

Note: This is a reference cited in *AP 42, Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

AP-42 Section 9.6.1
Reference 9
Report Sect. _____
Reference _____

New Standard Encyclopedia

VOLUME 4
(C to Civ)

Standard Educational Corporation
CHICAGO

Varieties of Cheese



Name	Description	Ingredients	Origin	Uses
American	Light yellow to orange; semisoft	Cheddar, Colby (patented process)	U.S.A.	Sandwiches, salads, in cooked foods, appetizers
Blue and Roquefort	Creamy-white with blue-green mold; semisoft	Whole milk (Blue); sheep's milk (Roquefort)	France	Dessert, salads, appetizers, in cooked foods
Brick	Pale yellow; semisoft	Whole milk	U.S.A.	Sandwiches, appetizers, salads
Brie	Whitish crust; creamy yellow interior; soft	Whole milk	France	Appetizers, salads, dessert
Camembert	White crust; creamy yellow interior; soft	Whole milk	France	Dessert
Cheddar	Whitish to orange; firm texture	Whole milk	England	Sandwiches, in cooked foods
Colby	Light yellow; hard	Whole milk	U.S.A.	Appetizers, sandwiches, in cooked foods
Cottage	White; soft curds	Skimmed milk; cream may be added	Uncertain	Salads, appetizers, cooked foods
Cream	Soft, white; with buttery flavor	Cream and whole milk	U.S.A.	Appetizers, sandwiches, salads

Cheese, a dairy product made by separating the solid part of milk (the *curd*) from the watery part (the *whey*). Most cheese is made from the curd, but some varieties use the whey instead. Cow's milk is most commonly used, although some cheeses are made from the milk of goats or sheep. Cheese can be made from almost any form of milk, including whole milk, skim milk, buttermilk, or cream. The taste depends on the kind of

C-238

milk used, and on the manufacturing and curing processes.

Cheese is a concentrated protein food. Most types are 20 to 30 per cent protein (principally casein), about 30 per cent fat, and 40 per cent water. Cottage cheese is an exception, being about 80 per cent water, 16 per cent protein, and 4 per cent fat. Special dietary cheeses also have a reduced fat content. Cheese also contains mineral

Name	Description	Ingredients	Origin	Uses
Edam	Creamy yellow with red wax coat; firm texture	Skimmed milk	Netherlands	With fresh fruit, appetizers
Feta	White; firm	Cow's, sheep's, or goat's milk	Greece	Appetizers, in cooked foods
Gorgonzola	Similar to blue cheese	Cow's milk (whole) and/or goat's milk	Italy	Dessert, appetizers
Gouda	Similar to Edam, but softer	Whole or partly skimmed milk	Netherlands	Appetizers, with fresh fruit
Gruyère	Similar to Swiss	Partly skimmed milk	Switzerland	Appetizers, dessert
Limburger	Creamy white, soft interior; pungent odor	Whole or partly skimmed milk	Belgium	Sandwiches, appetizers
Monterey Jack	Similar to Cheddar	Whole milk	U.S.A	In cooked foods
Mozzarella	White; rubbery texture	Whole milk	Italy	In cooked foods
Muenster	Creamy white, semisoft; tan or white surface	Whole milk	Germany	Appetizers, sandwiches
Neufchatel	Similar to cream cheese	Whole milk	France	Appetizers, sandwiches, salads
Parmesan, or Reggiano	Light yellow; hard grating	Partly skimmed milk	Italy	Soup, salads, as seasoning (grated)
Port du Salut, or Oka	Russet surface, creamy yellow interior; semisoft	Whole milk and rennet	France	Dessert, appetizers, with fresh fruit
Provolone	Golden yellow surface; hard	Whole milk	Italy	Appetizer, in cooked foods
Ricotta	White; soft	Whey, whole milk, or skimmed milk	Italy	In cooked foods, as seasoning
Romano	Very hard	Partly skimmed milk	Italy	Appetizer, as seasoning (grated)
Roquefort	See <i>Blue</i> .			
Stilton	White with blue-green mold veining; semisoft	Whole milk with cream	England	Appetizer, dessert, in cooked foods
Swiss	Pale yellow with firm texture and "eyes"—holes formed by gas bubbles	Partly skimmed milk	Switzerland	Sandwiches, appetizers, salads

Photo: United Dairy Industry Assn.

and milk sugar, and most types are rich in vitamin A. Cheese is a good source of calcium, phosphorus, sulfur, and riboflavin. Cheese is valuable in the diets of both children and adults.

In the United States, cheese is eaten as an appetizer, in soups, in such dishes as Welsh rabbit, quiche, and cheese fondue, in omelets, casseroles, and sauces, and with macaroni. Italian-style dishes, especially, are fla-

vored with cheese. Cheese is also used in salad dressing, sandwich spreads, pastries, and desserts.

Kinds of Cheese

Natural (unprocessed) cheeses are classified into three main groups:

Hard Cheeses, such as Cheddar, American, and Swiss, have a relatively low moisture content.

Semi-hard Cheeses, such as brick, Muenster, Roquefort, and Stilton, have a slightly higher moisture content.



Chuck Pelley, Seattle
Cheese Worker separates curd cubes from the whey to assure that all of the whey will drain off.

Soft Cheeses, such as cottage, cream, Brie, and Camembert, have a high moisture content and are more perishable than the two other classes.

Processed cheese is made by blending two or more varieties, or by blending together portions of the same type of cheese that are at different stages of ripeness. The blend is heated with an emulsifying agent to produce a mild cheese with uniform flavor and improved keeping qualities.

"Cheese food" is processed cheese made by adding milk solids to Cheddar or American cheese. This product is easily spread and is especially adaptable for cooking.

How Cheese Is Made

Pasteurized or unpasteurized milk is placed in large kettles or vats, blended to produce a uniform fat content, and heated. The milk is made to coagulate (curdle, or thicken) by the action of bacteria-produced lactic acid, by enzymes such as rennet, or by a combination of both methods. The coagulation occurs mainly in the casein, or protein part, of the milk. The temperature at which coagulation takes place is carefully controlled. It varies from 68° to 104° F. (20° to 40° C.), depending on the kind of cheese being made.

The coagulated milk, or curd, is cut into tiny cubes. Their size determines the final texture of the cheese and its moisture content.

The whey is drained away and the curd

CHEESECLOTH — CHEETAH

cubes are allowed to mat together into a rubbery mass. This is cut into blocks, chopped into small pieces, and placed in molds, or *hoops*. Salt may be added before or after hooping.

Hard and semi-hard cheeses are then ripened, or cured, to develop distinctive flavor and texture. During this process, which takes from three months to a year, the milk protein in the cheese undergoes a chemical change. Certain bacteria and molds develop, contributing to the distinctive flavor.

History of Cheese Making

The art of making cheese has been known for thousands of years. The milk of many animals has been used, including that of mares, camels, and reindeer. Cheese has long been an important staple food for nomadic peoples because it is easily carried and keeps well. In early times the ingredients and methods of cheese making were kept secret. A town or family producing a desirable cheese went to great pains to maintain a monopoly on the product.

Most cheese is now made in factories and cheese making has become a science. The United States, Russia, France, West Germany, and Italy are leading producers. More than a third of all the cheese made in the United States comes from Wisconsin.

See also CASEIN; MILK; RENNET.

Cheesecloth. See TEXTILE (table).

Cheetah, chē'tā, or **Hunting Leopard**, an animal of the cat family. Once abundant from Israel eastwards through northern India, the cheetah is now found in the wild only in isolated areas of the Middle East and adjacent regions to the north and south. The cheetah is an endangered species whose numbers have been greatly reduced by overhunting and destruction of its natural habitat.

Although a true cat, the cheetah resembles the dog, especially the greyhound, in many respects. The cheetah is the swiftest of all land animals; it can run 70 miles per hour (113 km/h) for short distances. Its legs are long and its paws are small. Unlike other members of the cat family, it has short, unsheathed claws.

The adult cheetah's body is about 50 inches (127 cm) long. Its long, bushy tail is about half the length of the body. The cheetah's color ranges from a tawny yellow to a pale buff or grayish white. It is uniform

otted on its upper white and unspeckled black lines in the corner of the short, broad head. The cheetah is a member of the Felidae.

See also CAT (column).
Cheever, John, an American short-story writer awarded the Pulitzer Prize for *The Story of an Hour* (1894) and *The Shot* (1897). He was born in New York.

His other books include *Way Some People Live* (1953); *The Book of the Dead* (1954); *The World of the Living* (1957); *Oh What a Wonderful World* (1957); *Oh What a Wonderful World* (1957).

Chekhov, Anton, chē'khov, chē'khov, (1860-1904), a Russian playwright and short-story writer. He was the world's leading writer of the late 19th and early 20th centuries.

His plays include *The Cherry Orchard* (1904), *The Seagull* (1896), *The Three Sisters* (1901), and *The Uncle Vanya* (1899). He was a member of the Russian Academy of Sciences.

His short stories include *The Lady with the Dog* (1899), *The Artist* (1894), *The Death of a Clerk* (1894), and *The Man with a Camera* (1898).

His plays include *The Cherry Orchard* (1904), *The Seagull* (1896), *The Three Sisters* (1901), and *The Uncle Vanya* (1899).

His short stories include *The Lady with the Dog* (1899), *The Artist* (1894), *The Death of a Clerk* (1894), and *The Man with a Camera* (1898).