

Development of Bovine Colostrum Supplements for Sports Nutrition

I. Title of Research: Development of Bovine Colostrum Supplements for Sports Nutrition

3. Invention patent filed.
4. Utility model patent filed.

II. Research Team Members

Department	Name	Position
Office of Physical Education	Chia-En Yang	Assistant
		Professor
Biological Science and Technology	Yi-Hsien Chen	Master's student
	Te-Yueh Lu	College student
	Jie-Ying Yang	
Food Science	De-Xin Xie	
	Heng-Yu Lin	

III. Description of Industrial Needs and Research Result Applications

The BC supplement developed in this project contains immunoglobulins, growth factors, and other bioactive components, which not only enhance immune system function but also promote muscle repair and growth, while reducing post-exercise fatigue. It meets various health needs. Additionally, the naturalness and safety of bovine colostrum align with modern consumer expectations for health foods. Bovine colostrum is also versatile in processing and can be made into various product forms such as powders, capsules, and beverages to meet the needs of different groups, ranging from general fitness enthusiasts to professional athletes. With increased market awareness and ongoing scientific research, the potential for developing bovine colostrum-related products extends beyond the health supplement sector and is poised to play a significant role in the field of sports nutrition.

IV. Performance of Research Team

1. The product has passed SGS food safety inspection, and discussions with the manufacturer are ongoing regarding production and commercialization.
2. Led 5 laboratory students on a practical visit to the National Training Center, providing hands-on learning in the product development process.



Fig. 1: Bovine colostrum is pasteurized using the pasteurization method, and after sterilization, the samples are sent to SGS and the Aquatic Products Inspection Center for safety verification. Finally, the colostrum is designed and developed into sports and health supplements.



Fig. 2: The farm currently has about 300 dairy cows, with stable breeding and calving numbers, ensuring there are no issues with the future production of bovine colostrum products.