

What Happens to Our Bodies Shortly After We Eat Junk Foods?

Food is made up of three major nutrients: carbohydrates, proteins, and fats. There are also vitamins and minerals in food that support good health, growth, and development. Getting the proper nutrition is very important during our teenage years. However, when we eat junk foods, we are consuming high amounts of carbohydrates, proteins, and fats, which are quickly absorbed by the body.

Let us take the example of eating a hamburger. A burger typically contains carbohydrates from the bun, proteins and fats from the beef patty, and fats from the cheese and sauce. On average, a burger from a fast-food chain contains 36–40% of your daily energy needs and this does not account for any chips or drinks consumed with it. This is a large amount of food for the body to digest—not good if you are about to hit the cricket pitch!

A few hours to a few days after eating rich, heavy foods such as a burger, unpleasant symptoms like tiredness, poor sleep, and even hunger can result. Rather than providing an energy boost, junk foods can lead to a lack of energy. For a short time, sugar (a type of carbohydrate) makes people feel energized, happy, and upbeat as it is used by the body for energy. However, **refined sugar**, which is the type of sugar commonly found in junk foods, leads to a quick drop in blood sugar levels because it is digested quickly by the body. This can lead to tiredness and cravings [5].

Fiber is a good carbohydrate commonly found in vegetables, fruits, barley, legumes, nuts, and seeds—foods from the five food groups. Fiber not only keeps the digestive system healthy, but also slows the stomach's emptying process, keeping us feeling full for longer. Junk foods tend to lack fiber, so when we eat them, we notice decreasing energy and increasing hunger sooner.

Foods such as walnuts, berries, tuna, and green veggies can boost concentration levels. This is particularly important for young minds who are doing lots of schoolwork. These foods are what most elite athletes are eating! On the other hand, eating junk foods can lead to poor concentration. Eating junk foods can lead to swelling in the part of the brain that has a major role in memory. A study performed in humans showed that eating an unhealthy breakfast high in fat and sugar for 4 days in a row caused disruptions to the learning and memory parts of the brain [6].

If we eat mostly junk foods over many weeks, months, or years, there can be several long-term impacts on health. For example, high **saturated fat** intake is strongly linked with high levels of bad cholesterol in the blood, which can be a sign of heart disease. Respected research studies found that young people who eat only small amounts of saturated fat have lower total cholesterol levels [7].

Frequent consumption of junk foods can also increase the risk of diseases such as hypertension and stroke. Hypertension is also known as high blood pressure and a stroke is

damage to the brain from reduced blood supply, which prevents the brain from receiving the oxygen and nutrients it needs to survive. Hypertension and stroke can occur because of the high amounts of cholesterol and salt in junk foods. Furthermore, junk foods can trigger the “happy hormone,” **dopamine**, to be released in the brain, making us feel good when we eat these foods. This can lead us to wanting *more* junk food to get that same happy feeling again [8]. Other long-term effects of eating too much junk food include tooth decay and constipation. Soft drinks, for instance, can cause tooth decay due to high amounts of sugar and acid that can wear down the protective tooth enamel. Junk foods are typically low in fiber too, which has negative consequences for gut health in the long term. Fiber forms the bulk of our poop and without it, it can be hard to poop!

One way to figure out whether a food is a junk food is to think about how processed it is. When we think of foods in their whole and original forms, like a fresh tomato, a grain of rice, or milk squeezed from a cow, we can then start to imagine how many steps are involved to transform that whole food into something that is ready-to-eat, tasty, convenient, and has a long shelf life.

For teenagers 13–14 years old, the recommended daily energy intake is 8,200–9,900 kJ/day or 1,960 kcal–2,370 kcal/day for boys and 7,400–8,200 kJ/day or 1,770–1,960 kcal for girls, according to the Australian dietary guidelines. Of course, the more physically active you are, the higher your energy needs. Remember that junk foods are okay to eat occasionally, but they should not make up more than 10% of your daily energy intake. In a day, this may be a simple treat such as a small muffin or a few squares of chocolate. On a weekly basis, this might mean no more than two fast-food meals per week. The remaining 90% of food eaten should be from the five food groups.

In conclusion, we know that junk foods are tasty, affordable, and convenient. This makes it hard to limit the amount of junk food we eat. However, if junk foods become a staple of our diets, there can be negative impacts on our health. We should aim for high-fiber foods such as whole grains, vegetables, and fruits; meals that have moderate amounts of sugar and salt; and calcium-rich and iron-rich foods. Healthy foods help to build strong bodies and brains. Limiting junk food intake can happen on an individual level, based on our food choices, or through government policies and health-promotion strategies. We need governments to stop junk food companies from advertising to young people, and we need their help to replace junk food restaurants with more healthy options. Researchers can focus on education and health promotion around healthy food options and can work with young people to develop solutions. If we all work together, we can help young people across the world to make food choices that will improve their short and long-term health.

Section 1: Multiple Choice – Inference and Detail

1. The passage suggests that the initial “energy boost” from refined sugar is followed by:

- A. sustained high energy levels
 - B. a rapid decrease in blood glucose causing fatigue
 - C. a balanced increase in energy
 - D. a gradual mood decline
2. According to the text, the impact of junk food on cognitive functions is primarily due to:
- A. the lack of vitamins
 - B. inflammation in specific brain regions
 - C. excessive calorie intake
 - D. lack of sleep
3. Which statement best describes the relationship between saturated fat consumption and cholesterol according to the passage?
- A. Saturated fats have no significant effect on cholesterol levels.
 - B. Lower saturated fat intake correlates with reduced total cholesterol.
 - C. High saturated fat intake decreases cholesterol.
 - D. Cholesterol levels are unaffected by dietary fat intake.

Section 2: True/False/Not Given – Critical Thinking

- 4. The passage states that consuming junk food can impair learning and memory.
- 5. It is claimed that junk food is the sole cause of hypertension and stroke.
- 6. The passage implies that fiber deficiency from junk food can lead to digestive difficulties.
- 7. According to the text, junk food advertising should be unrestricted.
- 8. The authors suggest that public health interventions require multi-sector cooperation.

Section 3: Summary Completion

Complete the summary using NO MORE THAN THREE WORDS from the passage. Write your answers in the spaces provided.

Eating excessive junk food can cause several long-term health problems such as increased _____ and elevated risk of _____. The text highlights the importance of replacing junk food with _____ to maintain good health. Government actions are recommended to limit _____ aimed at young people, and researchers should focus on health _____ and working with youth.

Section 4: Fill in the blanks (NO MORE THAN THREE WORDS)

1. Food is mainly made up of carbohydrates, proteins, and _____.
2. A typical burger contains carbohydrates from the _____.
3. Refined sugar causes a rapid drop in _____ after consumption.
4. Fiber helps slow the stomach's _____ process.
5. Junk food consumption can cause swelling in the part of the brain responsible for _____.
6. High intake of saturated fat is linked with increased levels of _____.
7. Frequent junk food eating increases the risk of hypertension and _____.
8. Soft drinks can cause tooth decay due to high amounts of sugar and _____.
9. Junk foods are typically low in _____, which affects gut health.
10. Teenagers should limit junk food to no more than _____ of their daily energy intake.
11. Governments should stop junk food companies from _____ to young people.
12. Healthy foods help to build strong bodies and _____.
13. The "happy hormone" released when eating junk food is called _____.
14. A diet high in junk food can disrupt learning and _____.
15. The recommended energy intake varies depending on one's level of _____.