

The Dangers of Over-Cooking Your Food

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Here are some statistics to put into perspective the dangers of overcooking and undercooking.

- The Center for Disease Control and Prevention reported 340 Cases of E. coli infection in 1997 which makes the incidents rate of 2.1 per 100,000 people.
- Also reported that scientists have estimated that the average cancer risk because of heterocyclic amine exposure ranges from 1 per 10,000 for the average person to more than 1 to 50 for those ingesting large amounts of well-done muscle meats, especially flamed-grilled chicken.

Recently a report by Leif Busk, head of the Research and Development Department of the Swedish National Food Administration showed that overcooking of some baked and fried starchy foods causes acrylamide to be formed in these cooked foods. Acrylamide is cancer causing in animals.

With this new information in mind, it is wise to look at this whole subject of over-cooked food. Over-cooked food might take on a different meaning than it has previously.

Not only is acrylamide formed in some starchy food but also meat cooked at high temperatures has as many as 20 compounds known as heterocyclic amines, or HCAs for short. HCAs are known as cancer causing. Many people feel that it is important to cook food well in order to avoid bacterial infection. These same people do not realize that cooking meat, poultry, or fish at high temperatures for long periods of time can also be dangerous to your health.

There are other epidemiologic studies that suggest that there is a relationship between methods of cooking and various cancers and heart disease.¹ In one study the researchers found that those who ate their beef medium-well or well-done had more than three times the risk of stomach cancer than those who ate their beef rare or medium-rare. Additional studies have shown that an increased risk of developing pancreatic, colorectal, and breast cancer is associated with high intakes of well-done, fried, or barbequed meats.

http://cis.nci.nih.gov/fact/3_25.htm

Evidence To Show That The More Food Is Cooked, The More Difficult It Is To Digest And Metabolize

This is true of any food. The higher the temperature that food is cooked, the longer it stays in the gut and the more difficult it becomes for our digestive mechanisms to digest it. This makes it more difficult for the food to absorb and function at a cellular level where it needs to work. When the food can not function in the cells, the cells can become deficient and/or toxic which leads to deficiency and toxicity of the whole body making the body less able to function optimally.

There are many ways to cook food, some with less harmful results. Steaming, boiling, and stewing expose food to heat not exceeding 100 degrees C. On the other hand, baking and roasting expose food to temperatures up to 200 degrees.

Microwaving also exposes food up to 200 degrees C. but there are also many other [problems with microwaving food](#). The highest temperatures that foods are exposed to are broiling and barbecuing which can be 400 degrees C. Frying with a pan or wok normally uses high surface temperatures.²

As early as 1930 research was done in Switzerland showing what processed and cooked food did to the leukocytes, the white blood cells in humans. Prior to this research it was noted that upon eating there would be an immediate increase of the white blood cells which was called "digestive leukocytosis." Digestive leukocytosis means that there is a rise in the number of white blood cells after eating. At the time this was considered a normal physiological response to eating.

It was not know why the cells would increase after eating and this increase usually meant that the person had been exposed to a harmful substance such as toxic chemicals, a trauma or infection. <http://www.halalvitamins.com/cooking.htm>

Then at the Institute of Clinical Chemistry, Dr. Paul Kouchakoff found that eating unaltered, raw food or food heated at low temperatures did not cause a reaction in the blood. Kouchakoff also found that if the food was processed or heated beyond a certain temperature it caused a rise in the number of white blood cells. He found that foods that had been refined, homogenized, pasteurized, or preserved causes the greatest increase in white blood cells.

Examples of these harmful foods are:

- Pasteurized milk,
- Chocolate,
- Margarine,
- Sugar,
- Candy,
- White flour and
- Regular salt.

There are two more interesting facts about this study:

1. If the food was chewed very thoroughly, the harm to the white blood cells would lessen.

2. If a person ate as much of the same raw food as he/she ate cooked the pathological reaction in the blood would be minimal.³

Researchers from the University of California at Davis examined how volunteers digested bread that had been cooked to varying degrees: first very mildly, second normally, and third over-cooked. The slightly cooked bread went through the stomach quite rapidly and caused no problems in digestion. But the longer the bread was cooked, the longer it stayed in the stomach.

In fact, the dark over-cooked bread caused an immune response in the bloodstream. An immune response can be triggered by undigested food that gets into the bloodstream and must be treated as a foreign invader by the immune system.

Francis Pottenger found that every food has a heat labile point. The heat labile point is the temperature point at which food changes its chemical configuration. All foods are made up of carbon, hydrogen, nitrogen and oxygen in different chemical configurations with minerals added.

We have come from early man eating foods in certain chemical configurations. We have the digestive enzymes to digest foods with those chemical configurations. When food is heated past the heat-labile point, its chemical configuration changes.

Pasteurization, deep-frying, and barbecuing are all forms of cooking where food is heated past the heat labile point. The body does not understand these new chemical configurations and does not have the enzymes to digest the food easily.⁴

When the food does not digest properly, it can sit in the gut, unable to be assimilated completely and it starts to become toxic. The carbohydrates start to ferment, the proteins begin to putrefy and the fats become rancid. These toxins irritate the lining of the gastrointestinal tract mucosa.

This can poison the gut bacteria causing the ecology of the gut to become upset. Three hundred to four hundred of the bacteria species can become upset causing overgrowth of candida and other pathogens. The irritation also makes the cells on the lining of the gastrointestinal tract to enlarge.⁵

When the cells become larger, the putrefied, undigested or partially digested food slips into the blood stream, called the leaky gut syndrome or gut permeability.⁶

When they get into the blood stream they are called free radicals with such formidable names as cadaverines, endols, putricine, and phenol.

Since it is the liver's job to detoxify toxins, the liver becomes overloaded and less able to do its job. In the bloodstream, this undigested or partially digested food (in the form of macromolecules) is in too large a particle to get into the cell to function. This undigested or partially digested food moves through the blood stream causing havoc in the body.

This is a form of food allergy. The macromolecules can go to the head and cause the classic symptoms of allergy such as runny eyes, scratchy throat, itchy ears, sinusitis, and sneezing. They can go to the brain and cause headaches, anger, fatigue, schizophrenia, and perspiration.

This putrefied food can go to the joints or tissues and cause arthritis, or to the nerves and cause multiple sclerosis. These macromolecules can also go to the skin and cause acne, edema, psoriasis or rashes. It can lodge anywhere in the soft tissues in the body and cause problems, straining whatever a person's weak link may be.⁷

Finally the immune system comes to the defense of the body, and makes these undigested particles back into substances that the body can use or escorts them out of the body. The immune system is asked to do the job that our digestive system did not do.

The immune system was not designed to do this on a daily basis, every time we eat over-cook foods or over-processed foods. Over a period of time the immune system becomes exhausted and the door is opened to infectious and degenerative diseases.

From this research and the principle of the heat labile point, it seems that the best way to cook food is the least way.

The more food that you can eat raw, the better.

If you do cook your food the best way to cook food is lightly steam, stew, or use a slow crock cooker. Eat as few over-processed and over-cooked foods as possible. The body has a difficult time digesting fried, barbecued, pasteurized, dried, and other over-processed and over-cooked foods that you find in cake mixes, dried milk, dried eggs, pizza mixes, dairy products and other boxed and processed foods. Bon appetite au natural.