

5th International Conference on Nutrition, Food Science and Health Management
7th World Summit on Virology, Microbiology & Infectious Disease

May 05, 2022 | Webinar

The future of nutrition in a nutshell

Martina Zurli

Frucom, Belgium

The term 'edible nuts' refers to any hard-walled, edible kernel, namely the seed of different species of plants. Nuts are energy-dense and nutrient-rich. Although their chemical composition varies depending on the nut type, they all have a considerable fat content. Nuts contain of mono- and polyunsaturated fatty acids in different amounts, proteins, fiber, vitamins and minerals. Nuts have been studied extensively over the years for their role in preventing several human chronic diseases and maintaining good health, as part of a healthy diet and a lifestyle.

A possible concern is represented by ant nutrients (e.g., phytates), but some studies show their potential health benefits.

Nuts consumption in the general population is lower than the recommended amount. Nuts among other plant-based protein sources have a far lower GHG emission

count compared to animal-based food products, but their environmental impact depends on the nuts type.

Nuts can have a role in food reformulation and positive nutrition. As a part of a varied and balanced healthy diet, nuts are important plant-based sources of protein and other nutrients which can support a shift towards a healthy and sustainable diet away from meat-based diets while ensuring optimum nutrition for the future population.

Speaker Biography

Martina Zurli completed her MSc in Food Science and Human Nutrition at the age of 24 years. She is a licensed Nutritionist and completed the course 'Plant-based nutrition: a sustainable diet for optimal health' at the University of Winchester. She is Nutrition and Communication Advisor at FRUCOM. Her articles were published on the website lyfesculpt.com.

martina.zurli2@gmail.com

Received date: March 21, 2022; **Accepted date:** March 23, 2022; **Publish date:** May 10, 2022

5th International Conference on Nutrition, Food Science and Health Management
7th World Summit on Virology, Microbiology & Infectious Disease

May 05, 2022 | Webinar

Viral diseases and antiviral effect of glycyrrhiza glabra with special reference to Ajmer Rajasthan, India

Rashmi Sharma

Samrat Prithviraj Chauhan Government College, India

Rajasthan is the western state of India. Ajmer is located in the center of Rajasthan, hemmed all sides by Aravalli hills. Ajmer has hot summer (49 0 C) followed by rainy season, winters temperature drops 2 0 C. Microbial diseases occur during March or September. Glycyrrhiza glabra belongs to family Fabaceae is a herbaceous plant indigenous to west Asia, South Europe, North Africa and East America. Also known as Liquorice. Glycyrrhizic acid is present, it has insecticidal, antimicrobial, antifungal, anticancer, Antiobesity effects. Glycyrrhizin is present which has sweet taste. Phytoestrogen glabridin, Isoflavene glabrene is present in roots. High doses are toxic, can cause high BP, edema, paralysis, electrolyte imbalance & kidney fail it is used to treat leprosy, chicken pox, measles, asthma, Influenza, respiratory diseases, ulcer

and skin diseases. It is also used in cookery of many societies, flavoured with tobacco. As flavouring agent with candies.

Key words: Glycyrrhiza glabra, Anti-viral.

Speaker Biography

Rashmi Sharma is Associate Professor Samrat Prithviraj Chauhan Government College, India. She has 28 years teaching and Research experience. She has published more than 30 papers in International journals. She has attended more than 70 International and national conferences. 8 students have completed MPhil under her guidance. 5 Students are doing PhD under her guidance. 2 completed under her guidance. 1 candidate Awarded PhD degree under guidance. She is author of 20 books.

sharmarashmigca@gmail.com

Received date: March 6, 2022; **Accepted date:** March 8, 2022; **Publish date:** May 10, 2022

5th International Conference on Nutrition, Food Science and Health Management
7th World Summit on Virology, Microbiology & Infectious Disease

May 05, 2022 | Webinar

Utilization of calcium from eggshells to target bone diseases

Fiza Asad

University of Engineering and Technology, Pakistan

Undernutrition affects the health and survival of mothers and their children due to a lack of availability to high-quality, nutritional meals. Inadequate dietary intake causes nutritional deficiencies, particularly calcium, which is necessary for growth and physiological function. The possibility of boosting dietary calcium intake by adding heat treated crushed eggshell to locally made cuisine was studied in this study. The hard, outer coating of an egg is called an eggshell. Calcium carbonate, a common type of calcium, makes up the majority of it. Protein and other minerals make up the remaining. Calcium is an important mineral found in a variety of meals, including dairy products. Many leafy and root vegetables have lower concentrations.

Eggshell powder made from hen eggs has been used as a natural calcium supplement for decades. Eggshells contain about 40% calcium, with each gram containing 381–401 mg.

Chicken eggshell has a high calcium concentration (380 mg calcium per gram) and a bioavailability of 39%, which is comparable to calcium carbonate. The most likely harm to human health from eggshell ingestion was identified as Salmonella. Experts concluded that boiling eggshells for 10 minutes while making hardboiled eggs and cooking crushed eggshell in staple dishes for another 20 minutes will kill the germs found in eggs. Ground eggshell could be a cost-effective way to boost calcium consumption.

Osteoporosis is a disease that causes weak bones and a

higher risk of fractures. In 2010, it afflicted an estimated 54 million senior citizens in the United States. Although ageing is a substantial risk factor for osteoporosis, a lack of calcium in the diet can also contribute to bone loss and osteoporosis over time. If you don't get enough calcium in your diet, supplements might help you meet your daily needs. Eggshell powder is a low-cost alternative.

Eggshell powder, coupled with vitamin D3 and magnesium, dramatically improved postmenopausal women with osteoporosis' bones by boosting bone mineral density. Purified calcium carbonate may not be as efficient as eggshell powder in lowering osteoporosis risk.

Collagen is the most abundant protein in the eggshell membrane. It also contains chondroitin, sulphate, glucosamine, and other minerals in modest doses. The trace levels of these health-promoting chemicals found in eggshell membrane are unlikely to have a major impact on your health.

Speaker Biography

Fiza Asad has completed her MPhil in Food Science and Technology and she has done BS (Hons) in Human Nutrition and Dietetics. During her degree, she worked in hospitals as an interne dietitian where she used to deal patients with different diseases. In one of her internship, she has also worked as a food analyst. Other than this, she has given lectures on different topics of nutrition on social media and she is also working as a dietitian through her Instagram.

fiza.asad89@gmail.com

Received date: March 19, 2022; **Accepted date:** March 21, 2022; **Publish date:** May 10, 2022

5th International Conference on Nutrition, Food Science and Health Management
7th World Summit on Virology, Microbiology & Infectious Disease

May 05, 2022 | Webinar

Marine actinomycetes a reservoir of novel bioactive molecules antagonistic to urinary tract bacterial pathogens

Deepa Mathew P

Scott Christian College, India

The development of multi drug resistant uropathogens is a big threat to human race. Infections with multidrug-resistant bacteria are hard to treat. The present study is the Characterization of bioactive compounds from marine actinomycetes antagonistic to urinary tract bacterial pathogens. This aims to prove marine actinomycetes have some bioactive compounds which are antagonistic to multi drug resistant uropathogens. In this study 14 different urine samples were collected from UTI suspected patients and isolated five uropathogens from it. 50 marine actinomycetes were isolated from various marine samples collected from different stations of Vizhinjam coastal region, part of Arabian Sea on the western coast of India. The isolated colonies were studied on their morphological characteristics. These diverse colonies were observed and indicated that the potential diversity of the actinomycetes isolated from various sources. The antagonistic activity studies showed that among the 35 marine actinomycetes isolates 9 isolates showed significant antagonism against all the five test organisms *Escherichia coli*, *Klebsiella* sp., *Pseudomonas* sp., *Enterococcus* sp., *Proteus* sp. in primary screening. The isolate VZ9 showed

maximum inhibitory activity against *Escherichia coli* (18mm). The result was consistent on both well diffusion and disc diffusion methods. Similarly VZ4 showed maximum activity against *Klebsiella* sp. VZ35 showed maximum activity against *Pseudomonas* sp. in well diffusion assay. But in disc diffusion method VZ2 is the most potent strain against *Pseudomonas* sp. Against *Enterococcus* sp. VZ9 showed the highest antagonistic activity in both the secondary assays followed by VZ2. VZ4 is the most potent isolate against *Proteus* sp. in both disc and well diffusion methods. From this study it is evident that the marine actinomycetes are a potential source of bioactive secondary metabolites which can be used to address the ever increasing drug resistance in the clinical scenario.

Speaker Biography

Deepa Mathew P was completed her post-graduation at the age of 22 years from Bharathiar University and bachelor's degree from Mahatma Gandhi university, Kottayam. She has published 4 papers in reputed journals. Now she is doing her Phd in microbiology from Manonmaniam Sundaranar University, Tirunelveli, Tamilnadu, India.

deepamathew1947@gmail.com

Received date: May 2, 2022; Accepted date: May 4, 2022; Publish date: May 10, 2022

5th International Conference on Nutrition, Food Science and Health Management
7th World Summit on Virology, Microbiology & Infectious Disease

May 05, 2022 | Webinar

The effect of non-caloric restricted, low-carbohydrate diet in reversing type 2 diabetes mellitus among active Omani diabetic patients attending North Mawaleh Health Centre

Salma Alkalbani

Al Mawaleh North Health Center, Oman

Background: There is growing evidence that low-carbohydrate diet can positively improve glycaemic index in patients with type 2 diabetes mellitus.

Objective: This study examined the effectiveness of a Non-Caloric Restricted, Low-Carbohydrate Diet (NCRLCD) in improving glycaemic index over a 24-week period in active Omani diabetic patients attending primary care setting at North Mawaleh Health Centre, Muscat, Oman.

Methodology: This is a prospective, descriptive study with longitudinal follow-up and pre-test, post-test comparison. Eighty-three patients were recruited. Blood sample was collected at baseline, 12-week and 24-week. Each patient was advised to follow a NCRLCD (< 80 grams of carbohydrate per day) and exercise recommendations. The primary outcome was glycated Haemoglobin (HbA1c). The level of significance was obtained at p value <0.05.

Result: Seventy-one patients had completed the study. Non-Caloric Restrictive Low-Carbohydrate diet significantly reduced the glycated haemoglobin in a 24-week period by 11.58%, from 7.12 % (SD=1.07) at week 0 to 6.28% (SD1.07)

at week 24, p-value < 0.05. This reduction was noticed along with adjustment of diabetic medications with more than three-quarters of patients have achieved optimal glycaemic level at the end of study period. The mean weight had shown significant reduction from 82.63(SD=14.3) kg to 76.67(SD=14.90) kg, p <0.005. However, linear regression failed to show any correlation between HbA1c and weight changes. Diabetic medication was stopped in 18 (25.4%) patients, reduced in 7 (9.8%) patients, increased in 2 (2.8%) patients and remained unchanged in 44(62.0%) patients.

Conclusion: Non-caloric restricted low carbohydrate diet had improved glycaemic control in patients with type 2 DM in this study. Further controlled studies are warranted.

Speaker Biography

Salma Alkalbani completed her postgraduate training in family medicine at Oman Medical Speciality Board, Oman, in 2014. She completed her master of public health at University College Dublin in 2021. Currently, she is doing her fellowship training in public health in Ireland. Her main area of interest is non-communicable disease management, including obesity, through health promotion.

rashidsalma053@gmail.com

Received date: April 26, 2022; **Accepted date:** April 28, 2022; **Publish date:** May 10, 2022

5th International Conference on Nutrition, Food Science and Health Management
7th World Summit on Virology, Microbiology & Infectious Disease

May 05, 2022 | Webinar

Chicken egg whites and DNA

Irina Mikhailovna Zyrianova

LK Ernst Federal Science Center for Animal Husbandry, Russian

It is widely known that chicken eggs are an important component for human nutrition and egg whites are a significant source of proteins for nutrition. When studying the composition of egg white, researchers extensively study and discuss the content of proteins and never mention the presence of DNA in it.

This work provides evidence of a possibility to isolate the total DNA from chicken egg whites. Total DNA yield have been varied from 0.73 to 0.85 µg from 1 ml of an outer thin white of an egg. It is not enough DNA in extracted DNA samples which could be able to see on an agarose gel, however, the presence of the nuclear DNA in extracted total DNA samples has been proved by the 18S ribosomal DNA-based PCR test. Moreover, the specific ribosomal PCR fragment of 97 bp have been cloned and sequenced for three breeds, and sequence analysis has revealed 98.97% identity (with one replacement C17 → T17) with 18 sequences of Gallus gallus 18S ribosomal RNA gene from GenBank.

Hoechst 33342 are widely used for labeling DNA in cells and allow visualizing of nuclei in interphase or in mitotic stages. In this work, it has been received Hoechst 33342 stained images of nuclei of outer thin white cells to prove that outer thin whites of chicken eggs contain cells. So, this study shatters the misconception that there are no cells, and no DNA in chicken egg whites.

Speaker Biography

Irina Mikhailovna Zyrianova studied Cytology and Genetics at the Tomsk State University, Tomsk, Russia, and graduated with MS in 1985. She then studied Chemistry at the Moscow State University and finished with PhD in molecular biology in 1993. Afterward, Irina worked at the different Russian Research Institutions and participated in Postdoc programs at Reading (England) and Miami (USA) programs. Since joining the Institute for Innovative Biotechnologies in Animal Husbandry, she has been involved with studies of polymorphisms and phylogeny of genes and proteins of viruses and farm animals and birds. She has published eight research articles in SCIE journals.

mirsimzyrianova@mail.ru

Received date: April 11, 2022; **Accepted date:** April 13, 2022; **Publish date:** May 10, 2022