

are we what we eat?

Our diet has certainly changed over the past fifty years. With the advent of packaged foods our idea of what we choose to eat has certainly been transformed. We can purchase any type of food in a box – rice, mashed potatoes, macaroni and cheese, and even freeze-dried vegetables along with cake and pudding mixes.

If we look at the label on these boxes of "food," we will see names such as soy protein isolate, BHT, MSG, citric acid, sulfites, aspartame, corn syrup, propylene glycol, and red dye No. 2. We might ask ourselves, "where are the 'real' foods?"

Food manufacturers are allowed to use food additives, flavorings, coloring agents, synthetic proteins, chemical preservatives, and a myriad of other chemicals to make their boxes of "food" look, smell and taste like "real" food.

so what difference does it make whether we eat processed and artificial foods instead of the real thing?

Packaged foods, even if they are just freeze-dried from natural food sources, do not contain the same amount of nutrients as the original foods. In fact, many times the food manufacturers have added vitamins or minerals to the packaged foods to replace some of the nutrients lost in processing. In addition, chemical preservatives and flavor enhancers are added to the foods to make them more palatable.

Most packaged foods also have hidden chemicals – that are not directly stated on the label. For example, pesticides that are used in the farming of the original foods source are one type of hidden chemical. Chemicals that are used in the processing of the food before it is packaged, often add to the amount of chemicals in the foods.

who regulates food safety?

There are three agencies that are responsible for regulating food in the United States:

- Environmental Protection Agency (EPA¹)
- US Department of Agriculture (USDA²)
- Food and Drug Administration (FDA³)

The FDA is responsible for the regulation of food additives and contamination of foods as well as making certain that everyone who handles the foods from farmer to truckers ensure the safety of our food supply.⁴

what are the differences between the types of foods?

- Wholesome fresh organic foods in their natural state grown without synthetic chemicals or pesticides
- Foods grown with pesticides
- Packaged foods that contain little to no natural food

wholesome, fresh, organically-grown foods:

benefits

- · Contain no toxic chemicals (pesticides, hormones, antibiotics)
- Contain a variety of needed vitamins, minerals, and phytonutrients
- Grown in mineral rich soil
- Has to be eaten fresh
- Available seasonally

drawbacks

- Not always available
- Usually more expensive



conventionally grown fresh foods

be∩efits |

- A wide variety of fruits, vegetables, and spices available anywhere and anytime
- Foods grown in different parts of the world and available all year around
- More reasonably priced as many are grown on larger farms
- Creates a global economy of fresh foods

drawbacks

- Grown with chemical fertilizers, insecticides, and pesticides, which can build up in our bodies with some dire health consequences
- May be genetically modified
- Many are hybrids of different types of foods
- Many are picked before they are ripe
- Some are grown hydroponically without soil. They may contain vitamins, but no minerals as the mineral content of foods comes from the minerals in the soil.

packaged and processed foods

benefits

- Convenient to prepare
- Ease of preparation
- Available everywhere
- Long shelf life
- Made to taste good

drawbacks

- Made from freeze-dried food
- Lots of chemical additives and flavor enhancers
- Many times made mostly of synthetic chemicals. (no "real" food)
- Vitamins and minerals have to be added usually only a few selected ones
- Many of the chemicals have not been fully researched for any health consequences
- If we consume mostly packaged foods, we will end up with nutrient deficiencies

bioavailability

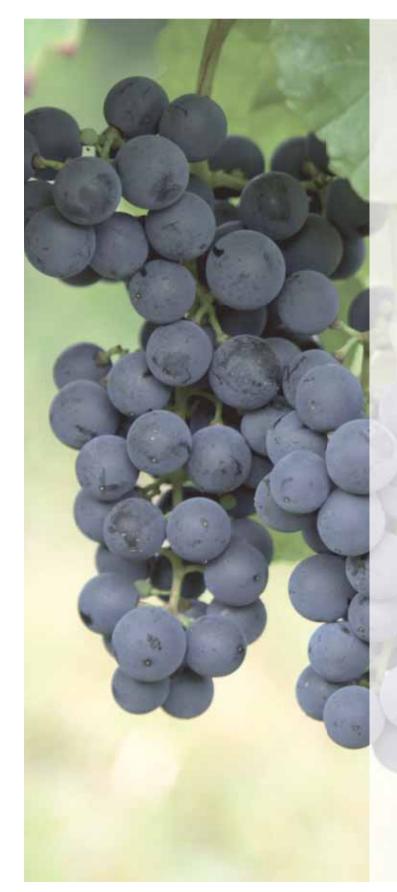
When applied to food, bioavailability means nutrients available for consumption and use by the body. This brings us to which form of food provides the most nutrients. For example, is food healthier if canned, frozen, packaged, or fresh? Is food healthier if stored in a refrigerator or at room temperature?

which is best?

Hands down, whole natural, fresh, organic foods are the ultimate choice and provide the most available nutrients.

Freezing and canning the foods diminishes the amount and type of nutrients available for consumption. A can of green beans has less than half the Vitamin C as freshly steamed green beans.

Packaged foods contain chemicals and foods that have been freeze-dried and nutrients have to be added to make up for those stripped away in processing.



some ways to increase bioavailability:

- Store most fresh fruits and vegetables at room temperature. Storing at room temperature can release up to 149 percent more antioxidants in different fruits.⁵
- To make the leafy green vegetables more bioavailable, use olive oil salad dressings or eat them with avocado or nuts. The good fats help you absorb the cartotenoids in the salad.

References

- 1. EPA: is an agency of the federal government of the United States charged to regulate chemicals and protect human health by safeguarding the natural environment: air, water, and land.
- 2. USDA: is the United States federal executive department responsible for developing and executing U.S. federal government policy on farming, agriculture, and food.
- 3. FDA: is a Government agency of the United States Department of Health and Human Services and is responsible for regulating and supervising the safety of foods, tobacco products, dietary supplements, medication drugs, vaccines, Biopharmaceutical, blood transfusion, medical devices, electromagnetic radiation emitting devices, veterinary products, and cosmetics.
- 4. 437: Haas, E. Staying Healthy with Nutrition, 2006:Celestial Arts, Berkeley, CA.
- 5. La Puma, J. Chef MD;s Big Book of Culinary Medicine, 2008: Crown Publishers, N.Y.

ACTION PLAN

IDENTIFY AND LIST PROBLEM FOODS IN YOUR DIET

ALTERNATIVES