Joint Event

21st World Congress on

Nutrition and Food Chemistry

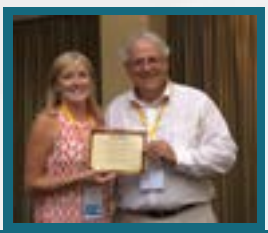
3rd Euro-Global Summit on

Probiotics & Nutraceuticals

August 24, 2022

WEBINAR






Accepted Abstracts

Joint Event
21st World Congress on
Nutrition and Food Chemistry
3rd Euro-Global Summit on
Probiotics & Nutraceuticals

August 24, 2022
WEBINAR

J Clin Nutr Diet 2022, Volume 08

Gut ecosystem modulation as precursor for blood glucose regulation through moringa leaves aqueous extract- An experimental study

Shaista Jabeen*, Aamina Sabir, Tabussam Tufail, Muhammad Ubaid Tayyib, Hafsa Kamran and **Tehmina Sabir**
The University of Lahore, Pakistan

Moringa oleifera (MO), also known as drumstick, has gained importance as a medicinal plant. It has high nutritional and pharmacological value. In this experimental study, anti-hyperglycemic effect of different doses of *Moringa oleifera* has been investigated along with its prebiotic activity against Lactobacillus. 20 Male Albino rats weighing 200-250 g were housed in cages with free access to water and food. Diabetes was induced using Streptozotocin 50 mg/kg in overnight fasted rats. Diabetic rats were divided in 4 groups (n=5). Control group rats were given Metformin 100 mg/kg/day; treatment group 1, 2 and 3 rats were treated with MO 100, 200,300 mg/kg/day respectively. Random blood glucose levels were monitored twice a week for 21 days and were represented as mean of each week. Study results conclude that *Moringa oleifera* has promising anti-hyperglycemic properties but results are more evident on a dose of 100 mg/kg/day from 152.50±7.7 to 119±7.07 (p value= 0.010) compared to the other doses (p>0.05). The result of stool analysis showed that it supports the growth of Lactobacillus which is evident by increased count of 104 CFU Lactobacillus in group 2 & 3 compared to the control group 103 CFU Lactobacillus. While higher 105 CFU Lactobacillus in group 2 treated with 100 mg/kg/day of MO leaves. Moringa oleifera maintained blood glucose level and supports the gut microbial growth as evident by the Lactobacillus growth in each treatment group compared to the control group. The results of this study suggest the need of further experimentation for a longer duration to establish the effective dose of *Moringa oleifera*.