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## Teenage Diet

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by Susan Sutherland Airone

Food plays a very important role in the lives of all living things. Both plants and animals are concerned with the intake of proper amounts of nutrients so that they can continue their individual life processes. This need for food is a basic function of life. The American people and the food they eat represents a study in a variety of extremes. As a high school teacher and the mother of three teenage sons I am very concerned with and interested in the variety of eating habits demonstrated by American adolescents. It seems like only yesterday I was saying, "Eat, eat. The neighbors will think I starve you." Now I have considered padlocking the refrigerator and nailing shut the cupboards. They eat everything in sight and more. The people at the local supermarket see me so often they think I work there too. This type of increase in appetite is a normal change due to adolescents entering a stage of intensified and increased growth. Their bodies are merely responding to the increased need for nutrients to cope with the growth spurts and physiological changes due to puberty. This shift is in the expected range of normal change in eating habits. It is the extremes and the overall issue of poor nutritional habits among teenagers that I wish to address in this paper. Adolescents need to have their attention focused on the long-range effects that their poor daily nutritional habits will have on their futures and the teachers of adolescents need to be more aware of and sensitive to the effects that these poor nutritional habits have on the performance of teenage students in their classrooms.

The population of the world is increasing in staggering numbers. This means increased food needs. We are constantly hearing about the plight of keeping up with world hunger. Many countries can not provide for the nutritional needs of their populations because of a variety of economic and political reasons. Many times the governments are controlled by a privileged few who wish to increase their personal wealth. They are not interested in the nutritional needs of the poor masses over which they rule. Many poor nations are busy raising cash crops for export while multitudes starve. These same starving people could survive on basic grain crops raised for local consumption. When we think of starving people the United Nations commercial depicting several stereotypical starving, emaciated children with their empty rice bowls springs to our minds. But malnutrition, faulty or poor nutrition, can be due to the inadequate intake of nutrients OR the overconsumption of foods in improper amounts. America is plagued with both extremes plus a few unique problems in-between. It is this issue of malnutrition among American adolescents that I will address in this paper.

There are so many facets to the serious problem of poor teenage diet that I have decided to deal with those that are intertwined by the financial thread. Money plays an important role in many of these problems. Edwin Meese may think that there are no hungry people in America, but many have quickly disagreed with him. We
are living in a time of economic strife. High unemployment rates, especially among the minorities, contributes greatly to their continued poor nutritional status. It is quite difficult to be upwardly mobile without a job and money. Many of the teenagers who attend the middle and high school in New Haven come from families on public assistance.

The myth that people on welfare are living "high off the hog" can be disproved when one realizes that the AFDC grant payment for a family of four is $\$ 549$. Medical coverage is separate as are food stamps. The cost of food stamps depends what the monthly expenses are for each individual household. On today's standard of living that does not stack up very high. From this amount all living expenses must come.

The buying of food in itself presents problems. Large supermarket chains have left the inner city for the more lucrative suburbs, leaving in New Haven one local chain, Pegnataro's which was recently bought by the Everybody's Market, and several medium size stores as Ferraro's, Danny's Market, Congress Supermarket, and many small expensive stores. These smaller establishments are numerous, but their prices are higher because they lack buying volume. Why shop where it is going to cost more money? Because many of the families lack the needed transportation to the larger chains with lower prices. A student activity is included on local shopping. Frequent trips to the smaller local stores are also needed because the typical poor household does not have sufficient refrigeration and freezing space to stock up on perishable and frozen items. Small stores sometimes extend credit to families at the end of the month when their money has run out.

Ask anyone who does the grocery shopping for their family and they will quickly tell you how expensive food is. Almost weekly increases on food items results in decreased buying power for the same amount of money or the buyer is forced to spend more for the same amount of groceries. But one has to admit that the array of items for sale at the supermarket is incredible. The frozen food section gets my vote for having the most varied assortment of prepared delights from breakfast foods to desserts and everything in-between. The convenience of these foods is yours just for the price.

The food pattern exhibited by any group of people usually reflects geography, climate, local plants and animals, religion, beliefs, economic conditions, memories, and expectations, along with current political tendencies as well as issues of war and civil unrest. But new elements have been introduced to be considered. The far reaching and impacting effects of advertising coupled with the availability of food items, and the advent of "fast-foods" and "convenience foods" have altered the American food pattern in such a way that it would not have been predictable fifty years ago. These phenomena of advertising, choice, fast and convenience foods that have swept not only the United States but are enjoying huge success in many other parts of the world, need to be examined.

I use the term "convenience foods" to refer to those foods that have drastically cut down on the food preparation time to basically being only heating time. All the preparation is already done for the buyer by the manufacturer. Frozen pizzas to TV dinners are examples of convenience foods. The term "fast-foods" refers to establishments such as McDonalds, Burger King, Church's Chicken, Subway, Wendy's, etc. that do the preparation of their special foods for the buyer and serve the food quickly. These two food concepts have revolutionized the eating habits of Americans on every economic level.

The dawn of the fast food establishment occurred in the 1920's with the White Castle hamburger stands and Howard Johnson's restaurants being the two most successful beginners. Both of these chains are still successfully doing business today all across the USA. McDonald's made its appearance in the 1950's. Why did these chains meet with such instant success? They were clean, had standardized menus, fast service and cheap prices due to their large scale operation. Part-time teenage help kept the cost of labor down as well.

They were informal eating places you could take the whole family to without the fuss and expense of eating in a fancy restaurant.

The youth of America have adopted fast-food establishments on a social level. They are the hang-outs where adolescents can get together with peers in a way similar to the corner drug store of thirty years ago.
"Adolescent identity with fast food menus was acknowledged by the New York City Board of Education which in
1977 announced school lunches of fast foods such as tacos, pizza, cheeseburgers, french fries, and shakes." 1
Authorities have argued that the typical school lunch provided and lunches brought from home are thrown out by vast numbers of students. So why not give students the type of food they will eat, fast-foods. But this meal is overloaded with fat, sugar, and salt and is low in essential nutrients. Some attempts have been made by school cafeterias to "up" the nutrient content of fast-food meals, but they still contain too much sugar, fat, and salt. ${ }^{2}$ These problem areas for adolescents will be discussed later. A student activity on school lunches is included. It is my experience that many students arrive at school in the morning armed with a supply of junkfood for the day to be eaten INSTEAD of the lunches provided. Many of the students will delay eating until after the school day and stop off at a fast food place on the way home. A student activity is included on the number, location and utilization of fast-food establishments in New Haven. I am frustrated seeing school lunches wasted and low nutritional junk food eaten instead, but the "If you can't lick them, join them" policy does not appeal to me either. This generation of students has been weaned on junk and fast-foods and the major chains will seize every opportunity to capitalize on the addiction of youth to fast-foods.
"An advertising campaign of McDonald's was based on a study that showed in three out of four cases it was the children, not the parents, who decided where a family would eat." 3

The latest marketing effort of the major fast-food chains should be noted because it concerns a problem nutritionists and teachers have been very concerned with, getting students to eat breakfast. The fast-food chains are launching a heavy sell on breakfast items that range from the egg mcmuffin to meat croissants and a fruit bar. They know that there is a potentially enormous market for this important meal of the day. But we come back to the fact that their food contains too much sugar, fat, and salt whether you eat it in the morning, noon, or at night. A student activity on breakfast eating is included.

The important element in both convenience foods and fastfoods is TIME. Their appeal is decreased or no preparation time for the buyer. ZAP! Instant food without the mess and work of preparing it. The tight economy has required many women to join the work force. Mothers who have traditionally been the cooks in families are now out in the working world and they either do not have the time for extensive food preparation or they are too tired to prepare meals along with their other chores. With Mom not at home to get meals many teenagers pick something up at one of the many fast-food establishments or stick a frozen something in the oven. They know the food will be uniform in taste. I was astonished at how many students frequent fast-food places and equally surprised at how much they spend on fast-foods in a week. For many teenagers fast and convenience foods represent their main food source. When I asked students about why they did not just make their own food, it came to light that many teenagers are totally ignorant of basic food preparation techniques. If it requires more than heating they will not fix it. I see this resulting from a shift in society's accepted food patterns, mothers not practicing or teaching total food preparation, and the removal of home economics classes from the curriculum. The element of time is not restricted to the promptness of food prepared. The whole emphasis in fast-food restaurants is to get people in fast, serve them fast, and get them out fast. The actual time spent eating is sharply reduced. Which brings us to a very important point. What are convenience
and fast-foods doing to the social structure of the family? Supper or dinner was the one meal traditionally eaten together by a family. It is slowly disappearing and with it so is dinner conversation. This was the time when parents and children could communicate with each other about the happenings of the day. Togetherness at meal times is being replaced by togetherness in front of the television set. But there is no room to communicate to each other when the TV is on. With so much television viewing time there is a parallel consumption of junk food snacks and drinking that occurs. Both of these factors feed into the problem of obesity due to too many calories and too little activity that will be discussed later. Television commercials frequently advertise convenience and fast-foods. These commercials are prime examples of sophisticated conditioning. Because American youth watches so much TV and listens to so much radio, they are continually being brain-washed by the likes of, "You deserve a break today.", "Where's the beef?" etc. The amount of top dollar advertising time targeted at youth on TV is shown in "A Federal Trade Commission study found sugar in some form was being promoted between eight and fourteen times an hour on each network's programming for children on Saturdays." 4 Mothers are then strongly influenced in their selection of products by the requests, demands, and pestering of their children who have been brain-washed by these commercials. A student activity on food advertisements on television is included.
"A steady diet of fast foods can contribute to unbalanced nutrition." ${ }^{5}$ Fast foods do not provide the variety needed for sound balanced nutrition. They usually provide close to one-third of the Adult Daily Recommended Dieter Allowance for protein, but are high in calories, fat, sodium, sugar and low in fiber, certain key vitamins and minerals. As a quick meal on the run once in a while fast-foods are convenient and a change of pace, but a steady diet of fast-foods is risky to good nutrition and is expensive when compared with home cooked meals. A student activity on eating out expenses versus eating at home costs is included.

New Haven, like the rest of the United States, has a significant number of pregnant teenagers.

> "All adolescents who become pregnant are high medical risks. The younger the girl, the greater the risks to her and to her infant, for the additional nutrient demands of pregnancy may compromise her growth potential and that of her fetus. . . Anemia and toxemia are common problems. Some authorities believe this reflects the nutritional status of teenagers rather than their chronological age." 6

The problem is complicated many times by pregnant teenagers who deny to themselves that they are pregnant. They wait too long, three to five months, before seeking prenatal care and they continue along on their junk food/chips and soda diets. The Special Supplementary Food Program for Women, Infants and Children, WIC, has made great strides in helping pregnant women, nursing mothers, infants and small children with their nutritional needs. Pregnant teenagers need to be encouraged to seek EARLY prenatal care. The "stitch in time saves nine" principle applies here. Healthy pregnant girls tend to give birth to healthy babies. Money spent on sound nutrition before birth will help cut down on medical bills after birth.

Teenage pregnancy is a major problem because the competition between the nutritional needs of the developing fetus versus the nutritional needs of the developing teenage mother. This creates a terrible strain if the girl has not been practicing sound nutritional habits.
"Twice as many maternal and infant complications occur among early teenage mothers than mature mothers.
American nonwhites and women from lower socioeconomic groups have more pregnancy hazards than their
comparable group." 7
The vitamin Folacin or folic acid and its related compounds has recently been identified as extremely
important in the formation of nucleic acids that are needed in the rapid cell divisions that occur in the developing fetus. This under publicized vitamin is scarce in most foods, but liver, wheat germ, and brewer's yeast are good sources. 8 Pregnant teenagers should be encouraged to include these folacin foods in their diet during their pregnancy.

The recent switch back to breastfeeding from prepared formula is applauded by medical experts in all fields, BUT it must not be forgotten that the excellent quality of breast milk depends on a nutritionally sound diet for the mother. Nursing mothers must pay strict attention to their own diets. 9

Today's teenagers are a generation that has been brought up on SUGAR. They are the sweet-toothed kids. As a group their consumption of sugar is very high. What are some of the problems that this enormous level of sugar in their diet causes? First, sugar which is a carbohydrate requires a number of $B$ vitamins to allow the body to assimilate it. If the teenage diet does not include an adequate amount of vitamin $B$ a deficit results. Second, sugar is concentrated calories highly consumed by teenagers who as a group are becoming less physically active. Hence a weight problem. Obesity and related coronary problems are a common problem for teenagers. Third, sugar is a proven factor in tooth decay and periodontal disease. The formation of plaque results from bacteria and sugar. It is quite common for teenagers to have had several teeth removed due to extensive cavities.
> "Recently, a controlled experiment with children who consumed 12 Oz . of soft drink a day for 3 years showed they suffered in certain teeth 50-150 percent more decay than another group who drank water. On the whole, the decay rate tended to be higher in the soft drink consuming group compared with the water drinking group." 10

Fourth, sugar, due to its simple construction, quickly increases the level of blood sugar and is likewise quickly utilized. This sudden elevation or high followed by the fall or crash is seen quite commonly by teachers after students snack on sweets. Sugar is habit forming. The more that is consumed, the more that is wanted. It affects one's taste of other foods which appear flat and tasteless in comparison. Teenagers snack on candy, cake, soda, etc. instead of nutritious foods. These highly refined snacks provide little in the way of solid nutrients, vitamins and minerals. The consumption of soda and sweetened juices has practically made the drinking of milk a thing of the past. The enormous amounts of caffine in most sodas does the nervous system of teenagers no good as well.

This addiction to sugar has another spin-off problem. School lunches, for which approximately $60 \%$ of New Haven middle and high school students qualify for free or reduced lunches, are heavy on the starch side. Students complain about the lack of taste in the food provided by the cafeterias. It is easy to see why the food tastes dull when their taste buds are used to such high levels of sugar. Because the food does not taste good to them and because it tends not to be especially aesthetically pleasing to the eye many teenagers get the lunches only for the juice or chocolate milk and the dessert. The rest of the lunch ends up in the garbage pail. A tragic waste of needed nutrition. They will bring in or buy a-la-carte items such as ice cream, cakes, cookies, chips and candy. The practice of bringing in your lunch from home is something most teenagers stopped doing in elementary school. It is not part of the image they wish to portray. Since a number of teenagers skip breakfast, either to get a few extra minutes of sleep or because no one will fix breakfast for them, this lunch time nourishment represents the majority of what they will get until dinner.

The meal most often skipped by Americans is breakfast. Reasons cited most often for skipping breakfast by adults and children alike are they prefer to sleep longer, late getting to school or work, not hungry, dislike breakfast food, no regular family breakfast time-everyone on a different schedule, and no one to prepare it.

This represents a change in our food pattern, because in the earlier days of this country, way before hightechnology, breakfast was the meal needed to refuel the body for the strenuous work of the day until the evening meal. To go without breakfast means to deprive the body of nutrients for at least 18 hours. The result is reserve nutrients must be broken down to fill in for the missing nutrients that would have been obtained in breakfast, taking them away from other physiological needs.

> "We have indications from research studies that children who do not eat breakfast do less well in school, perform physical tasks less well, and may be more irritable and emotionally unstable." 11

It is very difficult to apply yourself to the demands of classes when the body is not properly fueled day in and day out. Most teenagers would not put dirty fuel into a car engine, but they are more particular about the clothes they wear on their bodies than the food they put into their bodies-their engines. The body, like any machine, will eventually develop running problems if not cared for.

I feel that the high sodium intake of adolescents needs to be addressed. The body needs sodium in the regulation of body water and acid-base balance, but adequate amounts can be obtained from natural food sources. Excessive salting of our food and the high volume consumption of foods containing salt added in processing has become a national habit. Our sedentary lifestyles of today no longer require the daily replenishing of sodium levels. But old habits are hard to break, even those that belonged to other generations. The connection between salt and water retention and the possible role in hypertension should be enough to cause people to want to cut down on salt intake. But like sugar, today's adolescents have grown up with a "salty tongue." Salt is a hidden additive in many processed foods that do not give its presence away in the taste. There are approximately 329 mg of sodium in McDonald's chocolate shake and 456 mg in their cherry pie. Manufacturers widely use this natural element to increase the shelf-life span of their products. Adolescents and many adults will automatically salt food first and then taste after. They need to realize that other products, such as onion and garlic salt, meat tenderizers, bouillon, soy sauce, canned vegetables and soups, and cold cuts, are very high in sodium. A student activity on salt is included.

Two nutritional problems of adolescents are drug related. The use of alcohol and other drugs has nutritional ramifications. Alcohol is a part of many facets of the American culture. It has religious as well as social uses. The misuse of alcohol by Americans, young and old, is a lengthy topic in itself. Alcohol interferes with the body's ability to digest and absorb nutrients such as thiamin and vitamin B12. It can lead to liver problems and the empty calories of alcohol cause deficiencies and their resulting illnesses. The teenage beer drinker can develop into a full fledged alcoholic and a very obese young adult. The pregnant teenager who drinks can cause fetal alcohol syndrome with all of its related problems. The use of recreational drugs in America by teenagers is truly a scary scene. The insecure transitional period of adolescence is a prime time for experimentation. Stimulants such as cocaine, amphetamines(diet pills), metamphetamines, even caffeine and nicotine, may cause lack of appetite. Depressants and narcotics can cause nausea and the sight and smell of food can result in vomiting. The most popular recreational drug of youth is marijuana. One of this drug's short term physical reactions is insatiable hunger and thirst. Or as the students say, "I got the MUNCHIES!" So they binge on high sugar content foods and drinks.

Obesity has been around since the days of the Stone Age as seen in artifacts. Obesity has fallen in and out of style through out the years. In the days of the Old Testament it was out because the scriptures forbade the eating of animal fat. But it definitely was in during the Roman Empire. In more recent times in America with the shift from rural to urban living there was not the need for a hefty body build because the physical demands were greatly reduced as machines did more and more of the heavy labor. At the same time science
discovered about the importance of vitamins and amino acids. Nutritionists did an excellent job in letting the general public know about the benefits of eating vitamin and protein-rich food, but they failed to let the public know that they needed to regulate their food intake to compensate for improved foods and reduced physical activity. The standard of living has climbed steadily in this country. More free or recreational time is available to all. The advent of leisure time activities that are more and more sedentary and usually involve more and more food, such as cook outs, TV snacks, coffee breaks, dinner parties, cocktail parties, professional spectator sports, have resulted in an obese America. 12

It is now considered "normal" for an American to eat nearly 5 pounds of meat and poultry per week, a staggering total of 254 pounds per year. This is far more protein than our bodies can absorb. ${ }^{13}$ This enormous protein consumption also includes a high level of fat, a factor in obesity. Interestingly, I have found that many people view the eating of meat with wealth and the eating of basic staples to be a sign of poverty.

Many factors influence adolescent obesity such as heredity socioeconomic, ethnic, familial, media, self-image, and peer relations. Adolescents who are over weight many times have mothers who are uncertain or overwhelmed with the maternal role and compensate for their lack of interest by over feeding or mothers who receive a great contentment from their child and use food, especially foods liked by the child, to keep the relationship close. Parents tend to equate weight with health. "A fat baby is a healthy baby." "Oh, he's so cute! He's so fat!" ${ }^{14}$ Often times parents dispense food to their children for a variety of reasons, such as to quiet, to appease, to reward, thereby setting up life-long eating patterns that lead to and maintain obesity.

But a strange ambivalence around eating has sprung up in this country. We are in the midst of a love affair with food, which naturally can lead to obesity, because the average physical activity is comparatively low, but at the same we are programmed into relentless pursuit of excessive thinness. Studies have shown that fat-overweight-obese people are discriminated against. Our society does not love fat people. They feel overweight adolescents could do something about their weight. An obese adolescent is viewed to be fat because of laziness, gluttony, greed, and lack of will power. Unfortunately, overweight teenagers usually begin to believe in these character flaws and resign themselves to a life of being overweight. ${ }^{15}$ People need to remember that adolescence is a time of enormous physical and emotional stress. Approximately 15 percent of all high school students are overweight for their body size. When you consider all the previously discussed factors and add in the recent local cut backs in physical education classes, it is a small wonder that 50 percent of all high school students are not overweight.

Once again we look upon the power of advertising. Adolescent girls are frequently on different diets to try and become the perfect " 10 " they see in the ads. These diets are often self-inflicted fastings. Periods of total abstentious from all foods robs their bodies of needed nutrients, vitamins and minerals. Many teenagers will even spend a great deal of money on liquid diet plans and diet pills. Both of which are not designed for the high nutritional demands of the adolescent body. A sensible diet of the proper foods while reducing the calorie intake along with increased physical activity would accomplish the desired weight loss without the damaging side effects.

This brings us to the interesting phenomenon of anorexia nervosa. This illness is on the upswing. "One out of every 250 adolescent girls will develop Anorexia Nervosa. Ten percent will die because of it." ${ }^{16}$ What is anorexia nervosa? It is an eating disorder that can take three different forms. First, limiting intake where extremely low calorie intake (200-600) occurs along with low liquid intake. Feeling full is cause for panic. Second, Anorexia/Bulimia in which there is an altering between starving and binges of over eating. Third, Bulimarexia, where up to 15,000 calories are consumed per day but then vomiting is self-induced to prevent
calorie buildup. Individuals suffering from these eating disorders will have possibly abused laxatives, diuretics, enemas, and diet pills. Now why would a teenager submit to such practices?

> "Anorexia has to be seen as a "stylistic" breakdown resulting from cultural pressure, since it amounts to a pathological exaggeration of society's message to women. . . A generation of young girls and women has been indoctrinated by the thin ethic." 17

Granted this is an extreme reaction to our society's emphasis on thinness and other personality traits need to be present before an individual becomes anorexia. But the upsetting point is the increase in this eating disorder. Teenage males are beginning to show up with the symptoms as well. How bizarre that our society has teenagers whose families can not afford food and at the same time we have teenagers who willingly reject nourishment for their bodies.

In all of these problems around teenage eating I do see some hope. Gyms and fitness centers are enjoying an upsurge in popularity especially among the young. Hand in hand with sound physical fitness goes sound eating habits. Food costs can be somewhat offset by the raising of part of one's needs by gardening. Vegetable gardens are definitely back in vogue. Community gardens are springing up in several different city locations. People are discovering the great taste of home grown vegetables. As people toil to raise some of their food they undergo a new or renewed feeling toward food. This grass roots return to gardening allows for an increased degree of control over the individual's food supply. This awakening results many times in the revival of "basic, inexpensive" home cooking which would go a long way in reducing the cost of food. A student activity on simple cooking is included.

A student activity is included on the concluding point of this paper. You are what you eat, so treat yourself right. You deserve to feel and look your BEST!

## Student Activity \#l-Analysis of Home Food Shopping

PURPOSE : To have students become visually aware of the available and accessible food sources and to be aware of food shopping patterns within their own family.

MATERIALS : A local map of the city with streets-preferably large. Local telephone directory, Common pins with different colored beads or regular common pins with different colored masking tape flags, Ditto on shopping, Magic markers.

PROCEDURE : Students may or may not be aware of where and when their family shops for food. Give the ditto out as homework to be filled out by the student with the family member(s) who does the shopping. Strongly suggest that the students go shopping for first hand knowledge if they do not normally go shopping.

Examples of questions contained on ditto:
How often does your family do MAJOR shopping? Once a week, twice a week, every two weeks, every three weeks, once a month, other?

Where does your family do its MAJOR food shopping?
How often does your family do in-between shopping?
Where does your family do in-between shopping?

Does your family use a dairy/milk store? Where and how often?
Does your family use a store especially for meat purchases? Where and how often?
Does your family use a bakery or bakery outlet? Where and how often?
Does your family use a farmer's market? Where and how often?
Does your family use a fish market? Where and how often?
Does your family use an ethnic market such as Jewish, Spanish, Chinese? Where and how often?
Does your family use an orchard or farm? Where, how often and for what products?
Spread the map of the city out on the wall.
Designate a particular color pin for each of the following type suppliers: Large supermarket, medium size supermarket, small grocery store, 24 -hour convenience store, specialty store.

Using the telephone directory locate all food sources in the areas of the city that your students come from. Then add in any additional food sources that the families of your students utilize. If they shop beyond the city limits roughly indicate the location.

Have students mark out in magic marker all nearby bus routes to all food sources.
SPIN-OFF ACTIVITY: Give students a list of standard items with size.
Have them price these items at different food sources in the neighborhood and at a "super discount store".
Collect results and discuss findings.

## Student Activity \#2-School Lunches

PURPOSE : To raise student awareness around their daily eating habits.
MATERIALS : Student questionnaire
PROCEDURE : Spend several days observing the students during the entire lunch time. Eat the school lunches for several days so you can speak objectively. Hand out questionnaire.

Examples of questions that could be asked:
Do you eat lunch in school?
Do you eat the school lunch?
Do you eat lunch from home?
Do you eat lunch at home after school?
Do you stop and buy food on the way home?

Do you skip lunch all together?
Do you ever throw your lunch away without eating most or any of it?
Do you eat snack food for lunch?
(figure available in print form)
Think about the school lunches. How do you find the taste?
(figure available in print form)
What is your favorite school lunch?
What is your least liked school lunch?
How would you change the lunches served in the school?
Does the food differ in the different schools you have been in?
In your school career, did you ever go home during lunch time? Did you eat when you went home?
In your school career, did you ever consistently bring lunch in from home? Did you eat these lunches from home?

Are you hungry at lunch time?
Are you hungry before lunch time?
What do you usually eat in the morning before school starts?
Are you a full of energy person during the school day, a so-so energy level individual, or an always drained-no get up and go person?

## Student Activity \#3-Fast-Food Establishments

PURPOSE: To provide students with an overall visual representation of the location of fast-food establishments in the city and to have students analyze their use of fast-food establishments.

MATERIALS : A local street map-preferably large, local telephone directory, common pins with different colored heads, ditto.

PROCEDURE : Spread the map of the city on a wall.
Designate a particular color pin for each of the identified fast-food establishments.
Locate each of these fast-food establishments on the map with a pin, using the telephone directory.
Discuss with students why they think these chains located where they have.
Discuss with students any fast-food chains that they know of that have "failed" or shut down. For example, Wendy's on Whalley Ave.

Give students a copy of the ditto on fast-food useage.

How often do you frequent the following fast-food establishments?
FREQUENTLY SOMETIMES SELDOM NEVER
McDonald's
Burger King
Kentucky Fried Chicken
Church's Chicken
Big Top Shoppe
Ching Chang
Howard Johnson's
Subway
Wendy's
Pizza Hut
Chucky Cheese
American Steakhouse
Jimmies
Others-please list
How often do you eat at fast-food establishments?
How often do fast-foods make up the MAIN meal of your day?
Does eating fast-foods satisfy your hunger and appetite? Explain.
Approximately how long do you spend eating in a fast-food establishment per visit?
How much do you think you are influenced by the advertisements for fast-foods, such as "Aren't you hungry? Aren't you hungry?", "You deserve a break today," "Where's the beef?"?

I go to fast-food places usually by myself, with friends, with family.
Approximately how much do other members of your family use fast-food establishments?
Describe what the people are like who are usually in your favorite fast-food place.
Rate your favorite fast-food place. Good OK Terrible
Service

Cleanliness

Cost
Food-taste and quality
Speed
When do you go to fast-food establishments? Circle as many as applies.
WEEKDAYS SATURDAY SUNDAY
morning-afternoon-evening morning-afternoon-evening morn-noon-eve
Should there be more fast-food establishments built? Where would you locate one if it was your decision? Why?

If the school cafeteria served fast-food style food would you eat it?
What are the products you buy in fast-food establishments most frequently?
PRODUCT HOW MANY APPROXIMATE COST OF PRODUCT
What is your favorite fast-food item and why do you like it?
If you wanted the following types of food, fill in what restaurant you would go to get that type of food
Italian
Chinese
Seafood
Mexican/Spanish
Steaks/Beef/Chops

Chicken
Hamburgers

## Student Activity \#4-Sugar 18

PURPOSE : To make students aware of the high amounts of sugar in common foods.
MATERIALS : 2 oz. chocolate bar, 3 lbs. of apples, sugar, 10 bottles numbered 1-10, ditto, optional-actual samples of food items discussed.

PROCEDURE: Having talked about high sugar intake and the results, show the class the 2oz. chocolate bar and then the 3 lbs . of apples. Ask students which they think has more sugar. Then explain that they are approximately equal in sugar content.

Show a 2 lb . box of sugar. This represents the weekly average amount consumed by Americans. Teenagers consume on an average between 140-150 lbs. of sugar a year, or a little less than 3 lbs . a week.

Put out for display the ten bottles containing various amounts of sugar.
Hand out the ditto to the students and have them select the item that goes with the numbered bottles. Go over class results.

Discuss with students the need to read labels on all food products. The calories need to be considered along with the ingredients of the product. Sugar goes by many different names. Remember that the ingredients are listed in descending volume. If sugar in any form is listed in the first three ingredients, the product is high in sugar volume. For teacher to

Example of ditto: Bottle Number make up bottles

| 12 oz. Coca cola------ | 9 tsp. |
| :--- | :--- |
| 6 oz. Hi-C orange drink---- | 5 tsp. |
| 1 Tbsp. French dressing---- | .7 tsp. |
| $1 / 2$ cup jello-------- | 5 tsp. |
| 1 cup chocolate milk----- | 7 tsp. |
| 8 oz. strawberry yogurt---- | 7.5 tsp. |
| $1 / 2$ cup canned sweet peas---- | .9 tsp. |
| $1 / 2$ cup Quaker $100 \%$ Natural Cereal-- 3 tsp. |  |
| $3 / 4$ cup Kellogg's Sugar Smacks-- | 4 tsp. |
| 5 oz. Snack Pack Pudding---- | 5 tsp. |

## Student Activity \#5—Salt 19

PURPOSE : To make students visually aware of the high amounts of salt use by American daily.
MATERIALS : salt, 3 bottles numbered 1-3
PROCEDURE : Ask students how many of them salt their food. Ask students to guess at how much salt they use in a day. Put the three bottles out for display. Explain to students that bottle numbered 1 represents 1 tsp. of salt, the amount the normal person needs in a day.

Bottle numbered 2 represents 4 tsp. of salt, the amount of salt consumed daily by the average American due to hidden salt in their food.

Bottle numbered 3 represents 6 tsp. of salt, the amount of salt consumed if you salt your food when eating.

## Student Activity \#6—Breakfast Eating

PURPOSE : To get students to look at their eating habits and to analyze if they are developing poor nutritional eating patterns.

MATERIALS : Ditto on breakfast eating.
PROCEDURE : Ask the students what the word "breakfast" means.
Explain it means to break the fast.
Give students a copy of the ditto. They are to fill in all spaces with either a $Y$ for yes, an $N$ for no, or an $S$ for sometimes.

WEEKDAYS SATURDAY SUNDAY
Do you eat breakfast?
Want to sleep instead of eat.
Would rather eat than sleep.
Not hungry in the morning.
Hungry in the morning.
Too rushed.
Not rushed.
Don't like breakfast food.
Like breakfast food.
Not a set family breakfast time.
A set breakfast time for family.
No one to fix breakfast.
Someone to fix breakfast.
No breakfast type food in house.
Breakfast food on hand in house.
If you EAT breakfast, what do you usually eat?
WEEKDAYS
SATURDAY
SUNDAY
If you DO NOT eat breakfast, what might you eat if you had your choice?
WEEKDAYS

## SATURDAY

## SUNDAY

Do you ever fix your own breakfast? If you do, what do you make?
Do you eat breakfast with others or alone?
Do you ever stop for something to eat on the way to school in the morning? If you do, what food do you purchase?

## SNACK-FOOD DONUTS COFFEE HOT-CHOC. BREAKFAST-FOOD OTHER

Do you ever stop at a fast-food chain like McDonald's or Burger King for breakfast on the way to school? How frequently? What do you usually order? How much do you usually spend? Do you ever get hungry before lunch?

## Student Activity \#7-Television Commercials For Food Products 20

PURPOSE : To raise student awareness of the frequency of, timing of, content of, and the overt and subtle techniques of food advertising on television.

MATERIALS : Student access to a television, ditto on ads.
PROCEDURE : Ask students how much they think the average adult is influenced by television commercials. How much influence do ads have on children?

Point out that "By the time most kids graduate from high school they will have spent an average of 15,000 hours watching TV and 11,000 hours in school. All that TV watching includes 10,000 commercials a year just about food. . . .Some advertisers spend $\$ 125,000$ for a one-minute commercial!"

Give the ditto to the students to be filled out on the weekend. It you can make it a week long assignment it provides more observation time which will aid in a more complete analysis.

Example of information to set up on ditto:
Day of the week
Time slot
Name of product
Type of product-food/other
Factual information given on product
Special offers
Special effects used in commercial
Was the commercial able to get you to want to buy the product?

Make at least a one hour observation on Saturday morning and a one hour observation on the same channel during prime time viewing 7-9:00 P.M.

## Student Activity \# 8 Fast-food Meal Versus A Basic Home Cooked Meal

PURPOSE : To have students experience that a simple inexpensive meal can be prepared which is nutritionally sound with very little effort and cost, but which needs some planning as compared with the convenience and expense of a fast-food meal for the same number of people.

MATERIALS : I pound of dried pinto beans, pepper, large onion, 2-3 carrots, 2-3 stalks of celery, mushroomsoptional, large can of crushed tomatoes, chili powder, garlic, other seasonings as desired, crock pot or large pan, hot plate, can opener, knife, styrofoam cups, plastic spoons

PROCEDURE : Soak pinto beans overnight. Boil until tender, drain.
Add beans to crock pot.
Chop up onion, celery, pepper, carrots, mushrooms. Add to crock pot along with crushed tomatoes and seasoning.

Let simmer for rest of day or until lunch time.
Have students figure up the cost of making this meatless meal.
How many people could you feed with this meal?
How much would this meal cost if a pound of hamburger were added?
What other foods would go with this meal? What would the cost be?
Have students figure up how much it would cost to feed the same number of people at a typical fast-food place.

Compare nutritional information on each type meal.
Discuss convenience/time/money as these factors relate to meal preparation.

## Student Activity \#9—You Are What You Eat!

PURPOSE : To have students artistically express by making collages of nutritional foods and problem causing foods, that what you eat is important because the food you eat becomes YOU.

MATERIALS : Magazines with pictures of food, food label pictures, wrappers from junk food, glue, scissors, pencil, large paper

PROCEDURE : Have students cut out pictures of nutritious and non-nutritious foods either at home or in class.
Have students bring in wrappers and clean, empty containers from snack type food.
Draw the outline of a student on two large pieces of paper.

Fill in one outline with pictures of nutritious foods.
Fill in the other outline with snack-junk food pictures.
Hang the two filled in outlines with a sign such as,
"You are what you EAT! Which do you want to be?"

## Notes

1. Hooker, Richard, Food and Drink in America-A History (New York: The Bobbs-Merrill Co., 1981), p. 354.
2. Packard, Vance, Our Endangered Children , Growing Up in a Changing World (Boston: Little, Brown and Company, 193 , p. 10.
3. Hooker, p. 354.
4. Packard, p. 105.
5. Gacoin, Linda, "The Fast Food Phenomena," Snacking and Food Choices-A Nutritional Module for Secondary Schools(Storrs: Connecticut Cooperative Extension Service, University of Connecticut, 1981), p. 1.
6. Clark, Ann, Dyanne D’Affonso, Child Bearing : A Nursing Perspective (Philadelphia: F.A. Davis Company, 1978), p. 801.
7. Committee on Maternal Nutrition: Food and Nutrition Board, "Maternal Nutrition and the Course of Pregnancy" (Washington: NSA/NRC, 1970).
8. Deutoch, Ronald, Realities of Nutrition (Palo Alto: Bull Publishing Co., 1976), p. 312.
9. Mayer, Dr. Jean, "Quality of Breastmilk Depends on Diet," Food for Thought (New Haven Register, June 6, 1984).
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11. Lowenberg, Miriam, "Between Infancy and Adolescence" The Yearbook of Agriculture 1959. (Washington: The United States Printing Office, 1959), p.30.1.
12. Stuart, Richard, Barbara Davis, Slim Chance in a Fat World (Champaign: Research Press, 1972), p.1.
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14. Grinder, Robert, Adolesence (New York: John Wiley \& Sons, Inc., 1973), p. 75.
15. Grinder, p. 75.
16. Levenkon, Steven, Treating and Over Coming Anorexia Nervosa (New York: Warner Books, 1982), p. i.
17. Levenkon, p. 4.
18. Mancinelli, Angela, Maureen McGuire, "The Teenage Sweet Tooth and What To Do About It", Snacking and Food Choice s-A Nutritional Module for Secondary Schools.
19. Mancinelli, "The Facts About Salt and Fat."
20. Bershad, Carol, Deborah Bernick, Bodyworks (New York: Random House, 1979), p 112.

## Suggested Student Reading

Bershad, Carol and Deborah Bernick. Bodyworks-The Kids ' Guide to Food and Physical Fitness . New York: Random House, 1979.

A fun book for people of all ages that is full of facts and little known stories, such as why King Louis XVI could eat so much.

Burns, Marilyn. Good For Me! All About Food in 32 Bites. Boston: Little Brown and Company, 1978.
Contains 32 different sections on foods that are very informative and entertaining to read.
Levenkron, Steven. Treating and Overcoming Anorexia Nervosa. New York: Warner Books, 1982.
Levenkron, author of The Best Little Girl in the World, explains in simple language that is quite readable his new therapy for anorexia nervosa.

McCoy, Kathy and Charles Wibbelsman M.D. The Teenage Body Book . New York: Simon \& Schuster, 1978.
Contains a section on "Healthy Body/Healthy Mind" that uses questions on nutrition from teenagers as a way of presenting information.

Rosenberg, Edward, Henry Gurney and Vivian Harlin M.D., Investigating Your Health . Boston: Houghton Mifflin Company, 1978.

This health text book contains a good chapter on "Eating" that includes some of the more practical issues around food, such as additives, labeling and shopping.

## Suggested Teacher Reading

Ashley, Richard and Heidi Duggal. Dictionary of Nutrition . New York: St. Martin's Press, Inc., 1975.
A useful reference on basic nutritional information. It gives composition and nutrient value of close to 500 foods.

Deutsch, Ronald. Realities of Nutrition . Palo Alto: Bull Publishing Co., 1976.
A valuable resource book on nutrition that explains a great deal of scientific knowledge in very readable form. It has a good reference list and charts on nutritive values for many foods.

Hooker, Richard. Food and Drink in America—A History . New York: The Bobbs-Merrill Co., 1981.
A look at food customs in America from the settlers on.
Jacobson, Michael and Catherine Lersa. Food For People , Not-Profit . New York: Ballantine Books, 1975.
A straight forward look at food, including nutrition, production, marketing and selling.

Kotz, Nick. Let Them Eat Promises-The Politics of Hunger in America . Englewood Cliffs: Prentice-Hall, Inc., 1969.

Describes the national political issues of 1967 and the struggle with the government over the problems of hunger.

Lappe, Frances. Diet for a Small Planet. New York: Ballantine Books, 1975.
The issue of world hunger is looked at and switching to non-meat foods as a way of reducing this global hunger is discussed.
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