

## **FASTING BLOOD GLUCOSE LEVEL IN A GROUP OF UNDERGRADUATES, UNIVERSITY OF PERADENIYA**

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Diabetes mellitus (DM) is a chronic and a common global health problem. Type 2 DM is the commonest among types of DM for which obesity, family history, lack of exercise, dietary habits, persistent stress, smoking and alcohol consumption are known risk factors. Fasting Blood Glucose (FBG) levels  $\geq 7$  mmol/l (or 126 mg/dl) is considered as DM and 5.6-7 mmol/L (100-126 mg/dL), is classified as Impaired Fasting Glucose (IFG), which is a pre diabetic state which requires medical attention. Undergraduates may be stressed due to several reasons which could be reflected in their fasting blood glucose levels. The current pilot study was conducted to assess the prevalence of DM, pre diabetes and associated risk factors among the veterinary undergraduates of the university of Peradeniya. All veterinary undergraduates, after a 12 hours fasting period, visited a "one day health clinic". At this clinic, they gave written consent to the study, filled a questionnaire and their height, weight, waist circumference and capillary blood glucose (using a glucometer, expeed<sup>TM</sup> VIVO) were measured. Their Body Mass Index (BMI) and waist circumference were interpreted according to World Health Organization criteria. Out of the 356 currently registered veterinary undergraduates, a total of 193 from 4 batches (43-59 students from each batch) participated in the study. The range of FBG was 82-119 mg/dl and the highest levels were among 3rd years. Treatment for chronic disease (n=16), smoking (n=2) and alcohol consumption (n=6) appeared to be rare among the students participated. The numbers of students with family history of DM (n=69) were considerably high and therefore may need prompt and proper advice. Approximately half of the students indicated that they follow regular exercise though the observed numbers of students in university sports facilities do not support this. A total of 20% (n=39) students were abdominal obese, one was obese, and 10% (n=19) were overweight. A total of 42% (n=82) appear to be having IFG. The IFG, and prevalence of potential risk factors for the development of DM among veterinary undergraduates especially of 3<sup>rd</sup> years, appear to be high compared to general Sri Lankan population. A detailed study in this context including all faculties is warranted, situation must be monitored and remedy must be implemented.