

Middle and High School Curriculum

NUTRITION 101

LESSON SIX
FOOD DIET

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student
notes





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NUTRITION 101

LESSON 6 Food Diet

STUDENT-FRIENDLY OBJECTIVE

I will grasp the difference between a processed and whole food, the difference between acute and chronic disease, and how these affect my everyday living.

Processed and Whole Foods

PROCESSED FOODS:

Processed foods have been altered from their natural state by adding food coloring, preservatives, bleached, and food enhancers. Food processing typically takes whole food crops and uses these to produce attractive and often long shelf-life food products. Processed foods are foods that come in boxes, bags or cans. Processing utilizes large mixing, grinding, chopping and emulsifying equipment in the production process. These processes inherently introduce a number of contamination risks as hygiene.



Processed foods that may be bad for your diet:

- Canned foods
- White breads and pastas
- Packaged snack foods such as chips and candies and cakes and cookies.
- Frozen dinners
- Sugary breakfast cereals
- Processed meats

WHOLE FOODS

Whole foods are foods you can pick off trees, bushes, or pull out of the ground.



Interesting! An avocado has more than twice as much potassium as a banana.



A brilliant tip:

Replace juice or pop with iced herbal tea.

When were processed foods introduced?

1920s

One of the most striking developments in this time was the shift toward processed foods. Housewives had previously prepared food from scratch at home were now introduced to ready-to-cook meals. World War I brought about new methods of food processing as manufacturers streamlined production methods of canned and frozen foods.

Manufactured foods introduced in the 1920s include - Baby Ruth Candy Bar, Wonder Bread, Yoo-Hoo Chocolate Drink, Popsicles, Hostess Cakes, Kool-Aid, Velveeta Cheese

1930s

Frozen foods were introduced: frozen vegetables, fruits, fish and meats.

Why were processed food introduced?

Advantages

- Processed foods reduced the amount of time in the meal preparation: peeling, grinding, and cutting.
- The post-war expansion of international trade allowed diets to be more diverse, and making fresh fruits and vegetables available year round.
- The introduction of refrigerators enabled healthier and longer storage of perishable foods.
- Refrigeration also permitted the transport of perishable foods over much longer distances by road and sea.

Disadvantages

- Smaller farms were absorbed by larger farms who could afford the expensive farm machinery that lowered costs and improved profitability while increasing production.
- Chemical additives and preservatives (sodium and trans fats) may cause long-term health problems.
- Processing decreases the nutrient value of foods.
- There is an increased risk of contamination in manufacturing processing plants.
- Added fats and sugar may cause long-term health problems.



Eat your water! Watermelon is 92% water, cabbage is 90%.



DIFFERENCES BETWEEN ACUTE AND CHRONIC DISEASE

Acute Disease

An acute disease is a disease that begins rapidly, has unpleasant and intense symptoms (e.g. fever, coughing) but will have a short lifespan (1 to 2 weeks). The symptoms can range from mild to severe and at times, fatal.

- Most acute disease can be prevented from proper hygiene—washing hands.
- Examples of acute disease: colds, flus.



Kale eases lung congestion and is beneficial to the stomach, liver and immune system.

Chronic Disease

The symptoms of chronic disease and acute disease maybe quite similar; however, chronic disease symptoms will last from 3 months to years and typically do not have a rapid onset.

- Examples of chronic disease: asthma, arthritis, diabetes.

COMPARING FOOD AND HEALTH IN THE LAST 100 YEARS

What has changed in the last 100 years in the food industry?

Loss of nutrients

According to a recent study at the University of Colorado the nutrient density of food has declined significantly over the past 100 years. In fact nutrient density has declined approximately 40-60% over the past 100 years. That indicates that food eaten today is up to 50% less nutrients than what past generations ate.



Broccoli contains twice the vitamin C of an orange!

Additives in food

There is an increasing use of chemicals - food additives, flavor enhancers - to create a longer shelf life and convenience to consumers. Some research is showing the negative health impact due to these artificial chemicals additives.

What has changed in the health industry?

A hundred years ago most people died from acute diseases. And most of these diseases were due to poor hygiene (no running water). These days, most people suffer from chronic diseases like heart disease, asthma, diabetes, cancer, arthritis, and obesity.