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Effect of ginger flour supplementation on fermented millet flour 'ibyer' anti-diabetic and biochemical properties

A mucoso-respiratory highly contagious disease; COVID-19, has led to tremendous global health and economy damages. This virus could be dampened through home use of fermented bio food material. Fermented millet flour (ibyer) is an indigenous non-alcoholic gruel made from cereals either (maize, sorghum and millet). It is prepared by cooking reconstituted cereal flour or wet milled paste with water. In this study, fermented millet fl our supplemented with ginger powder blends were formulated in the ratio 100:0, 95:5, 90:10, 85:15, 80:20, 75:25 and 70:30 for the production of gruel. The blends were subjected to feeding trial experiment using wistar albino rat. Results analysis revealed that Serum cholesterol was less than 200 mg/dl. The fasting blood glucose was also within the recommended range (67.7 - 125.0 mg/dl). The biochemical parameters were within recommended range, total serum protein ranged from 5.82-7.06 g/L, Alanine aminotransferase ranged from 28.53 to 41.13 iu/L, Aspartate aminotransferase ranged from 28.50 to 48.66 iu/L. The albino rats showed slight increase in body weight throughout the experimental period, ranging from 78.67 -103.80 g. The experiment shows that the diet did not have any adverse effect on the experimental animals and were within the recommended range hence a good anti diabetic blend and has excellent biochemical profile properties for homes use.

Research Article Published Date:- 2020-11-16

Eating habits and lifestyle changes during the COVID-19 lockdown: A comparative study (before and during isolation) on the 9 de Julio city (Buenos Aires, Argentina) population

Following the COVID-19 proliferation beyond China's borders at the beginning of 2020, containment measures have been taken by different countries around the globe. Citizens were forced to stay at home. Specifically, on March 19th, the Argentine Government decided to implement the "Social, preventive and mandatory isolation", strategy that unfortunately impacts on the lifestyle, the practise of physical activity and on the nutritional aspect of the population. The aim of this study was analize eating habits and lifestyle changes during the COVID-19 lockdown on the 9 de Julio city, Bs. As., Argentina. The survey was conducted using Google Form. The questionnaire was divided into different sections: sociodemographic data, eating habits, physical activity and concepts and emotions associated with isolation. The research reached 287 responses with a medium socioeconomic level. During isolation, the frequency of purchases decreased. It was observed an increase in the consumption of pasta, bread and cakes. Concerning the physical activity, approximately 70% declared to train before the COVID-19 lockdown, decreased by 13% during the lockdown. Other activities conducted during the COVID-19 lockdown; the most mentioned were cleaning the house, cooking, watching television, series and movies. A percentage greater than 50% of the surveyed population associated the situation of lockdown with positive emotions (share with my family, stay at home); while only 24% associate it with negative emotions (anxiety, anguish, fear). It is expected that most habits will return to normal, however, it would be interesting to know which of those developed, adopted and implemented during lockdown will remain in the new normality.

Research Article Published Date:- 2020-06-03

Quality Evaluation of Sorghum bicolor Stem Sheath Enriched with Spondias mombin Extract

The nutritional compositions of sorghum stem sheath-Spondias mombin extract were evaluated. The enriched stem sheath extract were obtained by mixing sorghum stem sheath and Spondias mombin (iyeye) extract in varied proportions at 100:0; 0:100; 95:5; 90:10 and 85:15. The five samples were subjected to analysis: proximate, mineral, vitamin C, antinutrient composition. Data obtained were analysed using descriptive and inferential statistics. The result showed that observable increases were noticed in proximate, vitamin C and mineral composition from 5% inclusion of Spondias mombin extract in sorghum stem sheath drinks. The anti-nutrient compositions: tannin, oxalate and saponin, ranged from (0.144 to 0.442, 0.303 to 0.385, 0.070 to 0.198) mg/100 ml, respectively for sorghum stem sheath-Spondias mombin extract which were within consumable safe limits. The study concluded that nutritious enriched drinks could be produced from sorghum stem sheath and Spondias mombin extract at ambient temperature.

Opinion Published Date:- 2020-05-29

Demystifying the power of magnesium

Epsom salts was inadvertently discovered in Epson spring in England and used as magnesium salt in 1697. It is simply the magnesium sulphate, a commonly used ingredient in beauty and wellness kiosks for soothing joints, muscles and mind. Richard Martin Willstatter working on plant pigments begged a Nobel Prize in 1915 for his discovery of chlorophyll containing magnesium. The magnesium holds the centre position in chlorophyll in a manner as iron in hemoglobin.

Review Article Published Date:- 2020-03-10

Bioactive components of tea

Tea (Black tea and Green tea) are one of the most widely consumed beverages in the world. However, with the increasing interest in the health properties of tea and a significant rise in scientific investigation, this review covers some of the recent findings on the health benefits of both green and black tea. The mechanisms of action of various black and green tea components have been presented. Green tea contains a unique set of catechins that responsible for its biological activity potentially relevant to the prevention of diseases. Although there has been much focus on the biological property of the major tea catechins, black tea offers major health benefits either due to the presence of the catechins in epimerized form or some other active components of both varieties of tea. Characteristics unrelated to the antioxidant properties of green and black tea might also be responsible for their therapeutic potential in preventing diseases. Synergistic effect of the tea constituents is increasingly recognized as being potentially important to the medicinal benefits of black and green tea. The studies indicate that tea has the potential of being a part of diet for healthy living.