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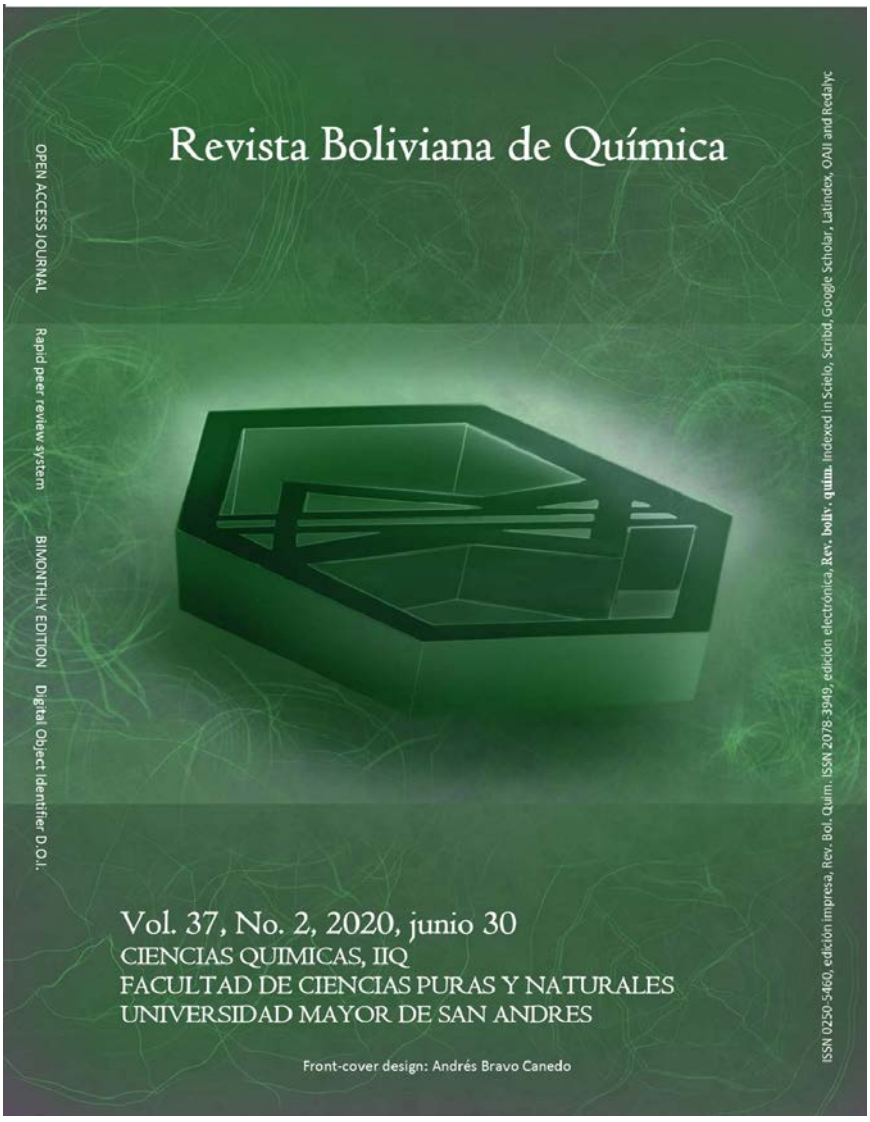
Abstracts



FATTY ACID COMPOSITION IN LLAMA MEAT FROM BOLIVIAN MARKETS, OBSERVATION FROM THREE DIFFERENT MARKETS

COMPOSICIÓN DE ÁCIDOS GRASOS EN CARNE DE LLAMA DE MERCADOS BOLIVIANOS, OBSERVACIÓN DE TRES MERCADOS DIFERENTES

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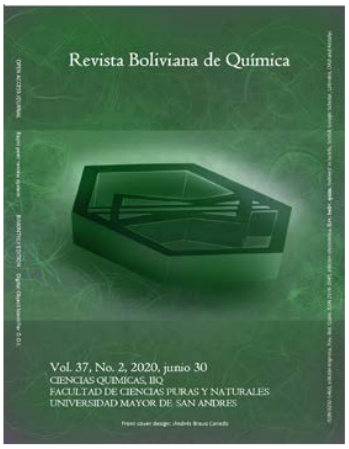

Full original article *Peer-reviewed*

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Keywords: *Llama (Lama glama), Meat, Fatty acid profile.*

Palabras clave: *Llama, (Lama glama), Carne, Perfil de ácidos grasos.*

ABSTRACT

The present work is an attempt to characterise the llama meat available in the most popular Bolivian markets (Oruro department) in terms of its fatty acid profile, in order to provide information on its nutritional and healthy quality and to increase the interest of the Bolivian consumers in this meat.

Llama meat was obtained from three different markets. *M. Longissimus lumborum*, as well as subcutaneous and intermuscular adipose tissue were subjected to analysis of the fatty acid profile and furthermore the meat was compared to meat of other species.

Llama adipose tissue displayed significant saturation comparable to the observed in the fat depots of the ruminant animals, however high proportions of the beneficial C18:1n-9 and C18:1n-7 were detected and were also observed in the muscle tissue. *M. Longissmus lumborum* presented considerable percentage of essential polyunsaturated fatty acids (PUFA) (C18:2n-6 and C18:3n-3), conjugated linoleic acid (CLA), as well as long chain polyunsaturated n-3 fatty acids (C20:5n-3 and C22:5n-3). The advantages of llama meat concerning its fatty acid profile were compared to beef, lamb and pork. Data indicated that llama meat should not be considered inferior to the above mentioned meats. It presented favourable ratio of n-6/n-3 PUFA, as well as P/S, and low atherogenic potential.

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2

ASSESSMENT OF THE FORMULATIONS OF ANTI-ANEMIC BISCUITS WITH DIFFERENT CONTENTS OF QUINOA AND DIFFERENT CONTENTS IN HEMINIC IRON, BY REDUCTION OF ANEMIA IN HOLTZMAN RATS

EVALUACIÓN DE FORMULACIONES DE GALLETAS ANTIANÉMICAS CON DIFERENTES CONTENIDOS DE QUINUA Y DIFERENTES CONTENIDOS EN HIERRO HEMÍNICO, POR REDUCCIÓN DE ANEMIA EN RATAS HOLTZMAN

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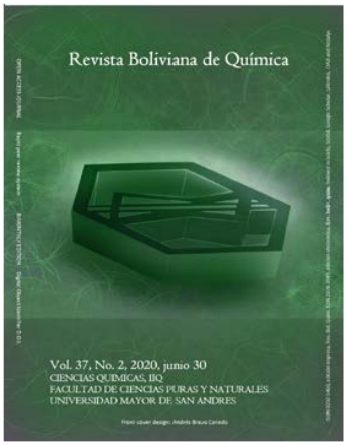

Full original article *Peer-reviewed*

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Keywords: *Anemia, Biscuit, Chenopodium quinoa, Bovine blood.*

Palabras clave: *Anemia, Galletas, Chenopodium quinoa, Sangre bovina.*

ABSTRACT

In this investigation, the formulation of antianemic cookies with different contents of quinoa (*Chenopodium quinoa* Willd) and heme iron was evaluated in the reduction of anemia in Holtzman rats. White quinoa from the INIA-Ayacucho Experimental Station and bovine blood obtained from the slaughterhouse of the Carmen Alto district (Ayacucho, Peru) were used. The methodology included: 1. treatment of the quinoa and bovine blood sample, 2. formulation of the mixture, 3. bromatological, microbiological analysis and organoleptic evaluation of the elaborated product, 4. determination of hemoglobin. The results of the bromatological analysis of the product showed: 346.72 Kcal, 5.2% moisture, 10.25% protein, 20.17% fat, 42.9% carbohydrate, 1.25% ash, 0.09% acidity, 0.15 meq / Kg of oil, 27.6 mg Fe and absence of potassium bromate. The microbiological analysis reported: *Salmonella* sp. absent, *E. coli* MPN / g <3, *Staphylococcus aureus* coagulase (+) MPN / g <3, *Clostridium perfringens* CFU / g <10 and count of molds CFU / g <10, being suitable for human consumption. The iron-poor diet led to a decrease in hemoglobin levels (11.4 g / dL) and the fortified diet recovered these levels (15.66 g / dL). The formulated antianemic cookies comply with the nutritional requirements required by FAO and the Peruvian Sanitary Standards, proving to be suitable for human consumption, likewise the treatments in Holtzman rats allowed to reaffirm that with adequate levels of Chenopodium quinoa Willd and heminic iron, it was reduced anemia.

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3

DEXTRINE AND PECTIN EXTRACTED FROM VEGETAL DISPOSALS AND THEIR USE AS ADDITIVE FOR GLUE

DEXTRINA Y PECTINA EXTRAÍDAS DE DESECHOS DE ORIGEN VEGETAL Y SU USO COMO ADITIVO PARA PEGAMENTO

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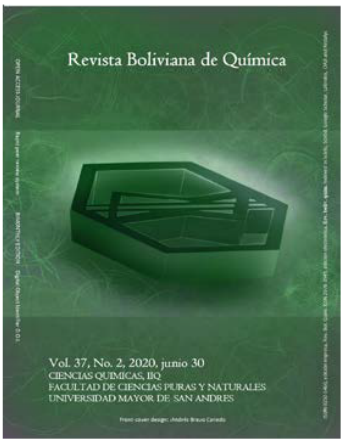

Full original article *Peer-reviewed*

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Keywords: *Glue, Vegetable waste, Dextrin, Pectin.*

Palabras clave: *Pegamento, Residuos vegetales, Dextrina, Pectina.*

ABSTRACT

Dextrin and pectin extracted from cassava, potato and yam plant residues were used in the formulation of a glue. The plant residues were characterized and the yield was determined for the dextrin extraction process by calcination method (80.0%) and for the pectin extraction by acid hydrolysis (10.3%). Dextrin was characterized by the positive test with iodine and the solubility in water with the absence of reducing sugars. In IR spectroscopy, the characteristic bands of dextrin functional groups were observed. The pectin obtained is low in methoxyl and with a high degree of esterification, which is why it needs the presence of calcium ions to gel. The functional and organoleptic properties of the glue samples were evaluated, with the one formulated with 0.25% pectin showing the best characteristics..

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4

CORONAVIRUS, COVID-19, PREVENTING THE SPREAD OF VIRUSES IS EASIER THAN WE THINK; BIOSAFETY PROTOCOLS, GUIDE FOR THE REOPENING OF THE COUNTRY AND FOR REDUCING THE RISK OF REACTIVATION OF THE SPREADING

CORONAVIRUS, COVID-19, PREVENIR LA PROPAGACIÓN DE VIRUS ES MÁS FÁCIL DE LO QUE SE PIENSA; PROTOCOLOS DE BIOSEGURIDAD, GUÍA PARA LA REAPERTURA DEL PAÍS Y PARA LA DISMINUCIÓN DEL RIESGO DE REBROTE DEL CONTAGIO

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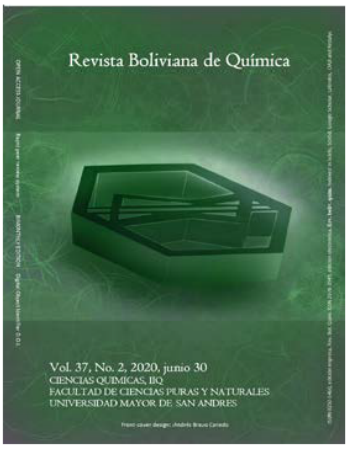

Letter from the editor *Peer-reviewed*

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Keywords: *Coronavirus, COVID-19, Prevention, Pandemia, Quarantine, Biosafety, Protocols, Reopening, Reactivation, Reducing, Spreading.*

Palabras clave: *Coronavirus, COVID-19, Prevención, Pandemia, Cuarentena, Bioseguridad, Protocolos, Reapertura, Reducción, Rebrote.*

ABSTRACT

Since March the 16th, 2020, Bolivia is under quarantine in order to slow down the coronavirus COVID-19 pandemic viral disease. The attempts to achieve this goal have been diverse and have produced somehow favorable effects. Nonetheless, the end of the contagion is still out of scope. In agreement with the development of the expansion of the viral disease in the world, it currently becomes more real the possibility of adding the character of endemic to the viral pandemic. A date for the formulation of vaccines and antiviral drugs for the different stages of the sickness, remains still uncertain. We have collected information of the development of the virus all over the world, and we have approached the virus from a scientific stand point, characterizing its physicochemical properties from bibliography sources, in order to know how to react face to the infection patterns, particularly in Bolivia. We have noted among people, the lack of knowledge on the virus nature with a consequent misunderstanding of the appropriate social conduct to prevent the viral contagion. Scientific misinformation through the media and social network have provoked social paranoia and mistaken conducts throughout the world. After concluding about the real dimension of the biological threat for the society, we have proposed biosafety protocols for various social environments; we warranty the effectiveness of these conduct advises. This article should provide security for the reopening of the country in the midst of an endemic viral infection, with the consequent return to economic activities without exclusion, education and public health and its recovery to normal levels.

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