Authentic flavours



John Boddington, manager natural products, at Treatt, looks at creating authentic tastes with natural and synthetic flavour ingredients UK citizens made 60.7 million trips abroad in 2003 and are choosing increasingly non-traditional holiday destinations¹. This upturn in international travel to exotic, farflung locations has urged consumers to try more exciting and authentic savoury taste experiences, which they are keen to recreate at home. But many consumers have little time or inclination to prepare foods such as guacamole and salsa, or blend vegetable juices themselves, preferring instead to purchase them in ready-to-eat and -drink formats.

However, convenience products often fail to capture the exact flavour of freshly prepared foods, posing a challenge for food and beverage manufacturers.

Choosing the right flavour ingredient is critical to pinpoint the desired taste. Treatt plc, has developed a range of natural and synthetic savoury ingredients which offer flavourists the opportunity to design innovative and distinct flavour blends for use in a variety of foods and beverages.

Natural fresh flavours

Whether right or wrong, natural is frequently viewed as a synonym for healthy – it implies 'goodness' and is often associated with a better, more authentic taste. This 'natural equals healthy' perception has led to a surge in demand for foods and beverages containing only natural ingredients. With this in mind, flavourists should consider selecting all-natural flavour ingredients when creating savoury blends.

But what exactly is an all-natural flavour? As the name suggests, all-natural flavour ingredients originate from materials found in nature. Obtained by physical processes such as distillation or extraction, and free from chemical reactions they are often from a named botanical origin. They can be divided into three categories:

- From The Named Food (FTNF) flavours derived solely from the food in question
- With Other Natural Flavourings (WONF)
 an FTNF flavour blended with other natural flavours
- Natural flavours, which, although natural, can contain flavour ingredients from various sources.

These flavours enable food and beverage manufacturers to make a clean label declaration on their products, stating that only natural ingredients are used, enhancing consumer appeal.

Creating savoury tastes... naturally

Treatt has developed the Treattarome range of FTNF savoury ingredients for use in a variety of flavour blends. Using a short duration, low temperature distillation technique to maximise flavour entrapment, Treattarome FTNF products reflect the character of the original food so enabling the creation of authentic savoury flavours.

Three products in the range: Roasted Bell Pepper Treattarome, Celery Treattarome and Watercress Treattarome, could be used in a number of so-called international savoury applications including arrabiata sauces, hummus, barbecue dips and vegetable juices. When incorporated into food and beverage systems, the natural character of these flavour ingredients masks unpleasant cooked notes. The authentic aroma released during heating can also give the impression that the product is freshly made - a positive attribute for many consumers. Savoury Treattarome products can be used at various dosage levels depending on the desired flavour intensity. For example, at 500ppm,

Roasted Bell Pepper Treattarome can give an intense roast pepper flavour, while at a lower dosage level of 100ppm it adds green, sautéed notes.

Solving a sticky problem

Traditionally, flavourists would often turn to oleoresins to develop authentic flavour creations. However, the sticky character and high viscosity of these ingredients can make them difficult to handle. To overcome this, Treatt has added a number of distillates to its natural savoury ingredient range, which, with their low



viscosity, provide an effective alternative to oleoresins. These FTNF flavour ingredients maintain the fresh, natural flavour of the original food under numerous processing conditions. They can also be used at different dosage levels.

Effective alternatives

Occasionally it is more appropriate to select a non-natural ingredient to produce an authentic flavour blend. For example, some food manufacturing processes can result in flavour loss if natural ingredients alone are used. Synthetic flavour chemicals are able to withstand many processing conditions and can compensate for this. Synthetic ingredients are also usually nature-identical, i.e. the same chemical is present in the natural flavour, but it may be difficult to isolate or lack the characteristics required to create an authentic flavour profile. Synthetic ingredients are available year-round, in the required quantity, regardless of crop rotation and seasonality.

Two products in the Treatt range of synthetic flavour ingredients, s-methyl thiohexanoate and trithioacetone, 2,2,4,4,6,6-hexamethyl-1,3,5-trithiane, provide top note character in a variety of savoury applications. Both ingredients are

nature-identical and can be used at low dosage levels, from 0.0005 – 0.5 ppm, determined by the depth of flavour intensity required. S-methyl thiohexanoate can be used to create Caribbean cream cheese dips, taramasalata and Italian pesto sauces, for example.

Trithioacetone, 2,2,4,4,6,6-hexamethyl-1,3,5-trithiane, with its penetrating, sulphurous odour and camphor undertones, could add a nutty taste to exotic dishes such as raita, Indian korma and Mexican chilli sauces.

Natural and synthetic flavour ingredients can also be used in combination to formulate distinctive flavour creations. However, these blends are unsuitable if the consumer product profile stipulates that only natural ingredients are included.

Ever-increasing consumer demand for better, more authentic-tasting ethnic foods and beverages has encouraged flavourists to develop flavours that reflect the true character of the original food. Manufacturers like Treatt, which offer a full portfolio of natural and synthetic ingredients, enable flavourists to select the most suitable option to meet the product brief. These distinctive flavour blends can, in turn, be used to produce a variety of tasty, exotic creations to satisfy even the most sophisticated palates.

