Novel Introduction of Spice and Fruit Butters and Oils in Cosmetic Applications

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Abstract

The relationship between food and health has been duly recognised throughout recorded history. Herbs, roots and berries with health beneficial properties were known thousands of years ago and have been continuously utilised to promote sound health and to combat diseases. In more recent times, it has been discovered that these reliable products are the source of vitamins, antioxidants and other health related essential nutrients. This paper presents unique developments of natural products employing spices and fruits to design extremely effective oils and butters for cosmetic applications. These products are internally stabilised to enhance the shelf life of the final applications.

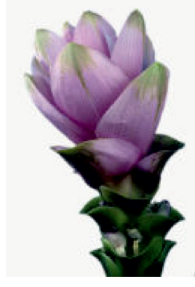
Introduction

Spices and herbs have played a dramatic role in the development of Western Culture. Spices are seasoning for food that come from bark, buds, fruit or flower parts, roots, seeds or stems of various aromatic plants and trees. Herbal medicines rarely have significant side effects when used appropriately and at suggested doses. Spices play an important role in the human diet. A diet containing all the nutritive components required by the body may be quite insipid without spices. The term spice or condiment applies to 'such natural plant or vegetable products or mixtures thereof, in whole or ground form, as are used to impart flavour, aroma and piquancy to and for seasoning food'.

Ayurveda medicine prescribes more that 700 plant-based medicines that contain spices and food additives to encourage good health. Good quality clinical research to support the reputed effects of many herbs is extremely lacking.

Of the various spices available, only nine spices *viz*, pepper, ginger, cloves, cinnamon, cassia, mace, nutmeg, pimento and cardamom together contribute to over 90% of the total world trade in spices. The major spices of India include pepper, cardamom, ginger, turmeric and chillies, forming about 85% of the total export of spices.

Turmeric (*Curcuma longa*) belongs to the ginger family. Of about 70 turmeric species *C. longa* is the most important cultivated variety (96% of the cultivated area), whereas *C. aromatica* accounts for 40% of the area under cultivation. The cured turmeric has a sweet fragrance and is largely used to make several cosmetic products.



Turmeric Plant (*Curcuma longa*)

The turmeric rhizomes, like ginger, are cured for the development of the colour and aroma. The rhizomes are cooked in water, limewater or sodium bicarbonate solution and the soft, cooked rhizomes are sun-dried, cleaned and polished mechanically in rotary drums. The cured and finished product is brittle and has a striking yellow colour.

Component	%
Moisture	5.8 %
Protein	8.6 %
Fat	8.9 %
Carbohydrates	63.0 %
Fibre	6.9 %
Ash	6.8 %
Calcium	0.2 %
Phosphorous	0.26 %
Iron	0.05 %

Table 1. Nutritional Composition of Indian Turmeric [1]