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Correspondence

Classical vs commercial: Is the 'efficacy' of *chyawanprash* lost when tradition is replaced by modernization?



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Dear Editor.

This is an eye-opening correspondence with regards to Chyawanprash (CP), where traditional approach is been replaced by commercialization and modernization. If this continues, the essence and efficacy of the classical CP may be lost.

1. Classical CP

Chyawanprash (CP or cyavanaprăsh) is one of the elements in canonical Ayurvedic treatments used to enhance immunity, longevity, strength, and to allay a wide range of health disorders, specifically respiratory ailments [1]. It is an Avaleha (polyherbal jam) prepared according to the traditional Ayurvedic recipe, enriched with a synergistic blend of around 50 medicinal herbs and spices—including amla (Emblica officinalis/Indian gooseberry), the richest source of Vitamin C [2,3]. The finished product is dark shining brown in colour with a semi-solid consistency. Ayurvedic dosage form Avaleha (the Sanskrit term 'Leha' means 'to lick'), is administered by tongue licking. Here, the actions begins locally by drug absorption starting from oral mucosa [4] and eventually resulting in a systemic action. Ayurveda doctrine mentions about six different tastes where each taste plays an important role in healing. Classical CP has five of the six tastes (mentioned in Ayurveda) viz: sweet, sour, bitter, pungent, and astringent [2] each having its own objective, rationale, and significance [5].

2. Commercial CP

Today's commercial CP is the converted 'modern science to culture' product [1]. The classical CP seems to be losing its authenticity in the procedures of preparation and the methods of promotion to make it more special than the competitors' product. The deviation from the original recipe of CP is a common malpractice witnessed in Indian pharmaceutical sector for the past decade [6]. In these

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commercialization trends, companies have launched CP in various forms viz: sugar-free diabetic CP, snack cookies, sugar-free biscuits, snack bars, spicy cookies, chocolate granules, fruit-flavors (orange or mango) with a motive to make the 'traditional' brand appealing to consumers of every age group [6].

3. Is the efficacy of CP lost when tradition is replaced by modernization?

करणं पुनः स्वाभाविकानां द्रव्याणामभिसंस्कारः। संस्कारो हि गुणान्तराधानमुच्यते। ते गुणास्तोयाग्निसन्निकर्षशौचमन्थनदेशकालवासनभावनादिभिः कालप्रकर्षभाजनादिभिश्चाधीयन्ते॥२॥

This verse of ancient Ayurvedic treatise, Charaka Samhita means that, "Processing results in the transformation of the inherent attributes of the substances. Transformation of the attributes is affected by dilution, application of heat, cleanising, churning, storing, maturing, flavouring, impregnation, preservation container etc." [7]. Based on this verse, and knowing the properties of classical CP, it can be seen that, the processed commercial CP (cookies, biscuits and granules) have lost the unique consistency, taste, and probably the healing effect.

Commercial sugar-free CP produced for diabetes [8] and spicy cookies [6] does not contain sugar and honey as in classical CP, which not only improves the palatability, but also works together as 'Yogavahi' (carrier of herbs), to catalyze the delivery of a particular bioactive drug component and encourages its penetration deep into the cells [2,5,9]. Based on this fact, the execution process of the commercial CP [6,8] may be altered.

A clinical study indicates that regular consumption of CP for a period of six months among children who consumed it twice daily could significantly improve immunity, energy levels, physical fitness, strength, stamina, and quality of life [10]. Additionally, in the wake of the COVID-19 pandemic, the Ministry of AYUSH, Government of India, has projected CP as an immunity booster. We found two clinical trials evaluating the effectiveness of CP as an immunity-booster against COVID-19 [11,12]. In both the trials, the participants consumed CP twice daily; however, there appears to be a disparity in what is cited in the literature versus what is recommended in the studies [10-12] with regard to the frequency of consumption. According to Charaka Samhita, the ideal way to use CP is to first undertake cleansing of the body, perform meditation, and religious ceremonies, and develop a cheerful disposition. Further, it should be consumed in a place where the room is clean and the temperature is mild [9] and should be taken in a quantity

such that it does not interfere with hunger and appetite for food on an empty stomach in the morning [6].

If ingredients other than the traditional mix-up are added, it cannot be be called as CP [9]. However, the Drugs and Cosmetics Act permit Proprietary Ayurvedic Medicines which are prepared by differing the classical texts recipe; however here, the aspect of evidence of efficacy and safety becomes pertinent. [13].

Overall, there seem to be some grey areas with regards to CP. Firstly, there is no one standard recipe for classical CP because different authoritative texts provide their separate unique recipes for preparation [6]. Secondly, clinical evidence of CP in the literature is based on studies with smaller sample size and short duration [14]. Lastly, there is no clear-cut scientific evidential clarity on topics such as dosage prescription for children and adults, time of intake, frequency of consumption, seasonal variation, and its effects on preparation, and consumption. The effects CP has on people with different *Prakriti's* (phenotype-based human constitution), and importantly the efficacy of classical CP versus commercial CP needs to be explored. These are the highly recommended areas for vigorous and robust scientific exploration.

It is an appeal that an expert committee should come together to take these points into consideration, prepare standard guidelines for not only CP preparation and research, but also for assessing the licensing of the product prepared by deviating from the classical CP.

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None.

Authors contribution

Pradnya Kakodkar: Conceptualization, Resources, Writing-Original draft preparation. **Rohit Sharma:** Resources, Writing-Reviewing and Editing. **Arati P Dubewar:** Resources, Supervision.

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