

Oat Milk Based Instant Soluble (Effervescent) Tea Tablets And A Method For Its Production

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Abstract of the invention:

The present invention relates to oat milk based instant soluble effervescent tea tablet and a method for its manufacture, which integrates tea, sugar, oat milk and other flavoring compounds in appropriate proportion without use of any lubricant, to replace instant tea segment i.e. tea bags, tea powder or similar other existing product with user friendly and health benefiting attributes. Importantly, tea tablets produced according to the present invention involves Non-dairy product i.e. oat milk instead of conventional dairy product. The process of producing the tea tablets involves proper blending of the ingredients oat milk, tea powder and sugar, optimized with three component constraint mixture design, with required level of water and dried in a spray drier to form tea powder which is further mixed with effervescent agents (Sodium bicarbonate, Alginic acid) in appropriate proportion and subjected to direct compression in a die-punch setup at desired pressure to obtain tea tablets of desired taste and properties.

Novel Features:

The present research work has been undertaken for providing a simple, scientific driven & technologically alternative, materials & process to replace instant tea segment i.e. tea bags and such other product into instant soluble tea tablets

The present invention uses on-dairy product (oat milk) instead of dairy milk so as to prevent the antagonistic effect of milk protein (casein) on antioxidants present in black tea.

Design of tablet forming unit for laboratory scale production which can be converted into a pilot plant further for large scale production.

Potential users:

1. Instant tea producing industries.
2. Restaurant, Air lines, Railways like mass transport system.
3. Pharmaceutical companies.
4. Cardiovascular disease patients and lactose intolerant.
5. Diabetic patient

