



# Teen Obesity



## What are the Problems?

- ✚ Poor Nutrition and Food Choices.
- ✚ Trouble figuring out how to manage weight.
- ✚ Lack of Meal Planning.
- ✚ Low Income Family runs out of money before month end.



## What are the Solutions?

### ✓ Eat More, Weigh Less!

- You get full by the amount of food you eat, not the number of calories! <sup>1</sup>
- Aim for a variety of colored Vegetables along with lean meat and carbs. <sup>1</sup>

### ✓ Cook at home

- Eating home-cooked meals is healthier. <sup>2</sup>
- It helps reduce risk of heart health, cholesterol and diabetes. <sup>2</sup>

### ✓ Make Smart Choices at School Lunch

- Pick whole-wheat bread instead of white bread. <sup>3</sup>
  - Choose grilled chicken instead of fried. <sup>3</sup>
- Use mustard or ketchup instead of mayo or dipping sauces. <sup>3</sup>

### ✓ Say NO to Fast Foods

- Fast Foods are heavily processed foods devoid of nutrients. <sup>4</sup>
  - Leads to insulin resistance, type 2 diabetes and stroke. <sup>4</sup>

### ✓ Rethink your Drink

- A can of soda a day adds up to 15 pounds a year! <sup>3</sup>

### ✓ Turn FAT into FIT

- Variety is the key. Alternate between cardio, dance, yoga and sports. <sup>5</sup>

### ✓ Get Motivated

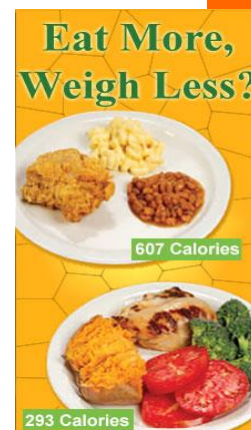
- Find a weight-loss support group in your community. <sup>5</sup>  
It's fun to do it together.

### ✓ Manage your Monthly Budget

- Plan ahead of the month: allocate monthly money bucket for food and groceries. <sup>2</sup>

Additional Resources: <https://www.cdc.gov/obesity/childhood/wic.html>

Free Printable Budget templates: <https://thesavvycouple.com/budget-templates/>



## **Picture Source:**

Pictures are obtained from the following Websites: [www.Shutterstock.com](http://www.Shutterstock.com), [www.VectorStock.com](http://www.VectorStock.com).

## **Bibliography:**

1. Salomon S. Eat more, weigh less: Who says you have to starve to lose weight? filling up on low-energy high-volume foods namely fruits and vegetables--can help you lose weight. <http://web.b.ebscohost.com/une.idm.oclc.org/ehost/pdfviewer/pdfviewer?vid=1&sid=c9a1a33e-a661-4ac8-a9c8-a3dc2a55adf8%40sessionmgr102>. *Environmental Nutrition*. 2013;36(4):1. Published April 2013. Accessed April 7, 2019.

The author, Sharon Salomon who is a Registered Dietician, discusses various strategies to lose weight gradually while eating a big plate and feeling full. In a study conducted by Penn State University called as 'Ultimate Volumetrics Diet', the researchers discuss the phenomenon of filling up on foods of low energy or calorie density, which are foods that have fewer calories per unit of weight, such as fruits and vegetables. The research revealed that people tend to eat a consistent amount of food by weight each day, regardless of the number of calories and nutrients in the food. In the meal time solutions section, the author has discusses how having a pre-meal appetizer of very low calorie density food allows the body time to think and fill up the plate for the main course. This is one of the best research articles, which provides weight loss solutions without compromising on the nutrition as well as eating to satiety.

2. Mills S, Brown H, Wrieden W, White M, Adams J. Frequency of eating home cooked meals and potential benefits for diet and health: Cross-sectional analysis of a population-based cohort study. *International Journal of Behavioral Nutrition and Physical Activity*. 2017;14(1):1-11. <https://doaj.org/article/ebf3afc5bf4a491aac456befd00a38b2>. doi: 10.1186/s12966-017-0567-y. Published August 17, 2017. Accessed April 7, 2019.

This research article is one of its kind because most of the previous research has focused on preparing, rather than eating, home cooked food and used small, non-population based samples, rather than overall diet quality or health. The researchers aimed to assess whether frequency of consuming home cooked meals was associated with diet quality and heart health. Using the baseline data from a United Kingdom population-based cohort study of adults aged 29 to 64 years the study has showed that those eating home cooked meals more than five times, compared with less than three times per week, consumed more than double the amount of fruits and 97.8 g more vegetables daily. More frequent consumption of home cooked meals was associated with greater likelihood of having normal range BMI and normal percentage body fat. This study has indicated that planning the family budget before the start of the month using simple tools like excel can go a long way in stretching the budget till the month end. This tip is particularly useful for low-income families that are struggling to manage finances.

3. Miyawaki A, Lee JS, Kobayashi Y. Impact of the school lunch program on overweight and obesity among junior high school students: A nationwide study in Japan. *Journal of public health (Oxford, England)*. 2018. <https://www.ncbi.nlm.nih.gov/pubmed/29873776>. doi: 10.1093/pubmed/fdy095. Published June 05, 2018. Accessed April 7, 2019.

The authors have taken case studies from Japanese school children that experienced a low prevalence of childhood obesity. It is the authors' idea that the Japanese nationwide school lunch program has helped this phenomenon. The longitudinal study was conducted for 10 years starting in the year 2006 on both the genders of children between 13-to-15 year old. Based on the study outcome, the authors prove that appropriate nutritional intake through school lunch may be effective to reduce childhood obesity. This research article is a good eye-opener into the school lunch systems.

4. Block JP, Christakis NA, O'Malley AJ, Subramanian SV. Proximity to food establishments and body mass index in the framingham heart study offspring cohort over 30 years. *American Journal of Epidemiology*. 2011;174(10):1108-1114. <https://www.ncbi.nlm.nih.gov/pubmed/21965186>. doi: 10.1093/aje/kwr244. Published March 04, 2009. Accessed April 7, 2019.

The authors used thoroughly analyzed data that included repeated measures of BMI and accounted for residential mobility and the appearance and disappearance of food establishments. Each 1-km increase in distance to the closest fast-food restaurant was associated with a 0.11-unit decrease in BMI. In sex-stratified analyses, this association was present only for women. Other aspects of the food environment were either inconsistently associated or not at all associated with BMI. Fast foods are pointed to as one of the major distractions to the subjects' will power and weight loss goals.

5. McQueen MA. Exercise aspects of obesity treatment. *The Ochsner journal*. 2009;9(3):140. <https://www.ncbi.nlm.nih.gov/pubmed/21603430>. Published September 2009. Accessed April 7, 2019.

The author Matthew has discussed about the study that aimed to demonstrate that exercise is the key parameter in aiding with weight loss uses direct measurement of Vo2max using special equipment and expertise. The general description of the impact of exercise is extended to the obese patients who need special care for the health conditions associated with being obese for a long term. A combination of cardio respiratory and resistance training is the key to unlock the magic bullet for weight-loss. Overall, it is a very informative and useful study especially benefitting the obese population.