VINEGAR

The dictionary defines vinegar as “sour wine” or “a sour liquid obtained by acetic fermentation of dilute alcoholic liquids and used as a condiment or preservative.”

Vinegar is made by two distinct biological processes, both the result of the action of harmless microorganisms (yeast and “Acetobacter”) that turn sugars (carbohydrates) into acetic acid. Many of our favorite foods involve some type of bacteria in their production – from cheese and yogurt to wine, pickles and chocolate. The first process is called alcoholic fermentation and occurs when yeasts change natural sugars to alcohol under controlled conditions. In the second process, a group of bacteria (called “Acetobacter”) converts the alcohol portion to acid. This is the acetic, or acid fermentation, that forms vinegar. Proper bacteria cultures are important; timing is important; and fermentation should be carefully controlled.

Although acetic acid is the primary constituent of vinegar aside from water, acetic acid is not vinegar. Vinegar contains many vitamins and other compounds not found in acetic acid such as riboflavin, Vitamin B-1 and mineral salts from the starting material that impart vinegar with its distinct flavor.

Vinegar can be made from any fruit, or from any material containing sugar.

The Vinegar Institute conducted studies to find out and confirmed that vinegar’s shelf life is almost indefinite. Because of its acid nature, vinegar is self-preserving and does not need refrigeration. White distilled vinegar will remain virtually unchanged over an extended period of time. And, while some changes can be observed in other types of vinegars, such as color changes or the development of a haze or sediment, this is only an aesthetic change. The product can still be used and enjoyed with confidence.

Most vinegars contain insignificant amounts of some or all of the mandatory nutrients required in nutrition labeling. Most vinegars have less than 3 calories per tablespoon and no fat. Seasoned vinegars may contain more calories due to the added ingredients. Check the label of your favorite vinegar product to determine the nutrition information for that product.

Vinegar is a liquid substance consisting mainly of acetic acid and water, the acetic acid being produced through the fermentation of ethanol by acetic acid bacteria. It is today mainly used in the kitchen, but historically, as the most easily available mild acid, it had a great variety of industrial, medical, and domestic uses. Commercial vinegar is produced either by fast or slow fermentation processes. In general, slow methods are used with traditional vinegars, and fermentation proceeds slowly over the course of weeks or months. The longer fermentation period allows for the accumulation of a nontoxic slime composed of acetic acid bacteria. Fast methods add mother of vinegar (i.e., bacterial culture) to the source liquid before adding air using a venturi pump system or a turbine to promote oxygenation to obtain the fastest fermentation. In fast production processes, vinegar may be produced in a period ranging from 20 hours to three days.

Any type of vinegar may be distilled to produce a colorless solution of about 5% to 8% acetic acid in water, with a pH of about 2.4. This is variously known as distilled spirit or "virgin" vinegar, or white vinegar, and is used for medicinal, laboratory, and cleaning purposes, as well

as in cooking, baking, meat preservation, and pickling. The most common starting material, because of its low cost, is malt vinegar.

Nutrition Facts

Serving Size: (100 grams)

Amount Per Serving

Calories: 12

	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 1mg	0%
Total Carboydrates 5g	1%
Dietary Fiber 0g	~
Sugars 5g	~
Protein 0g	0%

Vitamin A	0%	Vitamin C	0%
Iron	0%	Calcium	0%

*Percent Daily Values are based on a 2000 calorie diet. Your daily values may be higher or lower depending on your calorie needs