

Our Favorite Summer Soup: Gazpacho

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Abstract: Kitchen chemistry is the theme of this year's National Chemistry Week (November 5–11, 2000). This brief article discusses garlic and gazpacho and includes a recipe for this cold Spanish tomato soup.

Because kitchen chemistry is the theme of this year's National Chemistry Week (November 5–11, 2000), we thought that a short article about and recipe for gazpacho (cold Spanish tomato soup) would be of interest to our readers.

Gazpacho is apparently a peasant dish, for in Rouben Mamoulian's 1941 20th Century Fox movie based on Vicente Blasco Ibañez's novel "Sangre y arena" (Blood and Sand), young Juan Gallardo (played by Rex Downing) tells his mother (Nazimova), "I'm not going to starve the rest of my life on gazpacho and rotten codfish." However, by the time that he has grown up and become a popular matador, the mature Juan (Tyronne Power) sings its praises to Doña Sol (Rita Hayworth) and her snooty society friends.

Although Juan describes gazpacho as composed of biscuits, oil, vinegar, onions, garlic, and bread crumbs, the main ingredient of the dish, as we regularly prepare it each summer to use up our garden crop, is tomatoes. Yet the recipe is flexible, permitting many variations; this summer our Armenian cucumber crop was unusually large so we used it to augment our meager tomato crop, with no perceptible change in flavor or consistency in the finished product.

The other essential ingredient of this delicious, healthy, easy-to-prepare, cold Spanish soup is garlic (*Allium sativum*), the bulbous perennial plant of the lily family (*Liliaceae*), long prized as a flavoring and for its medicinal properties. In ancient and medieval times garlic was carried as a charm against vampires and other evils. Its powerful onion-like aroma and pungent taste have made it a classic ingredient in many national cuisines. Its wide use in the United States originated among European immigrant groups.

Garlic, also known colloquially as "the stinking rose," is native to central Asia but also grows wild in Italy and southern France. The self-proclaimed "Garlic Capital of the World" is the southern Santa Clara County city of Gilroy, California, which features an annual Gilroy Garlic Festival. However, most of the fresh and processed garlic comes from the San Joaquin Valley. Because of white rot, a fungal disease, attacked the crop in Gilroy, in 1999 Fresno County was California's Number 1 garlic producer with a \$175 million crop.

Garlic bulbs are used either sliced or ground to flavor tomato sauces, stews, and salad dressings in southern European and Asian cooking. The membranous skin of the garlic bulb encloses as many as 20 edible bulblets (cloves). The plant is propagated by planting the cloves or top bulblets and is grown as an annual crop by methods similar to those used in growing onions.

Garlic lowers blood pressure, fights bacteria, thins the blood, helps prevent heart disease and cancer, and strengthens the immune system. It contains about 0.1 percent essential oil of garlic, a complex mixture whose chief components are allyl disulfide ((CH₂=CHCH₂)₂S₂), diallyl trisulfide ((CH₂=CHCH₂)₂S₃), and allylpropyl disulfide ((CH₂=CHCH₂)-(CH₃CH₂CH₂)S₂). Its immediate health-promoting precursor, allicin, is decomposed into a variety of compounds by heating, but gazpacho requires no cooking (a definite plus for both chef and guests in summertime Fresno). One caveat: The garlic odor is absorbed and exuded from the pores for several days, keeping vampires and infections from other persons at bay.

Spanish cold tomato soup (8 servings)

12 cups of tomatoes (quartered)
6 cups yellow sweet peppers (quartered) or 6 cups sliced cucumbers
1 red onion (quartered)
8 garlic cloves
1 can beef broth (14-1/2 oz. by weight)
2 teaspoons basil leaves
2 teaspoons ground ginger
1 hot pepper (seeds removed) (adjust amount to taste)
1/4 cup lime or lemon juice
Garlic salt (to taste)

- Blend ingredients in a blender (high speed) to desired consistency.
- Pour into tall container and refrigerate.
- To serve, mix thoroughly and pour into cup or bowl.
- Garnish with cold boiled shrimp and/or diced cucumbers or tomatoes.
- Enjoy and laugh at vampires!