

New cooling agent

Researchers in Germany have developed a compound that is reported to exhibit 35 times the cooling power of mint. The natural ingredient maintains its cooling effect twice as long as mint and without mint's taste or smell. While mint is the most popular choice for gum, candy and mouthwash, there are several instances where only its cooling or soothing effect is desirable. The new compound offers this possibility when added to food, drinks, cosmetics and other consumer products.

The researchers evaluated 26 non-mint cooling compounds and compared their cooling effect to that of menthol, the active ingredient of mint that is derived from the oils of peppermint or spearmint plants. Of the cooling agents tested, four showed cooling activities at concentrations equal to or below menthol, but without the minty odour. The most active compound had 35 times the oral cooling activity of menthol. On the skin, the same compound showed 250 times the cooling activity of menthol. It also lasts longer than menthol, which lasts for 15 minutes.

The new class of cooling compounds, known as cyclic alpha-keto enamines, was developed from chemicals in dark malt. These compounds are generally formed by reactions between sugars and amino acids when foods are heated. Researchers are as yet not sure of the exact mechanism by which the new compounds exert their cooling effect. *Contact: Mr. Beverly Hassell, American Chemical Society, the United States. Tel: +1 (202) 8724 065; E-mail: b_hassell@acs.org.*
(Website: www.globaltechnoscan.com)