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OP 13 - Metabolic parameters in healthy long-term meditators: An interim analysis

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Introduction: Physiological changes of meditation are through neuro-humoral modulation. There are reports of healthy meditators having favourable metabolic parameters. The study was designed to compare metabolic parameters (body mass index (BMI), fasting blood sugar (FBS), HbA1C and lipid profile) of a sample of Sri Lankan long-term meditators to a matched control group.

Methods: Long term skilled meditators were selected using intake interview. Face and content validity of interview process was obtained through rigorous process of extensive literature review, focus groups, Delphi interviews. Questions included; duration and details of meditation, heightened peripheral awareness, stable attention, alertness and emotional stability. From total of 50 intake interviews conducted, 12 long-term skilled meditators (LM) were identified and then matched 12 non-meditators (NM) were recruited.

Results: Interim analysis included 4 females and 8 males in each group. Mean age (LM=38.75+7.13, NM=39.91+6.47 years). There was no significant difference in level of education and average duration of sleep. All were non-smokers and teetotallers and none engaged in regular exercise. LM, mean BMI 25.1$\pm$3.8 and NM 25.6$\pm$3.1(p=0.7). Among LM, 4 had desirable BMI (<23): NM only 2 (p=0.34). LM mean FBS 88.1$\pm$7mg/dL & NM 84.4$\pm$6.9mg/dL. LM mean HbA1C%=5.2$\pm$0.3 and NM 5.1$\pm$0.2(p=0.7). Among LM, 75% had desirable LDL cholesterol level(<160mg/dL) while NM only 58.3% (P=0.38). LM had lower mean total cholesterol/LDL/triglyceride levels (222.8/150/121mg/dL) compared to NM (238.2/165/127.3mg/dL) (p>0.05). Ten LM and 9 NM had desirable triglyceride levels(<150mg/dL) (p=0.6). Among males in both groups, 5 out of 8 had desirable HDL (>40mg/dL). Female LM, all 4 had desirable HDL (>50mg/dL) but one in NM.

Conclusions: Mean BMI, total cholesterol, LDL and triglyceride levels shows tendency to be lower in LM than NM. Limitations include small sample size and possibility of other confounding factors (dietary variations, stress levels). Large scale study is needed to confirm these observations.

Key words: Meditation, long term skilled meditators, metabolic parameters

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