factors could help in better seizure control and possibly in reduction of dosage of AEDs. Larger prospective studies are required to confirm these observations.

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Risk Factors for Obesity in Children

In India, it was basically under nutrition, which attracted the focus of health workers. Childhood obesity was rarely seen. But over the past few years this entity is increasingly being observed. The changing life style of families in the so called modernized India with increased purchasing power, easy availability, more comfortable and luxurious living, thanks to improved technology has all attributed to this problem. Increased hours of inactivity due to increasing academic pressure, television, video games and computer have all replaced outdoor games and other social activities. The incidence of obesity in children attending the O.P.D. of the PGI was increasingly being observed. An attempt was hence made to identify such obese children and determine the contributing risk factors. A total of 120 children were observed over a period of one year (2000-01). Body mass index (BMI) >85th percentile and >95th percentile was taken as the criteria to identify overweight and obesity respectively(1).

Patients with obesity due to secondary causes were excluded from the study. Detailed anthropometry was recorded and dietary assessment done by interviewing the mothers, using 24 hour recall method and the food frequency consumption questionnaire. Details of family history and life style patterns were also recorded. Intake of food calories, proteins, fats and carbohydrates were calculated using the ICMR standards(2).

Other details like family history, activity levels of each child and number of hours of television viewing were also recorded.

A total of 120 children presenting to the OPD for primary obesity were studied out of which 79 were obese and 41 were overweight.

TABLE I– *Total calories intake and distribution of calories from various nutrients.*

Age group (years)	RDA	Total calories intake	% calories from		
			Fats (25)*	CHO (55)*	Protein (20)*
4-7	1690	1996.8 ± 564.6	31.97 ± 11.5 P <0.01	55.48 ± 11.6 NS	12.53 ± 1.57 P<0.01
7-10	1950	2076.5 ± 427.59	28.64 ± 6. 47 NS	61.1 ± 7.12 NS	11.35 ± 1.63 P<0.01
10-12	2190	2260.3 ± 475.4	28.03 ± 7.63 NS	61.03 ± 7.39 NS	11.67 ± 1.67 P<0.01
10-12 Girls	1970	1979.2 ± 413.81	27.76 ± 3.47 NS	60.75 ± 3.75 NS	11.56 ± 1.52 P<0.01

* Denotes desired values.

As seen in *Table I* an interesting feature noted in this study was that the mean total caloric value intake of all these children was not significantly high but the calories derived from fats did seem to be more than the desired 25%, which was especially significant in the 4-7 year age group. Similar observations have been made by Rolland Cachera(3) where he states that obese and non-obese individuals have similar energy intakes implying that obesity results from small imbalances of energy intake & expenditure. Moreover diets high in fats are likely to be energy dense and highly palatable. This combination leads to increased energy intake and to increased body mass index(4). Moreover the calories taken from proteins did seem to be significantly below the recommended 20% of the total caloric intake.

Various other factors contributing to obesity were analyzed. It was found that lack of physical activity, watching television or video for more than one hour daily and a positive family history of obesity all contributed significantly to child obesity. Several authors have noted the role of physical activity in the obese children. Exercise showed beneficial effects when added to a reduced energy intake program(4). Robinson in his school-based trial targeted the reduction of media as a way of influencing adiposity, physical activity and dietary intake. His results showed that although increased activity may not be as effective in weight reduction as diet modifications, physical activity patterns seem to play a crucial role in weight maintenance(5).

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Diabetes Mellitus in Neurofibromatosis I: An Unusual Presentation

Neurofibromatosis (NF) are a set of genetic disorders resulting from abnormalities of neural crest development or 'neurocristopathy'. They can affect the development of non-nervous tissue such as bones, soft tissue, endocrine glands and skin. We report a case of NF I with diabetes mellitus. To the best of our knowledge diabetes mellitus in association with NF 1, has not so far been reported in children. A 9-year-old male presented with general debility, fever off and on since birth, polydipsia, polyuria, and polyphagia for the last 3 months. There was no history of diarrhea, steatorrhea, jaundice, abdominal pain, headache or seizures. He was found to be both underweight and short statured. Multiple (>15) Cafe-au-lait spots measuring 2 mm to 20 mm and axillary freckling was present. Two large naevi with underlying neurofibromas covered the lower back and gluteal region. Eye examination revealed bilateral Iris Lisch nodules, and pigmentary changes in the fundus. The left lower limb was found to be 6cm longer than the right. Systemic examination did not reveal any abnormality. The child was normotensive, had a cheerful isposition, average intelligence and showed no psychological or behavioral problems. Investigations revealed a random blood glucose 830 mg/dL, and fasting blood glucose 307 mg/dL. Urine examination showed specific gravity 1.040, glucosuria 4+, and traces of ketone bodies. No abnormality was detected on ultrasonography or CT scan of the abdomen or duodenal endoscopy. MRI abdomen could not be performed due to financial constraints of the patient. The patient was put on insulin therapy and normoglycemia was maintained on 0.8 units of insulin / kg / day.

The diagnosis of NF type I is based largely on clinical criteria set up by National Institute of Health, 1987(1). The condition is associated with protean manifestations as well as some serious complications. In 1983 a syndrome of multiple endocrine neoplasia was described as MEN type III which included duodenal carcinoid (often producing somatostatin) and NF type I or pheochromocytoma(2). Unlike other endocrinal abnormalities, diabetes mellitus is rarely seen in association with NF I. It is attributed to occurance of somatostatinomas in pancreas and duodenum. These are rare gut-pancreatic endocrinomas that secrete somatostatin. Inhibition of insulin release produces the diabetic state which is easy to control because of concomitant suppression of glucagon release. Most somatostatinomas in NF I are duodenal in location(3). Duodenal