



Breast milk will always be the most natural food during the first six months, and every mother who can, should breast-feed her baby for herself.

Henri Nestlé 1869.

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SINGAPORE NUTRITION AND  
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## Tenth Anniversary Issue



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### EDITORIAL

1994 is a very special year for the dietitians and nutritionists in Singapore. We celebrated the tenth anniversary of the Singapore Nutrition and Dietetics Association (SNDA) this year. Further, the Asian Forum of Dietetic Professionals (AFDP) organised the very first Asian Dietetic conference. It was held from 2 - 5 October in Jakarta and several of our members attended.

The SNDA Main Committee members have been busy co-ordinating several activities to celebrate the tenth anniversary and a report of some of the activities are included in the article by Lynn Alexander.

We are glad to carry a series of articles on professional enhancement presented as papers by our members at the AFDP conference. A brief report on the conference and the declaration presented at the end are included in this issue.

The Editorial Committee members of the SNDA enjoyed putting together the second of the tenth anniversary celebration issues for you. We would appreciate your contributions to and comments on our *Journal*.

Season's greetings and best wishes for a happy and prosperous new year to all our members and readers.

Anna Jacob  
Editor

### CONTENTS

Important Factors for Improving Dietetics Management in Hospital <i>Fong Mei Lin</i> .....	2
The Surgical Nutrition Advisory Team <i>Selena E. Chan</i> .....	4
Computer-Assisted Food Service Management <i>S. M. Leow and E. Fong</i> .....	6
Challenges For A Dietitian In Private Practice <i>Anna Jacob</i> .....	8
Update on Asian Forum of Dietetic Professionals (AFDP) <i>Lynn Alexander</i> .....	12
An Interview with Ms. Anita Owen <i>Kath Walsh</i> .....	13
Fruit and Vegetables Week <i>Dr Mabel Yap and Toh Hui Kheng</i> .....	15
Jakarta Highlights <i>Selena E. Chan</i> .....	17
Scientific Seminar "Eat More Fruit and Vegetables - The scientific rationale" <i>Lynn Alexander</i> .....	18
Career Profile : Mrs Tan-Fong Mei Lin.....	19
Nutritional Behaviour And Weight Management In Adolescents <i>Lynn Alexander</i> .....	21
Book Review : Clinical Paediatric Dietetics <i>Georgina Stable</i> .....	24
Cooking Up a Storm - With Pulses & Grains <i>Ho Fong</i> .....	25
Product Update.....	26
Meetings.....	27
Abstracts.....	27-28

# Important Factors for Improving Dietetics Management in Hospital

Fong Mei Lin, Manager  
Department of Dietetics  
National University Hospital, Singapore

## Development of dietetics as a discipline in Singapore

Before the 1970s, hospitals worked only through doctors and nurses to meet consumer needs. There was little regard to holistic care programmes that were patient-centred. Doctors and administrators were unaware of the benefits of quality nutrition care. Dietitians worked as caterers in the kitchen rather than as clinical support specialists. To the public the term "dietetics" often conjured images of dieting or slimming centres and some of the less informed even thought that it was a misspelling for the word "diabetic".

The 1970s brought the beginning of a movement towards a more pragmatic consumer. Younger cost-conscious, quality-conscious consumers tend to shop around for health services. This brought on dramatic and rapid changes in the healthcare industry during the 1980s.

The major changes that are directly affecting dietetic practice are evident to all of us. First there is the "new healthcare" which is described as "old caring plus new managing skills". Each department is managed with an eye on the medical as well as the economic outcome.

While we attempt to be cost-effective in healthcare, a second movement towards health promotion/disease prevention has occurred. It represents an emerging consensus among health professionals and the community that the nation's healthcare strategy must be dramatically changed from treatment orientated approaches to emphasising the prevention of disease. Managers need to understand the implications of a changing healthcare environment.

To stay ahead, there is evidence of fundamental restructuring in hospitals. All departments are under extreme pressure to continue to deliver quality care - and also justify its cost. There is always a need to balance delivery of quality patient care with financial viability. Marketing is a management function that offers us new approaches to meet these challenges.

To be competitive the Dietetic Manager needs to apply systematic business disciplines to the practice of dietetics.

## Implementing marketing strategies

- Focus on patient's needs and how to turn those needs into wants. Traditionally, we are able to identify services and products that would improve their health status. But these services were provided before they were made aware of their need.

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*Ms. Fong Mei Lin is a member of the SNDA and currently working as the Manager of the Department of Dietetics at the National University Hospital, Singapore.*

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- Effective marketing is user-orientated. With the new approach, professionals should be patient-centred rather than self-centred. The professional is someone who is sincere and creates trust and confidence in the patient. Only then will he buy our services.
- Integrate the marketing plan for dietetics into the overall marketing strategy of the hospital.
- Convince hospital management that we can enhance quality care and generate income by developing plans that can be justified for the benefit of the whole organisation.
- Prove to consumers that dietetic services and products are cost-effective.
- Timely intervention in providing quality nutrition care can prevent costly complications.
- Deliver quality care by translating the science of nutrition into the practice of furnishing optimal nutrition care to patients.
- Project the image of care, concern and competence.
- Focus on specific needs of the hospital in order to refine professional skills.

In National University Hospital (NUH), the Dietetics Department is divided into 2 units:

- Catering Administration and
- Clinical Dietetics

### Catering Adminstrating Unit

- Kitchen is operated by an outside caterer.
- Policy and procedures are set by dietetics department.
- Dietetics Department controls capital budget, repair and maintenance budget of the entire kitchen.
- Dietetics Department monitors and evaluates overall catering performance.
- Continuous effort to improve service standards through constructive feedback.

### Clinical Dietetics Unit

- Diabetic
- Renal
- Nutritional Support
- Paediatric

Dietitians take part in:

- Multi-disciplinary ward rounds
- Assessment of nutritional status and requirements
- Selection of regimens

- Counselling the patients
- Monitoring the patients

They also:

- Educate other health professionals
- Reach out to the community
- Participate in media presentations by being actively involved with the radio, television and press.
- Contribute to public/professional education.
- Participate in seminars/talks
- Conduct workshops

Marketing is a continuous process. We become more sensitive to the consumer needs. Managers who understand and apply marketing concepts in an innovative way bring success to their organisation. The future holds unlimited possibilities.

## Acknowledgement

The author would like to acknowledge the team members of the Department of Dietetics at NUH.

Ms. S. Saratha  
Ms. Bridget Fenby  
Ms. Selena Chan  
Ms. Georgina Stable

# The Surgical Nutrition Advisory Team

Selena E. Chan

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Malnutrition, often an unrecognised complication of surgical and medical disorders, can seriously delay recovery and can be life threatening. Studies from Britain and the USA report that 30 - 35% of hospital patients show signs of malnutrition on admission. Many more are put at risk following episodes of trauma, surgery, nil-by-mouth regimens, diarrhoea, vomiting and loss of appetite. Hospitalisation presents many fears and anxieties to the patient resulting in a reduction in normal food intake. Uncertainties about the medical and surgical condition, new surroundings, absence of friends and relatives, and unfamiliar foods can further affect a patient's general nutrition. Being well-nourished promotes a sense of well-being which contributes to a speedy recovery.

Over the last two decades, nutritional support has evolved and developed into a cornerstone in critical care and supportive therapy for the recovery of patients, particularly the malnourished. Many factors have contributed to its progress including the establishment of multi-disciplinary nutritional support services and the formation of dedicated nutritional advisory teams.

Nutritional support teams have been in existence since as early as the 1970s. They usually comprise a doctor, a dietitian, a nurse, and a pharmacist, all of whom have a special interest in nutrition.

The aim of the team is to provide the easiest, safest and cheapest method of nutritional support to help achieve the ultimate goal in recovery.

Many studies support the incorporation of the team approach for managed care. Changes shown include improved quality of treatment with a more efficient and effective service, improved nutritional status, reduction in costs to the hospital and the patient, a shortened length of stay and more job satisfaction for the hospital staff.

In view of this, a nutrition support team was established at the National University Hospital (NUH). The initial aims for the team were to decrease the rate of line sepsis and, to set up protocols and a database to be used within the hospital. The first meeting of the Surgical Nutrition Advisory Team (SNAT) was in October 1992. Headed by a surgical consultant, the team consisted of a general surgeon, a dietitian, a pharmacist and a research assistant. All members that attended had a special interest in nutritional support. Because of administrative reasons, the team did not have a nutritional nurse. An infection control nurse was not included as the hospital already had an infection control team.

The original SNAT objectives were:

1. To provide an efficient and effective nutritional support service using a "Team approach".

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2. To collate and analyse data in relation to patient outcome,
3. To provide clinical and laboratory research into nutritional problems,
4. To facilitate the teaching of nutrition as a discipline.

To enable nutritional support to be given in the best manner to each patient, the management should be a collaborative effort by all team members.

Therefore the SNAT:-

1. Identifies the patients in need of nutritional support,
2. Assesses the patient's nutritional status and requirements,
3. Calculates and designs the most suitable feeding regimen for each individual,
4. Regularly monitors the patient's progress and adapts the nutritional support regimen as appropriate,
5. Gives encouragement and support to parents, friends and relatives.

Since the inception of SNAT, a more efficient and effective service has become available to patients requiring nutritional support. Enteral and parenteral nutrition protocols have since been established and followed by the surgical unit, and they are available to all hospital staff. These were developed partly as a result of the following studies conducted by the team.

## Study 1

*A comparative study of the impact of a nutritional advisory team on TPN with respect to clinical indications and to the complication of line sepsis.*

This study showed that with a team approach the incidence of "wrong" indication for commencing TPN decreased, there was a significant decrease in the incidence of line sepsis and duration of time TPN could be given increased.

The study emphasised the importance of standard protocols for the use of TPN and the necessity of a dedicated team, in providing improved monitoring of patients and ensuring adherence to strict aseptic precautions.

## Study 2

*A study of the microbial quality of enteral feed solution with time and hence a review of the maximum hanging time of enteral feed solutions.*

It was revealed that a shorter hanging time should be used by the hospital, up to a maximum of 6 hours, and that set standards are followed to ensure minimal contamination of enteral feeds during their preparation and administration.

## Study 3

*Effect of fibre in enteral feeds on surgical patients.*

Studies attempting to manage diarrhoea by adding various forms of fibre in tube feeding formulae have not been conclusive. Our current study will examine the effect of fibre in tube feeds on a population of Asian patients and will determine whether the presence of fibre in enteral feeds would reduce the incidence of diarrhoea. In addition, the effects of fibre on serum cholesterol, triglycerides and blood cholesterol levels will be monitored.

## Study 4

*A retrospective study on the appropriate use of TNP and monitoring of patients in a hospital without a SNAT.*

This is a current study examining a hospital that does not have a SNAT. It is hoped that the results of this study will prompt the quick initiation of a nutrition team for overall improved patient care and follow in the footsteps of our SNAT.

The SNAT does not only care for the patient but is available and responsible for the education of medical, nursing and allied healthcare staff in the principles and details of nutritional support and for the preparation of protocols, guidelines and standards. This is reinforced with regular ward level talks and lectures, contact with local and overseas hospitals, and continuing education of each team member.

In conclusion, with an increased number of referrals to the team, results of studies, and the introduction of an infection control nurse, the team approach to nutrition support at our hospital appears to be a step in the right direction, giving us a positive outlook for the future,

Future plans of SNAT include:

- Hospital recognition
- Decrease in cost/i.e. cost savings to the patient and hospital
- Continual decrease in line sepsis
- Regular review and update of protocols
- Formation of an Enteral Nutrition Committee
- Inclusion of a clinical nurse consultant and
- Extend service to other areas

## Current SNAT members

A/P Steven Chan	(Surgical consultant)
Dr. Ong Chong Leng	(Surgical senior lecturer)
Dr. Damian Png	(Surgical registrar)
Mr. Carl Tan	(Pharmacist)
Ms. Selena Chan	(Dietitian)
Ms. Helen Goh	(Infection control nurse)
Ms. Marilyn Cheong	(Research assistant)

Credit and acknowledgement to the original committee of SNAT:

Prof. Abu Rauff	(Chief, Dept of Surgery)
Prof. Steven Chan	(Surgical consultant)
Dr. Ong Chong Leng	(Surgical senior lecturer)
Dr. Damian Png	(Surgical registrar)
Ms. Nicola Gilbert	(Dietitian)
Mr. Peter Yap	(Pharmacist)

## Useful References

1. Agnesti - Johnson C., Dwyer K., Steinbaug M. Nutrition support practice: A study of factors inherent in the delivery of nutrition support services. JPEN, 1988; 12: 130 - 134.
2. ASPEN Board of Directors: Guidelines for the use of parental and enteral nutrition in adult patients. JPEN 17 (4) 7 - 10SA, 1993.
3. Barry J Gales and Marla J Gales - Nutritional Support Teams: A review of comparative trials. The Annals of Pharmacotherapy, 1994; 28: 227 - 235.
4. Brown R.O., Carlson S.D., Cowan G.S., Powers D.A., Luther R.W. Enteral nutritional support management in a university teaching hospital: team vs nonteam. J Parenter Enter Nutr, 1987; 11 : 52 - 6.
5. Blackburn G.L., Bothe A., Lahey M. Organisation and administration of a nutrition support service. Surg Clin North Am, 1981; 61 - 709.
6. Hamaoui E. Assessing the nutritional support team. J Parenter Enter Nutr, 1987; 11 : 412 - 21.
7. Jensen T.G., Dudrick, S.J. Implementation of a multi-disciplinary nutritional assessment program. J Am Diet Assoc, 1981; 79 : 258.
8. Jones M.G., Bonner J.K., Stitt K.R. Nutrition support service: Role of the clinical dietitian. J Am Diet Assoc, 1986; 86 : 68 - 71.
9. Lennard J. (1992) A positive approach to nutrition as a treatment. Kings Fund Report.
10. Nehme A.E. Nutritional support of the hospitalised patient: The team concept. JAMA, 1980; 243 : 1906 - 1908.
11. Position of the American Dietetic Association. The role of the registered dietitian in enteral and parenteral nutrition support. J Am Diet Assoc, 1991; 91 : 1440 - 1441.
12. Powers D.A., Brown R.O., Cowan G.S., Luther R.W., Sutherland D.A., Drexler P.G. Nutritional support team vs non-team management of enteral nutritional support in a veterans' administration medical centre teaching hospital. J Parenter Enter Nutr, 1986; 10 : 635 - 8.
13. Skipper A., Perlmutter S. Function and role of the dietitian on a nutritional support team. Nutrition, 1992; 8(6) : 391 - 394.
14. Standards of nutritional support : Hospitalized patients. Nutr Clin Pract, 1988; 3 : 28.
15. Standards of practice: Nutrition support dietitian. Nutr Clin Pract, 1990; 5 : 74 - 78.

# Computer-Assisted Food Service Management

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E. Fong  
Manager, CIAS Enterprises, Singapore

Changi International Airport Services (CIAS), a joint venture between the Port of Singapore Authority and six international airlines including Air France, China Airlines, Garuda Indonesia, KLM, Royal Dutch Airlines and Lufthansa German Airlines, was established in 1978. Working closely with the most renowned airlines, we aim to provide an efficient and comprehensive range of ground handling services in Singapore. To ensure personal and better service to the airlines, CIAS offers the following services - Cargo Services, Ground Services, Passenger Services, In-Flight Catering Services and Security Services.

## In-Flight Catering Services

Singapore, with one of the busiest airports in the world, is visited by several millions of travellers of different nationalities each year. A team of experienced chefs from various parts of the world to cater for the different tastes of international passengers. A Special Meal Section caters for the needs of the travellers' dietary modifications i.e. for religious or medical reasons. A dietitian is on hand in this section to provide consultation and to advise on special diets if required.

In a modern laboratory, a team of trained technicians conduct daily stringent microbiological checks on raw materials and cooked meals to maintain high standards of hygiene in the kitchen. The temperature control of the food and the environment are computerized to ensure the wholesome quality of prepared meals.

With the rapid growth of business in Singapore, CIAS has expanded further and ventured into other related non-aviation activities. Changi International Airport Services Enterprises Pte Ltd was formed in 1992 as a wholly owned subsidiary of CIAS. It is divided into three main areas, namely: Hospital Food Services, Security Services and Engineering Services.

## Hospital Food Services

Serving patients' needs are first and foremost. We have a team of experienced and competent food service personnel to provide consultation and advice to meet exacting demands and requirements. Our team consists of experienced and trained chefs, food and beverages

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executives, dietitians and other trained service personnel. They are responsible for the smooth operation of the hospital food services.

CIAS Enterprises has developed a unique computerised order taking and production system. We have a team of trained diet assistants and a dietitian to manage this system. The system controls the food orders and food production requirements of the hospitals' Food Service Department.

The order taking and production system has the following objectives:

- to provide more accurate information through on-line verification of data during data entry.
- to introduce built-in security measures to ensure proper authorisation of transactions and updating of data. All modifications will be logged for audit purposes.
- to increase administrative efficiency through automation of manual and repetitive tasks, e.g. the preparation of production summaries.
- to ensure consistent and up-to-date information by maintaining a centralised database of food orders.
- to integrate with other computerised systems and provide this system with the relevant meal production information.

This system maintains the food orders of patients and guests in the database for meal order processing. The three areas of operations identified for computerisation are as follows:

## Maintenance of Meal Orders

Meal orders from the wards are captured from the meal requisition forms (MRF). Data from the MRFs will be entered via on-line screens into the system. The system maintains one record for each patient. The information captured includes the patients' particulars, the ward and bed number, food orders, special meal orders and dietetic requirements of the patient.

## Generation of Diet Cards

A diet card is generated for each patient from the personal food order record. The diet card generated is used when serving the food. Dietetic requirements of the patient are represented by pre-defined colour codes. Common food restrictions are pre-printed on computer forms which are crossed out by the system if not applicable. With the system, missing or old diet cards can be replaced by on-line printouts (Figure 1).

## Generation of Production Summaries

An on-line facility is provided to print production summaries for each kitchen. The following production summaries are available. They are:

- Muslim meal
- Chinese meal

- Western meal
- Cutlery
- Pastry
- Afternoon tea
- Fruit basket/sandwich order

These reflect a patient's meal requirement together with the individual special meal order. These are followed closely by the various sections of the kitchen.

## Generation of Reports

The system also provides on-line printing of the following reports:

- Daily meal count analysis
- Patient records checklist
- Discharge list
- Trolley checking list
- Normal patient diet
- Nil-by-mouth list

- Diabetes mellitus/reduction breakfast
- Diabetes mellitus/gestational diabetes mellitus
- Sandwich order

The daily meal count analysis is a report reflecting the total number of meals served to date.

The patient records checklist contains information listing all existing patients in the respective wards.

With the trolley check list, the trained diet assistant ensures that correct meals are served to the respective wards.

This computerised order taking and production system provides a good control of raw materials, resources and man-power in the meal production process.

This system has been in operation for four years. During this time, changes were made based on feedback from the users. It will be fine-tuned by experts, experiences and new requirements on the system to make it more efficient.

LEE LIN LINY			21/11/94 11:43			
PAED	YR	MTH	WARD	BED	UNIT	
			64	3	1	C
F	1			MEAT	VEG	STARCH
APPLE OR WATERMELON ONLY						
NO SKIN, NO BUTTER						

Figure 1: Individual diet card.

# Challenges For A Dietitian In Private Practice

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Food and Nutrition Specialists Pte. Ltd.  
Singapore

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## Dietetic practice - An evolving profession

At the outset of the profession of dietetics, most dietitians were hospital based and their target population was only patients in hospital.

Dietitians then went on to practice within community settings. Community education projects with a focus on prevention, were undertaken, with dietitians as educators, educating groups of individuals with increased or specialised needs like pregnant and nursing mothers, diabetics etc. Today, the practice of dietetics is not always limited to these traditional settings. We also see dietitians working within food industry, in the areas of operations, product development and marketing. Within each area of specialisation of the dietetic profession, there has been tremendous change as dietitians are beginning to assert themselves and gain recognition.

One exciting trend in this new wave, has been the move of some enterprising dietitians to set up independent practices, without the support of medical institutions or food-based industries.

## Dietetic private practice

A credible dietetic private practice is usually set up by a consultant dietitian. A consultant dietitian is defined as "a professionally trained individual with responsibility for assisting the physician in the nutritional assessment of the patient and for evaluating and recommending modifications, where indicated, in the diets of patients." (1)

The dietetic private practice must be viewed as a self-supporting or profit-making independent business unit, selling advice to well and ill-individuals of all age groups in a variety of settings. The dietetic practice can also provide for more than patient counselling.

## The characteristics of the dietetic entrepreneur

It takes an individual with very special characteristics to want to set up a private practice. The dietitian must be enterprising, with much initiative and creativity, and the determination to think through the business concept and have the courage to put ideas into action. The dietitian must also have confidence and be open to new experiences and ideas.

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As with any other business venture, success truly rests on the ability of the dietitian to carry out a thorough market research, streamline the product/service and market it in a viable fashion. This requires the total concentration of the dietitian in every aspect of the business. However, just as it may be considered relatively easy to set up the business unit, it takes hard work and a great deal of perseverance to stay in the business, so that it can provide a life-long career.

## Pre-requisites for a dietitian in private practice

Every dietitian embarking on a career must have the required educational qualifications and training, which may vary from institution to institution. However, working experience of at least three to five years would be essential for the dietitian to gain confidence in the practice of skills acquired and to build rapport with other dietitians and medical professionals, before launching into private practice.

## Setting up and maintaining a successful private practice

### Capital

It is important to start with enough capital to invest in essential office equipment, a scale and may be even to rent an office space and to pay yourself for a while before you begin to make enough money to break even. Some dietitians with private practices suggest that you maintain a regular part-time job initially (2). However, it would be important to weigh the time commitment required to start up the private practice and the sensitivity of being in competition with your employer.

### Marketing

#### Direct Marketing

The customers of a dietitian in private practice are physicians in private practice, private clinics, community clinics, food industry, drug companies, mass media publications, advertisers, and corporate clients carrying out wellness programs for staff. Direct mailing and meetings help to establish contacts. Some money must be invested in written material promoting the product or service (3). Material should include some information about the dietitian, the company and the product/service sold.

#### Indirect Marketing

This would be essentially networking with fellow-

“To help ensure my baby was born healthy, I kept healthy with Mama Plus.”

“By taking Mama Plus, my mum helped me to get a healthy start to life.”



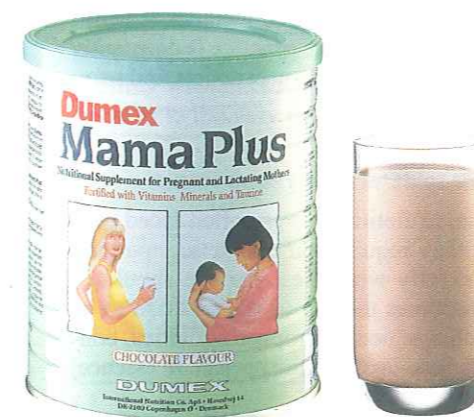
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professionals, medical practitioners, food technologists, publishers and advertisers. Undertaking some projects free for the sake of promoting business and establishing reputation, is an useful tool for marketing services indirectly.

#### Professional help

As the successful business expands, it may be necessary to hire professional staff and delegate non-dietetic activity to relevant professionals. This will free time to concentrate on selling of service and bringing in the money.

#### Specialising

Once the business is established, it may be necessary to streamline the projects undertaken. This will help to create the right image for the company and help to consolidate viable business projects.

#### Marketing strategies

To stay in the business, the dietitian in private practice must apply the following strategies to keep up-to-date. It is important to listen to the customer and anticipate needs and trends. After thorough research, adapt or create products/services to meet the new needs.

Maintaining good business relationships with customers and fellow professionals leads to more referrals. Enlisting support to market, adapt and create products/services is essential to keep at the cutting edge.

#### Negative aspects of the dietetic private practice

##### Variable business opportunities

In private practice, business opportunities can be long or short term. If the bulk of the business is in short term projects, the dietitian has to look out for more and greater business opportunities on a regular basis. Long term contracts on a retainer basis make the business more stable. A good mix of long and short term business opportunities keeps the business exciting and yet stable.

##### Variable income

With the business opportunities being variable, income too, is variable. Thus, income of the dietitian in private practice is not stable or fixed, making financial commitments harder to undertake.

##### Persistent marketing

With private practice, there is no end to marketing of services. The dietitian must be on the look out for bigger and better business opportunities at all times. Creative dietitians are also able to create products/services and market them independently and their business is not dependent on external customers.

##### Lack of traditional support or promotion

Dietitians working with hospitals and industry have their services promoted directly or indirectly through or

during organisational promotional activities. The reputation of the hospital or food industry, helps to add prestige to the service of the dietitian in that setting. However, in private practice, marketing has to be totally self-generated.

##### Commanding an equitable price for services

In the past, patients in hospitals got individualised counselling free or at cost. Today, several hospitals charge for their services but most of the time the charges are subsidised or low cost. Providing similar service at a fixed price in a private practice is therefore difficult. The questions raised are - should the charges be time-based or based on the complexity of the diets?

Fixing a price on dietetics services to the food or advertising industry must take into consideration time required to complete the job, the advertising potential and value to the company. Much of the time spent in meetings, and in capturing the business often goes unpaid. The private practice dietitian will need to include professional time, overhead and running costs of business into the pricing of services sold. Flexible charging systems must be maintained and the dietitian must use the most suitable one for the business opportunity.

##### Maintenance of professional rapport and reputation

It takes a lot of personal effort to maintain the rapport and contact with physicians in private practice. Without the backing of a hospital or organisation, it then becomes the responsibility of the dietitian in private practice to be heard and to be known in professional and public circles. This can be time and cost intensive, but may pay back indirectly by helping to secure future business deals.

##### Working in different environments

Working in a private practice requires the dietitian to be able to perform or provide services in various places, most of the time away from familiar surroundings. This takes a great deal of organisation and planning to ensure that all equipment required is available and the environment is suitable.

##### Achieving results within limited time frames

A dietitian in private practice is expected to achieve positive and visible results within limited time frames. This requires a great deal of ingenuity and an ability to focus on the most important issues, prioritise, delegate and coordinate activities.

##### Need to upgrade skills and product constantly

For the dietetic practice to sustain business, it is important that the dietitian in private practice is constantly upgrading skills and developing new products and services.

##### Assisting the client to determine requirements

The private practice dietitian is very often faced with clients who know they require some dietetic input and yet do not know exactly what these services should or could be. It then becomes the job of the dietitian to be able to assess the clients' needs, propose activities, conduct, evaluate and follow-up the entire project. In essence,

the dietitian will be responsible for the success of the entire business project.

#### Positive aspects of dietetics private practice

##### Prime importance given to dietetics or nutrition promotion

The main business focus being dietetics and nutrition, all nutrition promotion activities get first priority unlike within other organisations, where dietetics is only a support service that must take back seat when compared to other critical organisational activities.

##### Unlimited variety of jobs and experiences

Being in private practice, it is possible for the dietitian to enjoy great variety in the jobs undertaken. Apart from diet counselling, dietitians can also be involved in nutrition education in a variety of settings. This keeps the private practice a very exciting and interesting area of work.

##### Unlimited opportunities for individual expression and creativity

The skills and talents of the dietitian in private practice can fully utilised in a private practice set up as the business undertaken to suit the particular talents of the dietitian.

##### Quick decision making and conducive work environment

A dietetic private practice being in essence a small business, it usually has a small workforce and therefore, decisions can be made quickly to meet business opportunities and needs. The private practice that is always on the move, is not bureaucratic and provides a more flexible environment for work and self-expression.

##### Charting your own career

Being in sole control helps the dietitian in private practice to also be in control of her own career and direct it as she requires or is comfortable. The business can specialise in the area of interest of that particular dietitian.

##### Satisfaction for individual efforts

The dietitian in private practice derives great satisfaction from seeing personal career growth as the company expands. The greatest satisfaction comes from the freedom to promote your professional interests in the most exciting way and to see each project through right from the start to the very end.

A dietitian in private practice needs to be self-motivated and survive on being satisfied with the knowledge that the job is well done.

#### Persistent marketing

As with all professional business units, such as lawyers, doctors and accountant, dietitians in private practice need to be aware that they are responsible for their own actions and professional decisions. Proper records need to be maintained in the legal, accounting and professional areas. All action and activities undertaken by the dietitian in private practice must meet the standards set during the training period.

Private practice takes up much more time and effort than working for other people or for an organisation because the dietitian is in charge of the entire business unit and is also responsible for managing and generating business. Most entrepreneurial individuals also set very high standards for themselves (higher than what any boss could set for a worker) and are at the same time driven to achieve by an internal need for achievement. It is therefore very important that any dietitian thinking of setting up a private practice, evaluates ability, life expectations, lifestyle and responsibilities before undertaking a private practice.

#### Conclusion

Private practice offers dietitians another avenue or setting for practising high standards of nutritional care. While it offers much excitement, freedom, self-expression and challenge, running a private practice comes with great responsibility and its demands on time and effort.

At the present moment in time, dietetic private practice concept is still in its infancy especially in South East Asia. In the future, more and more dietitians will set up and run private practices and we will be able to exchange more ideas on professional enhancement in this field.

#### Books reviewed:

1. Statement on physicians in private practice and referral to consultant dietitians, by Committee on Public Health The New York Academy of Medicine, Nutrition Today, September/October 1979.
2. Tallmudge, K.E., Starting an independent consulting business, *in the* Competitive edge: Marketing strategies for the Registered Dietitian, ADA, 1986.
3. American Dietetic Association, Competitive edge: Marketing strategies for the Registered Dietitian, ADA, 1986.

# Update on Asian Forum of Dietetic Professionals (AFDP)

Lynn Alexander  
President, SNDA

At the 1st Asian Conference on Dietetics, Jakarta, 2nd - 5th October 1994, representatives from the nine member countries of the Asian Forum of Dietetic Professionals met to discuss the future directions of the organisation. This meeting was attended by Mrs. Yeong Boon Yee and myself. The meeting opened with a buffet dinner, which offered the opportunity for us to talk informally and get to know fellow members from other countries.

A round table meeting then followed, and went on right up until midnight! The possibility of upgrading the Forum to a Federation was raised, and after some discussion this move was passed. The organisation will now be known as the Asian Federation of Dietetics Associations (AFDP).

There then followed the drafting of the Jakarta Declaration which is published below in full. Election of new office bearers rounded off the meeting. Mrs. Murni Prakoso of Indonesia, formerly Secretary-General of AFDP and Chairman of the Organising Committee for the 1st Asian Conference, was elected as the new president. The outgoing president, Dr. Chwang Lei-Chii, from Taipei Dietitians Association, Taiwan, was heartily thanked for all her hard work and pioneering efforts in seeding and bringing to fruition the alliance between the Asian countries.

The venue for the second conference in 4 years' time, which will be known as a congress from now on, will be Korea, with Malaysia volunteering to host the third Congress. The Korean representative, Ms. Suh Eun Kyung, was then elected as



Ms. Fong Mei Lin presenting her paper.

the new Secretary-General.

It was decided that The Singapore Journal of Nutrition and Dietetics will continue to be the venue for communication for AFDA, and we will continue to circulate our Journal to each of the AFDA member Associations.



From left to right: Mrs. Lynn Alexander, Mrs. Murni Prakoso, Dr. Chwang Lei-Chii and Ms. Lynn Daniel.

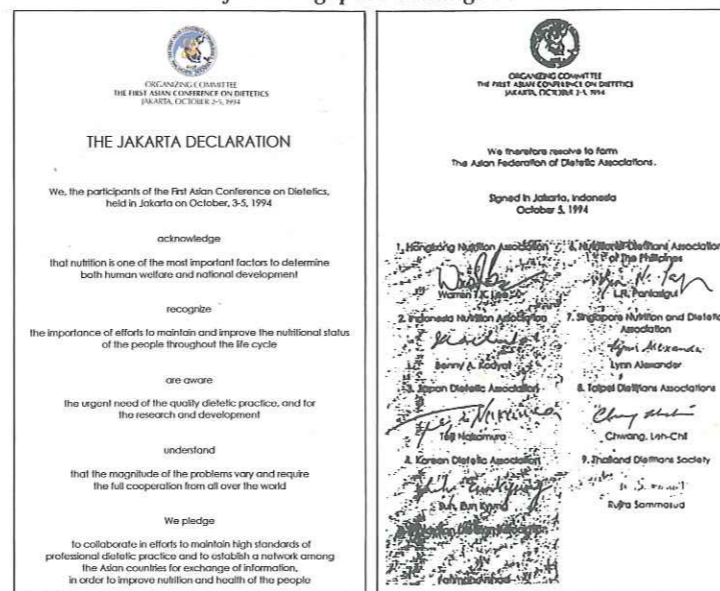


Some members of the Singapore contingent.



Ms. Selena Chan being congratulated after her presentation.

Lynn Alexander, President, represented SNDA at the business meeting of the AFDP held in Jakarta.



# An Interview with Ms. Anita Owen

Interviewed by Kath Walsh

To celebrate the 10th anniversary of the SNDA, Anita Owen, MA, RD (USA), a past president (1986 - 87) and an active member of the American Dietetic Association (ADA) presented the keynote address on "Eat more fruit and vegetables - the scientific rationale" at the scientific seminar held on 30 September 1994. Ms Owen, with thirty years of experience in the field of nutrition and dietetics, shared her views with Kath Walsh, a member of the SNDA Editorial Committee, on the current issues facing the ADA, established nearly 75 years ago. Also she discussed the present and future role of nutrition and dietetics, as well as the crucial and important position of the nutritional professional as the expert on health issues related to food.

**SNDA:** What changes has the ADA experienced over the years?

**Owen:** Three major changes have taken place.

- Dietitians have gained recognition as the major source of accurate nutrition information for consumers in the U.S.
- There has been a major growth in the membership from a small group to 65,000 members in 1994.
- The registration of dietitians - the RD trademark is now widely known as this promotes the dietitian as the health professional who has extensive training in nutrition.

**SNDA:** How has your association gained a foothold in healthcare at the local and government level?

**Owen:**

1. 65% of dietitians are employed in hospitals.
2. The ADA has developed practice groups such as diabetic specialists, public health specialists, clinical specialists and nutrition support specialists. This has given dietitians greater exposure, experience and status in working as members of the medical team.
3. At the local level, education and training are going on constantly to upgrade dietitians' skills.
4. However, one negative aspect is dietitians have not been reimbursed adequately for their services. We are working diligently to get into the new healthcare reform package as medical nutrition therapists.

Ms Anita Owen has a wealth of experience in the areas of public health and community nutrition. She is president of Owen and Owen Ltd, a nutrition consulting company in Scottsdale, Arizona, U.S.A.

Kath Walsh is currently a principal lecturer of the Language and Communication Skills Centre at Ngee Ann Polytechnic, and a qualified dietitian. She is an active member of the Editorial Committee of the SNDA.

**SNDA:** How has the ADA handled the variety of so-called nutrition consultants in the States?

**Owen:** The ADA has realised that the "real" nutrition educators in the U.S. are the media since they reach such a broad audience. To minimise misinformation the ADA has established a group of ambassadors and media representatives in each state who are trained to act as spokespersons and to set the record straight. This programme has been very helpful in minimising the influence of the "untrained nutritionist".

**SNDA:** What future direction will the ADA take on at the advent of the 21st century?

**Owen:**

1. The ADA mission is to assist consumers to make the right choice about foods in a healthy diet.
2. The ADA is working towards being the voice of nutrition for the US population. Although we have gained recognition, we have a long way to go to achieve this goal.
3. The ADA would like to play a major role in healthcare including improving re-imburement.

**SNDA:** What key roles can professional dietitians and nutritionists play in the new healthcare challenges and with an aging global population?

**Owen:** With any population, dietitians are the only health professionals who have knowledge of food, nutrition and health. Other professions may know nutrition and health but dietitians are the only ones who have the knowledge to apply foods people eat to the equation. As a result, we must gain recognition as nutrition counsellors who can help patients particularly the elderly with chronic diseases to have a better quality of life with good nutrition.

**SNDA:** What changes would you foresee in the training and upgrading of the skills of health professionals to meet these new challenges?

**Owen:** Learning is a lifelong process. With the new advances in medicine and nutrition, dietitians in order to maintain their RD status, must have 75 hours of continuing



education for a five year period. This keeps the dietitian current.

Additional formal education such as a masters degree or PhD is required in several areas since the base of knowledge required in dietetics is very extensive.

Training and education must be geared to modifying behaviour in many cultural and economic groups. Understanding human behaviour is a fertile area for dietitians' training. Also leadership training is required to meet new roles.

**SNDA:** As a former president of the ADA, what advice would you give to the SNDA on the celebration of its 10th anniversary?

**Owen:** My advice is:

- **Serve the public well**  
Dietitians will gain further recognition if they offer

services that the public wants and needs. The more we serve the consumers, the more they will utilise our services and talents.

- **Develop leadership skills**  
The SNDA could probably benefit from an assessment or strategic planning as to where they want to be in the next five years. This will help focus the activities - perhaps they have already done this.
- **Become proactive**  
The SNDA should take on an active role with media and public policy issues affecting the nutritional needs of Singaporeans.

## Fruit and Vegetables Week

17 - 24 September 1994

Dr. Mabel Yap and Toh Hui Kheng  
Food and Nutrition Department

*In conjunction with the National Healthy Lifestyle Campaign 1994, the Ministry of Health organised a 'Fruit and Vegetables Week' to promote the consumption of fruit and vegetables daily.*

### Rationale

Many studies have shown that fruit and vegetables are beneficial to health. They contain a wide spectrum of nutrients such as dietary fibre, vitamins A, C and E and minerals like potassium, calcium and iron. When prepared properly, they are also relatively low in fat, especially saturated fat, free from cholesterol and sodium. Adequate intakes of fruit and vegetables have been associated with lower risks of coronary heart disease, cancers, hypertension and diabetes mellitus. Fruit and vegetables also play an important role in the total management of patients with these diseases.

A recent consumption study conducted by the Food and Nutrition Department, Ministry of Health, showed that the diet of a Singaporean adult is generally low in dietary fibre, vitamin A, calcium and iron while being relatively high in saturated fats. In a separate study on supermarket shoppers, it was found that while most shoppers were aware of the health benefits of fruit and vegetables, many were not eating enough due to ignorance of the actual amounts needed. Nearly 70% of shoppers indicated that they would increase their consumption of fruit and vegetables if encouraged to do so.

In view of the above, it was timely to organise a 'Fruit and Vegetables Week' to promote the consumption of fruit and vegetables in the daily diet.

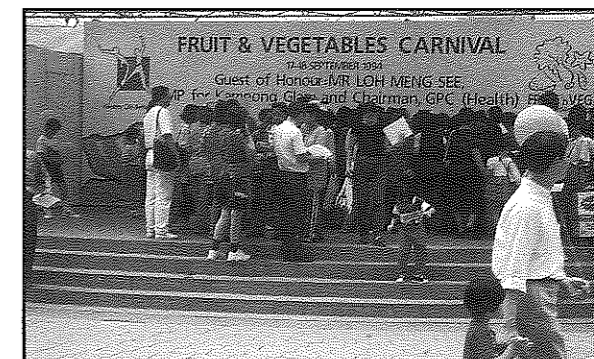
### Objectives

- The aims of the Fruit and Vegetables Week were to:
- Create awareness of the benefits of consuming fruit and vegetables.
  - Emphasize the need to include a variety of fruit and vegetables in the daily diet.
  - Educate Singaporeans on the daily requirements for fruit and vegetables and ways to incorporate these into daily meals.
  - Suggest practical tips on the proper preparation of fruit and vegetables for the maximum conservation of nutrients.

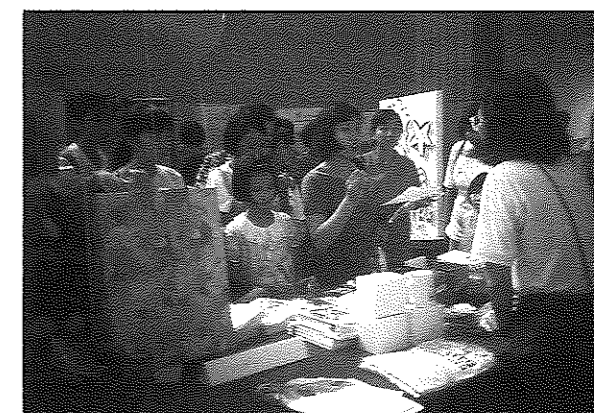
*Dr. Mabel Yap is currently Deputy Director of the Food and Nutrition Department of the Ministry of Health, Singapore.*

*Toh Hui Kheng is a Nutritionist at the Food and Nutrition Department of the Ministry of Health, Singapore and an active member of the Editorial Committee of the SNDA.*

The following events were organised towards achieving these aims. These were conducted successfully and well-received by the public.



*Fruit and Vegetables Carnival - Launch at Ngee Ann City Civic Plaza.*



*Oral quiz at Fruit and Vegetables mini carnivals.*

### The fruit and vegetables carnival

This marked the start of the campaign and was launched at Ngee Ann City Civic Plaza by Mr. Loh Meng See, MP for Kampong Glam and Chairman of GPC for Health on 17 September 1994. The two-day carnival was organised to bring across the Fruit and Vegetables messages to Singaporeans in fun and colourful ways. A total of 20 booths were occupied by suppliers of fresh, dried and frozen fruit, and vegetables, juices, food storage containers and cookware. Special offers, free sampling, cooking demonstrations and lucky draws, a 'Guess the Vitamin C content' contest, nutrition counselling, oral quizzes, computer games, video screening and an exhibition of a hydroponic greenhouse, took place at the booths. Special events included two 'live' shows by Radio Heart and guest appearances by Ms. Violet Oon, our local

cooking celebrity, and Mr. Jimmy Choo, a kitchen artist from the Westin Hotel. Adding to the carnival atmosphere were colourful larger-than-life fruit and vegetables mascots greeting visitors and handing out balloons to eager children. More than 15,000 people, mostly families, participated in the Fruit and Vegetable Carnival.

#### Public forums

Two public forums on "Fruit and Vegetables - An Everyday Affair" held on 24 September 1994 at the Regency Ballroom, in the Hyatt Regency were attended by 1,200 people. Both sessions received a very good response from the audience, ending with very lively question and answer sessions.



Gift wrapping competition at the Fruit and Vegetables public forum.

#### Scientific symposium

A scientific symposium entitled "Eat more fruit and vegetables: a scientific rationale" was jointly organised with the Singapore Nutrition and Dietetics Association on 30 September 1994 at the College of Medicine Building. The symposium was attended by doctors, nutritionists, dietitians, nurses and other health professionals.

#### Promotions at eating outlets

Promotions at the eating outlets were conducted actively by the various organisations. A total of 44 restaurants, 270 hawker stalls, two workplace canteens and eight hospitals participated in various ways to promote fruit and vegetables. Eighty-nine supermarkets from five supermarket chains also promoted fruit and vegetables through newspaper advertisements and various in-house promotions.

#### Neighbourhood centres

Two mini carnivals were organised, in Toa Payoh and Bukit Merah housing estates, reaching out to about 16,000 people.

A total of 82 banners bearing the message "Healthy Family Meals with More Fruit and Vegetables" in four languages was displayed in wet markets across the island.



Banners at wet markets.

#### Materials produced

A range of materials was produced to support these activities. These included a fruit and vegetables recipe book, a pamphlet "Enjoy fruit and vegetables everyday", a video tape "Scoring with fruit and vegetables", four computer programs and souvenirs, such as T-shirts, mugs, magnets, stickers, placemats and tea towels.

#### Mass media

Four key messages were advertised in all the major newspapers. They are "Variety Today", "An Everyday Affair", "Are you Getting the 2 + 2" and "Seal in the Goodness".

The mass media gave a very good coverage of all the programmes conducted. Besides the major newspapers, activities were also featured on A.M. Singapore, the SBC news (English and Mandarin), Radio Heart (English), City Sounds (Mandarin) and Radio 4 (Tamil).

#### Conclusion

Overall, the series of events throughout the Fruit and Vegetables Week received tremendous support in terms of sales and the consumers. This week generated a lot of interest in the importance of an adequate intake of fruit and vegetables. It also indicated the beginning of a good working relationship with food suppliers to promote healthier food choices.

## Jakarta Highlights

Selena E. Chan

The First Asian Conference on Dietetics was held in Jakarta, Indonesia, 2 - 5th October, 1994. The total attendance was 600 with representatives mainly from the Asian region, a few came from the Netherlands, Egypt and Canada. Singapore was represented with 13 nutritionist and dietitians.

The first highlight of the conference, only for the early birds, was the official welcome from the vice president of Indonesia where we had the opportunity to shake hands with him and then followed by a breakfast.

The conference programme was spread over 3 full days to accommodate plenary lectures, symposiums and free communications covering clinical dietetics, food service and public health. Presentations delivered gave a diverse coverage of the progress of nutrition and dietetics around the world.

I felt the most outstanding speaker was Anita Owen who presented a plenary lecture on the first day. Her topic was "Beyond Nutrition: Challenges and opportunities for professionals in dietetics". She discussed two provocative facets of women issues:

1. women's professional roles as managers and leaders.
2. personal issues in women's health.

The conclusion was that dietitians must assume greater leadership roles to meet the challenges described in the World Declaration and Plan of Action for Nutrition. Furthermore, organisations should not assume that male and female managers differ greatly in personal and professional qualities. Success in the 21st century calls for organisations to make the best use of the talent available to them.

Credit also has to go to the Singapore speakers for their excellent presentations. They reflected Singapore's high standards in progress and development in nutrition around this region.

Besides oral presentations, others represented their work at the poster display. A wide range of the latest

nutritional products were also displayed at the conference centre's foyer.

During the conference we were hosted to a variety of dinners at different locations in Jakarta. Besides a wide selection of local Indonesian cuisine and Western delights, we were also entertained by cultural performances representing all the different areas of Indonesia. This was definitely only for those with good co-ordination and stamina! At the farewell dinner we had an opportunity to show off our talent during the karaoke cum cultural show. Singapore was well represented by the hidden talents of Lynn and Christa.

The annual meeting of the Asia Forum of Dietetic Professional (AFDP) was held during one evening. The Jakarta declaration was finalised and the association's name was changed to Asian Federation Dietetic Association (AFDA). The next conference is scheduled for 1998, to be hosted by the Korean Dietetic Association and named "The 2nd Asian Congress in Dietetics".

The closing ceremony saw the signing of the Jakarta declaration and the official handover to the Korean Dietetic Association. With all matters completed, the conference ended with a low impact aerobic session conducted by the Australian representatives. Definitely a sight not to have been missed.

Despite the hectic timetable during the conference, we were still able to have an enjoyable and relatively relaxed time. We were able to catch up with old friends and colleagues and make new friends. Following in the true Singaporean tradition we even managed to squeeze in some sightseeing between all our shopping sprees. At the end of the conference we had not only gained a wealth of knowledge but also excess luggage and body weight!

The conference was a very valuable experience and sincere thank you must go to our sponsors, our departments/companies and colleagues that were left behind to do our work.



Ms. Anita Owen, keynote speaker at the First Asian Conference on Dietetics.



Some members of the SNDA with Ms. Anita Owen in Jakarta.

## Scientific Seminar

# "Eat More Fruit and Vegetables - The scientific rationale"

Lynn Alexander  
Clinical Dietitian, Gleneagles Hospital, Singapore

The tenth anniversary of SNDA was marked on 30th September 1994 by a special scientific seminar held jointly with the Food and Nutrition Department, Ministry of Health (MOH), in line with the Fruit and Vegetable Week, 17th - 24th October 1994, the theme was "Eat More Fruit and Vegetables - The scientific rationale."

The seminar was held at the Auditorium, College of Medicine Building, and kindly sponsored by Mead Johnson Nutritionals. It was attended by around 200 health professional, including members of the Association, staff of MOH, nurses and doctors.

Chairing the seminar was Mr. Garry Wainscott from Mead Johnson Nutritionals, Perth, Australia. Mr. Wainscott, formerly based in Singapore, was instrumental in helping SNDA get off the ground. His presence at our tenth anniversary celebration was indeed memorable!

In his opening speech, Mr. Wainscott remarked, "Looking back over the past 10 years it is truly remarkable what this band of stalwarts and their ready helpers have achieved. Today therapeutic dietitians are recognised in their own right in Singapore, nutritional support groups have been established within key hospitals, with dietitians playing a key role in them; the Singapore Nutrition and Dietetics Association is very active within

*Lynn Alexander is currently working as Clinical Dietitian at Gleneagles Hospital. She is President of the SNDA and a member of the Editorial Committee.*

## Family Learning Carnival 25th September 1994

This event was organised by the Association of Child Care Educators, World Organisation for Early Childhood Education and Pre-School Teachers Association, in conjunction with the International Year of the Family. SNDA manned a nutrition booth and gave advice on

National Health Campaigns, and The Singapore Journal of Nutrition and Dietetics is a very much respected and sought after publication. Already private foods and nutrition consultancy practices have been set up in Singapore. Well done!!! Congratulations!!! What a superb accomplishment!!!"

Also speaking at the seminar was Mrs. Chan Yoke Yin from Food and Nutrition Department, MOH. She shared with us the findings of the Department's survey on local fruit and vegetables purchasing and consumption patterns.

We were delighted also to have with us one of our members all the way from USA, Dr. Wang May Choo. Dr. Wang spoke about the fruit and vegetables consumption patterns in US, and the efforts to educate the public towards eating "Five a Day" (five servings a day of fruit and vegetables).

The highlight of the seminar was most certainly the keynote address, by Ms. Anita Owen. A former American Dietetic Association president, Ms. Owen, was on her way to Jakarta to be a keynote speaker at the 1st Asian Conference on Dietetics. Thanks to Mead Johnson Nutritionals, we were able to invite her to stop over in Singapore. She graciously accepted our invitation and addressed us on the theme of our seminar, "Eat More Fruit and Vegetables - The scientific rationale."

Members of the audience were extremely impressed with Ms. Owen's depth of knowledge and eloquent style of presentation. It was indeed a most memorable meeting, and a very apt way for us to close our first ten years and begin the new chapter of our second decade!

healthy eating to families attending the carnival. Fun education activities and quizzes were used, with healthy snacks as prizes.

A big thank you to all SNDA members who kindly offered their help and made the day such a success.

## SPOTLIGHT

### Career Profile

Mrs Tan-Fong Mei Lin

Member since 1984

**Current Position :** Manager  
Chief Dietitian  
Dietetics Department  
National University Hospital



Fong Mei Lin graduated from Iowa State University of Science and Technology (USA) in the late 1970s, following a one year dietetic internship in Chicago. She worked at the Illinois and Iowa Health Departments for three years as Clinical Dietitian and progressed to also work as Dietetic Administrator there.

Upon returning home to Singapore in 1981, Mei Lin worked single-handedly as Clinical Dietitian at Mount Elizabeth Hospital, involved mainly in clinical work and also as advisor to the catering department. At this time she got involved with the SNDA and served on the Main Committee for one year.

A milestone in her career came when she joined National University Hospital (NUH) as Chief Dietitian in 1985. She was involved in setting up the Dietetics Department and has seen it grow enormously to support the growth of NUH and its increasing demands. The number of full time dietitians employed by NUH has increased from one at the outset in 1985 to a team of six today, with substantial clerical support.

Initially, a lot of groundwork was required including drawing up and implementing policies and procedures for the dietetic services, in addition to formulating therapeutic and non-therapeutic diet guidelines. Training was also provided to catering and nursing staff.

As her role increasingly involved more administrative work, Mei Lin took on the post of Manager of the

department in 1987. The scope of the departments work also widened when it took over catering administration in 1990.

Enjoying a high profile in the nutrition and dietetic professional circles, Mei Lin has been invited to participate regularly in local and international radio and television programs. She is also very involved in giving talks to the community in Mandarin, Cantonese and other dialects as well as English.

Mei Lin has visited hospitals in New Zealand, United Kingdom, United States of America and Australia to observe the running of their dietetic and catering departments and to look at specific areas such as nutrition support. In turn, dietitians from Hong Kong, Philippines and Malaysia have visited NUH and sought Mei Lin's advice on developing services.

Mei Lin feels that one of the most satisfying aspects of her job is to see the dietetic department at NUH grow and develop to provide both general dietetic services as well as, specialized support in areas such as nutrition, renal, paediatric, and endocrine medicine.

Mei Lin has been involved in setting up the nutrition classes for the ante-natal and cardiac rehabilitation programmes and also in providing in-house talks on dietary taboos associated with traditional Chinese medicine.

She is also an external examiner and visiting lecturer for the University Kebangsaan Malaysia.

Mei Lin feels that seeing the increased importance placed upon the nutritional care of patients and observing the increased recognition that dietitians are deservedly receiving for their work, feels has been most fulfilling professionally.

*Bridget Fenby graduated from King's College, University of London. She is a full member of the SNDA and an active member of the Main and Editorial Committees. She is currently working as Clinical Dietitian at NUH and her special area of interest is renal nutrition.*

*Interviewed by Bridget Fenby*

### SNDA members who helped at the Fruit and Vegetables Carnival and Family Learning Carnival

#### Fruit and Vegetables Carnival

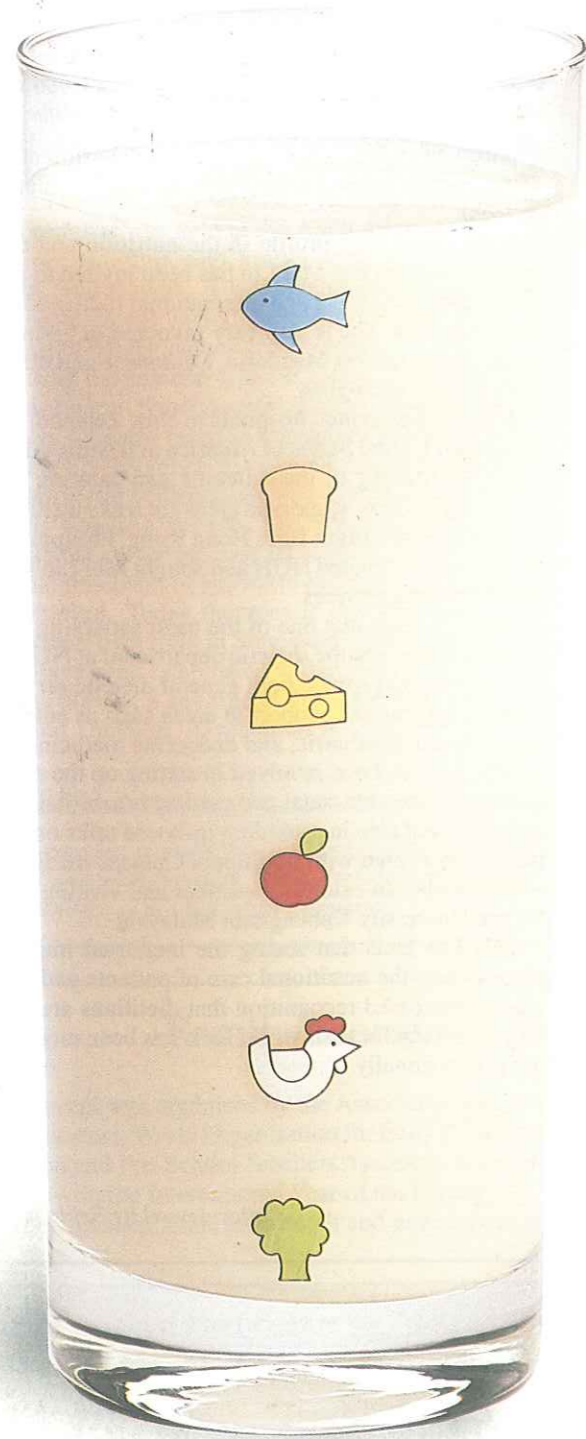
Lynn Alexander	Leow Sooi Mee
Selena Chan	Usha
Ang Kai Ling	Ho Fong
Ravina Srinivasan	Myriam Young
Louisa Zhang	Beatrice Png
Georgina Stable	Sue Pritchard
Bridget Fenby	Christa Koënic

#### Family Learning Carnival

Christa Koënic	Sue Pritchard
Selena Chan	Bridget Fenby
Louisa Zhang	Eunice Chan
Lynn Alexander	Sue Hixson
Michelle Funk	

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an active teenager, a busy adult,

a pregnant woman, a physically-fit athlete, or a

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the US Recommended

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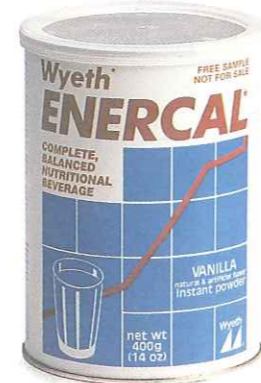
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VITAMINS AND MINERALS	PER LITRE	PERCENTAGE OF U.S. RDA* PER LITRE
Protein ++	50g	110
Vitamin A	5,000 IU	100
Vitamin C (Ascorbic Acid)	200 mg	330
Thiamine (Vitamin B1)	1.5 mg	100
Riboflavin (Vitamin B2)	1.8 mg	100
Niacin	20 mg	100
Calcium	1,000 mg	100
Iron	18 mg	100
Vitamin D	400 IU	100
Vitamin E	30 IU	100
Vitamin B6	2.2 mg	100
Folic Acid (Folacin)	400 mcg	100
Vitamin B12	6 mcg	100
Phosphorus	1,000 mg	100
Iodine	150 mcg	100
Magnesium	400 mg	100
Zinc	15 mg	100
Copper	2.0 mg	100
Biotin	300 mcg	100
Pantothenic Acid	10 mg	100
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# Nutritional Behaviour And Weight Management In Adolescents

(with particular reference to Singapore)

Lynn Alexander

Department of Dietetics, Gleneagles Hospital, Singapore

Adolescence is a nutritionally vulnerable period because of its rapid physical and psychological changes. Normal growth and optimal health during this period, as well as prevention of future disease, depend on appropriate nutrition.

In adolescence nutritional behaviour is often less than ideal. Greater freedom and more time away from home means that more meals and snacks, including fast foods, are eaten outside the home. Choices made are not necessarily healthy. Other common eating behaviours among adolescents include dieting, skipping meals, snacking and trying unconventional diets. These behaviours are related to busy schedules, peer influence and decline of parental influence, group conformity, search for self-identity and body image dissatisfaction.

## Consequences of poor nutritional habits in adolescence

Besides nutrient and energy demands for rapid growth and physical activity during adolescence, there are increased iron requirements for girls. Hence, one outcome of poor adolescent nutrition in the short term is likely to be anaemia. No data is reported for incidence of anaemia in Singaporean adolescents, but Nelson et al (1993) found that among British 12 - 14 years old, incidence of anaemia was 3.5% and 10.5% in boys and girls respectively, with average daily iron intakes of 12.3 mg for boys and 9.6 mg for girls. In one group, with low iron and low vitamin C intakes, the prevalence of anaemia was 14.5%.

Calcium requirements are also increased during the growth spurts in adolescence. The risk of osteoporosis later in life, particularly in post-menopausal women, is greater if the diet during adolescence is lacking in calcium, as the peak bone mass may not have been achieved. Traditionally, the Singapore diet, is low in dairy products and calcium, and recent reports suggest that incidence of osteoporosis is indeed rising in Singapore.

Poor eating habits in adolescence may also result in obesity due to excess energy intake in relation to energy expenditure. The incidence of childhood obesity is rising dramatically in Singapore. The Anthropometric Study '93 on 30,000 Singapore students aged 6 - 16 years showed them to be bigger and taller than their counterparts in 1983. The overall prevalence of obesity for

schoolboys increased from 1.6% in 1975 to 3.8% in 1983 and 15.2% in 1993 in boys. In girls, the incidence rose similarly from 1.1% in 1975 to 2.4% in 1983 and 12.9% in 1993. (Rajan, 1994).

## Factors affecting childhood obesity

Several factors may be responsible for the increase in childhood obesity - among them increased affluence and increased food availability. Recent changes in dietary patterns in Singapore are evident from National Food Availability data prepared by Food and Agricultural Organisation (Lee and Gourley, 1986). In the period from 1961 - 1980 there were increases in the supply of all the major food groups with the exception of pulses. The most marked changes were in the supply of meat and offal which increased by almost two and a half times. Other substantial increases were seen for eggs, animal fats, oils and fruits. The per capita calorie supply increased by 25%, protein by 34% and fat by 67%. These changes in food availability are consistent with the growing affluence in the country.

While fast food has become very popular in Singapore, the diet of young people is still fairly traditional. Wang et al, (1993) found that among Singaporean Chinese adolescents traditional low-fat Chinese foods were consumed more frequently compared to the consumption by their American-Chinese counterparts. The Singaporeans consumed more fish and less processed meats, dairy products and snack foods. Interestingly, there was no difference between the two groups in consumption of french fries and carbonated soft drinks.

Another probable factor contributing to the childhood obesity problem is lack of physical activity. The young in Singapore increasingly spend more time in sedentary activities like studying or watching television or playing computer games. This may be compounded by high-rise living which reduces the tendency for frequent outdoor activities.

A UK national survey found that increased body fatness in childhood was associated with less physical activity (Davies et al, 1994). In obese 7 - 11 year olds, 10 weeks of controlled physical training decreased body fat content (Gutin et al, 1994). Must et al (1994) made the interesting observation that parental inactivity behaviour influence a child's inactivity level, suggesting that attempts to increase physical activity in children may be more effective if parental behaviours are targeted as well.

The genetic factor in obesity must also be taken into consideration. In a case control study on childhood obesity in Singapore, Yap and Tan (1993) reported that the obese children tended to consume more deep-fried snacks, sweetened drinks and candies compared to their

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non-obese counterparts, but the mean energy intake in the two groups or time spent on sedentary activities was not significantly different. On the other hand, a strong family history was observed with 23% cases and 12% control having at least one obese parent. Cases having at least one obese sibling numbered 26%, while only 15.6% controls had an obese sibling.

Wang (1991) has postulated that having increasingly numbers of women in the workforce, may also have an effect - as the mothers are no longer able to spend as much time with the child seeing to the proper development of good eating habits. Advances in food technology with so many convenience foods being imported into Singapore may also have contributed to changes in diet.

### Impact of adolescent obesity on future health

Since around one-third of obese adolescents will become obese adults, there is concern about the impact this will have on incidence of obesity-related disorders including hyperlipidemia, hypertension and cardiovascular disease and diabetes. Cardiovascular disease is now the number two killer in Singapore, and the incidence of diabetes in Singapore is increasing dramatically. In 1992, diabetes was present in 8.6% of the adult population compared with 4.7% in 1984 and 2% in 1975 (Ministry of Health, 1993).

Furthermore, the natural history of childhood obesity that persists into adulthood suggests the obese child who becomes an obese adult will have more severe adult obesity than adults whose obesity began in adulthood. Fifty year follow-up studies of a cohort with adolescent obesity have demonstrated that the mortality and morbidity of cardiovascular disease was significantly increased compared with a cohort that was lean throughout adolescence (Dietz, 1993).

### Tackling the problem of childhood obesity

Obesity is one of the most devastating risk factors for cardiovascular disease found in the Framingham Heart Study (Castelli, 1994). There is broad agreement that the most effective way of curbing the global epidemic of cardiovascular disease is to prevent the early onset of obesity and other risk factors in children and youth. Youth should therefore be targeted with preventive measures to achieve the goals of good dietary habits, regular physical activity and maintenance of appropriate weight (The Victoria Declaration on Heart Health, 1992).

The childhood obesity problem in Singapore is being tackled in various ways. Public education and active programmes in schools and among young national servicemen are being conducted to help the overweight alter their eating habits and take up more exercise. There are also changes in school tuckshops and canteens - less fried food and confectionary being offered and more emphasis on noodle soups, rice porridge, and other low fat alternatives like fresh fruits, plain biscuits and seaweed snacks instead of keropok, potato chips and chocolates.

### Eating disorders in the young

While many programmes are focused on combating overeating problems in the young, a minority of adoles-

cents are suffering from anorexia nervosa and other eating disorders. The incidence of these appears to be rising in Singapore, and there is concern over the possible reasons.

Many young girls identify with images of extremely thin waif-like television stars and fashion models which appear regularly in the teen magazines. Wang (1994, personal communication) reported a high incidence of dissatisfaction with body size and shape in adolescent Singaporeans, particularly among females. This dissatisfaction increases with increasing body mass index (BMI). Even in the lower tertile of BMI (BMI less than 19, which is considered underweight by Western standards), 20% of girls think about dieting and 11% think about being thinner. The desire for thinness was significantly higher in those who spoke English at home, but only marginally associated with higher socioeconomic status.

On the other hand, many underweight adolescents, particularly boys and athletes, seek ways to gain weight and are susceptible to claims by manufacturers of "body building" foods and supplements.

### Conclusion

Adolescent nutrition is seen as an increasingly important area since it is recognised that several chronic diseases may have their beginnings at this period.

Vigilance on the part of parents and health personnel to identify problems, and nutrition counselling to advise on correct eating habits and dispel nutritional myths is therefore important for this group.

### References

1. Castelli W. P. Weight cycling has serious medical consequences (Socratic debate: the case against). *Int J Obesity* 18 (Suppl 2) : 155, 1994.
2. Davies P.S.W., Gregory J., Mills A., and Clarke P. Physical activity and body fatness in pre-school children. *Int J Obesity* 18 (Suppl 2) : 6, 1994.
3. Dietz W.H. Therapeutic strategies in childhood obesity. *Horm Res* 39 (suppl 3) : 86-90, 1993.
4. Gutin B., Cucuzzo N., Islam S. and Smith C. Effects of physical training on body composition of obese 7-11 year old girls. *Int J Obesity* 18 (Suppl 2) : 6, 1994.
5. Lee H.P. and Gourley L. Food availability in Singapore from 1961 to 1983 : Implications for health research. *Food Nutr Bull* 8 (2) : 50 - 54, 1986.
6. Must A., Ching P.L.Y.H., Dietz W.H. Like parent, like daughter? Patterns of activity within families. *Int J Obesity* 18 (Suppl 2) : 117, 1994.
7. Nelson M., White J., Rhodes C. Haemoglobin, ferritin and iron intakes in British children aged 12 - 14 years: A preliminary investigation. *Br J Nutr* 70(1) 147 - 55, 1993.
8. Rajan U. Obesity among Singapore students. *Int J Obesity* 18 (Suppl) : 27, 1994.
9. The Victoria Declaration on Heart Health. Advisory Board of the International Heart Health Conference, Victoria, Canada 1992.

10. Wang M.C., Block G., Ho T.F., Anderson J. and Sabry Z.I. Dietary patterns in Chinese American and Singaporean youths. *Proc XV Intl Congress Nutr*, 1993.
11. Wang M.C., Personal communication, 1994.
12. Wang M.C. Lifestyle, socioeconomic changes and

nutrition-related problems in Singapore. *Sing J Nutr Diet* 1(1) : 18 -21, 1991.

13. Yap M.A. and Tan W.L. Factors associated with obesity in primary school children in Singapore. *Sing J Nutr Diet* 3 (2) : 6, 1993.

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# Clinical Paediatric Dietetics

Reviewed by Georgina Stable, Dietitian, Bsc (Hons), Leeds Polytechnic, SRD., UK.

Editors : Vanessa Shaw and Margaret Lawson for the Paediatric group of the British Dietetic Association.

ISBN No : 0-632-03683-4

Publisher : Blackwell

Price : £39.50

Up until now the main reference for clinical paediatric dietetics has been "Diets for Sick Children" by Dorothy Francis, the most recent edition being published in 1987 - 7 years ago! Therefore, this new text provides a much needed source of up to date information on the nutritional management of an extensive range of paediatric disorders.

It begins with chapters on "Principles of paediatric dietetics" and "Provision of nutrition in a hospital setting". The following sections cover : Nutritional support for infants and children; Nutrition for pre-term and

low birthweight babies; Nutritional management of diseases of different organ systems; Inborn errors of metabolism; Lipid disorders; Eating disorders and other conditions. It does not deal with nutrition for healthy infants and children as this is dealt with in "The Manual of Dietetic Practice" edited by Briony Thomas.

From a user's point of view, it is very readable and provides clear and specific nutritional guidelines.

However, one drawback for users in Singapore is the fact that being written from the UK perspective, all food lists/exchange lists, infant formulas, specialised feed formulas and vitamin supplements are also based on what are available in the UK. Extra work is therefore needed to find alternatives which are available in this region.

This aside I would strongly recommend this book to any dietitian dealing with paediatric cases in the hospital setting. At the time of writing, I have had this book for only a short time and have referred to it numerous times already!

*Georgina Stable is a Clinical Dietitian currently working at National University Hospital. She has a special interest in paediatric dietetics. She is chairman of the Continuing Education Committee and an active member of the Editorial Committee of the SNDA.*

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# Cooking Up a Storm - With Pulses & Grains

Reviewed by Ho Fong

It is widely believed by many Singaporeans that healthy foods are not tasty. Well, we have a surprise for such people. SNDA has recently published "PULSES & GRAINS COOKBOOK" which contains 69 healthy, delightful and absolutely mouthwatering recipes. This cookbook includes a selection of Asian and Western dishes that range from snacks and dips, soups and salads, main and side dishes, breads, spreads and chutneys to baked goods and desserts. Preparation and cooking tips for pulses and grains and nutritional analysis of the main nutrients are also included.

This cookbook is a result of the efforts and dedication of the Main Committee of 1993/94 and 1994/95 and also members who have contributed and helped to test the

recipes. The idea for this cookbook was mooted by last year's Committee to commemorate the 10th anniversary of SNDA's founding (1984 - 1994). The Committee also hoped that this Cookbook will be kept by members as a memento and used as an educational tool for patients and the public. It is also timely that dietitians and nutritionists show that they can put into practice what they have learnt, that is to provide practical, easy-to-follow dietary guidelines in the form of these delicious and nutritious recipes.

So, if you still do not have a copy, do get one soon before they are sold out! This cookbook will make superb Christmas and birthday presents for your friends, family members and patients. You may also like to try some of these recipes yourself, perhaps for that special dinner that you have planned, how about some sushi for entre, followed by the feta cheese and kidney bean salad and crunchy oat baked chicken with nasi parpu for the main dishes and a fruit flan to finish off ... simply scrumptious, wouldn't you say?

*Ho Fong is a member of the Main Committee of the SNDA and is working as Nutritionist at the International Nutrition Company.*



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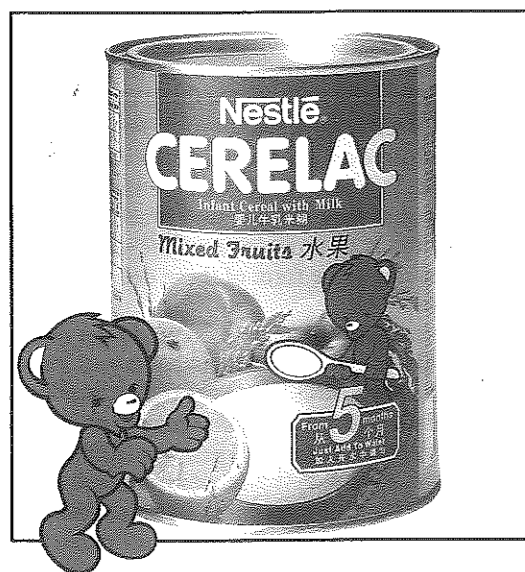
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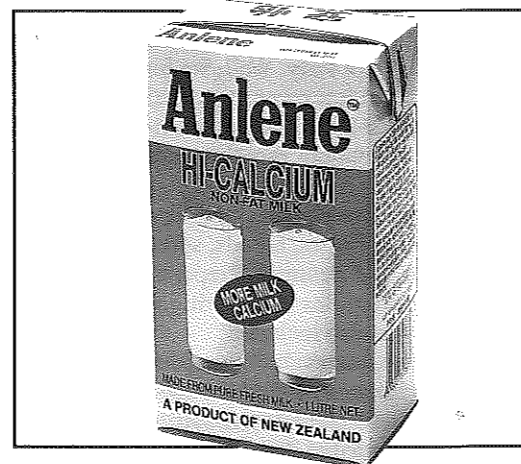
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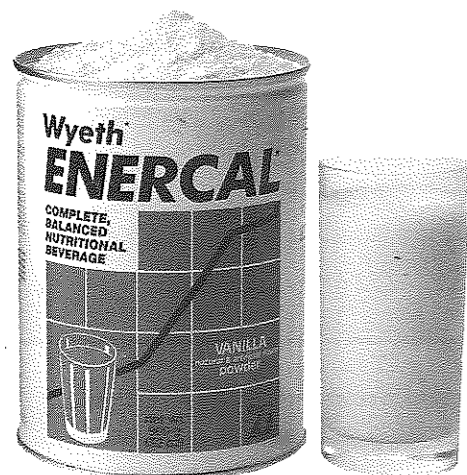
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**NUTRITION EDUCATION IN PRIMARY CARE: PRIORITIES, PRESENT PRACTICE AND NEEDS FOR FURTHER TRAINING. 1992. J. Thomas, H.K. Toh.**

A survey, using a self-administered questionnaire was conducted to assess the importance attached by general practitioners (GPs) to promoting nutrition advice in the prevention and treatment of disease, and to explore their current activities and needs for further training. Attempts were made to explore if there were differences in the attitudes and practice of GPs in nutrition education between fundholders and non-fundholders, as well as if geographical differences existed among GPs from the northern, central and southern regions in England.

Overall, 338 (32%) valid responses were received from the GPs of which 55% were fundholders and 45% were non-fundholders 32% of the GPs were from the northern region while 36% of GPs and 33% of GPs were from central and southern regions of England respectively.

The results indicate that a majority of GPs see their role as part of the primary health-care team in promoting nutrition education. GPs' attitudes towards nutrition education were favourable. However, their attempts to promote nutrition education seemed inadequate and unsystematic. Practice staff, such as other GP colleagues, practice nurses and health visitors were also involved in nutrition education. Only 2% of the practices had a full-time dietitian working, while 35% had part-time dietitians. 50% of the GPs indicated the use of dietary protocols in their practices. However, attempts to record and monitor nutrition advice given to patients were unsatisfactory.

Time constraints, patients' lack of interest and patients non-compliance were cited as obstacles which GPs faced. Patients non-compliance could be due to the insufficient assessment and follow-up of the nutritional advice. There are alternatives available to GPs in promoting nutrition education. It is the GPs' responsibility to ensure that these are carried out to the maximum benefit of their patients. The GPs should be the initiating force behind nutrition education in general practice.

It was also unexpected to find that there were not many differences between fundholders and non-fundholders. Across regions, non-fundholding GPs from the northern region in small practices were more likely to spend time advising their patients on nutrition, compared to the central and the southern regions. The northern region also had more dietitians in the general practices compared to the southern region.

It is encouraging to find that GPs realised the need to attend nutrition courses to improve their effectiveness in promoting nutrition education in their practices. With the Government's support for health promotion and the given incentives for GPs to upgrade themselves to provide better care for their patients, postgraduate courses on nutrition for GPs should be made available. Courses for other practice staff should also be provided on nutrition education.

**FATTY ACID COMPOSITION OF ERYTHROCYTES AND PLASMA TRIGLYCERIDES AND CARDIOVASCULAR RISK IN ASIAN DIABETIC PATIENTS.** *D.B. Peterson, K. Fisher, R.D. Carter, and J. Mann, The Lancet, Vol. 343, May 21, 1994, 1528-1530.*

A high dietary intake of linoleic acid may not protect against coronary heart disease (CHD) unless balanced by significant intakes of oleic and n-3 fatty acids, at least in Indian Asians with diabetes. A comparison was made of the fatty acid composition of erythrocyte membrane phospholipid and plasma triglyceride in 36 Gujarati Asians and 24 Europeans with non-insulin dependent diabetes mellitus (NIDDM). Erythrocytes from Asian subjects contained higher proportions of oleic and n-3 fatty acids. Triglycerides contained higher linoleic and lower oleic acid levels. By itself, the recommendation to substitute polyunsaturated for saturated fat may be inadequate to reduce thrombogenesis. A reduction in the intake of peanut oil, when replaced by olive oil or another oil high in monounsaturates, and an encouragement to eat fish could help reduce the incidence of CHD in Asians with NIDDM.

**ADVERSE EFFECTS OF IRON SUPPLEMENTATION ON WEIGHT GAIN OF IRON REplete YOUNG CHILDREN.** *Indjradinata, W.E. Watkins and E. Pollitt. The Lancet, Vol. 343, May 21, 1994, 1252-1254.*

Iron supplements were found to reduce weight gain in a study of 47 iron sufficient children (aged 12 to 18 months) in Indonesia. The children were randomly assigned to receive either ferrous sulphate (3 m/kg daily) or a placebo every day for 4 months. Before treatment the length, weight and arm circumference, of the two groups were similar. During the 4 months of supplementation, the rate of weight gain was significantly greater in the placebo group than in the iron-supplemented group. There were no differences between the groups in rates of gain in length and arm circumference or in the frequency of respiratory and gastrointestinal infections.

**PHYTOCHEMICALS: NATURAL ANTI-CANCER AGENTS.** *Nutrition and the M.D., October 1994, Page 5.*

Although the increased risk for breast cancer has been traced to diets high in fat, such diets are also low in fibre, micronutrients and phytochemicals. Phytochemicals are plant compounds with biological activity.

One group of these compounds, the phytoestrogens, bind to estrogen receptors and act as weak antiestrogens, reducing the levels of free estradiol. Since many human breast cancers are estrogen dependent, reduced cancer cell growth could result. Phytoestrogens can be divided into two groups: isoflavones and lignans. Isoflavones are found primarily in soybeans, soy products and legumes. Good sources of lignans are flaxseed, wholegrain products, vegetables and fruits.

Results from epidemiological and laboratory studies, suggest that carotenoids, the best known phytochemical, could exert a protective effect against breast cancer.

Indole-3-carbinol, another phytochemical, found in cruciferous vegetables, increases the activity of an enzyme that converts estradiol to antiestrogenic metabolites. Flavonoids, are also considered anti-carcinogenic, because they function as anti-oxidants, metal-chelators, and inducers of enzymes that affect chemical carcinogenicity. Flavonoids are found in citrus fruits, onions, apples, kale and beans.