Spray Drying: Shaping of Modern Herbal Formulation

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Application of latest technologies has now allowed other traditional systems to adopt new techniques in order to enhance their global outreach. Herbal medicine has history over centuries and being used at present in many parts of the world. Although, herbal products are formulated in their traditional way but many herbalists are now using the systems that are used by the pharmaceutical companies to formulate allopathic medicines. Herbal medicinal industry is now bestowed with the technology to convert bulk of the medicinal plant material through aqueous and solvent extraction into powder technology. This art of botanical extracts and standardized powdered extracts has generated ease in producing dosage form design. Herbion has the distinction to launch the first of its kind of spray drying plant at Lahore to manufacture herbal products in the form of syrups, capsules, tablets, ointments, lozenges and personal care products. The improvement of shower drying gear and procedures advanced over time of quite a few years from the 1870s through the mid 1900s. Spray drying becomes an adult amid World War II, with the sudden need to lessen the vehicle weight of sustenance’s and different materials. This method empowers the change of feed from a liquid state into dried particulate frame by showering the feed into a hot drying medium. It is a consistent molecule handling drying activity. The feed can be a solution, suspension, scattering or emulsion. The dried item can be as powders, granules or agglomerates relying on the physical and synthetic properties of feed, dryer structure and last powder properties wanted.

Spray drying is by and by a standout amongst the most energizing advances for pharmaceutical business, being a perfect procedure, where the final result must conform to exact quality guidelines with respect to molecule measure circulation, lingering dampness content, mass thickness and morphology.

It is essential to use herbal medicine with the powdered material obtained through this technology make better quality of herbal medicine. The advantage lies on speed, versatility, quality assurance and quality control. Researches are coming out more to generate particulate products with precise specifications in continuous operations. Production of tablets by direct compression, stable herbal dried powders with good flow properties are easily formulated as required.

Further research on spray dried herbal medicine is contributing on the utilization of the different medicinal plant materials for product development and herbal medicine promotion. Spray drying technique has made it possible to engineer intermediate products of many medicinal plant materials with improved physical and mechanical characteristics for further developing quality indicators. Since bioactive compounds present in plant material comprises of multi-segment blends and by the utilization of shower drying innovation, their partition and assurance could be a better option. We may expect in near future many established herbal preparation will come in market using these techniques and it will gain its market capital much quickly.