

## ACHIEVING ACADEMIC POTENTIAL WITHOUT STRESS - ROLE OF PARENTS

Every student has inherent potential to excel. When it comes to academics, most of the student finds it difficult and struggle till end to achieve upto their real academic capacity. The million dollar question arises is where and what goes wrong! How to make students achieve academic potential without stress to their best capacity? What can parent's and families do to remove those blocks?

There are two major issues which we need to understand. First is how to prepare child for achieving their academic potential and second, what should be parents role when the 'D' Day comes i.e. at the time of examinations and how to help children to beat the exams stress to bring best out of them.

### How to prepare?

- Develop a healthy pattern of communication with your child -share your feelings and values with him/her. Provide an atmosphere where he/she can do the same with you.
- Have a meaningful relationship with your child, be there and be involved with your child, be friendly to your child and don't make your child fear you.
- Comparing your child with another child or his/her sibling could create problems. Realizing the fact that each individual is different and unique. Expect according to the interest and capabilities of your child. Children need to be encouraged to become confident and made to believe in their capabilities.
- Work out a study schedule - timetables offers your presence and assistance in whichever manner she/he needs BUT do make a realistic schedule.
- It's advisable to make realistic short-term and long-term goals which will give the child a sense of satisfaction and will keep him/her motivated.
- Emphasize upon studying as a source of learning and not only obtaining a high percentage of marks.

The skills and the strategies the child develops during preparations will help him better.

- It's best to space the studying over days and weeks, and continually review the class material instead of cramming the last minute.
- To make them attend classes regularly throughout the school year round.
- There are many ways for effective learning and it varies from child to child. Children devise their own ways to memories concepts. Here are a few strategies one could use to help them studying -
  1. Breaking into small manageable parts – It is best to break down chapter into parts till where the concentration is the greatest of to the point where one finds mind wandering to other things. Then that indicates that child have reached saturation point. Covering the course in small, manageable portions will give the child a sense of achievement as they complete each part.
  2. Develop a timetable – so that child can track and monitor one's own progress. Work out a study schedule - timetables offers your presence and assistance in whichever manner she/he needs BUT do make a realistic schedule.
  3. Give your child frequent breaks to avoid burn out while studying. It is better to relax for a while than carrying on with a tired mind. This way your child will come back refreshed.
  4. Important points – During revision, ask your child to highlight all the salient features of the subject matter. It can be helpful for the child if they can note them down on index cards for a quick reference of revision. Instead of opening his text books again he can simply revise form the cards.
  5. Read aloud – Reading out aloud is also an effective technique which may work for some children.
  6. Practice makes perfect – Encourage children to

regularly practice especially in subjects, which are not his strong points. Repetition helps. You could encourage your child to write down matter and learn. Writing things down will etch them in his memory better.

□ If children need extra help and academic inputs which is beyond the parents capacity, then seek for extra classes/tuitions.

□ Trial examination sample papers – With abundant simulated examination papers available in the market, you could probably pick the one suited best for your child and encourage him/her to try and solve them. This way he/she will get a chance to learn according to application. And if learning is based on what is expected to write in the actual exam papers, then recall will be much better. You could also train him/her to finish them within the time frame required like that of the real exam.

□ Play role of facilitator, not as director or bossy parent/s.

### **Exams stress?**

Exams, a time when we all are going through a process which evaluates, scrutinize and measure us on various measures. At the end of the day it may seem that it was not a realistic mark of ones potential and capacity but for the society and academic system it does matter. But then it is natural for such a system to create apprehension, anxiety and unknown fear in the psyche of students and their families. Most of the time it is an expected normal anxiety but occasionally it may escalate to morbid and pathological levels. There when the help and support becomes essential. While it's good to be concerned about studies and exams, getting overly anxious can often hinder your child's performance. Helping your child to effectively manage exam anxiety may be a challenging task for parents, but with your support and guidance your can get your child full

steam ahead in tackling exams and achieve his/her academic potential without stress.

### **What parents need to do at the time of exams?**

□ If you are anxious about his/her exam, which is understandable, try to keep cool around your child. You don't want your anxieties to be passed on to him/her which may in turn put more pressure on him.

□ Create and maintain a home environment where he feels relaxed and well-rested during exam days. Give lots of encouragement as he will definitely need this now. Words of encouragement will keep him motivated and his spirit positive. If they feel good about themselves they will perform better.

□ Praise children for what little progress they make.

□ It's advisable to encourage and guide your child according to his/her abilities and capabilities. Avoid placing unnecessary demands on him. Be realistic about your expectations from your child.

□ Be enthusiastic about the revision and so will they.

□ If the child wants you could offer to test him/her by asking him/her questions on the course material.

□ Remind the child to spend time on his/her weak points as well rather than just focusing on his/her strengths.

□ Just make yourself available during this time and offer the child any necessary assistance.

□ Let him overcome any monotony and weariness by taking short breaks in his revision schedule. Allow your child to have short break during study after every 50-60 minutes, tell him/her to go out for few minutes.

□ Let him sleep 7-8 hours in night, going early to bed is better.

□ Let him/her talk to friends and family members.

□ Tell to relax –by doing yoga, relaxation exercise/ meditation, brisk walk and watching TV programme of her/his choice for half an hour - it will boost the energy levels, clear his mind and aid in decreasing any feelings of stress.

- Encourage your child by reminding positive and past success.
- Do not give/allow any anti-anxiety medicine without consultation.
- Remember certain levels of anxiety or stress is normal, please watch it should not go beyond optimum level.

**A day before exams:**

- Go to bed early.
- Don't learn anything new.
- Revise important points and notes.
- Remind him/her to just think of their strengths and belief in themselves.
- Tell your child to read and follow instructions carefully while writing the paper. To tackle the questions with a positive attitude without worrying about the results.
- Emphasize that exams are important and may seem like the most crucial thing right now but in the larger scheme of things they are a small part. There is much more to you and life than just marks and exams.

**On the day of exams:**

- Get him to wake up slightly early than usual to make sure he has everything that's required for his exam like extra pens, pencils, erasers et cetera.
- And finally see him off by conveying that no matter how he does, you love him and just tell him to do his best. Success does not only mean getting a good score – it's much more than that.
- Reach the hall before time.
- Avoid any discussions on the material of the exams with you or any fellow students outside the examination hall as it may confuse him and make him more anxious.

Parents are the biggest support for every child. They are the inherent strength which children always look

for. Parents need to realize this fact and work along with their growing children to achieve their realistic potential in all spheres of life.

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**Bouquets**

Dr Varinder Singh was invited as faculty at the World Asthma Meet held at Istanbul from 22-25 June 2007. He delivered a talk on Managing asthma in developing world setting. He also chaired the poster session at the meet. Dr Singh was incidentally the sole invited Indian faculty and also the only Indian pediatrician in the congress faculty.

**Bouquets**

Dr. Harish K.Pemde has been awarded prestigious WHO Fellowship on "Clinical Epidemiology and Biostatistics". This is a 6 weeks fellowship at Clinical Epidemiology Unit, Faculty of Medical Sciences, Khon Kaen University, Thailand from 1 July to 12 August 2007. He is one of the 12 persons from India selected for this fellowship. He is the only Pediatrician in this group.

**ATTENTION**

The use of Delhi IAP PAN Number without permission/authority from DIAP for conference Donations is illegal. The IAP Delhi will not be responsible for the legal consequences.

**G. Sec.  
DIAP**

## ADOLESCENT NUTRITION

Adolescence represents a window of opportunity to prepare for a healthy adult life. During adolescence, nutritional problems originating earlier in life can potentially be corrected, in addition to addressing current ones. It is also a timely period to shape and consolidate healthy eating and lifestyle behaviours, thereby preventing or postponing the onset of nutrition-related chronic diseases in adulthood. There are nutritional issues, which are adolescent-specific, and which call for specific strategies and approaches.

### **ENERGY AND NUTRIENT NEEDS:**

Total nutrient needs are higher during adolescence than any other time in the lifecycle. Nutrition and physical growth are integrally related and optimal nutrition is a requisite for achieving full growth potential. Failure to consume an adequate diet at this time can result in delayed sexual maturation and can arrest or slow linear growth.

Nutrition is also important during this time to help prevent adult diet-related chronic diseases, such as cardiovascular disease, cancer, and osteoporosis.

Prior to puberty, nutrient needs are similar for boys and girls. It is during puberty that body composition and biologic changes emerge which affect gender-specific nutrient needs.

Nutrient needs parallel the rate of growth, with the greatest nutrient demands occurring during the peak velocity of growth. At the peak of the adolescent growth spurt, the nutritional requirements may be twice as high as those of the remaining period of adolescence.

### **Energy**

Energy needs of adolescents are influenced by activity level, basal metabolic rate, and increased requirements to support pubertal growth and development.

Basal metabolic rate is closely associated with the amount of lean body mass.

Adolescent males have higher caloric requirements since they experience greater increases in height,

weight, and lean body mass than females.

To meet these calorie needs, teens should choose a variety of healthful foods, such as lean protein sources, low-fat dairy products, whole grains, fruits, and vegetables.

Adolescents, who participate in competitive sports, and those who are more physically active than average, may require additional energy to meet their daily caloric needs. Adolescents who are not physically active and those who have chronic conditions that limit mobility will require less energy to meet their needs.

The adolescent growth spurt is sensitive to energy and nutrient deprivation. Chronically low energy intakes can lead to delayed puberty or growth retardation.

### **Protein**

Protein needs of adolescents are influenced by the amount of protein required for maintenance of existing lean body mass and accrual of additional lean body mass during the adolescent growth spurt.

Protein requirements per unit of height are highest for females in the 11 to 14 year age range and for males in the 15 to 18 year age range, corresponding to the usual timing of peak height velocity.

When protein intakes are consistently inadequate, reductions in linear growth, delays in sexual maturation, and reduced accumulation of lean body mass may be seen.

### **Carbohydrates**

Carbohydrate is the body's primary source of dietary energy. Carbohydrate-rich foods, such as fruit, vegetables, whole grains, and legumes are also the main source of dietary fiber.

Dietary recommendations suggest that 50% or more of total daily calories should come from carbohydrate.

### **Fat**

The human body requires dietary fat and essential fatty acids for normal growth and development. Adolescents should consume no more than 30% of calories from fat, with no more than 10% of calories derived from saturated fats. Trans- fats should not account for more than 1% of calorie intake.

## **Calcium**

Calcium needs during adolescence are greater than any other time in life.

Since 45% of peak bone mass is attained during adolescence, adequate calcium intake is important for the development of dense bone mass and the reduction of the lifetime risk of fractures and osteoporosis. By age 17, adolescents have attained approximately 90% of their adult bone mass.

Efficiency of absorption of calcium from supplements is greatest when calcium is taken with food in doses of not more than 500 mg.

## **Iron**

For both male and female adolescents, the need for iron increases with rapid growth and the expansion of blood volume and muscle mass. The onset of menstruation imposes additional iron needs for girls. Iron needs are highest during the adolescent growth spurt in males and after menarche in females.

The RDA for iron is 8 mg/day for 9-13 year olds, 11 mg/day for ages 14-18.

The availability of dietary iron for absorption and utilization by the body varies by its form. Heme iron, which is found in meat, fish, and poultry, is highly bio-available while non-heme iron, found predominantly in grains, is much less so.

Because the absorption of iron from plant foods is low, vegetarians need to consume twice as much iron to meet their daily requirement.

## **ZINC**

Zinc is associated with more than 100 specific enzymes and is vital for protein formation and gene expression. Zinc is important in adolescence because of its role in growth and sexual maturation. Males who are zinc deficient experience growth failure and delayed sexual development.

The RDA for zinc for males and females ages 9-13 is 8 mg/day. For males and females ages 14-18, the RDA is 11 mg/day and 9 mg/day.

Zinc is naturally abundant in red meats, shellfish, and whole grains. Indigestible fibers found in many plant-based sources of zinc can inhibit its absorption.

Zinc and iron compete for absorption, so Increase intake of one can reduce the absorption of the other.

Adolescents who take iron supplements may be at increased risk of developing mild zinc deficiency if iron intake is over twice as high as that of zinc. Vegetarians, particularly vegans, and teens who do not consume many animal-derived products are at high risk for low intake of zinc.

## **Vitamin A**

Besides being important for normal vision, vitamin A plays a vital role in reproduction, growth, and immune function.

The most obvious symptom of inadequate vitamin A consumption is vision impairment, especially night blindness, which occurs after vitamin A stores have been depleted.

Beta-carotene, a precursor of vitamin A, is most commonly consumed by teens in carrots, tomatoes, green vegetables, sweet potatoes, and milk. The low intake of fruits, vegetables, milk and dairy products by adolescents contributes to their less than optimal intake of vitamin A.

Requirement: <13 years-600µg/day,

14-18 years, boys- 900 µg/day

14-18 years, girls-800 µg/day

## **Vitamin C**

Vitamin C is involved in the synthesis of collagen and other connective tissues. For this reason, vitamin C is an important nutrient during adolescent growth and development.

The RDA for vitamin C is 45 mg/day for 9-13 year olds, 75 mg/day for male's ages 14-18 and 65 mg/day for female's ages 14-18.

Almost 90% of vitamin C in the typical diet comes from fruits and vegetables, with citrus fruits, tomatoes and potatoes being major contributors.

## **Folate**

Adequate intakes of folate prior to pregnancy can reduce the incidence of spina bifida and other congenital anomalies. The protective effects of folate occur early in pregnancy, often before a teen may know she is pregnant.

Thus, it is important that female adolescents, who are sexually active consume 400µg/day of Folic Acid from supplements or from a varied diet that include fruits, vegetables and whole grains.

## **Fiber**

Dietary fiber is important for normal bowel function, and may play a role in the prevention of chronic diseases, such as certain cancers, coronary artery disease, and type 2 diabetes mellitus. Adequate fiber intake is also thought to reduce serum cholesterol levels, moderate blood sugar levels, and reduce the risk of obesity.

Significant sources of fiber in the diet of adolescents include whole grains, cereals, potatoes and corn.

The low intake of fruit, vegetables, and whole grains among adolescents is the greatest contributing factor affecting fiber intake among adolescent.

## **Teenage eating habits:**

Common teen eating habits include -skipping meals, routine fast food consumption, frequent snacking and dieting. By addressing each of these factors individually we can ensure that our teen is meeting the minimum nutritional requirements.

## **Skipping Meals:**

Teens skip meals for a variety of reasons, including irregular schedules, convenience, work and social activities. Up to 50% of teens skip breakfast at one point or another. Breakfast is actually the most important meal of the day!

What can you do? With regard to breakfast, let our teen know that skipping breakfast can slow their metabolism contributing to weight gain and poor performance. A busy lifestyle or running late are often reasons teens skip meals.

To combat this, have a supply of ready to eat healthy food items available that your teen can grab and go in the morning.

## **Snacking:**

Snacking doesn't have to be a bad thing. It can help maintain energy levels particularly in active and growing teens.

Because of the 'skipping meal' factor, many teens fail to eat three regular meals per day, thus snacking can actually be beneficial to ensure adequate caloric intake.

The key however is encouraging teens to consume snacks that are nutrient dense rather than junk foods low in nutrients.

Again, the key here is having snack items readily available including yogurt, fresh fruits and vegetables with dips, snack cheeses and healthy snack bars or trail mixes.

## **Fast Foods:**

No parent no matter how well meaning will be able to avoid fast food altogether. Teens are more apt to eat fast food because it is convenient and typically a social affair.

Fast food is often jam packed full of fat and empty calories however. What can you do? Educate your teen as much as possible. Help them make smart food choices even when at fast food restaurants. To as great an extent as possible, you should also work to provide wholesome and healthy foods at home including healthy snack items to supplement your teen's fast food diet.

## **Dieting:**

Teens often diet because of the perception that 'thin is in'. Dieting can lead to dangerous habits including eating disorders in teens. Some signs that your teen may be dieting include: skipping meals, 'binge' eating, fasting or use of laxatives or diet pills.

One thing you can do for your teen is to encourage a healthy self-esteem and body image. Engage your teen in extracurricular activities that promote a healthy lifestyle and regular exercise.

One approach is to attempt to eliminate the term 'diet' and replace it with 'healthy eating.' If you regularly incorporate healthy lifestyle and dietary practices into your life your teen is less likely to diet on a consistent basis.

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## Teenage Preventive Health Issues

Increasing prosperity, in any society, should lead to better health profile of its citizen. Unfortunately, opposite seems to be true. During last decade, rapid changes in life style, dietary habits, educational system & other factors have to a variety of health problems in urban India.

Adolescents & young adults, largely outside any medical system, need special preventive plans by primary care providers i.e. Pediatricians, on proactive basis. Following suggestions are based on guidelines of AAP, AMA, AHA & National Heart, Lung and Blood Institute, (US).

It is suggested that all adolescents should have an annual comprehensive medical examination, starting eleven years of age. In addition, this opportunity is used for health guidance, mental health, screening for potential health hazards, immunizations, and tests, as per need, to prevent life -style medical problems.

Components of annual visits are detailed in Table-1  
Table1- Annual visits, all adolescents

Some of the above points are discussed below; nutrition is covered elsewhere in this issue of Delhi Pediatrics.

### **Parenting:**

Parents should receive health guidance at least once during their child's early adolescence (11-14 years), once during middle adolescences (15-17 yrs.), and preferably once during late adolescence (18-21 yrs).

This includes providing information about:

Normal physical, sexual, emotional development of adolescence, signs & symptoms of disease and emotional distress, parenting behavior, healthy life styles & monitoring risk taking behavior by their wards and acting as role models.

### **Adolescence guiding:**

All adolescents should receive guidance annually to promote better understanding of physical,

psychosocial and psychosexual development, and the importance of being actively involved in decisions regarding their health care.

Injury risk reduction counseling pertains to bike helmets, car seat belts, avoiding use of alcohol while driving, promoting adequate conditioning before exercise.

Equally important is counseling to resolve conflicts without use of violence.

Counseling to promote avoidance of tobacco, alcohol, drugs and anabolic steroids.

### **Mental Health:**

All adolescents should be asked annually about behaviors or emotions indicating depression or suicide risk. Watch for declining school grades, chronic melancholy, sleep/ eating disturbance, family dysfunction, physical or sexual abuse, alcohol or drug use, suicide plans or previous attempts, follow with psychiatric referral as per need.

### **Eating disorders:**

All adolescents should be screened annually for Eating disorders by determining weight & stature, and asking about body image and dietary patterns.

Assess for organic disease, anorexia nervosa, or bulimia if weight loss of >10% of previous weight, recurrent h/o dieting, use of self induced emesis, laxatives, h/o starvation or body image distortions are found or if BMI is <5 percentile for age & sex.

Steps to prevent life style disorders are given in Table 2  
Other points shall be discussed in later issues.

It is to be noticed that Pediatrician plays an important role in coordinating adolescent health promotion. Annual visits permit early detection of health problems & offer an opportunity to provide health education and develop a therapeutic relationship. Involvement of parents & adolescents in education & decision- making should help adolescents evolve to a better future.

**Table 1— Annual visits, all adolescents**

<b>Health Guidance</b>	<b>Screening History</b>	<b>Physical assessment</b>	<b>Tests (Post assessment, need based)</b>	<b>Immunizations</b>
Parenting Development Diet Physical-activity Lifestyle Injury prevention	Eating disorders Sexual Activity Alcohol, drugs Tobacco Abuse School performance Depression Suicide risk	BP BMI Detailed physical exam Eye	Cholesterol Lipids Bl.sugar TB STD Pap Smear	MMR Td Hep B Hep A Varicella

**Table 2- Preventing life style disorders**

<b>Test</b>	<b>Frequency</b>	<b>Action</b>
BMI	Measure at each visit At least once per year	<b>BMI &gt; 95 per.</b> –in depth dietary & health assessment <b>BMI 85-94 p.</b> - in depth dietary & health assessment if a) BMI increased > 2 units since last visit b) F/O obesity, diabetes, hypertension, early CAD c) Adolescent expresses wt concerns d) If BP or Cholesterol is high
Blood Pressure	Measure at every visit At least once per year	<u>If one value</u> > 90 percentile for age/sex, repeat thrice within a month under similar physical conditions, find base line value If baseline 90-95 p. – assess BP & obesity every 6 months If baseline > 95th p. — complete biomedical evaluation & treatment
Cholesterol (Non fasting)	Assess if a) Age >19 years b) Parent's cholesterol > 240mg/dl c) F/h unknown d) If h/o smoking, obesity, high BP, Or h/o excessive fat intake	Value <170 mg/dl, repeat in 5 years value 170-199 mg/dl, repeat, see average if average <170, repeat in 5 years >170, Fasting lipoproteins value> 200 mg/dl- Fasting lipoproteins (no need to repeat Cholesterol)
Lipoproteins (fasting)	Assess if a) High cholesterol b) F/H of CAD, peri. Vascular dis. c) F/H of sudden cardiac death < 55years males, < 65 years females	Treatment based on average of two LDL levels  <110 mg/dl — acceptable 110-129 mg/dl – borderline >130 mg/dl — special treatment
Plasma Sugar (fasting)	Assess if a) Clinical suspicion on symptoms b) Presence of obesity, hypertension, dyslipidemia, PCOS, acanthosis nigricans, (any two) c) F/H of Diabetes in 1st or 2nd degree relations	70-99 mg/dl- normal fasting glucose, rpt. 2 yearly 100- 125mg/dl- impaired fasting glucose, repeat in 6 mths. life style & diet changes >126mg/dl- Diabetes- special management In select cases ( high suspicion with normal F.Glucose)- Oral Glucose challenge: 2 hour post 75 gm glucose levels Or1 hour post 50 gm glucose levels

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## Biodata of Dr. Panna Choudhury (IAP President Elect Candidate 2008).



**Dr. Panna Choudhury**, a hard-core IAP grass root worker, is popularly recognized as the Editor in Chief of Indian Pediatrics, a post held by him for 6 years. It is because of his efforts that the Journal is now included in the highest global indexing services "Science Citation" and rated as the most popular pediatric e-journal. *Dr. Panna seeks dynamic support and benevolence of IAP members for election to the highest office of the Academy, i.e., President Elect, IAP for 2008.* You will remember that in 2005, he marginally lost the race to this post.

Salient points of his career and 32 years of selfless service to IAP are given below:

**Dr. Panna Choudhury** did MD, Pediatrics from Maulana Azad Medical College, New Delhi in 1974; currently working as Consultant Pediatrician at Lok Nayak Hospital attached to MAM College; Conferred FRSTMH (London); and awarded FIAP (1993); FIMSA (1994).

Dr. Choudhury had been actively associated with all major events of **IAP Delhi** and served as , Joint Secretary (1987), Secretary (1988), Office coordinator for 3 years and finally as *President in 2001*. His notable experience for **Conference organization** includes, Convener, 8th Asian Congress of Pediatrics (1994), Org. Secretary, Indo-UK Symposium (2003), Chairman Org. Committee, 1st National Conference on Pediatric AIDS (2001), Jt. Org Secretary, PEDICON 2006. He has **Edited popular books** like Pediatric and Neonatal Emergencies, Nutrition in Children, Frontiers in Pediatrics, IAP Text Book of Pediatrics, Pediatric Drug Companion and has over 100 publications. He is also **Advisor/Expert/Resource person** for GOI, WHO, UNICEF, USAID, InClen, DST, ICMR-NIC.; UG and PG Examiner for various Universities.

Dr. Choudhury has already served as **National Vice President IAP in 1998; Central Executive Board Member for 11 times; Chairperson/ Secretary** of IAP Nutrition Chapter for 8 years (declared best Chapter during his tenure). While voting, keep in mind Dr. Panna's record of prompt interaction, non-partisan attitude, responsiveness to needs of members from all backgrounds; and above all his intense zeal and commitment to the cause of Child health and the Academy. He needs your wholehearted support in this second venture.

## Dr. P. N. Taneja Award 17th Dec. 2006

### ENDOTRACHEAL SUCTION VERSUS CHEST PHYSIOTHERAPY (CPT) IN MECHANICALLY VENTILATED CHILDREN

#### GIRISH KUMAR

Department of Pediatrics. (M.A.M.C.)

#### Objectives:

- to study the difference in effects of endotracheal (ET) suction and chest physiotherapy (CPT) on various parameters of respiratory functions &
- to study any adverse effects associated with endotracheal suction and chest physiotherapy.

#### Subjects:

50 mechanically ventilated children admitted in PICU, MAMC & associated LN Hospital.

#### Methods:

Each ventilated patient, on day one of the study, underwent ET suctioning first followed by CPT next time. On day two, the order of interventions was changed. CPT involved preoxygenation, mechanical hyperinflation, vibration and percussion followed by ET suctioning. Respiratory function parameters, namely PaO<sub>2</sub>, SPO<sub>2</sub>, Pa CO<sub>2</sub> were measured just before and at 30', 60', 90' and 120' after the either intervention (PaO<sub>2</sub> & PaC<sub>2</sub> were measured just before and at 30' after each intervention)

#### Result:

PaO<sub>2</sub>, SPO<sub>2</sub>, PaCO<sub>2</sub>, Oxygenation Index, Ventilation Index, Compliance, resistance & Tidal volume showed and improvement with both ET suctioning as well as with CPT but the improvement following CPT was quantitatively more as compared to ET suctioning alone. There was no significant adverse effect with either intervention.

#### Conclusion:

CPT is more likely to produce a short-term improvement in respiratory function parameters as compared to ET suction alone. However, long term favorable outcome of CPT need to be studied.

## Dr. Satya Gupta Award 17th Dec. 2006

Low Back Pain in School Children: Association of Bag Weight, Other Mechanical Factors and Psychosocial Factors

**Shravan Mehta**

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**Aims:** Low back pain (LBP) in school children with no apparent clinical cause is a common problem, but very little is understood regarding its etiology. Moreover there is no published data from the Indian subcontinent. We looked at the prevalence of LBP in adolescents and the role of mechanical and psychosocial factors (emotional, behavioral problems, other somatic complaints)

**Methods:** A cross sectional, prospective study was done in 1,134 school children aged 10-15 years. Pain was ascertained using a modified questionnaire of Fairbank et al. A self-questionnaire, and parent questionnaire were also administered; height, weight and weight of school bag were measured.

**Results:** The incidence of back pain was 38.3%. LBP was significantly associated with age ( $p = .004$ ), height ( $p < .001$ ), emotional problems ( $p = .0012$ ), conduct problems ( $p = .004$ ), troublesome headaches ( $p < .001$ ), abdominal pain ( $p = .001$ ) and leg pain ( $p < .001$ ). Median bag weight was 8kg, with 60.2% bags weighing  $> 6$ kg. 77.3% children carried bags  $>$  the recommended 10% of body weight. Children carrying bags 10% or more of their body weight had higher frequency of LBP. On multivariate analysis, headache, leg pain and bag weight carried (%body weight) were found to be independently associated with LBP.

**Conclusions:** The result suggest that LBP IS common in North Indian school children, and is associated with both mechanical (%body weight carried) and psychosocial factors. Further, LBP is most common among children reporting other frequent childhood symptoms and may be a marker of somatisation.

## Dr. S. Vaishnava Award 17th Dec. 2006

Effect of Life Style Modification Advice On Endothelial Function in Overweight Adolescents

**Taruna Chutani**

Department of Pediatrics. (M.A.M.C.)

**Objective:** To study the effect of life style modification on endothelial function in overweight adolescents.

**Design:** Longitudinal interventional study. Setting: Tertiary hospital.

**Methods:** Apparently healthy overweight adolescents were recruited. Baseline dietary, physical activity, anthropometric, biochem and endothelial function assessment was done. Subsequently, intervention in the form of life style modification advice was given as per the Indian Academy of Pediatrics (IAP) Task Force recommendations. Each subject was reassessed in a similar manner after a minimum of 4 weeks. The difference in flow mediated dilatation (FMD%) measured by ultrasonography was the primary outcome variable for this study.

**Results:** The 20 subjects available for follow up had a lifestyle conducive to development of adiposity. Following the life style intervention, there was a significant decrease (mean (95%CI) change) in caloric intake (211(154, 267);  $P < 0.001$ ), television viewing (5.2hours (3,7.37);  $P < 0.001$ ) and increase in the physical activity ratio (353.2(157.74, 548.6);  $P < 0.001$ ). There was a significant decrease in weight (1.5kg (1.0,2.1);  $P < 0.001$ ), BMI (0.6kg/m<sup>2</sup> (0.4,0.9);  $< 0.001$ ) and various anthropometric parameters along with improvement in flow mediated dilation (4.6%(2.3,7);  $P = 0.001$ ), the primary outcome variable of the study.

**Conclusions:** Diligently imparted advice an IAP Task Force Life Style recommendation resulted in beneficial effects on the dietary pattern, reduced television viewing and increased physical activity. This improved the cardiovascular risk factors including vascular function, anthropometry and diastolic blood pressure.



**Attempts at repairing brain damage need not be a sacrilege any more**

One Crore Indians live a life of exclusion and seclusion due to various forms of brain damage

e.g. Cerebral Palsy, Autism, Stroke and Traumatic Brain injury

Help bring many of them back to a mainstream life of socio-economic independence & dignity

**The missing factor is the know-how and the will on our part, to attempt repair**

*Welcome to*

## **International Neural Repair & Neuro Rehabilitation Conference (NR2CON)**

**Featuring** six of the foremost Western authorities on neural repair supported by twenty of India's best on Assessment, Diagnosis, Neural Repair, Neuro-Rehabilitation and specific Assistive Devices.

**Venue:** 15 to 17 September, 2007 at Dogra Hall, Indian Institute of Technology, New Delhi

**Organized by** UDAAN for the Differently Abled, New Delhi; Indian Academy of Pediatrics (Delhi Chapter); & Dept. of Medicine, Hamdard University, New Delhi

**Regdn. Fees:** *IAP Members:* 1750 till 31/7; 2000 till 31/8, 2250 thereafter. *Others:* 2000 / 2500 / 3500

**For details, incl. Regdn. form,** visit [www.udaan.org/nr2con](http://www.udaan.org/nr2con) or **write to Dr. Arun Mukherjee, MD;**

Organizing Secy. NR2CON; FSMHP-UDAAN; A-59 Kailash Colony; New Delhi 110048;

**Off. Tel.:** 011-41631140; **Email:** nr2con@udaan.org; **Cell:** 0-9811157839

## **MEMBERS of IAP Delhi**

Thanks

### **Organising committee Pedicon 2006**

For their generous contribution to the IAP Delhi. It was the best attended and managed Pedicon in the recent past.

## IAP WEST DELHI CITY BRANCH

is organising following programmes on these dates

Date	Topic	Registration Fees	Venue
19.08.07	Comprehensive Newborn Care Workshop	Free	Maharaja Agrasen Hosp, P. Bagh
16.09.07	Asthma Training Module	Free	Maharaja Agrasen Hosp, P. Bagh
23.09.07	Workshop on Adolescent Medicine	Free	Mata Chanan Devi Hosp, Janak Puri
07.10.07	NALS Course (Only 40 Seats are available)	1200/-	Mata Chanan Devi Hosp, Janak Puri
14.10.07	Art & Science of Pediatric Practice	Free	Maharaja Agrasen Hosp, P. Bagh
24.11.07 & 25.11.07	PALS Course (Only 40 Seats are available)	2000/-	Mata Chanan Devi Hosp, Janak Puri

- ☐ **Prior Registration is a MUST**
- ☐ **Kindly issue your Cheque/ DD in favour of "IAP West Delhi City Branch"**

**Contact:**

**Dr. C. P. Sachdev**

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New Delhi – 110087  
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E-mail : singla1960@gmail.com

**The Indian Academy of Pediatrics, Central Delhi Branch  
is organizing the following whole day Workshops as per schedule mentioned.**

**Sunday, 12<sup>th</sup> August 2007, 9.30am to 3pm**

**Hematology Workshop**

Venue: Auditorium, Nurses Hostel, SGRH

**Sunday, 30<sup>th</sup> September 2007, 9.30am to 3pm**

Respiratory Tract Infections (RTI GEM)

**Group Education Module**

Venue: Auditorium, Nurses Hostel, SGRH

**PROGRAMME HIGHLIGHTS**

- The CME programmes have been designed keeping in mind the needs of practicing pediatricians, specialists and post graduate students.
- Special emphasis shall be on rational management. Interactive discussion shall follow each session.
- The delegates shall receive free, a relevant book for each of the workshops.
- Applied for DMC accreditation; 5 hours for each of the workshops.
- Highly experienced and reputed faculty from major institutions:

**REGISTRATION: FREE**

**LIMITED REGISTRATION. PLEASE REGISTER IN ADVANCE**

For Registration: Dr B B Aggarwal,  
1-C/17, New Rohtak Road, Karol Bagh, New Delhi-110005  
Phone: 9811020206, 28716633  
Email: drbbaggarwal@hotmail.com or drjsbhasin@yahoo.co.in