



# IDA Bangalore Chapter's Nutr-E-Buzz



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It gives us immense pleasure to publish the First Issue of the Second Volume of Nutr- E- Buzz.

It is the endeavour of IDA - Bangalore Chapter to organise as many different activities as possible for the benefit of its members.

We, the editorial team request and encourage more and more participation from all our members to contribute to our own news letter Nutr-e buzz and make it a success.



## 50th Annual National Conference IDACON 2017

## Mark Your Calendar.....

IDA, Kolkata Chapter is hosting the 50th Annual National Conference of Indian Dietetic Association at Kolkata

A Landmark Event : 18th –20th December 2017

The Theme - "Let's Nourish to Flourish- Nutrition For Health & Economic Development "

Venue: Science City, Kolkata

Watch out for Interesting Informative Scientific Programs, Award Sessions, Pre Conference Workshop and many more..



Date	Day
1-8 August	World Breast Feeding Week
1-7 September	National Nutrition Week
28 September	World Heart Day
10 October	World Mental Health Day



**More Information on IDA at**

[www.idaindia.com](http://www.idaindia.com)  
[www.idacon2017.com](http://www.idacon2017.com)

**Facebook - Indian Dietetic Association,  
Bangalore**



## NUTRITIONAL MANAGEMENT OF PHENYL KETONURIA

*Dr. Malathi.V, R.D, Consultant & HOD,  
Department of Nutrition & Dietetics,  
Rainbow Children's Hospital, Marathahalli, Bengaluru*



A 1 year old female child with complaints of developmental delay had consulted our pediatric neurologist and was further referred to dietitian. The child was vegetarian, taking orally and had no food allergies. The child was diagnosed with Phenylketonuria .

Phenylketonuria is an inborn error of metabolism in which there is an absence or inactivity of Phenylalanine hydroxylase. Phenylalanine is normally broken down by the body into an amino acid called Tyrosine. If this chemical pathway does not occur, phenylalanine builds up in the bloodstream and brain tissue, causing central nervous system disorders.

For the initial nutrition assessment, Paediatric Nutrition Assessment and Reassessment forms were used and appropriate counselling was done.

At 1 year, the child showed

- Height – 43.5cms , Weight - 10.3 kg , Head circumference – 42 cms (>3<sup>rd</sup> Percentile)

Objective data was recorded using the reassessment form during the follow up visit @ 1.6yrs, 2yrs, 2.3yrs and 3yrs respectively.

At 2 years, the child was

- Height : 95 cm , Weight : 12 kg

### DIET ADVISED

**Foods to Avoid :** Egg, meat, poultry, fish & its preparations, milk and dairy products, wheat and wheat products, nuts and seeds, soya and its products, red gram dal and artificial sweeteners.

**Foods Restricted:** Green gram, bengal gram, cow peas, ash gourd, cucumber, ladies finger, amaranth, papaya, guava, figs, grapes, apricots, peaches and apple.

Focus was also to include Glycomacropeptide (GMP) a natural protein found abundant in sweet whey and ideally suited for PKU diet since it is naturally low in phenylalanine .

### CONCLUSION

Apart from normal growth and development, positive signs were observed with regard to food intake, activity and clinical symptoms. This can be attributed to early diagnosis, frequent monitoring of amino acid profile in the blood and diet with low phenylalanine, amino acid formulae which is nutritionally adequate. New therapies which may help to liberalize the strict diet for patients with PKU are BH4 (Tetrahydrobiopterin ) drug therapy and LNAA (Large Neutral Amino Acid ) supplementation.

### REFERENCES:

1. Bickel H, Garrard J, Hickmans EM. Influence of phenylalanine intake on phenylketonuria. Lancet. 1953; 265:812 - 813. [Pub Med]
2. Recommendations on the dietary management of phenylketonuria: Report of Medical Research Council Working Party on Phenylketonuria. Arch Dis Child. 1993;68:426 - 427. [PMC free article] [Pub Med]
3. Phenylketonuria (PKU): screening and management. NIH Consensus Statement. 2000;17:1 - 33



## NUTRITIONAL MANAGEMENT AFTER A STROKE

Dr Priyanka Rohatgi, M.Sc. A DND, PhD (Nutrition)

Chief Clinical Dietician ,  
Apollo Hospitals, Bengaluru



Mr. NRR, 55 yrs old Hindu male, a professor by occupation with known case of DM came to the hospital with history of sudden onset of the following:

- Weakness on the left side
- Had difficulty in walking and using left upper limb
- Appeared to have slurred speech
- 2 episodes of vomiting

After detailed investigations, he was finally diagnosed as CVA, DM accelerated HTN. There was nothing significant in the family history

There are two main types of stroke: **Ischemic**, due to lack of blood flow and **Hemorrhagic**, due to excessive bleeding. Both ultimately result in a part of the brain not functioning properly. CVA among the patients can be confirmed by neurological examination (National Institute Health Stroke Scale NIHSS), CT scans (most often without contrast enhancements) or MRI scans, Doppler ultrasound and arteriography

An evaluation of the patient using SGA showed an assessment of stage-A

Patient Height was 170cms, Weight—79 kgs, BMI -27.3kg/m<sup>2</sup> (obese), IBW – 70kg

### MEDICAL NUTRITION THERAPY PRESCRIBED

#### GOALS

- Weight reduction to control B.P
- Maintain fluid electrolyte balance
- Correct side effects like dysphagia, constipation- UTI etc
- Lowering serum lipid level

#### BIOCHEMICAL PARAMETERS

Parameters	Value	Reference value
GRBS	148*	70-140mg/dl
Total Cholesterol	224*	<200mg/dl
Triglyceride	258*	<150mg/dl
HDL cholesterol	37	35-55mg/dl
LDL cholesterol	183*	<130mg/dl
VLDL	52	

(\* is to bring attention to higher levels)

#### Mediterranean diet is a useful diet to follow, in this case

- Unsaturated fats replace most of the saturated fat.
- Fruits and vegetables are highlighted (Spence 2006).
- Use plant sterols and stanols as from margarines and related products.
- Increase Omega 3 fatty acids from fish.
- Try to use skim milk products. Milk fat is negatively correlated with certain CVD risk factors.
- Increase K<sup>+</sup> to reduce risk of additional strokes. Avoid use of K<sup>+</sup>, sparing diuretics.
- Fluid should be given in sufficient quantity if tolerated
- Estimate needs @ 30ml/kg. Increase to 35 ml/kg, if dehydration occurs.



## NUTRITIONAL MANAGEMENT AFTER A STROKE (Contd...)

*Dr Priyanka Rohatgi , M.Sc. A DND, PhD (Nutrition)*

*Chief Clinical Dietician ,  
Apollo Hospitals, Bengaluru*

The following medications were prescribed

Medication	Dosage	Action
Inj Clexane	BD	Anticoagulant
Tab Amlong 5mg	Stat	Antihypertensive
Pan 40mg	BD	PPI
IV Strocit 1gm	BD	Increases blood flow, oxygen to brain
Arovan 20ml	BD	Psychostimulant, Nootropics
Formin PGL2	BD	Antihyperglycemic
Duphalac 30ml	PO	Alpha blockers
Minipress 2.5 mg	BD	Antihypertensive

During the hospital stay, NNR was initiated on DASH diet and counseled to lose weight.

Nutrient Requirements	Obtained Values
Energy – 25 kcals/kg body weight	1975 kcals/kg body weight
Carbohydrate : 60% of requirement	300 gm/day
Protein: 1g/kg body weight	79 gm/kg. body weight
Fat: 10% of requirement	25gm/day

### Recommendations:

- Reduction of quantity of fat by 20-25 % (reduce animal fats)
- Restrict the amount of saturated and trans-fatty acids in the diet to 10% of total calories.
- Dietary cholesterol intake should be 300mg /day.
- Decrease the amount of salt added to foods in cooking and at the table.
- Replace saturated fat with mono-unsaturated sources
- Use more of oils such as olive, soybean or canola oils.
- Include nuts such as walnuts almonds, macadamias, pecans and pistachios.  
Walnuts contain alpha linoleic acids and almonds are a good source of vitamin E. Nuts also contain flavonoids, phenols sterols, saponins, elegendic acid, folic acid, magnesium, copper, potassium and fiber.

**Conclusion:** Mr NRR improved with time both with medications and diet modifications and was discharged in a stable condition.



## STUDENT DIARY

### The Hidden Culprits – Watch What You Eat

Ms Sarah Mehmood Kursiwala  
IIInd Year, PG – Food Science & Nutrition,  
Department of Nutrition & Dietetics,  
Mount Carmel College, Autonomous, Bengaluru



*It is said that the forbidden fruit is always sweet. Well, yes, and it's the same fruit that also causes diabetes. We believe what we are not aware of, will not kill us. But if we do not keep a tab on our salt intake, sooner or later, it will be the end of us. While a strong notion prevails that food without a thick coating of fat is not tasty, the habit has our waist lines broadening. Sugar, salt and oil – known to make food appetizing and delicious, are also infamous for being the path blockers towards a healthy life.*

*In a world of unhealthy foods and determined nutritionists, have you ever found yourself really torn? When a platter of delicious and rich food, high in calories is served in a restaurant, has it ever got you ridden with guilt? Most of us, I am sure have our guilt trips but, of course, we eat the whole meal, turning a blind eye to our conscience. We even justify to ourselves that the artery clogging, heart attack inducing meal, that causes a rush of blood sugar is just once in a while, so how bad can it get?*

*In the battle of our thoughts what ultimately wins are views such as 'What's the big deal anyway', 'If I don't eat now when else' and finally– 'We're all going to die eventually!' This gives us the green card to choose sugar over fiber, fried over steamed; processed over fresh and emboldens us to add the extra pinch of salt. Further, to add insult to injury, it weakens our resolve to head over for the morning run, we instead grab a few more minutes of sleep.*

*As justified as these actions sound, unknowingly, they are nothing but the result of us focusing on the halo and ignoring the devil wearing it. Salt, sugar, oil and the choice of being a couch potato are the majority of the reasons for prevailing lifestyle diseases. By now, most of us are aware of the culprits, however, only very few concentrate on regulating their intake. We hold the keys in our hands, and you would be surprised to know how big a difference little choices make. It all starts with a single step, but the outcome is multifold and so worth it.*

*As for beginners, all you truly need to do before you consume a meal is to take time to analyze it and check if there's something healthier that you can choose. What if I told you pizzas can be healthier dish than a normal pizza if the refined flour used in the base is traded for a combination of ragi & soy flour? And how about trading the everyday boring wheat flour chapattis for those made with multigrain atta or even bajra and jowar flours? You could probably make it more colorful and nourishing by adding vegetables like grated carrot or green leafy veggies to the dough.*



## STUDENT DIARY (Contd..)

### The Hidden Culprits – Watch What You Eat

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However, it is not only about paying attention to what you eat, but also to how much you eat. 'Portion size' today has gained a lot of momentum and is a hot topic, since any food when consumed in excess will have a debilitating effect. This is especially true of fats and carbohydrate food. When it comes to meals, the place where people make a huge mistake is that 'they eat how much they want', not 'how much they need'. Problems arise when the body receives too little of what is necessary, and too much of what is not.

The point is, if you think you tend to over eat, it's because you aren't making the right choice of food. A simple example is including sufficient fiber rich vegetables in your meals to make you feel full and give you satiety. In the process you will find that you are not reaching out for yet another serving of carbohydrate. It's all about paying attention to detail –about getting creative with food, including more color and varied texture in your diet.

As for the earlier debate within yourself, the next time you justify the choice of an unhealthy meal with, 'I'm going to die anyway' - remember, while it is still true, you can decide on how it will happen. Whether it's on a hospital bed with a deadly disease, or passing away with the satisfaction that you chose the quality of your life and that you have lived a happy and healthy one – **the choice is yours!**

### *Humour in Nutrition .....*





## QUIZ UP!

Waiting for your answers and contributions at  
[idaeditorialblr@gmail.com](mailto:idaeditorialblr@gmail.com)

**Q1. Which one of the following options represents historical features of the Subjective Global Assessment?**

- A. Weight loss and gastrointestinal symptoms
- B. Malignancy and nausea
- C. Family history of IBD and personal history of weight loss
- D. Family history of Celiac Disease
- E. Functional impairment and recent hospitalization

**Q3. Enteral nutrition is preferred over parenteral nutrition for all of the following reasons EXCEPT:**

- A. Lower risk of electrolyte abnormalities
- B. Lower risk of refeeding
- C. Lower risk of liver disease
- D. Improved Glycemic control
- E. Stimulate gut barrier function

**Q5. Forms fatty deposits in the arteries which may lead to narrowing of the arteries, restricted blood flow and eventually to heart attack or stroke.**

- A. Alcohol
- B. Smoking
- C. Cholesterol
- D. Fatty acids
- E. None of the Above

**Q7. Most of the hydrolysis of triglycerides occurs in the**

- A. Mouth
- B. Stomach
- C. Small Intestine
- D. Large Intestine
- E. Bile

**Q2. Which one of the following options represents potential complications of enteral nutrition?**

- A. Osteoporosis and refeeding syndrome
- B. Diarrhea and cholestasis
- C. Esophagitis and pancreatitis
- D. Aspiration and refeeding syndrome
- E. Aspiration and Constipation

**Q4. Which of the following is NOT a clinical consequence of refeeding syndrome?**

- A. Hypophosphatemia
- B. Hypomagnesemia
- C. Hypervolemia
- D. Hyperphosphatemia
- E. Hyperglycemia

**Q6. In this diet, dairy products are used to complement basic diet of plant foods.**

- A. Lacto-ovo vegetarian
- B. Lacto-vegetarian
- C. Ovo-vegetarian
- D. Vegan
- E. Partial Vegetarian

**Q8. Which one of the following micronutrients is routinely added to TPN?**

- A. Vitamin D
- B. Iron
- C. Vitamin E
- D. Vitamin K
- E. Manganese

## IDA Bangalore Chapter Glimpses - 2017

### 14th February

The Entrepreneurial Dietician. Food Service Trends in Health Care in 21st Century

### 2nd March

Bariatric Update—MNT & Challenges Faced

### 5th April

World Health Day at Sagar Hospital

### 25th April

Workshop on Millets for Nutritionists

In association with Mount Carmel College, Autonomous & Nutrition Society of India , Bangalore Chapter

### 16th June

Protein & Fiber: It's role in Satiety

In association with Kellogg



## IDA Bangalore Chapter Editorial Team



**Ms Vijaylakshmi Iyengar**  
Consultant Nutritionist  
Fresh Menu



**Dr. Geetha Santhosh**  
Assistant Professor  
Nutrition & Dietetics,  
Mount Carmel College,  
Autonomous



**Dr. Priyanka Singh,**  
Diet & Nutrition  
Consultant  
Beams Hospitals & Nu  
Cosmetic Clinic



**Dr. Archana D Nazre**  
Chief Dietitian  
Shankara Cancer  
Hospital & Research  
Institute



**Ms. Megha Vora,**  
Biology Educator  
Vidyashilp Academy