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Effect of lyophilized whey on intestinal health and intestinal microflora

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Background: Recently due to current discoveries of the nutritional and bioactive components, whey and its components are considered as main ingredients in most protein formula supplements in infant food, sport nutritional food and beverages among others in the developed country. Whey protein and product provides real benefits for people that are seeking muscle growth, fat loss and high quality nutrition.

Method: Laboratory rats were fed with different whey products to determine its effect on the intestinal health and microbes, liver enzymes and total protein. Four groups of rats were fed with different whey samples: Fresh liquid whey (FLW), Fermented liquid whey (FELW), Fresh lyophilized whey (FLYW), Fermented lyophilized whey (FELYW). Daily weight was recorded until twenty eight days (28) while their feacal microbial load was enumerated weekly. Liver enzymes and total protein were determined in blood collected.

Result: There was a gradual increase in rat weight and decrease in their microbial load from the first week to the end but a sudden increase in their weight was observed at the last day. Different whey increased total protein and no effect on liver enzymes.

Conclusion: Whey is very high in protein, promoting good health and increasing the human intestinal microflora and has no effect on liver. The types to be taken must be considered in order to achieve the desired results.

Biography

Margaret Alaba had her tertiary education training in: The Polytechnic, Ibadan, University of Ibadan, Ibadan, and Olabisi Onabanjo University, Sagamu Nigeria and is currently pursuing her PhD in Department of Pure and Applied Biology in Ladoke Akintola University of Technology Ogbomoso. She is an Assistant Chief Technologist in the Department of Medical Microbiology and Parasitology, Ladoke Akintola University of Technology, Ogbomoso, Nigeria and her research interest is on biofuel generation from wastes. She started her academic career in Pharmacy Department of Olabisi Onabanjo University, Ago–Iwoye, Nigeria as a technologist before joining LAUTECH. She is a member of Nigerian Institute of science Laboratory technologist and National Association of Academic Technologist. She has many publications.

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