual programme:**
  Combination of live and on-line courses
- **Individual portfolio based:**
  Following own goals and educational needs
- **Innovative methods of training:**
  PBL, case studies and self assessment,
- **Intensive training and certification**
  at Live Courses

BG/03/B/F/PP - 166039 Leonardo da Vinci

courses

- Topic 14 Nutrition in Pancreatic Disease
- Topic 9 Approach to Parenteral Nutrition
- Live course Topic 9 Approach to Parenteral Nutrition
- Topic 12 Nutrition in Gastro-intestinal Disease
- Topic 13 Nutritional Support in Liver Disease
- Topic 19 Nutritional Support outside the Hospital: Home Parenteral Nutrition (HPN) in Adult Patients
- Topic 23 Nutrition in Obesity
- Topic 3 Nutritional Assessment and Techniques
- Topic 31 Nutrition in Behavioural Disorders
- Topic 36 Nutrition in the Elderly

All courses ...

Main menu

- Future LLL Courses
- First ESPEN Dipomas issued
- Module Catalogue
- Site news
- LLL-Staff/Experts
- Our presentations
- Feedback

WELCOME TO THE LLL PROGRAMME IN

CLINICAL NUTRITION AND METABOLISM

The Life Long Learning **(LLL) programme in Clinical Nutrition and Metabolism** is an extremely effective educational programme for medical doctors and health specialists offering training on-line and at live courses, by variety of innovative training methodologies and resources.

LLL programme in Clinical Nutrition and Metabolism is based on an Educational curriculum **offering 120 training modules** (100 are already available on-line) created and peer reviewed by recognized European experts.

The Modules are freely accessible **on-line** after registration (Create new account).

The module is the main educational unit of LLL-Programme. Each module consists of updated review on a certain problem, clinical case, self-assessment test and grading quiz. Modules on related subject areas are grouped into Topics making it easier for the user to select modules in a particular field of interest.

Live courses (100 per year) provide intensive training and certification. Annual schedule of live courses is announced as Future Live Courses here and on ESPEN website.

Credits are awarded at live courses and for on-line training. Participation in a live course on one topic provides 3 CME credits. Each topic taken on-line provides CME credits as well. Credit accumulation gives you the opportunity to be awarded the ESPEN Diploma in Clinical Nutrition. The LLL programme gives an opportunity to study on an individual plan comprising self-selected list of modules, courses and lectures.

LLL Programme in Nutrition and Metabolism is a global effort of **ESPEN** supported by EU to provide post-graduate qualification in Clinical Nutrition and thus to improve daily practice.

It was developed as the project **BG-03-B-F-PP-166039 of Leonardo da Vinci** Programme by **ESPEN** and a number of European universities with the support of European Union.

LLL Programme in Nutrition and Metabolism was accredited by Union Européenne des Médecins Spécialistes.

Latest news

espen admin *14 Dec, 17:57*
Invitation for LLL courses in Leipzig

espen admin *14 Dec, 09:44*
Invitation T-LLL Leipzig 2013

Older topics ...

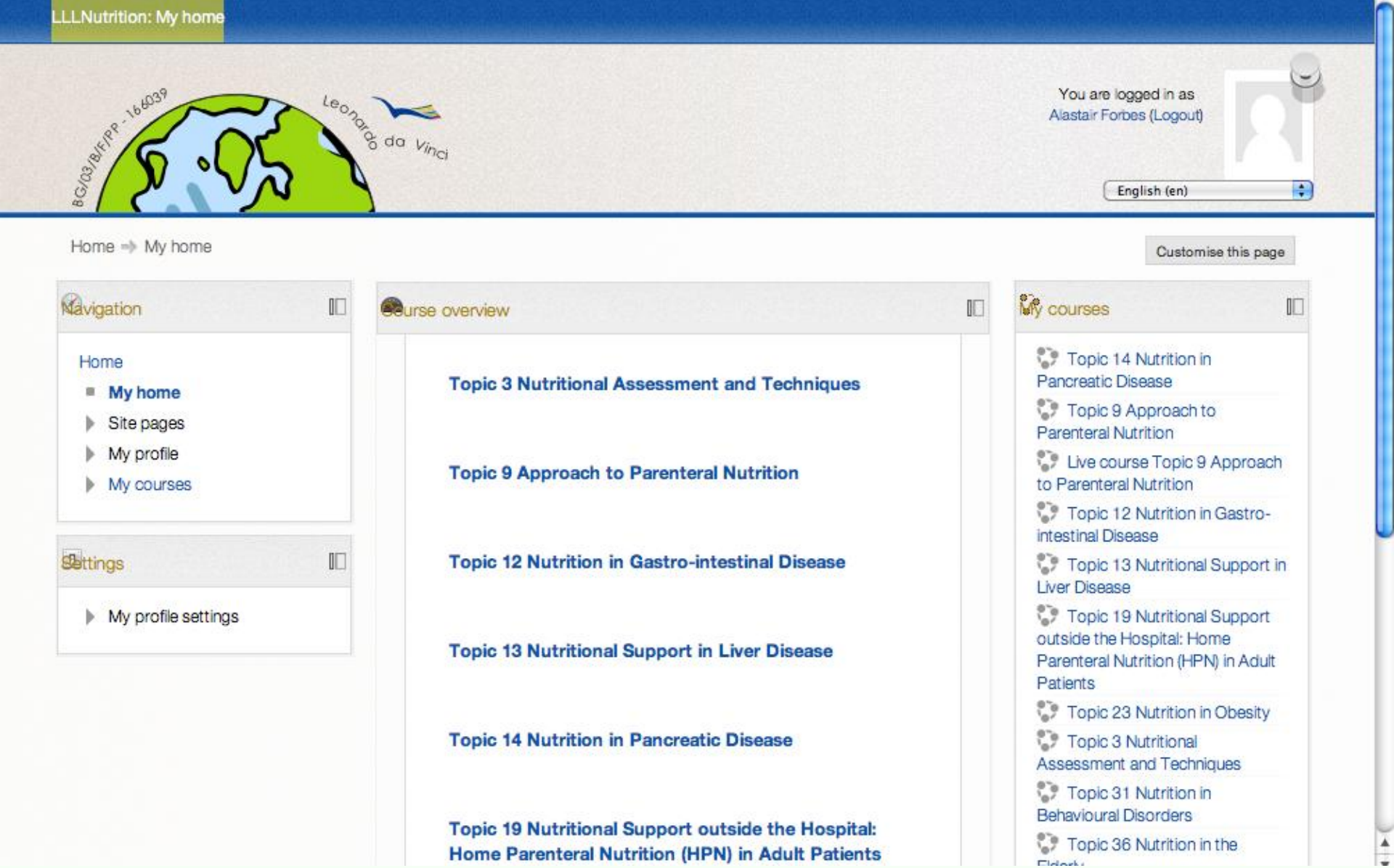
Upcoming events

Cairo, Egypt
Friday, 22 March, 2:00 PM
» *Sunday, 24 March, 11:30 PM*

Go to calendar...
New event...

European e-Journal of Clinical Nutrition and Metabolism Current Issue

Corrigendum to "Antioxidant and antiarthritic potential of coriander (Coriandrum sativum L.) leaves" [e-SPEN J 7 (2012) 223–228]
Survey of current enteral nutrition practices in treatment of amyotrophic lateral sclerosis
The glycaemic index of Manuka honey
Effects of oleic acid and olive oil on gastric emptying, gut hormone secretion and appetite in lean and overweight or obese males
Effects of a whole rice diet on metabolic parameters and inflammatory markers in


LLLNutrition: My home
BG/03/B/F/PP - 166039
Leonardo da Vinci
You are logged in as
Alastair Forbes (Logout)
English (en)
Home ➡ My home
Customise this page
Navigation
Home
My home
Site pages
My profile
My courses
Settings
My profile settings
Course overview
Topic 3 Nutritional Assessment and Techniques
Topic 9 Approach to Parenteral Nutrition
Topic 12 Nutrition in Gastro-intestinal Disease
Topic 13 Nutritional Support in Liver Disease
Topic 14 Nutrition in Pancreatic Disease
Topic 19 Nutritional Support outside the Hospital: Home Parenteral Nutrition (HPN) in Adult Patients
My courses
Topic 14 Nutrition in Pancreatic Disease
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Lifelong Learning Programme in Clinical Nutrition and Metabolism

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What is a Module?

- The Educational Unit of the system
- Precise information about a specific theme
- Developed through multidisciplinary collaboration
- Regularly updated

Two kinds of activities:

- **Web-based Module**
  Introduces the learner to the topic and facilitates self-study
- **Live Course**
  Supplements a web-based module with intensive real-time training, followed by evaluation and assessment

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Total

- **40 topics**
- **120 modules**

nutritionadmin@gmail.com 101 completed

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Lifelong Learning Programme in Clinical Nutrition and Metabolism

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What advantage is there?

- **Award of credits and competency-based certificates for Continuing Medical Education (CME)**
- **ESPEN Diploma in Clinical Nutrition and Metabolism - awarded after successful accumulation of 120 credits**
- **60 credits from on-line courses;**
- **40 credits from live courses**
- **20 credits from passing the final exam**

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Credit Accumulation

- **Live course on one topic: 3 credits**
- **Study on-line topic: 3-7 credits**
- **Reading content, clinical case, making self-assessment test provides 1 credit per topic**
- **Passing grading quizzes provides 4 credits**

  (2-6 credits depending on the number of modules in the topic)

EUROPEAN ACCREDITATION of LLL-Programme

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- **ESPEN DIPLOMA - accredited by EACME**
  European Accreditation for Continuing Medical Education

- **Master Diploma accredited by EU Erasmus (Master Programme – ECTS credits)**

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LLL On-line Students

- **More than 12,000 participants are currently registered on-line in the LLL Programme.**

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LLL Live Courses

- At present 472 LLL Live Courses have been organized
- 16,768 participants have attended LLL Live Courses

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LLL Live Courses II

Live courses have been held
- **in 5 Continents**
- **in >36 Countries**

In 2011: 113 courses at 35 meetings – 3836 participants

In 2012: 147 courses at 43 meetings – 5470 participants

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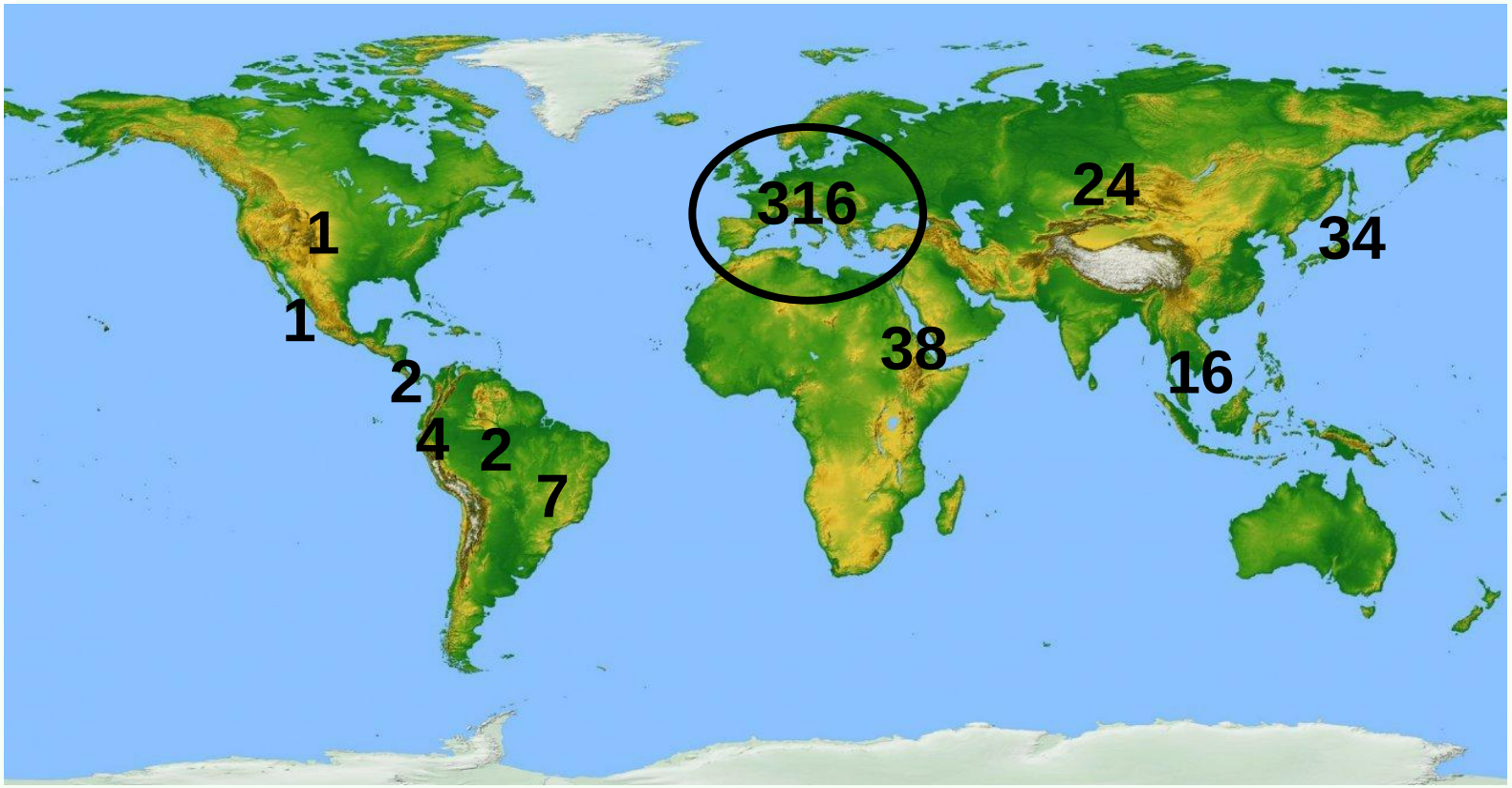
Courses in the world



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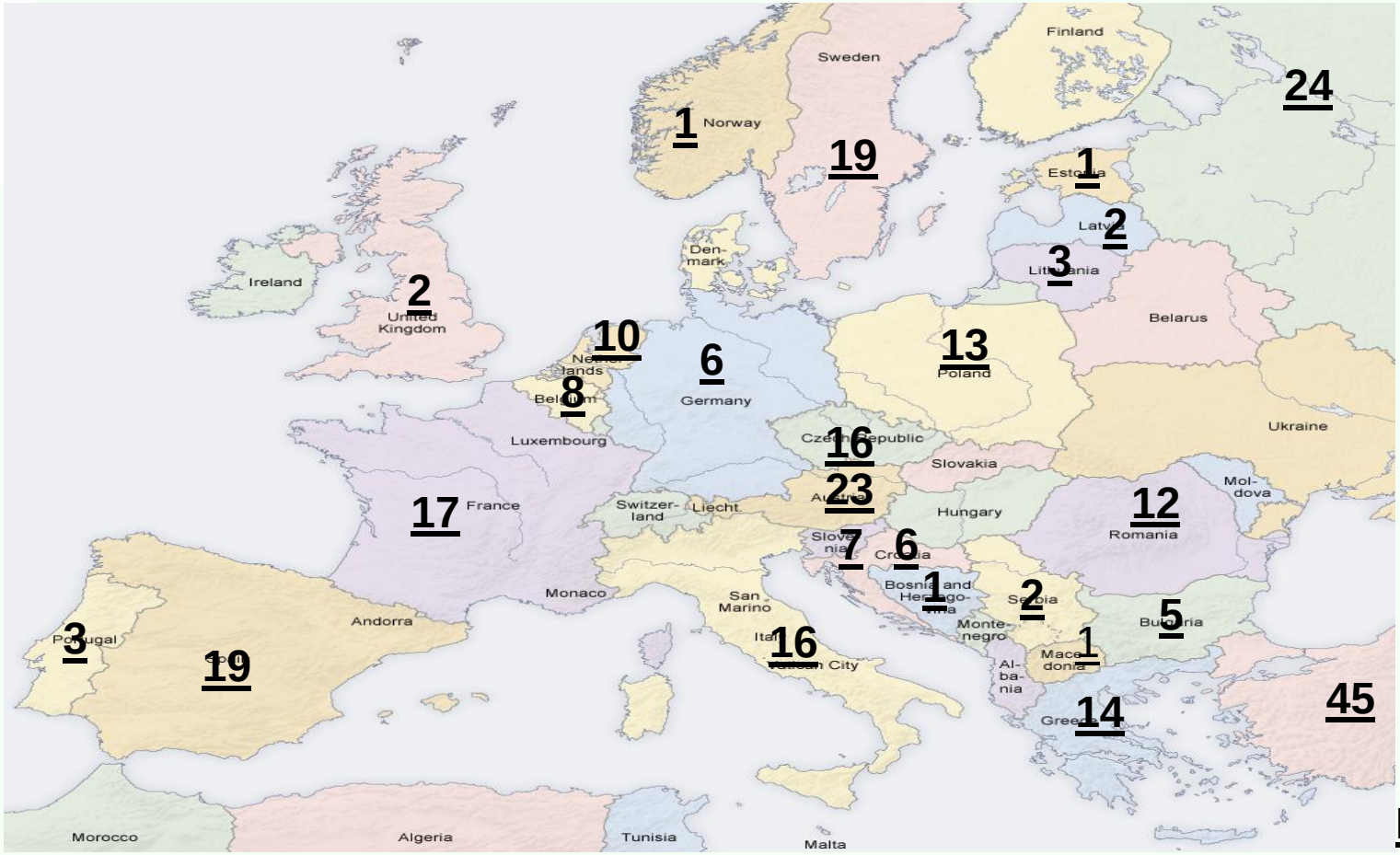
Courses in Europe: 2011



Israel 5

Egypt 32

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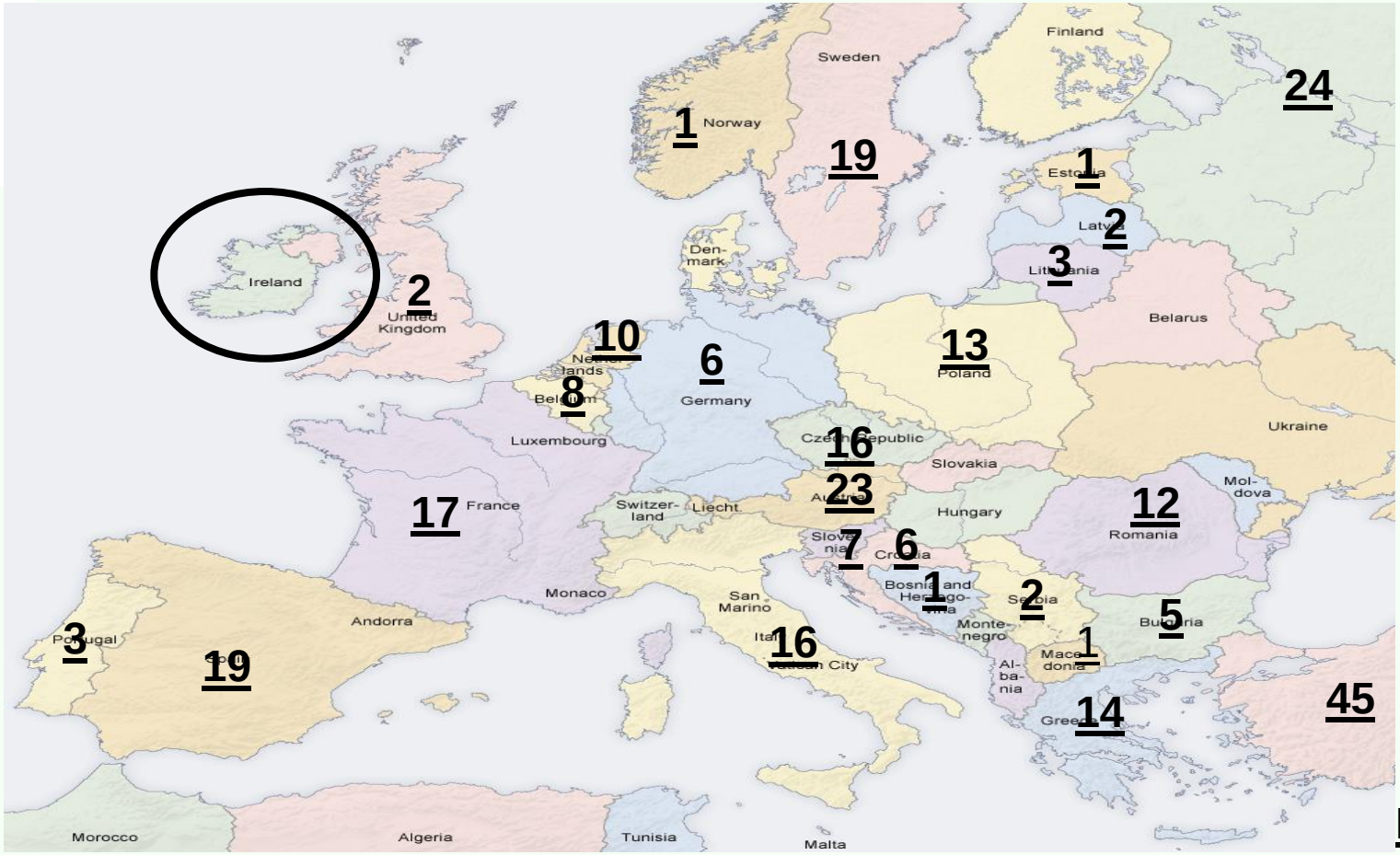
Courses in Europe: 2011



Israel 5

Egypt 32

Material on line - 9

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Modules

Module 9.1 Indications and Contraindications for Parenteral Nutrition

en fr de it es lt bg ru

Module 9.2 Techniques of Parenteral Nutrition

en fr de it es lt bg ru

Module 9.3 Compounding, Drugs and Nutritional Admixtures in PN

en fr de it es lt bg ru

Module 9.4 Monitoring and Complications of Parenteral Nutrition

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Topic 9 Approach to Parenteral Nutrition

Module 9.1

Indications and Contradictions for Parenteral Nutrition

printable version

Zeljko Krznaric
Federico Bozzetti

Learning Objectives

- To identify indications for administration of parenteral nutrition;
- To appreciate the role of parenteral nutrition in different clinical situations;
- To know basic facts about intestinal failure and HPN;
- To be aware of contraindications to parenteral nutrition.

Contents

1. Introduction
2. Indications for PN
    - 2.1 PN in different clinical situations
    - 2.2 PN versus EN in ICU patients
    - 2.3 PN as replacement therapy in intestinal failure
    - 2.3.1. Home parenteral nutrition (HPN)
    - 2.4 Elective PN for bowel rest
    - 2.5 Comparing different intravenous substrates in parenteral nutrition
3. Contraindications to PN
4. Summary
5. Clinical case
6. Self-assessment test

Topic 9 Approach to Parenteral Nutrition

Module 9.1

Indications and Contradictions for Parenteral Nutrition

printable version

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Material on line - 9

1. Introduction

The indications for nutritional support, comparison of parenteral and enteral nutrition in clinical practice, have been subject of many original studies, systematic reviews (1, 3, 7, 8, 9, 12, 13, 15), meta-analyses (4, 6, 10, 14, 16, 17), and guidelines from scientific societies (2, 5, 11, 18, 19, 20, 21, 22).
This text will focus mainly on evidence-based recommendations matching each type of patient management to results derived from a comparable group of patients. In the absence of clear evidence from randomised controlled studies, as a "not feeding" or starved control group would be ethically unacceptable, decisions may have to be made from clinical experience and from an understanding of the underlying pathophysiology. Because long-term starvation is associated with a high morbidity and inevitable death after 2-3 months even in previously healthy individuals, it could be construed as negligent to fail to provide artificial nutrition in such a situation.
The aim of parenteral nutrition (PN) is to administer the essential nutrients by the intravenous route to treat or to prevent malnutrition when oral or enteral nutrition is not possible - total parenteral nutrition or TPN, or is insufficient for complete nutrition - partial parenteral nutrition or PPN.

2. Indications for PN

Parenteral nutrition is indicated when:
- it is not possible to administer enteral nutrition because the gut is not functioning (e.g., perforation, obstruction, ileus or inadequate absorptive or propulsive capacity)
- the gut is not accessible (e.g., for anatomical reasons)
- tube feeding is not safe (e.g. ischaemic bowel disease) or unlikely to be effective (e.g. in patients with intractable vomiting)

2.1 PN in different clinical situations

A general recommendation is that when gastrointestinal dysfunction prevents nutritional needs being met by the oral or enteral route, the parenteral route should be used. Table 1 summarises some special conditions and situations when parenteral nutrition should be considered and this is discussed in detail in other chapters.

etc.

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Material on line - 9

5. Clinical case

A 18 year old female patient with previously diagnosed Crohn's disease was admitted to the hospital for fever, abdominal pain in the left lower quadrant and weight loss of 17 kg in 6 months.

On admission:

Physical examination: Temperature 38.5ºC, pulse 95/min, body weight 40 kg, BMI 14.2 kg/m^2

Abdomen: Three draining enterocutanous fistulas (daily loss 700 ml)

Blood tests: WBC 11000/ ?L, haemoglobin 10.9 g/dL, albumin 29 g/L, CRP 34 mg/L, BUN 22mg/dl (7.9mmo/L), creatinine 0.6 mg/dl (53 mol/L), Ca 2.11 mmol/L, Cl 93 mmol/L, Mg 1.1 mmol/L, Phosphate 2.1 mmol/L, K 3.3 mmol/L, Na 135 mmol/L, bilirubin 0.1 mg/dl (1.7 mol/L), AST 15 U/L, ALT 30 U/L, GGT 48 U/L, ALP 46 U/L

Plain X-ray of the abdomen was normal.

Diagnostic workup in progress.

Q1: Should this patient be fed? Yes or no?
Q2: If yes: enterally or parenterally?

The patient underwent surgery in which resection of the transverse colon with excision of enterocutanous fistulas was performed.

Q3: Should the patient be fed in the postoperative period? Yes or no?
Q4: If yes, by EN or PN?

Answers

etc.

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Material on line - 9

Topic 9 Approach to Parenteral Nutrition
Module 9.1 Indications and Contradictions for Parenteral Nutrition
Self-assessment test

Questions: 0
Correct answers: 0
Result: None

1. The role of parenteral nutrition (PN) in short bowel syndrome is

- maintenance of nutritional status
- correction of electrolyte imbalance
- improvement of quality of life (QoL)
- all of the above

Next question

etc.

Live courses x 4 Korea 2013

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0845 - 0900	Introduction to ESPEN LLL	R. Meier
0900 - 0930	Self introduction	
"Approach to Parenteral Nutrition"		
Chairperson : R. Meier		
0930 - 1000	Indications Et Contraindications of PN	R. Meier
1000 - 1030	Techniques of PN	R. Meier
1030 - 1100	Compounding, Drugs Et Nutritional Admixtures in PN	A. Forbes
1100 - 1130	Monitoring Et Complications of PN	A. Forbes
1130 - 1200	Coffee Break	
1200 - 1230	Case Discussion	R. Meier/A. Forbes
1230 - 1250	Test	
1250 - 1300	Test evaluation Et discussion	
1300 - 1400	Lunch	
"Nutritional Support in Cancer"		
Chairperson : A. Forbes		
1400 – 1430	Mechanism of wasting Cancer Cachexia	R. Meier
1430 – 1500	Cancer Anorexia	A. Forbes
1500 – 1530	Benefits Et Limitations of Conventional Nutritional Support	A. Forbes
1530 – 1600	Pharmacological Et Multimodal Therapy for Cancer Cachexia	R. Meier
1600 – 1630	Coffee Break	
1630 – 1700	Case Discussion	A. Forbes/R. Meier
1700 – 1720	Test	
1720 – 1730	Test evaluation Et discussion	
27 February, 2013 (Wednesday)		
"Nutrition Support in GI Disease"		
Chairperson : A. Forbes		
0800 - 0830	Compromised Gut	A. Forbes
0830 – 0900	Nutrition and Gastrointestinal Fistulas	R. Meier
0900 – 0930	Challenges in Treating Short Bowel Syndrome	A. Forbes
0930 – 1000	Nutrition Support in Inflammatory Bowel Disease	R. Meier
1000 – 1030	Coffee Break	
1030 – 1100	Case Discussion	A. Forbes/R. Meier
1100 – 1120	Test	
1120 – 1130	Test evaluation Et discussion	
1130 – 1230	Lunch	
"Nutritional Support in Elderly Patients"		
Chairman : R. Meier		
1230 – 1300	Malnutrition in the Elderly: Epidemology Et Consequences	R. Meier
1300 – 1330	Pathophysiology - Sarcopenia	A. Forbes
1330 – 1400	Nutritional Screening Et Assessment: Oral Refeeding	R. Meier
1400 – 1530	Artificial Nutrition	A. Forbes
1530 – 1600	Coffee Break	
1600 – 1700	Case Discussion	R. Meier/A. Forbes
1700 – 1720	Test	
1720 – 1730	Test evaluation Et discussion	

etc.

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LLL Final ESPEN Exam

86 participants have now passed the final ESPEN exam and received the diploma

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LLL Teachers

- **In 12 TLLL courses 224 LLL teachers have been trained to date**

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General courses for 2013

- Korea
- Vietnam
- Egypt
- Poland
- Germany
- China
- Japan
- Norway
- Malaysia
- etc

***>120* Courses**

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How to enrol

- Register via website
- Unique email address
- Password selected

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How to enrol

- Register via website
- Unique email address
- Password selected
- Pay the fee

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How to enrol

- Register via website
- Unique email address
- Password selected
- Pay the fee

Free

Sometimes a fee of 20-30€ for live courses

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How to enrol

- Register via website
- Unique email address
- Password selected
- ~~Pay the fee~~
- Identify suitable live courses
- Get started on web-based material

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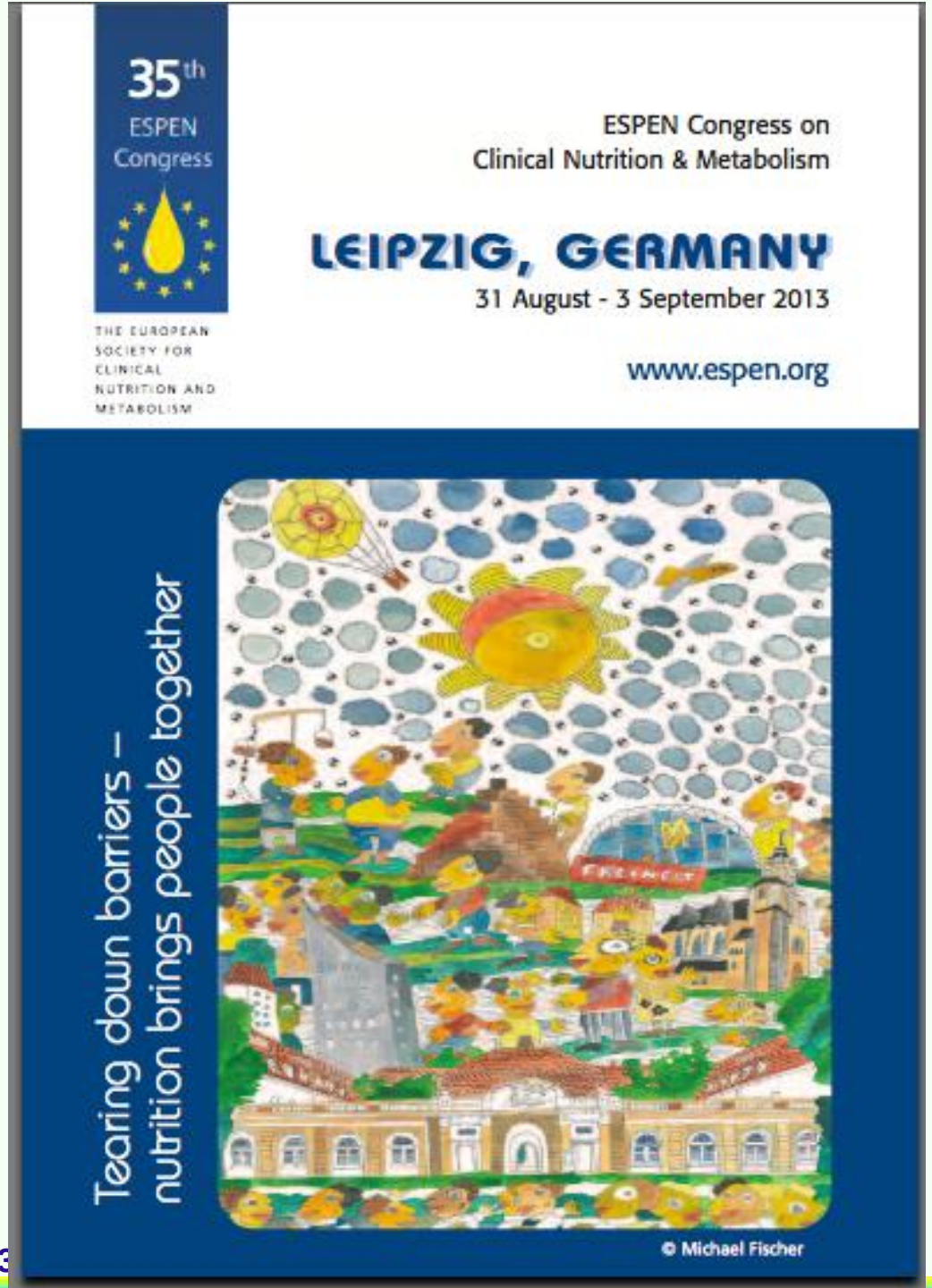

16 live LLL courses

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www.espen.org

www.lll-nutrition.com
www.lll-nutrition.com/tlll

nutritionadmin@gmail.com

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Remy wishes you a great LLL future