

Module-8: Spice oil and oleoresins: usages of oleoresins

8.1. Introduction

Spice oils and oleoresins can be used to advantage wherever spices are used, except in those applications where the appearance or filler aspect of the spice is of importance. The above details provide guide levels of replacement for spices, and suggested dispersion rate on to food carriers. In addition to the benefit of standardisation, consistency, and hygiene afforded by spice oils and oleoresins, there is a big potential in their use of new product development. New flavours and fragrances are constantly being sought to entice the consumer. This applies equally to food products, medications, as well as other non-food products. It also illustrates the range of applications for spice oils and oleoresins, specifying the areas, and the particular spice that is known to have a contribution potential.

8.2. Usages of oleoresins

8.2.1. Processed meats

The use of spices, particularly pepper, in the manufacture of meat products, is traditional to impart flavour and keeping quality to the products. Typical seasoning mix for fresh sausages, for example, consists of pepper, capsicum, ginger, nutmeg, plus herbs. For dry sausages and pickled meats cardamom and coriander are also used. The move to use oleoresins has been accelerated by the increasing size of the manufacturing plants, where the use of spice extracts benefits production quality, as well as easy handling and cost savings. The above spices are used in the dispersed form of their oleoresin, with cardamom and coriander in the form of their oils.

8.2.2. Fish and vegetables

Seasoning mixes for both fish and vegetables, and particularly pickled or brined products such as herrings, contain a wide range of spices and herbs. The use of oleoresins, particularly dispersed oleoresins on a soluble base, will provide a means of easier preparation, reduced handling and costs.

8.2.3. Soups, sauces, chutenys, and dressings

The increasing demand for convenience products available in the form of a dry mix for ready reconstitution has caused a rapid move from conventional seasoning towards dispersed or encapsulated oleoresins and oils. Oleoresins of celery, pepper, capsicum, are used in conjunction with the oils of onion and garlic. Coriander and ginger extracts are used in barbeque sauces. The uses of the lesser – known but highly useful spices such as fenugreek broaden the new product opportunities.

8.2.4. Cheeses and dairy products

The use of spices in cheeses is established in Germany, including "Quark". Spice extracts are unlikely to be used in these products as the spices provide the flavouring plus visual impact. However, spice oils and oleoresins will have significance in processed cheeses and savoury spreads.

8.2.5. Baked goods

The use of cardamom in baked goods in Scandinavia and Germany is traditional. The baking industry generally uses ginger, cinnamon, and nutmeg. The move from the spice to their oleoresin has been effectively taking place for many years for ease of handling and simplicity in manufacture. The use of spice extracts in cake fillings, biscuits, and snack products is also increasing steadily.

8.2.6. Confectionery

The use of spices and spices extracts in the confectionery area is rather rare, but demonstration of the use of such material as cardamom oil and other extracts in toffees, chocolates, and others, has shown that they provide a very novel and pleasing confectionery ingredient new to the market.

8.2.7. Snacks

The flavouring is an essential component of the appeal of snack products and unusual because the flavour is often applied on the surface, either by spray coating or dusting. For this purpose the seasoning mix has to be capable of being applied in spray form, or powder. Oleoresins of pepper, chilli, and celery, are widely used. Turmeric and chilli extracts are used to provide colour.

8.2.8. Beverages

Spice oils are used for the preparation of soft beverages, as for example ginger oil in the preparation of ginger beer, etc. Some of the less well-known spice extracts can be used to produce very pleasing soft drink products as yet not widely known outside of local production in countries where they originate.

8.2.9. Cosmetics

The use of spice oils in the preparation of creams, soaps, shampoos, lacquers, lipsticks, etc., is well known. However, some of the materials available from India are as yet not widely used, not recognised as providing means for a new dimension to cosmetic products.

The growing preference for herbal, spicy, and spicy coniferous products like shampoos and hair tonics are noted, yet such extracts as those of cardamom and fenugreek are little heard of. The use of lesser known spice extracts can provide new product appeal.

8.2.10. Perfumes

Perfumery uses a wide range of essential oils and oleoresins from sources far and wide, and yet some of the lesser – known oils and oleoresins are hardly used at all. Examination of the wide range of those available from India could well provide a new basis of products of appeal.

8.2.11. Hygiene products

Products like toothpastes, mouthwashes etc., depend on essential oils to provide their pleasing flavour, making them not only acceptable, but pleasant to use.

In cleansing materials, detergents etc., spice oils provide the aromatic appeal in otherwise uninteresting and sometimes offensive notes associated with some of the base products.

8.2.12. Aerosols

The use of aerosols worldwide is increasing at a significant rate in products such as air fresheners, polishes, lacquers and many cleansing agents, as well as waxes etc., All of these are perfumed with essential oils to provide their pleasant and fresh aroma.

The range of spice oils from India can make their contribution to new product development.

8.2.13. Pharmaceuticals

Both oils and oleoresins are widely used in pharmaceutical products, to provide either pleasant taste or aroma to render the medicinal products, which would otherwise be difficult to accept, pleasing and easy to use. These include medications, skin creams, cold remedies, etc.

SUGGESTED READINGS

- Spiro, M. and M. Kandiah. "Extraction of ginger rhizome: kinetic studies with supercritical carbon dioxide." International Journal of Food Science and Technology. Vol. 25, pp. 328-338, 1990.

