Patent on forskohlin assigned to Sabinsa Corporation

Sabinsa® Corporation was recently assigned a patent (U.S. Patent #5,804,596, dated September 8, 1998) for the use of forskohlin. The patent titled "Method of preparing forskohlin composition from forskohlin extract and use of forskohlin for promoting lean body mass and treating mood disorders", describes the use of a composition comprising of 1% to 40% forskohlin (extracted from Coleus forskohlii), in a suitable excipient, to promote lean body mass and treat mood disorders.

Coleus forskohlii is the only known natural source of the unique adenylate cyclase activating phytonutrient, forskohlin. Adenylate cyclase is the enzyme involved in the production of Cyclic Adenosine Monophosphate (cAMP), a significant biochemical agent in metabolic processes Coleus forskohlii

Mucuna pruriens Plant source of L-Dopa

Mucuna pruriens seeds contain about 5% L-dihydroxyphenylalanine, L-Dopa, a compound which is widely used in the management of nervous disorders such as Parkinson's disease. Other compounds in the seeds include bufotenine and serotonin which reduce cholinesterase activity thereby helping to attenuate brain functions.

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info@sabinsa.com

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MARKETING FOCUS :

Benita Barbosa

Customer Service Representative Benita joined Sabinsa's marketing team very recently, bringing with her about ten years of versatile experience including customer service, sales management and office management. Benita's experience in customer service and international sales management with a manufacturer of nutritional products, is particularly relevant to her job functions at SABINSA.

With her comprehensive experience in the natural products industry and interest in working with people, Benita enjoys helping customers find the products and information they need. We take this opportunity to welcome Benita aboard!

Formulation development assistance from Sabinsa Corporation

Ingredient compatibility, safety and stability are key concerns in the success of any nutritional formulation. Sabinsa Corporation's well qualified scientific staff would be happy to provide formulation development assistance with particular emphasis on these aspects.

Services offered include:

- Toxicity testing for ingredient combinations.
- Ingredient compatibility studies: Stability and interactions between active ingredients.

LactoSpore® Customer queries

Mr. Russell Bolden of Capitol Ingredients Pty. Ltd., Australia, had a few technical questions on Lactospore, which some of our readers have perhaps encountered off and on from end users....

1. What is the process by which Lactobacillus sporogenes forms spores? Is this an intrinsic characteristic of the species or does the manufacturing (fermentation) process determine this?

Sporulation is the transformation of microorganisms into bodies each wrapped in a protective coat (a natural process of microencapsulation in a calcium-dipicolinic acid- peptidoglycan complex). Spore formation in bacteria is controlled by a cascade of sigma factors resulting in the expression of specific genes. Therefore spore formation is restricted to certain species of microorganisms. It is defined as "a nutrient shift-down, starvation (C, N, P) induced, unidirectional developmental pathway" which culminates in the production of dormant endospores. Hence this intrinsic characteristic of the species is manifested only under adverse conditions. Under favorable conditions, the spores germinate into viable cells and carry on their life activities.

The processing method used is critical, as the balance should be towards spore formation with no harm done to the vegetative cells. The process used in the manufacture of Lactospore® involves the use of carefully controlled environmental conditions to ensure this.

2. Is it true that traditional probiotic cultures such as L. acidophilus are centrifuged during manufacture to separate the bacteria from the culture media? Our customer has been told that

this can cause many of the bacteria to break up and give false readings when performing a viable count of bacteria. They believe the result can often be higher than in the actual case. This doesn't sound right to me.

Centrifugation is often used to harvest cells in several fermentation processes. Centrifuge speeds are carefully controlled to ensure no individual bacterial cell break up which would damage the cell. If clumps of cells are broken up, there is no harm done and each cell would produce a growth colony during the viable cell count. In any case, during the viable cell count procedure, the culture is diluted and mixed several times to ensure a fair number of countable colonies.

A rational explanation for faulty counts on L. acidophilus is as follows:

L. acidophilus cells may not survive lyophilization1. The freeze-dried cultures have to be stored under refrigeration and do not retain viability under normal conditions2,3,4. Therefore, with time and fluctuations in storage conditions, there may be a fall in viable cell count.

References:

1. Mikolajcik, E.M, Hamdan, I.Y. (1975) Cultured Dairy Prod J. p 10.
2. De Valdez, G.F. (1985). Appl. Environ. Microbiol., 49, 413-415.
3. Brennan, M. et al. (1986). J. Food Prot. 49, 47-53.
4. Gilliland, S.E. and Rich, C.N. (1990). J. Dairy Sci, 73, 1187-92.