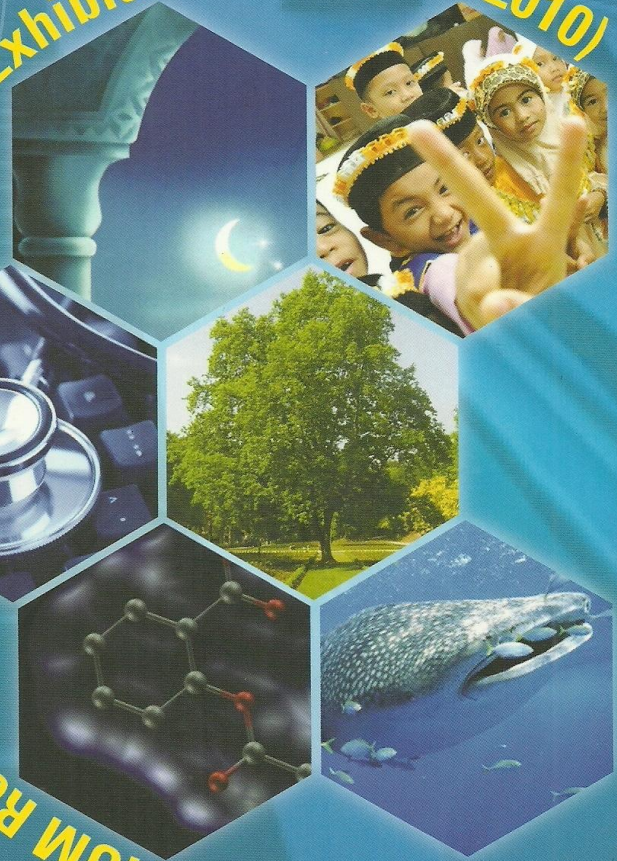




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discovering pathways for inhibiting viral replication.

**P-373 The Effect of Noise on Cardiovascular Parameters Using
Isolated Rat Heart**

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Prolonged exposure to loud noise can have lasting adverse effects on health. Noise damages not just the auditory system but also systematically by activating the sympathetic nervous and hormonal systems. This will lead to changes in blood pressure, heart rate, and other circulatory factors, which consequently can result in many cardiovascular diseases. In addition to that elevated noise levels can create stress, increase workplace accident rates. The present study was undertaken to evaluate the effect of acute and chronic high intensity noise on the isolated hearts of rats using the Langendorff apparatus by determining the effect of noise on the coronary perfusion pressure CPP (mmHg), heart rate HR (beat/min) and left ventricular diastolic pressure LVDP (mmHg), as well as to investigate its effect on plasma blood glucose concentration and lipid profile (Cholesterol, triglycerides and high density lipoprotein) as compared to control group. The rats were divided into four groups and they include exposure to noise of intensity 80-100 dBA on duration of 12 hours exposure (acute effect), 8 hours daily for 20 days (chronic effect), 20 days into 3 days exposure and 2 days without 8 hours per day (intermittent effect) and the control group. Noise of 80 – 100 dBA was found to cause significant increase in CPP, LVDP and HR ($P < 0.05$) for acute and both chronic groups versus control. Plasma glucose, cholesterol, TG and HDL were significantly increased in its concentration as a value ($P < 0.05$) for the acute and chronic continuous compared to no noise exposure while the concentration decrease for the chronic intermittent but still higher than the baseline controls. The present study showed that the high intensity noise does affect the cardiovascular parameters adversely.