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A Review of Family and Social Determinants of Children's Eating Patterns and Diet Quality.

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ABSTRACT

Children are more likely to have foods that are easily available and they tend to eat greater quantities when larger portions are provided. Additionally, characteristics of the social environment, including various socioeconomic and socio -cultural factors such as parents' education, time constraints, and ethnicity influence the types of foods children eat. children's consumption of fruits and vegetables (from seven day food records) was related to home availability and accessibility (as assessed by a parent telephone interview), after controlling for psychosocial characteristics. Mealtime structure includes social and physical characteristics of mealtimes including whether families eat together, TV-viewing during meals, and the source of foods (e.g., restaurants, schools). , children ate more fruits and vegetables for lunch at schools that offered more fruits and vegetables for lunch, after controlling for socioeconomic status. Parents also play a direct role in children's eating patterns through their behaviors, attitudes, and feeding styles. Interventions aimed at improving children's nutrition need to address the variety of social and physical factors that influence children's eating pattern

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INTRODUCTION

Recent research has begun to focus on family and social influences on children's eating patterns with the growing problem of childhood obesity. Research has proven that children's eating patterns are strongly influenced by characteristics of both the physical and social environment [1]. Childhood obesity with all its adverse health consequences is growing at a fast rate in developing countries due to changing life style as a result of rapid urbanization and mechanization. Identification of obese status early during childhood has substantial health benefits to the children and to the country [2].

These results offer preliminary support for the hypothesized relationships. Future research must delineate the anticipated complex relationships among food purchase and preparation practices that lead to availability and accessibility, child and parent food preferences, and consumption, in order to more clearly guide interventions.

Environmental variables can enable or impede children concerning what foods they consume. Availability and accessibility of foods are potentially important environmental variables. Availability concerns whether the foods are present in the home or school, while accessibility concerns whether the foods are prepared, presented, and/or maintained in a form that enables or encourages children to eat them. We hypothesized that greater availability and accessibility would lead to more consumption. Baseline data from two school nutrition education projects were used to examine relationships between availability/accessibility and consumption of fruits and vegetables [4].

Additionally, the degree to which parents viewed providing healthy foods and limiting unhealthy foods as effective in preventing obesity (response efficacy) was predictive of parent tracking of children's unhealthy eating behavior. Finally, parent TV viewing behavior was related to perceived response efficacy of limiting children's TV viewing hours. Practical implications for communication practitioners are discussed [3].

The findings suggest that the PEN-3 model is an appropriate framework for assessing how community and culture impact dietary habits of African Americans. African Americans still need information on basic nutrition topics such as serving sizes and reading food labels. The findings also suggest that programs and materials should be specifically developed for churches, neighborhood grocery stores, and local restaurants [4].

Childhood obesity is a serious medical condition that affects children and adolescents. It occurs when a child is well above the normal weight for his or her age and height [1].

Childhood obesity is particularly troubling because the extra pounds often start children on the path to health problems that were once confined to adults, such as diabetes, high blood pressure and high cholesterol. Childhood obesity can also lead to poor self-esteem and depression.

One of the best strategies to reduce childhood obesity is to improve the diet and exercise habits of your entire family. Treating and preventing childhood obesity helps protect the health of your child now and in the future.

Symptoms [3]

Not all children carrying extra pounds are overweight or obese. Some children have larger than average body frames. And children normally carry different amounts of body fat at the various stages of development. So you might not know just by looking at your child if his or her weight is a health concern.

Causes [3]

Lifestyle issues — too little activity and too many calories from food and drinks — remain a significant contributor to childhood obesity. But there are also some genetic and hormonal factors that likely play a role as well. Recent research has found that changes in digestive hormones can affect the signals that let you know you're full.



Risk factors[3]

Many factors — usually working in combination — increase your child's risk of becoming overweight:

Diet

Regularly eating high-calorie foods — such as fast foods, baked goods and vending machine snacks — can easily cause your child to gain weight. Soft drinks containing sugar are a risk factor. Candy and desserts also can cause weight gain. Foods and beverages like these are high in sugar, fat and calories.

Lack of exercise

Children who don't exercise much are more likely to gain weight because they don't burn calories through physical activity. Inactive leisure activities, such as watching television or playing video games, contribute to the problem.

Family history

If your child comes from a family of overweight people, he or she may be more likely to put on excess weight, especially in an environment where high-calorie food is always available and physical activity isn't encouraged.

Psychological factors

Some children overeat to cope with problems or to deal with emotions, such as stress, or to fight boredom. Their parents may have similar tendencies.

Family factors

If many of the groceries you buy are convenience foods — such as cookies, chips and other high-calorie items — this can contribute to your child's weight gain. If you can control your child's access to high-calorie foods, you may be able to help your child lose weight.

Socio-economic factors

Foods that won't spoil quickly — such as frozen meals, crackers and cookies — often contain a lot of salt and fats. These foods are often less expensive or an easier option than fresher, healthier foods. In addition, people that live in a lower income neighborhood may not have access to a recreation facility or other safe places to exercise

Complications [3]

Childhood obesity can have complications for the physical, social and emotional well-being of your child.

Physical complications [3]

Type 2 diabetes

Type 2 diabetes in children is a chronic condition that affects the way your child's body metabolizes sugar (glucose). Obesity and a sedentary lifestyle increase the risk of type 2 diabetes.

Metabolic syndrome

Metabolic syndrome isn't a disease itself, but a cluster of conditions that can put your child at risk of developing heart disease, diabetes or other health problems. This cluster of conditions includes high blood pressure, high blood sugar, high cholesterol and excess abdominal fat.

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High cholesterol and high blood pressure

Your child can develop high blood pressure or high cholesterol if he or she eats a poor diet. These factors can contribute to the buildup of plaques in the arteries. These plaques can cause arteries to narrow and harden, which can lead to a heart attack or stroke later in life.

Asthma and other breathing problems

The extra weight on your child's body can cause problems with the development and health of your child's lungs, leading to asthma or other breathing problems.

Sleep disorder

Obstructive sleep apnea, a condition in which your child may snore or have abnormal breathing when he or she sleeps, can be a complication of childhood obesity. Pay attention to breathing problems your child may have while sleeping.

Nonalcoholic fatty liver disease (NAFLD)

This disorder, which usually causes no symptoms, causes fatty deposits to build up in the liver. NAFLD can lead to scarring and liver damage.

Early puberty or menstruation

Being obese can create hormone imbalances for your child. These imbalances can cause puberty to start earlier than expected.

Social and emotional complications [3]

- **Low self-esteem and bullying.** Children often tease or bully their overweight peers, who suffer a loss of self-esteem and an increased risk of depression as a result.
- Behavior and learning problems. Overweight children tend to have more anxiety and poorer social
 skills than normal-weight children have. At one extreme, these problems may lead overweight
 children to act out and disrupt their classrooms. At the other, they may cause overweight children to
 socially withdraw.
- **Depression.** Low self-esteem can create overwhelming feelings of hopelessness in some overweight children. When children lose hope that their lives will improve, they may become depressed. A depressed child may lose interest in normal activities, sleep more than usual or cry a lot. Some depressed children hide their sadness and appear emotionally flat instead. Either way, depression is as serious in children as in adults. If you think your child is depressed, talk with him or her and share your concerns with his or her doctor.

CONCLUSION [5,6,7]

Obesity in adolescents and children has raised to significant levels globally with serious public health consequences. In addition to cardiovascular, emotional and social issues, it poses a serious hazard to the basic health care delivery system. Unless this epidemic is contained at a war footing, the implications of this global phenomenon on future generations will be serious. The reversibility of this disease with suitable intervention strategies should be seen as an opportunity and efforts pursued with vigour. Considering these advantages, future interventions to prevent or treat childhood obesity in this context should consider promoting daily breakfast consumption with special focus on Private schools and students from older age groups. There is scope for improvement, as one-third of the students in the present study did not eat breakfast daily. Such programs can include provision of healthy breakfast in schools or having a short break in the morning to allow students to consume breakfast that they can carry from home. Many schools in Delhi start very early in the morning, leaving no time for students to have a wholesome breakfast, which is an important barrier to overcome. These interventions should emphasize a supportive social environment to influence parents and



peers to promote breakfast consumption, too. Awareness should be created in the parents to educate, motivate and encourage their children to adopt healthy lifestyles, more involvement in physical exercises, sports and outdoor activities. Schools should play a critical role, by establishing a safe and supportive environment.

Encourage Traditional Infrastructure Indian Solutions (Yoga, meditation and dance) Doctors to promote Exercise and Nutrition Curriculum awareness Advocacy for change in Government Society NGOs Family Limit portion size Limit TV watching Joint family activityes: walks, picnics and Community endeavors to promote exercise Use media and classrooms to spread awareness sports

Figure 1: Preventable measures for childhood obesity

Figure 2: Complications of childhood obesity

Neurological **Psychosocial** Pseudotumor cerebri Poor self esteem Risk for stroke Depression Cardiovascular Quality of life Dyslipidemia Pulmonary Hypertension Asthma Left ventricular hypertrophy Sleep apnea Chronic inflammation Exercise intolerance Endothelial dysfunction Renal Risk of coronary disease Glomerulosclerosis Endocrine Proteinuria Type 2 diabetes Gastrointestinal Precocious puberty **Paniculitis** Polycystic ovary syndrome (girls) Steatohepatitis Hypogonadism (boys) Liver fibrosis Hernia Gallstones Risk for cirrhosis DVT/PE Risk for colon cancer Stress incontinence Musculoskeletal Risk of GYN malignancy Forearm fracture Blount's disease Slipped capital femoral epiphysis Flat feet Risk for degenerative joint disease

Complications of Childhood Obesity



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