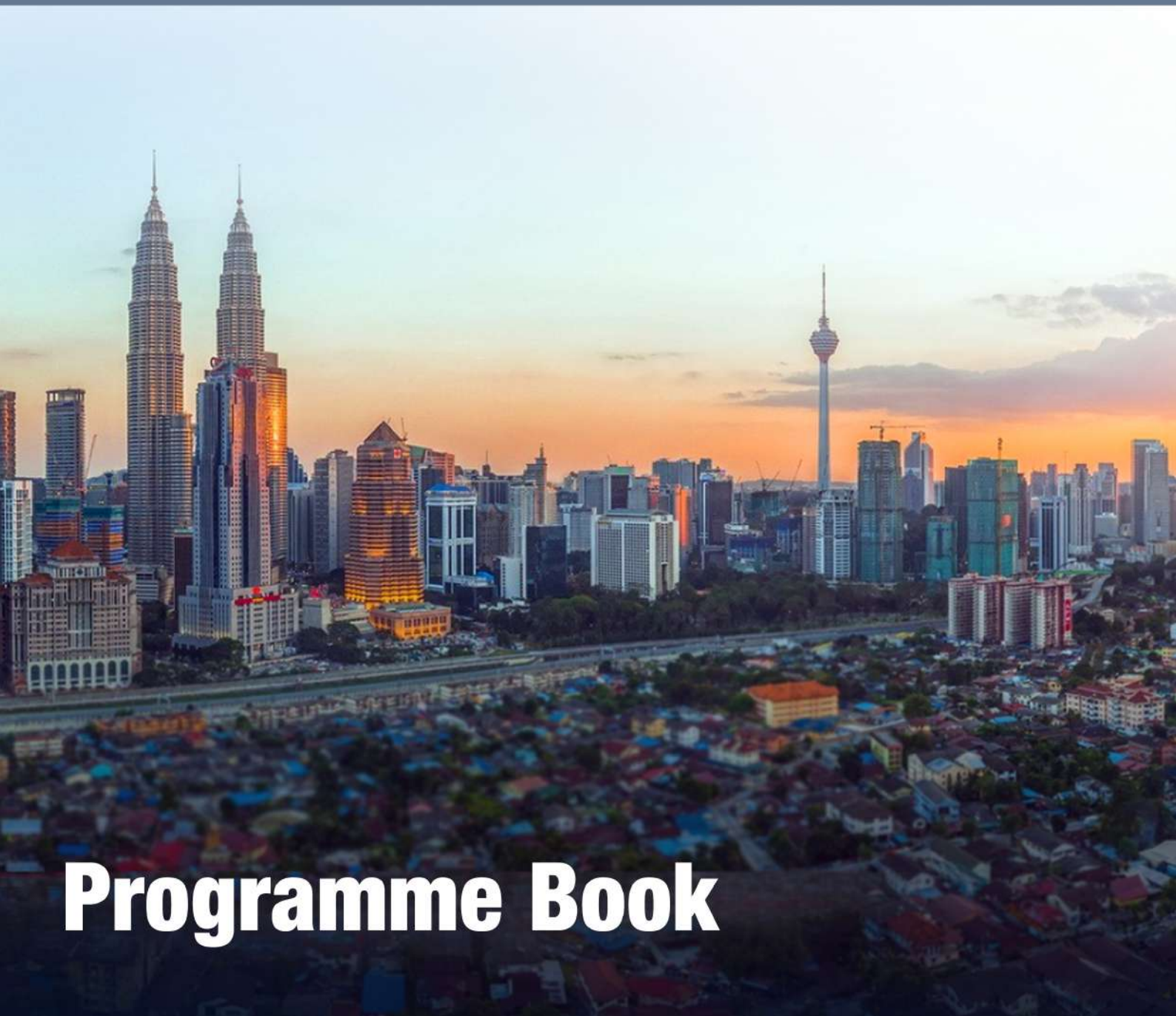
23rd Malaysian Dietitians' Association National Conference 2017

Organised by

Hotel Istana, *Kuala Lumpur* | 10 - 11 July 2017 | conference.dietitians.org.my

Theme: Advancing Clinical Nutrition Care in Dietetics



Programme Book

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Welcome Message from the Director-General of Health Malaysia

First and foremost, I would like to congratulate the Malaysian Dietitians' Association on successfully organising, once again a National Scientific Conference for the 23rd year, with the theme "Advancing Clinical Nutrition Care in Dietetics".

This theme is indeed very relevant and significant because Malaysian Dietitians' Association has about 1,000 members in which, around 80% of dietitians are working in the clinical area. Dietitians are important members of the multidisciplinary healthcare team who ensure early nutrition support is provided to aid the recovery of patients, so they can return to their normal lives and contribute to their families and society.

I also congratulate MDA on the launch of the evidence-based 2nd Edition Medical Nutrition Therapy Guideline for Critically Ill Patients this year. I am glad to note that the MDA for having developed a total of 7 other guidelines in various areas of clinical dietetics to promote evidence-based practice among dietitians in the country and ensure patient safety. These commendable efforts should be continued.

I would like to thank you again for participating in this conference and I extend a warm welcome to our local and international, visitors and participants.

I wish you all a very successful event.

Thank you.

YBhg. Datuk Dr Noor Hisham Abdullah
DIRECTOR-GENERAL OF HEALTH MALAYSIA

Welcome Message from the President

Welcome to the 23rd National Conference of the Malaysian Dietitians' Association! Once again we successfully organised our annual Conference, with the theme – "Advancing Nutrition Care in Dietetics" and keeping in line with MDA's direction of achieving Professionalism, Competency, Visibility and Breakthrough.

The theme was chosen because it is relevant and in line with the launching of the revised 2nd edition Medical Nutrition Therapy Guidelines for Critical Illness. Nutritional support in the acutely ill is indeed a complex subject and a fast evolving field. In recent years, there have been considerable changes in our understanding with regards to various aspects of metabolic response during critical illness, among others nutritional care and determination of calorie, protein and micronutrients requirements. Therefore, dietitians are expected to keep abreast with the current development in this field.

This year we are grateful and proud to have YBhg. Datuk Dr. Noor Hisham Bin Abdullah, the Director-General of the Ministry of Health to grace our conference and consenting to launch our revised guidelines. His presence is certainly meaningful to MDA and shows the Ministry of Health support for dietitians.

The scientific program is packed with 4 plenaries, 6 symposium and free paper session, 3 skills enhancing workshops and a record of over 105 poster presentations. We have maintained a high number of participants this year with 320 attendees from various sectors – government, private, academia and students, and expanded our audience to other health professionals who work alongside dietitians.

This year MDA is also acknowledging award winners for best undergraduate and postgraduate awards, including our inaugural Outstanding Clinical Instructors Award to recognise and inspire our dietitians who dedicate their work to training future dietitians for the country. We are also acknowledging dietitians who did fantastic service to supporting the cause of sustainable nutrition in homes during last year's Malaysian Dietitians Day. Most of all, MDA takes great pleasure in announcing recipients voted by members to be Fellows of MDA i.e 4 outstanding individuals who dedicate their careers to serving the profession.

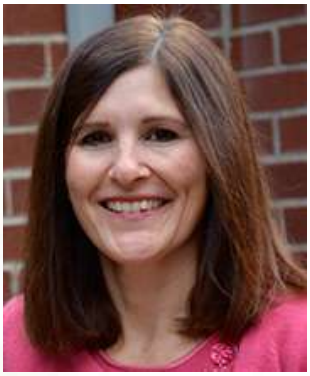
Finally, I take this opportunity to record my sincere gratitude to all who contributed to the success of this Conference including my fellow Organising Committee, invited speakers, oral and poster presenters, participants and our industry partners. I thank all my colleagues in the 12th MDA Council for their hard work, cooperation and support throughout the year! Enjoy the Conference and networking!

Prof Dr Winnie Chee
President & 23rd MDA Conference Chairperson

Faculty

Emma Ridley

ICU Nutrition Research Manager
ANZIC RC, Monash University



Rebecca Brody

Associate Professor
Rutgers Biomedical and Health Sciences

Invited Speakers

Dr Lim Su Lin
Dr Nurul Huda Razalli
Mr Mohd Khairul Azuan Bin Din
Prof Dato' Dr Kandasamy Palayan
Pn Mahnon Suria binti Mokhy
Dr Chong Lee Ai
Ms Tah Pei Chien
Pn Mageswary Lapchmanan
Dr. Esther Tan Zhao Zhi
Pn Nurul Huda Ibrahim
Dr Shanti Rudra Deva
Pn Mazni Mohamed
Ms Jessica Tharmapal-Dass
Dr Richard Lim Boon Leong
Dr Luqman Mazlan
Dr Philip Poi Jun Hua

MDA Award Winners

MDA Fellowship (FMDA)

1. **Mary Easaw A/P P M Easaw, FMDA**
2. **Tuan Hj Ridzoni Sulaiman, FMDA**
3. **Prof Dr Winnie Chee Siew Swee, FMDA**
4. **Shanaz Fatehali Hassam Mawji, FMDA**

Postgraduate Best Thesis Award

- **PhD (1st Prize) - Cheng Shi Hui** (Universiti Putra Malaysia)
- **PhD (1st Prize) - Harvinder Kaur a/p Gilcharan Singh** (International Medical University)
- **MSc (1st Prize) - Se Chee Hee** (Universiti Kebangsaan Malaysia)
- **MSc (2nd Prize) - Nur Maziah Hanum Bt. Osman** (Universiti Putra Malaysia)

Outstanding Undergraduate Dietetics Student Award

1. **Chin Yi Ying** (Universiti Sains Malaysia)
2. **Kiu Lee Ming** (Universiti Putra Malaysia)
3. **Ling Sheau Hui** (International Medical University)

MDA Clinical Instructor Award

1. **Muhd Nazirul Asri B. Badrul Hisham** (Universiti Putra Malaysia)
2. **Ng Kar Foo** (International Medical University)

Programme

Opening Ceremony

10:15	***Entrance of Guest of Honour*** YBhg. Datuk Dr Noor Hisham Bin Abdullah, Director General of Health, Ministry of Health Malaysia **Accompanied by Key MDA Council Members** 1. Prof. Dr Winnie Chee, President 2. Tuan Haji Ridzoni bin Sulaiman, Vice President 3. Ms. Rozanna M Rosly, Honorary Secretary 4. Dr Zulfitri Azuan bin Mat Daud, Assistant Honorary Secretary
	Negaraku
	Prayer Recital
10:20	***Welcome address by President of Malaysian Deititians' Association*** *Prof. Dr Winnie Chee*
10:25	***Speech and official opening by Director-General of Health Malaysia*** *YBhg. Datuk Dr Noor Hisham bin Abdullah*
10:45	***Launch of 2nd Edition MNT Guidelines for Critically Ill Adults 2017***
	Presentation of Awards & Fellows
11:00	***Launch & tour of exhibition by the Director-General***

Monday 10 July, 2017

07:30 - 16:00	Registration	
08:30 - 09:15	Plenary 1 (Mahkota II) **Role of Dietitians in Critical illness – Changing the Status Quo** *– Emma Ridley (Monash University, Australia)* *Chairperson: Prof. Dr Winnie Chee*	
09:15 - 10:00	Plenary 2 (Mahkota II) **MNT Guidelines for Critical Illness for Malaysia : NEW Insights** *– Mageswary Lapchmanan (Hospital Selayang)* *Chairperson: Tuan Haji Ridzoni Sulaiman*	
10:00 - 10:15	**8th Asian Congress of Dietetics 2018, Hong Kong presentation**	
10:15 - 11:00	***Opening Ceremony (Mahkota II)***	
11:00 - 11:45	***Refreshments / Trade Exhibition*** ***Poster Viewing Session***	
11:45 - 12:45	Symposium 1A (Mahkota II) **Translating MDA MNT 2017 Guidelines into Practice** *– Khor Ban Hock (UKM)* *– Tan Hooi Yen (Sunway Medical Center)* *– Rosli bin Mohd Sali (HKL)* *Chairperson: Mageswary Lapchmanan*	Symposium 1B (Safir II) ▪ **Perioperative Nutrition : Better Outcomes for Upper GI Surgery?** *– Prof Dato' Dr Kandasamy Palayan (IMU)* ▪ **Diet Therapy For Inflammatory Bowel Diseases (IBS) : The Established & The New** *– Mohd Khairul Azuan bin Din (UMMC)* *Chairperson: Rozanna M Rosly*
12:45 - 14:15	**Lunch Symposium - Abbott Nutrition** Multidisciplinary Approach in Perioperative Nutritional Care *– Dr Luqman Mazlan (UMMC)*	

14:15 - 15:15	Symposium 2A (Mahkota II) **Home Nutrition Therapy** ▪ Bridging Nutrition Therapy Between Hospital & Community. *– Nurul Huda Ibrahim (MOH)* ▪ Challenges in Managing Nutrition Therapy in Community Setting. *– Mahnon Suria Mokhy (MOH)* *Chairperson: A/P Dr Nik Shanita Safii*	Symposium 2B (Safir II) **Determining energy requirements** ▪ Indirect Calorimetry and Predictive Equations in Determining the Nutrition Requirement for the Critically ill Patients" *– Emma Ridley (Monash University, Australia)* ▪ Metabolic Determinants Of Resting Energy Expenditure Among Mechanically Ventilated Critically ill Patients In Malaysian Tertiary Hospital: A Preliminary Findings. *– Tah Pei Chien (UMMC)* *Chairperson: Dr Zulfitri Azuan Mat Daud*
15:15 - 16:15	Workshop 1 (Mahkota II) **The Nutric Score** *– Lee Zheng Yii (MOH)* *– Dr Ong Shu Hwa (IMU)* *– Siti Hawa binti Mohd Taib (UMMC)* *– Nor Hafizatul Huda binti Abd Razak (Hosp Selayang)* *Chairperson: Siti Hawa Mohd Taib*	Workshop 2 (Safir II) **Fluid and Electrolytes Management – Relationship with Feeding** ▪ Fluid & Electrolytes in ICU *– Dr Shanti Rudra Deva (HKL)* ▪ Fluid and Electrolytes in CKD *– Dr Esther Tan (Hosp Selayang)* *Chairperson: Teong Lee Fang*
16:15 - 16:30	***Refreshments / Trade Exhibition*** ***Poster Viewing Session***	
16:30 - 19:30	**23rd Annual General Meeting of the Malaysian Dietitians' Association (Safir I)**	
19:30 - 22:00	**AGM Dinner (Safir II)**	

Tuesday, 11 July, 2017

08:30 - 09:15	Plenary 3 (Mahkota II) **Identifying Malnutrition in Acute and Chronically ill Patients** *– Assoc Prof. Rebecca Brody (Rutgers University, USA)* *Chairperson: Prof Dr Winnie Chee*	
09:15 - 10:00	Plenary 4 (Mahkota II) **Enhancing Dietetics with Mobile Technology** *– Dr Lim Su Lin (NUH, Singapore)* *Chairperson: A/P Dr Nik Shanita Safii*	
10:00 - 10:30	***Refreshments/ Trade Exhibition*** ***Poster Viewing Session***	
10:30 - 11:30	**Student Case Presentation** (Makhota II) 1. Nutropenic Diet for Prevention of Infection in BMT- *Nor Qubbul Ain Yasin, IIUM* 2. Challenges of Transitional Feeding in Critically Ill Patient with Fecal Peritonitis with Small Bowel Perforations - *Lam Kah Yet, UPM* 3. Titrating Protein Need for Infant with Non-ketotic Hyperglycinemia (NKH) - *Ooi Jee Cheng, USM* 4. Nutritional Management for a Patient Receiving PEG feeding complicated with diarrhoea and pressure ulcer - *Wong Ting Xuan, IMU* 5. Case Study of Nutritional Management of Sepsis 2° to UTI in Elderly - *Amy Looi Yee Yee, UniSZA* 6. MNT for Burn - *NurulAdila Badrul Zaman, UITM* 7. Enteral nutrition support in malnourished multiple sclerosis patient - *You Yee Xing, UKM* *Chairperson: Ng Kar Foo*	**Dietitian Case Presentation** (Safir II) 1. Lesson Learnt from Provision of Nutritional Care for Patient with Cystic Fibrosis in Out Patient Clinic - *Jazlina Syahrul, Malaysia* 2. Post Pyloric Tube Feeding and Parenteral Nutrition Administration for Post-Operation of Subtotal Gastrectomy - *Zety An Nur Hisamudin, Malaysia* 3. Nutritional Care Process on Hemorrhagic Stroke Obese Patient in ICU - *Ruthy Telaum Banua, Indonesia* 4. Case Study:Nutrition Therapy for Chronically Critically Ill Patients - *Nor Hafizatul Huda Bt Abdul Razak, Malaysia* 5. Dietitianís Role in Implementing ERAS (Enhanced Recovery after Surgery) Protocol: A Case Study - *Aishah Zafirah, Malaysia* *Chairperson: Georgen Thye*
12:30 - 14:00	**Lunch Symposium – Kotra Pharma** Nutritional Issues of Geriatric Hospitalized Elderly *– Prof Dr Philip Poi Jun Hua (UMSC)*	

14:00 - 15:00	Workshop 3 (Makhota II) ***Nutrition Focused Physical Findings*** *– Assoc Prof Dr Rebecca Brody (USA)* *– Prof Dr Winnie Chee (IMU)* *– Dr. Chen Seong Ting (IMU)* *Chairperson: Prof Dr Winnie Chee*	Symposium 3A (Safir II) **Feeding the child with difficulties – multidisciplinary approach** ▪ Facilitating Feeding Development Through Play *– Mazni Mohd (UKM)* ▪ Feeding Group Therapy (FGT) *– Jessica Tharmapal-Dass (Sunway Medical Center)* *Chairperson: Ng Yee Voon*
15:00 - 16:00	Free Papers (Mahkota II) ▪ Abdominal Compartment Syndrome: St. John Hospital, Medical ICU Experience *– Dr Nurul Huda Razalli, Malaysia* ▪ Energy/Protein Adequacy and Mortality in Critically Ill Patients Receiving Nutrition Support *– Maziun Kamarul Zaman, Malaysia* ▪ Improving percentage of patients receiving enteral nutrition product (ENP) within 24hours of dietitian prescription in selected wards in Hospital Serdang *– Nurliyana Naharuddin, Malaysia* ▪ Effectiveness of Nutritional Therapy Combating Hospital Malnutrition in Indonesia Tertiary Level PICU *– Lora Sri Nofi, Indonesia* *Chairperson: Mushidah Zakiah Mohad Akran*	Symposium 3B (Safir II) **Palliative Nutrition in critical illness** ▪ *Overview of Palliative Care in Malaysia & Dietitian Role* *– Dr Richard Lim Boon Leong (Hosp Selayang)* ▪ *Nutrition in Paediatrics Palliative Care* *– Dr Lee Ai Chong (Hospice Malaysia)* *Chairperson: Ng Yee Voon*
16:00 - 16:30	**Prize Giving Ceremony** ▪ Malaysian Dietitians' Day 2016 ▪ MDA Student Case Study Oral Presentation Competition 2017 ▪ MDA Student Case Study Poster Competition 2017 ▪ MDA Dietitian Case Study Oral Presentation Competition 2017 ▪ MDA Best Research Poster Competition 2017 **Closing remarks**	
16:30	**Refreshments & Selamat Pulang!**	

Abstracts

The role of the dietitian in critical illness - changing the status quo

Emma Ridley
Monash University, ANZIC-RC, Department of Epidemiology and Preventative Medicine, Melbourne, VIC
Alfred Health, Melbourne, VIC

Dietitians are key members of the team within intensive care and need to be the leaders of nutrition in the clinical setting. To do this we must demonstrate our value to the team and advance our practice continually by demonstrating leadership, effectiveness, efficiency and depth of knowledge in nutrition care. This is challenging when others claim to know much about nutrition or challenge the basis of our practice due to poor quality or absence of evidence, but we must move forward. Further, continuous adjustments to funding mean that we need to collect data on effectiveness and proactively advocate for the value of nutrition with key leaders, whilst demonstrating efficiency improvements. This causes significant challenges when trying to get the best patient outcomes, manage the happiness of our workforce and encourage dietitians' to promote and stay in clinical practice.

To address some of these challenges and further our workforce it is essential that we participate in research, use the latest technology available to us and keep data on our practices. We must therefore learn to advocate and ask for the equipment and technology we require, allowing us to do the best job possible. Only when we have decided to be the leaders of clinical nutrition, embraced the challenges the opportunities this brings, will we be able to ensure a sustainable and bright future for our patients and the role of the dietitian within intensive care.

Indirect Calorimetry and Predictive Equations in Determining the Nutrition Requirement for the Critically ill Patients

Emma Ridley
Monash University, ANZIC-RC, Department of Epidemiology and Preventative Medicine, Melbourne, VIC
Alfred Health, Melbourne, VIC

Despite nutrition therapy being one of the most commonly provided therapies in critical illness, there remains significant issue in determination of energy requirements. The most commonly used methods, predictive equations, are known to be inaccurate and unreliable, however they continue to be used widely due to their ease of application at the bedside.

The gold standard of energy assessment in critical illness is indirect calorimetry, however this technology is not widely available and expertise is often lacking. If access and expertise can be improved, significant improvements in understanding of energy utilisation in critical illness and the role of energy delivery in critical illness in practice and research will be possible.

Identifying Malnutrition in Acute and Chronically Ill Patients

Rebecca Brody, PhD, RD, LD, CNSC

Using a case-based approach, this plenary will address algorithms used to characterize malnutrition including the Subjective Global Assessment and the Academy of Nutrition and Dietetics/American Society for Parenteral and Enteral Nutrition Characteristics Recommended for the Identification and Documentation of Adult Malnutrition. Etiologies of acute disease, chronic

disease and starvation related malnutrition and their relationship to inflammation will be discussed. Nutrition focused physical examination techniques will be introduced as they relate to fat, muscle and fluid assessment. The importance of using a comprehensive approach to malnutrition identification and clinical judgement will be stressed.

Nutrition Focused Physical Examination: A Stepwise Approach to Dysphagia Screening

Rebecca Brody, PhD, RD, LD, CNSC

This workshop will provide an overview of nutrition focused physical examination as it relates to identification of dysphagia risk. The steps involved in dysphagia screening will be presented using demonstration and a case study. Extra- and intra-oral screening inclusive of cranial nerve evaluation will be presented. Participants will learn how to assess dysphagia screening findings as part of a comprehensive nutrition assessment in light of the patient interview and observation, medical history, ability to eat and drink, and impact of disease.

Perioperative nutrition: better outcomes for upper GI surgery?

Prof Dato' Dr Kandasamy Palayan
Professor of Surgery, International Medical University

Numerous studies have demonstrated that malnutrition has a significant effect on the outcome of patients undergoing major surgery. Patients with esophagogastric cancers experience significant weight loss and often present with malnutrition at the time of diagnosis. Surgical intervention in these patients inflicts additional metabolic demands, increasing protein and energy requirements. Moreover, surgery of the upper gastrointestinal tract are complex and often associated with prolonged postoperative gut failure, causing further nutritional problems. This paper will review the strategies used to improve perioperative nutritional status in patients undergoing upper gastrointestinal surgery.

Enhancing Dietetics with Mobile Technology

Dr Lim Su Lin
Chief Dietitian & Senior Assistant Director, National University Hospital, Singapore.
Adjunct Associate Professor, Queensland University of Technology, Australia

The increasing prevalence of lifestyle diseases such as Overweight, Obesity, Diabetes, Hypertension and Hyperlipidaemia is a major concern in many countries around the world. Current treatment of lifestyle diseases is limited in its reach, reactive and often late in the disease process, which leads to higher healthcare cost. Disease management needs to move upstream to the prevention of disease and optimal control of the condition once it has been diagnosed to prevent further complications downstream.

Diet, exercise and behaviour modification are considered fundamental in the prevention and management of lifestyle diseases. However, there are major gaps in the current intervention methods, which are resource-intensive, costly, time-consuming, have high default rate and limited reach, and are not scalable to the population needing it. They also do not tackle the root causes of the problem, which are essentially poor diet and lifestyle habits.

Dietetics care can be enhanced and extended through mobile technologies. There are more and more studies supporting the use of mobile technologies to effect positive changes in health-related behaviours and lifestyle choices, prevent and manage lifestyle diseases at scale, and significantly improve health outcomes and save costs.

Using the example of the latest mobile-based solution Nutritionist Buddy (nBuddy) which she has developed, the speaker will share novel strategies to enhance Dietetics intervention via mobile technology, tackle chronic diseases and benefit the population.

Nutrition in Paediatric Palliative Care

Dr Chong Lee Ai
Palliative care doctor, Hospis Malaysia, Kuala Lumpur

Paediatric palliative care aims to support children with life-threatening and life-limiting conditions and their families. It begins at diagnosis and continues irrespective if the child receives disease directed treatment or not. The focus is to improve quality of life and reduce the suffering they might be experiencing living with their illness, and for families, caring for an ill child. Food and nutrition is integral to life and is an important aspect of care provided. A dietician with the knowledge and skills in nutrition, growth, development and health has a significant role within the interdisciplinary palliative care team that support and manages symptoms holistically. Children can have a diverse spectrum of illnesses with palliative care needs. Hence, an impeccable assessment of the child and understanding the changing goals of the child during the disease trajectory allows for skilful and appropriate dietary advice.

Chronic kidney disease (CKD) causes long-term morbidity and mortality

Dr. Esther Tan Zhao Zhi
Consultant Nephrologist, Hospital Selayang

Most patients are unaware of the condition as they are mostly asymptomatic until the disease has significantly progressed.

As glomerular filtration rate (GFR) declines, fluid and electrolyte imbalances occur.

Sodium and intravascular volume balance are usually well maintained until the GFR falls below 15 mLs/min/1.73 m2. As GFR declines, the ability to concentrate or dilute the urine maximally becomes impaired causing hyponatraemia or hypernatraemia in patients. As GFR declines, the kidneys' ability to regenerate bicarbonate also diminishes. The fractional excretion of phosphate also drops in patients with CKD.

This talk should encompass issues pertaining to sodium and water imbalance in CKD, potassium imbalance, metabolic acidosis, calcium and phosphorus imbalance leading to CKD-Mineral and Bone Disorder.

Feeding Group Therapy (FGT)

Ms Jessica Tharmapal-Dass
Sunway Medical Centre

The picky / problem eater is commonly noticed from the age of 1 onwards. Children with these feeding difficulties do not have positive experiences during mealtimes. This in turn causes parental anxiety. The Sequential-Oral-Sensory (SOS) approach to feeding was developed by Dr Kay

Toomey (Paediatric Psychologist) to assess and treat children with feeding difficulties. The SOS approach teaches the child with feeding difficulties to acquire the skills to eat in a step by step method. Parents are also included in this process and play an important role as a feeding team member. In SunMed, the modified SOS approach has been used since 2012 for the intervention of feeding difficulties in individual and group settings. In group settings, the transdisciplinary team which consists of a Dietitian, Speech-Language Therapist and an Occupational Therapist take turns running the Feeding Group Therapy (FGT). The children in the FGT were keen to imitate their peers during the food play sessions. The parents in turn were guided to carry over the home assignments. Parental feedback upon the completion of FGT was positive. The children were more accepting of new foods/textures and parents felt empowered to manage their children's mealtime difficulties.

Translating MDA MNT 2017 Guidelines into Practice

Khor Ban Hock
B.Sc. (Dietetics) UKM

The MDA MNT Guidelines on Critically Ill Patients 2017 was developed based on systematic evaluation of clinical evidence from the most recent literatures on the outcomes of nutrition therapy in critically ill patients. Therefore, implementation of this evidence-based guideline potentially improves the quality of care and clinical outcomes. The present guideline does not only focus on "what" are the right things to do, but also "how" to do these things. The implementation of the present guideline follows the 4-step approach of Nutrition Care Process (NCP): [i] Assessment; [ii] Diagnosis; [iii] Intervention and [iv] Monitoring and Evaluation. Initiation of nutrition therapy for critically ill patients begins with nutrition assessment, covering aspects such as identifying indication of nutrition therapy choices and access, as well as determining nutritional requirements. From the assessment, nutrition diagnosis terms and definitions are formulated to describe the nutrition problems that can be resolved or managed through nutrition treatment. Nutrition intervention includes prescription of nutrition formulation and composition, administration strategy and delivery rate. The monitoring and evaluation step reviews the outcomes relevant to the treatment objectives and management of complications such as fluid/electrolyte imbalance, gastrointestinal complications and metabolic abnormalities. The recommendations supported by varying levels of evidence are available in the present guideline to facilitate appropriate decision-making in every steps of the NCP. Finally, delivery of nutrition therapy in critically ill patients involves a multidisciplinary approach. Therefore adoption of the new guidelines into practice requires teamwork among all healthcare professions involved in patients' management. Nutrition therapy team and nutrition protocol are strategies to facilitate the standardization and incorporation of the guidelines into daily practice.

The NUTRIC score in identifying the nutrition risk status of the critically ill patients

Lee Zheng Yii
BSc (Dietetic), MSc (Clinical Nutrition) Universiti Putra Malaysia

Nutrition risk in critically ill (NUTRIC) is the first and the only nutrition risk screening tool developed and validated in the adult critically ill patients. The development of the score started with a conceptual model that linked age, disease severity, organ dysfunction, starvation and inflammation to nutritional status, which was then linked to clinical outcomes. The final variables included in the NUTRIC score were age, acute physiology and chronic health evaluation II (APACHE II), sequential organ failure assessment (SOFA), number of co-morbidities, days from hospital to ICU

admission and interleukin-6 (IL-6). The score was ranged from 1 to 10 and a score of 0-5 and 6-10 was considered as low and high nutrition risk, respectively. However, IL-6 is not routinely tested in the ICU. Therefore, the original NUTRIC score was re-validated (known as the modified-NUTRIC score) by removing IL-6. The modified-NUTRIC score ranged from 1 to 9 and a score of 0-4 and 5-9 was considered as low and high nutrition risk, respectively. The modified-NUTRIC score has been then used in a study Singapore and an International study. All of the studies showed that the NUTRIC score was able to identify critically ill patients who are most likely to benefit from more adequate nutrition therapy. It is important to note that not all critically ill patients are the same with respect to their response to nutrition therapy. The use of NUTRIC score will be able to help clinicians to prescribe a more precise nutrition therapy and therefore potentially improve clinical outcome in the broadest range of critically ill patients.

Multidisciplinary Approach in Perioperative Nutritional Care

Dr Luqman Mazlan
Colorectal and General Surgeon National University of Malaysia Medical Centre. Kuala Lumpur, Malaysia

The incidence of malnutrition in surgical patients can be up to 70% and it has been shown that nutritional status is important in determining the outcome of surgery. Malnutrition directly affects wound healing, infection rates and increases overall morbidity and mortality.

Managing these patients can be a challenge and studies have shown that a multidisciplinary team effort results in better perioperative outcomes.

I aim to share UKM Medical Centre's experience in setting up and running a Nutritional Support Unit and the importance of working as a team to manage surgical patients at risk of malnutrition. I will also share the latest updates on the very recently published ESPEN guidelines on Clinical Nutrition in Surgery.

Medical Nutrition Therapy for Critically Ill 2017: The latest updates

Mageswary Lapchmanan
Head of Dietetic and Food Services Department Selayang Hospital

Patients admitted to Intensive Care Unit (ICU) go through a catabolic stress state with systemic inflammatory response, which eventually lead to increased infectious complications, multiple-organ failure, prolonged hospitalization, and mortality. Nutrition therapy for critically ill patient is of paramount importance to help attenuate the metabolic response to stress, prevent oxidative cellular injury, and favourably modulate immune responses and bring better outcome in these patients. There have been many studies and new nutrition therapy recommendations published locally and internationally for ICU patients. Thus, this guideline is intended to guide dietitians involved in providing MNT to critically ill adult patients admitted to ICU. The best current available evidences and recommendations latest until December 2016, expert opinions and clinical practice aspects were appraised in developing this guideline. Relevant clinical questions were developed as a guide in searching for evidences for both enteral nutrition (EN) and parenteral nutrition (PN). Early EN, indications for PN, appropriate macro and micronutrient delivery, formula selection, strategies to improve feeding delivery were addressed. Evidences for adjunctive therapy and special recommendations for organ failures and other clinical conditions like meticulous glycemic control were given priority as well. However, it is highlighted that adherence to this guideline alone may not necessarily guarantee specific benefit in outcome or survival in every case. Individual

patient presentations, precise nutrition diagnosis and clinical judgment are important in clinical practice decisions and management.

Keywords: Intensive Care, Enteral Nutrition, Parenteral Nutrition, Medical Nutrition Therapy

Learning Objectives:

1. To understand the need for nutrition therapy in critically ill patients
2. To acquire knowledge on current evidences for MNT for critically ill patients
3. To get updated with latest practice recommendations

Challenges Managing Nutrition Theraphy In Community Setting

Mahnon Suria Mokhy
Phd Post Grad student, University Putra Malaysia (Clinical Nutrition)

Most of the community service by dietitian has focused more on bed ridden and disability. The homecare serviced by dietitian provide continuity patients management of nutrition care once discharge from hospital. Home service has been establish in Malaysia for long time by nurses but recently in 2010, dietitian starts to participate with the multidisciplinary teams to deliver homecare service called domiciliary. Dietitian brings value to this multidisciplinary team by providing care coordination, evidence-based care, and quality-improvement leadership. One of the most significant barriers to integrating dietitian into primary care for quality service is an insufficient resource. Others challenges including competency, awareness, communication between healthcare professional and agencies, logistic such transportation and economic including aid of enteral product. The home nutrition care guidelines for dietitian is also not yet been implemented well. The next challenge is for more competent dietitians to build on this base and become proactive, developing strong nutrition home care services and more opportunities for the profession.

Diet Therapy for Inflammatory Bowel Disease (IBD): The Established and the New

Mohd Khairul Azuan Bin Din
Clinical Dietitian, Universiti Malaya Medical Centre

Approximately around 2 million people worldwide suffer from inflammatory bowel disease (IBD), consist of Crohn's Disease (CD) and ulcerative colitis (UC). However pathomechanism of IBD is still remain unexplained. Although dietary modifications have a very strong interest, dietary advice only plays a minor part in published guideline. The scientific literature shows that dietary factor might influence the risk of developing IBD and may serve as a symptomatic treatment for irritable bowel syndrome-like symptoms in IBD. The role of nutrition is underscored by various dietary therapies including enteral nutrition (EN), total parenteral nutrition (TPN), use of probiotics and also FODMAP reduce diet. In pediatric patients with Crohn's disease (CD) enteral nutrition (EN) reaches remission rates similar to steroids. In adult patients, however, EN is inferior to corticosteroids. EN is not effective in ulcerative colitis (UC). Total parenteral nutrition in IBD is not superior to steroids or EN. The use of specific probiotics in patients with IBD can be recommended only in special clinical situations. There is no evidence for efficacy of probiotics in CD. When probiotics are used, the risk of bacterial translocation and subsequent bacteremia has to be considered. More understanding of the normal intestinal microflora, and better characterization of probiotic strains at the phenotypic and genomic levels is needed as well as clarification of the mechanisms of action in different clinical settings. By contrast, studies in UC have shown a beneficial effect in selected patients. A FODMAP reduced diet may improve symptoms in IBD.

Keywords: enteral nutrition; parenteral nutrition; probiotics; fermentable oligo-, di-, and monosaccharides and polyols; Crohn's disease; ulcerative colitis

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Bridging Nutrition Therapy between Hospital & Community

Nurul Huda Ibrahim
Family Health Development Division, Ministry of Health Malaysia

Nutrition support therapy (NST) was required in ensuring a good nutritional status among long term care patients such as stroke, spinal injury and etc. Achieving and sustaining a good nutritional status among patient were very important in healing, recovery and rehabilitation. In Malaysia, NST was very establish in hospital setting. Meanwhile, in community, NST still consider very young. With the present of dietitian in MOH Primary Health Care setting since 2010, the link of NST between hospital and community gradually increase and strengthen. Domiciliary Health Care Services, which started in July 2014, has been a platform for dietitian to provide NST with their team members. Since then, referral system from hospital to community were improved, the number of cases were also increased. Good communication, excellence coordination, strong team, highly competence health care provider, availability of guidelines were among the factors to the successfully of NST either in hospital or community.

Abdominal Compartment Syndrome (ACS): St. John Hospital, Medical ICU Experience

Dr Nurul Huda Razalli
Ph.D in Nutrition and Food Science Wayne State University (Detroit, USA)

Background

Abdominal Compartment Syndrome (ACS) and Intra-abdominal hypertension (IAH) are growingly recognised complications among ICU patients.

Client History

A 53-year-old African American female with severe COPD presented to the Emergency Department with SOB and lower extremities swelling. In Medical ICU, she was intubated, sedated and received fluid resuscitation. Noticeable increase in bladder pressure and abdominal distention revealed a diagnosis of abdominal compartment syndrome with possibility of paralytic ileus. She was kept NPO and dietitian was consulted on Day 3.

Assessment (Anthropometry, Food nutrition history)

Patient was morbidly obese (BMI of 40.6 kg/m2) with admission weight of 100.8 kg. Patient had elevated levels of BUN, serum creatinine and phosphorus related to AKI resulted from ACS. Calculation of PO2/FiO2 ratio revealed a status of acute lung injury. Energy needs were initially estimated based on Penn 2003b formula using admission weight with protein needs at 2.0 g/kg IBW/day.

Nutrition Diagnosis

Inadequate protein and energy intake RT medical condition, intubation and altered gastrointestinal function AEB estimated nutrient needs not met, current NPO status and unable to initiate feedings to rule out ileus.

Objective of Management & Nutrient Prescription

Nasojejunal feeding of Oxepa, a concentrated enteral formulation with anti-inflammatory lipid profile was initiated together with Healthy Shot, a liquid high protein supplement.

Outcome and Follow-Up

Elevated CO2 and glucose levels were seen indicating possible overfeeding upon follow up. Permissive hypocaloric feeding was then introduced (11-14 kcal/kg ABW). Pro-motility agents, Reglan and erythromycin were recommended. Patient was transferred to ICU step down unit on Day 21 and was discharged on Day 32 to a long term acute care facility with a feeding tube regiment using Glucerna 1.2.

Discussion

Hill et al. (2011) reported a low percentage of possibility for exclusive EN support via nasogastric among ACS patients, thus, postpyloric feeding should be considered.

Learning Points/Take Home Messages

1. Feeding ACS patients requires careful attention and aggressive measures such as adopting postpyloric feeding to maximise the delivery of enteral feeding and using prokinetics to optimise bowel management.
2. In mechanically ventilated patients, PO2/FiO2 ratio calculation is useful for possible prescription of formula suitable for lung impairment.

Overview of Palliative Care in Malaysia and Dietitian's Role

Dr. Richard B.L. Lim
MBBS, MRCP(UK)
Consultant Palliative Medicine Physician, Hospital Selayang

Palliative care is an approach that improves the quality of life of patients and their family facing the problems associated with life threatening illness through the prevention and relief of suffering by means of early identification and impeccable assessment of pain and other physical problems as well as psychological, social and spiritual. In Malaysia, palliative care only began developing as a field in the early 1990s and since then has been growing steadily. Today the field of palliative medicine is a recognised medical subspecialty in Malaysia since the year 2005 and more and more hospitals are developing specialised units to help address the needs of patients who are suffering from incurable illnesses due to symptoms and distress related to their conditions.

Food has always been regarded as the source of strength and life. Without food it is understood that we will all die of starvation. In illness, without proper nutrition, patients will not be able to recover to their normal constitution. To many cultures therefore, food is often a main focus in life and is related to all aspects of living. How then do we reconcile the situation where a person is dying and can no longer eat because he or she is being ravaged by a terminal illness? Should patients suffering from terminal cancer be forced to eat only specific foods so that this might cure their illness? Should we then force feed patients artificially by tube feeding or total-parenteral nutrition when they are no longer able to swallow?

In understanding the role of dietetics in palliative care one must first understand the role of food in the individual patient relating this to his/her disease trajectory. The act of feeding generally has 4 main functions: 1) To sustain life and nourish the body 2) To reduce suffering of hunger 3) To provide pleasure 4) To provide social fulfilment. Hence it is important to consider what role feeding is going to fulfil in a particular patient at a particular phase in his/her illness. Thus, dietitians must learn how to recognise and understand the prognosis of each patient and how the disease process is affecting him/her. Only then will the dietitian be able to prescribe and advise a logical approach to addressing the nutritional needs of the palliative care patient.

As food bears so much importance in life, the lack of oral intake is often distressing to family members and loved ones. Dietitians working in the palliative care setting should therefore recognise their role to address the psychospiritual distress patients and caregivers experience when faced with nutritional issues at the end of life. This requires skill and knowledge in emphatic communication and also medical ethics in order to advise and comfort patients and their loved ones who grieve over the loss of this most basic human function of eating.

Fluids and Electrolytes in ICU

Dr Shanti R.Deva
Department of Anesthesiology, Kuala Lumpur Hospital

The provision of fluids and electrolytes is the yin and yang of managing patients in the ICU. Too little fluids may result in poor perfusion to the vital organs. On the other hand, overzealous fluids will result in fluid retention with dire consequences.

When prescribing fluids to the critically ill patient, a number of questions need to be as asked. Firstly, is the patient euvolemic, hypovolemic or hypervolemic? Next, what is the type of fluids that needs to be given? Are there ongoing losses that need to be replaced? Is the patient on enteral nutrition? A daily review on the amount of fluid required is absolutely essential and for the sicker the patient, this review needs to be done more frequently.

Generally, fluids are reduced in patients with decompensated heart failure, oliguric renal failure, end-stage renal failure and pulmonary oedema. While patients in septic shock, acute bleeding and ongoing losses from stomas, ryles tube or diarrhea require more than just the maintenance fluids.

While prescribing fluids, ensuring adequate electrolytes is crucial. Sodium and potassium are essentially the principal electrolytes. Crystalloid solutions are commonly used as the main maintenance fluids in the intensive care. It generally contains sodium and chloride. Potassium needs to be added into the crystalloid solution. Other important electrolytes in the critically ill that needs to be monitored and replaced when low are magnesium, phosphate and calcium.

Intravenous fluid therapy is a ubiquitous intervention in critically ill patients. Prescribing and assessing the adequacy of fluids and electrolytes is as important as prescribing any other intravenous drug, with the aim of maximizing benefits while minimizing iatrogenic toxicity.

Metabolic Determinants Of Resting Energy Expenditure Among Mechanically Ventilated Critically ill Patients In Malaysian Tertiary Hospital: A Preliminary Findings.

Tah Pei Chien (UMMC)
Clinical Dietitian at University Malaya Medical Centre

Background: Nutrition therapy among critically ill patients relies heavily on the accurate estimation of energy requirements. Several predictive equations have been developed for estimation of energy requirement but very few were validated in mechanically ventilated critically ill patients among Asian population. Therefore, this study aimed at determining the validity and accuracy of these predictive equations for the estimation of energy requirement and identifying metabolic determinants that might influence resting energy expenditure (REE) among mechanically ventilated critically ill patients in Malaysia.

Methods: Resting energy expenditure (REE) was measured among 90 ventilated critically ill patients by using Indirect Calorimetry (IC). Fourteen predictive equations used to estimate patients'

energy requirement were validated against IC as reference standard. Metabolic determinants assessed in this study were sex, body mass index (BMI), age, patient type, mNUTRIC score and body cell mass (BCM) status.

Results: In the early phase of intensive care unit admission (≤ 5 days), measured REE for all critically ill patients was 1677±403kcal whereas for obese patients was 1926±438kcal. Intraclass correlation coefficient analysis showed that Penn State equation [PSU(m), 2003b] has the highest correlation (ICC=0.635), 95%CI (0.49,0.75), p<0.001 with IC in estimating REE among all the ventilated critically ill patients. Meanwhile, the Harris Benedict Equation (variants) [HBEa(50)x1.25] has the highest correlation (ICC= 0.581), 95%CI (0.12,0.84), p=0.010 in estimating REE among obese patients. The lowest correlation was (ICC=0.199), 95%CI (0.00,0.39), p=0.016 was observed in the Raurich equation. There was significant difference in the REE by sex, BMI and BCM status during early (≤ 5 days) and late phase (6-10 days). During chronic phase (>10 days), significant difference in the REE was observed in patient type and BCM status.

Conclusions: Based on the preliminary findings, the Penn State equation [PSU(m), 2003b] provides the most accurate assessment of REE in critically ill patients whereas the Harris Benedict Equation (variants) [HBEa(50)x1.25] provides the most accurate assessment of REE in obese critically ill patients among Malaysian population during early phase. Metabolic determinants that influence REE were sex, BMI, BCM status and patient type.

Keywords: resting energy expenditure, indirect calorimetry, metabolic determinants, critically ill.

Facilitating Feeding Development Through Play

Mazni Mohd (UKMMC)
Hospital Play Consultant in University Kebangsaan Malaysia Medical Center

Children with different age groups will have different diet requirements suitable to their development age stages. As parents and caretakers, we must recogize and acknowledge that children, even babies would have developed preference to taste, smell, shape and colours. Typically, the success of feeding your child with the recommended diet may vary. Some child may be easier to feed however some may be relunctant and post challenges. Parents and caretakers may have employed various creative feeding methods and techniques to feed the children however the success may vary depending on the child preferences. In this talk, we will introduce a unique feeding technique by capitalizing children instinctive need to play. We will start by introduce with play is very instintives need to a child, why are the suitable play techniques for children by their development age stages and share some ideas of how to encourage proper diet feeding through play.

Nutritional Issues in Hospitalised Elderly

Dr. Philip Poi
Geriatrician UMSC / SMC

Malnourishment in community dwelling elderly can lead to increased morbidity and mortality when these vulnerable subjects are admitted into hospital for an acute illness. This talk will discuss the nutritional issues that impact on the outcomes for elderly who are hospitalised. Dietitians and other health workers should be aware of and quickly identify the vulnerable under- or malnourished patient. Oral nutritional supplementation is an accepted nutritional alternative during the acute and recovery stages of hospitalisation and may augment the speed of recovery.

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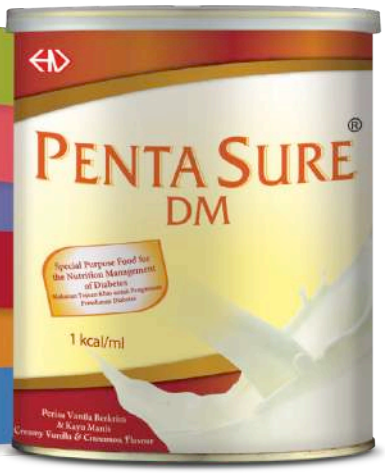

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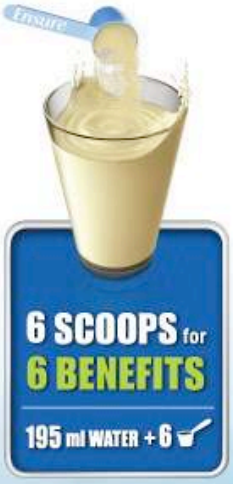

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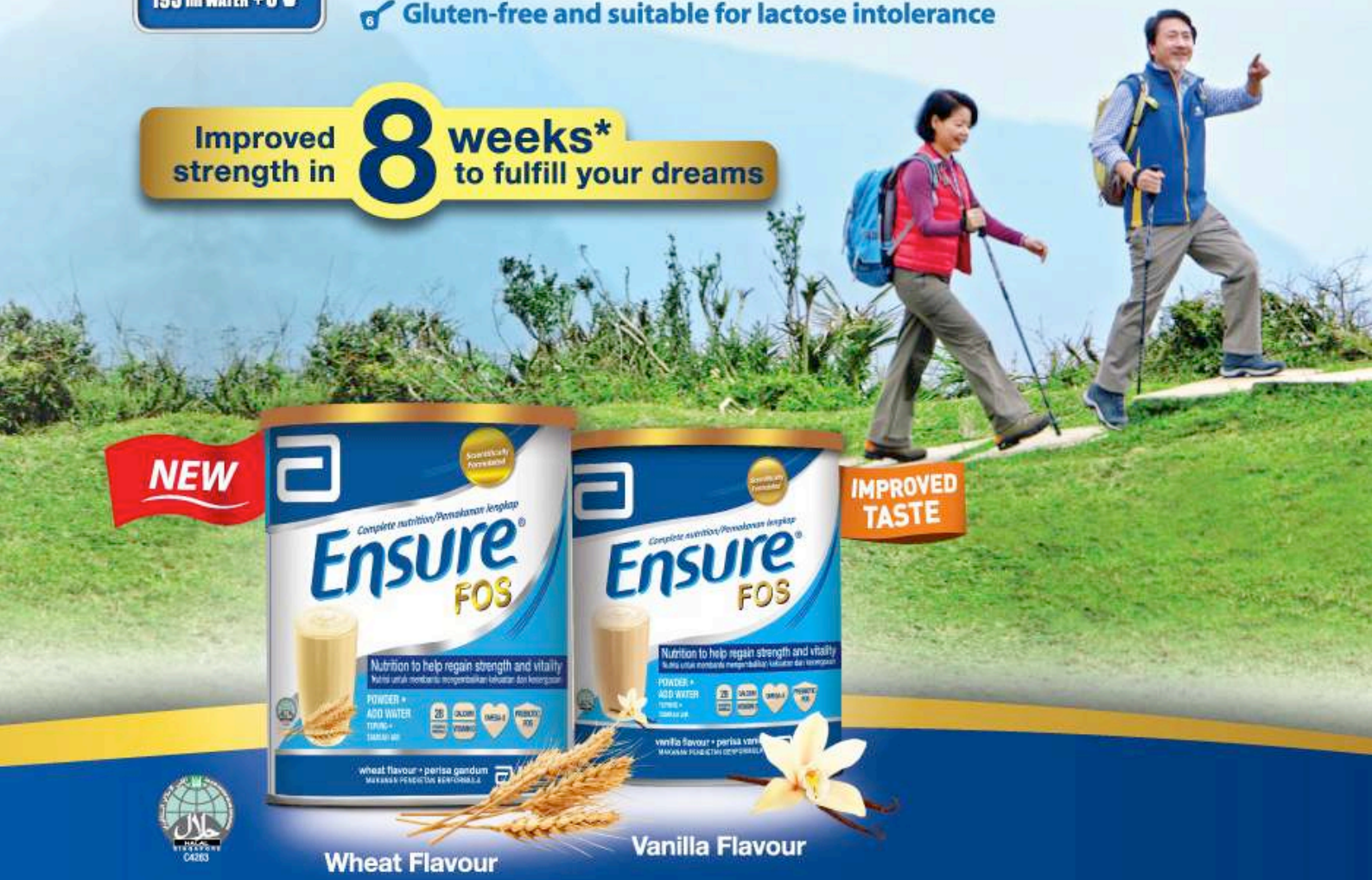

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* Edington J, Barnes R, Bryan F et al. Clinical Nutrition (2004) 23, 195-204. (Handgrip strength)
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Malaysian Dietitians' Association

"The Advocator of Nutrition & Dietetics for the Health & Well-being of the Nation"

Persatuan Dietitian Malaysia

Malaysian Dietitians' Association
Annual General Meeting 2013

About Us (who we are)

The Malaysian Dietitians' Association (MDA) is a professional body for dietitians established in 1994. Since its inception, MDA serves as a platform to represent dietitians in Malaysia in order to achieve our shared vision and mission.

Contact Us

Malaysian Dietitians' Association (MDA)

G-1 Medical Academies of Malaysia,
210 Jalan Tun Razak,
50400 Kuala Lumpur,
Malaysia.

603-4023 4700
603-4025 4700
603-4025 3700
603-4023 8100
secretary@dietitians.org.my
www.dietitians.org.my
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Vision (what we want to be)

To be advocators of nutrition and dietetics for the health and well-being of the nation.

Mission (why we exist)

- Actively advocate the principles of good nutrition and dietetics to the people through planned activities and via collaborations with professionals and organizations.
- Support innovations, evidence-based practice and continual professional development of dietitians.
- Provide Strategic leadership for the profession.

Aims & Objectives (what we want to achieve)

- To promote the professional practice of dietetics.
- To promote the study and understanding of the science of dietetics and allied fields.
- To encourage closer cooperation between members.
- To promote improvement in recruiting, training and conditions of employment of dietitians.
- To ensure that the profession is protected against persons who are untrained to practise as dietitians.

Activities (what we have done)

Nutrition Month Malaysia

MDA Outreach Projects

MDA Corporate Video

Annual Conferences & Seminars

Launching of MNT Guidelines

Collaborating with Chef