

**Special Supplement on INSULIN***Editorial***The right to euglycemia; the responsibility for glucophylaxis**

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*The Right to Health :*

Every Indian citizen enjoys the right to life, and to health. These rights, enshrined in our constitution, form the bed rock of our national vision and philosophy. In their endeavor to fulfil these obligations, public health and clinical medicine have worked together to eradicate diseases such as smallpox, guinea worm and polio, and limit the impact of illnesses like leprosy, tetanus and rabies. As these obstacles to life and health have been overcome, however, newer complexities have arisen. Prominent among these are the non-communicable diseases, including diabetes and cardiovascular disease<sup>1,2</sup>.

Recently, the Honorable President of India called for a diabetes-free India by the year 2030. Experts in diabetology have taken this as a challenge to ensure that no child born in India, from 2030 onwards, develops type 2 diabetes. Others feel that a diabetes free India can be defined as a country that has eradicated avoidable complications of diabetes. This concept of prevention includes both acute metabolic and chronic vascular complications in its ambit<sup>3</sup>.

*The Right to Euglycemia :*

In this context, we call for every Indian's right to euglycemia. Euglycemia is a state of normal glucose concentrations, which is physiologically present in all healthy individuals. Persons with pre diabetes and diabetes (of any type) do develop hyperglycemia, but there are multiple options now available to prevent this. These include non-pharmacological, oral drugs and injectable preparations. The efficacy and tolerability of modern glucose-lowering drugs and delivery systems is excellent, and the use of cutting-edge technologies for glucose monitoring enhances

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- A diabetes-free India targeted by 2030.
- Euglycemia is linked to eubolism.
- To achieve this – healthy lifestyle, patient education, public awareness, easy drugs affordability, a diabetes- friendly society and environment is needed.

their safety. Drugs listed in the National List of Essential Medicines are available in most public health care systems<sup>4</sup>. Costs have been limited, and affordability enhanced, thanks to the National Drug Price Control policy.

There should be no reason, then, for our fellow countrymen and women to have to live with hyperglycemia. Whether diabetic or pre diabetic, they should be able to access and avail of healthy lifestyle measures and evidence-based therapeutic agents. This will help them attain, and maintain, euglycemia. Lifestyle modification, glucose-lowering tablets and insulins should be viewed as a part of life: not more, not less. Their importance should be similar to that of salt: essential for life, not for luxury.

*The Right to Eubolism :*

The person's right to euglycemia is linked with the right to eubolism, or optimal metabolism. This implies the need to prevent and manage extreme catabolism (underweight) as well as maladaptive anabolism (overweight/obesity)<sup>5</sup>. Every citizen should have the right to informed healthy choices in eating, physical activity and medical management. This right is not limited just to medical settings or to the adult population. A focus on maternal and child health, to ensure optimal nutrition and medical care during pregnancy and childhood<sup>6</sup>, is essential if we are to achieve a state of national eubolism.

*Citizen's Responsibility :*

If the Indian citizen has a right to euglycemia and eubolism, she or he also has to exhibit a responsibility towards achieving the same. This is fulfilled by following a healthy lifestyle, including diet, physical activity/exercise and stress/coping mechanisms. It also entails timely acceptance of, and informed adherence to, prescribed medication, including insulin. All these activities should be viewed from a salutogenic prism, as promotion of health, and prevention or prophylaxis of disease, rather than management of illness<sup>7</sup>.

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In Greek, the word 'phylax' means 'guardian'. The person with diabetes should be sensitized and empowered to take care of guard, her or his own health. Thus, every individual plays the role of a Gluco Phylax for her/himself. Family members and the community can contribute to GlucoPhylaxis by providing a supportive and caring environment, conducive to diabetes control. The importance of yoga, meditation, region-specific healthy diet, folk dance and folk games as prophylactic measures for diabetes can be reinforced<sup>8</sup>. Such information and practices, including the concept of healthy eubolism, should be introduced in school education. In this manner, every citizen of India contributes to nation building by acting as GlucoPhylax for her/his country

### *Physician's Responsibility :*

The Indian health care professional must take responsibility for achieving the right to euglycemia and eubolism: she or he must position her/himself as the Gluco Phylax of the nation. India's doctors work to take care of India's health. As captains of the health care team, we must empower our colleagues in diabetes management, including insulin use. This must be accompanied by sensitization regarding the important of timely glycemc management. 'Hit the snake before it bites you' (courtesy: Dr Silver Bahendeka, Uganda; Dr Kaushik Ramaiya, Tanzania) is a simple adage which we would do well to heed. Person with diabetes and their caregivers must be educated, counseled and supported to achieve euglycemia with modern medication, while ignoring 'diabetes hearsay' and avoiding non-scientific unproven

therapies<sup>9</sup>. This emphasis on patient education must be complemented by public awareness, geared towards creating a diabetes- friendly society and environment.

### *JIMA's Action*

The Journal of Indian Medical Association (JIMA) has a sterling record of leadership in promoting India's health. With this supplement, JIMA positions itself as the GlucoPhylax of our great country. We hope this inter-professional editorial will stimulate readers to work towards achieving euglycemia and eubolism in their patients and communities.

### REFERENCES

- 1 Shah A, Kanaya AM — Diabetes and associated complications in the South Asian population. *Current cardiology reports* 2014; **16**: 476.
- 2 Kalra S, Lauritzen T, Sharmanov T, Akanov Z, Al Awadi F, Das AK, *et al* — Alma-Ata to Berlin: diabetes prevention and treatment to achieve healthy living. *Diabetic Medicine* 2017 Aug 1.
- 3 Kalra S, Gupta Y — Metabolic Syndrome: The drums are beating. *J Pak Med Assoc* 2015; **65**: 1148-9.
- 4 Kalra S, Gupta Y, Saboo B — Essential drugs in diabetes: South and South East Asian perspective. *Journal of Social Health and Diabetes* 2015; **3**: 4.
- 5 Kalra S, Gupta Y — Choosing injectable therapy: The metabolic fulcrum. *J Pak Med Assoc* 2016; **66**: 908-9.
- 6 Kalra B, Kalra S, Unnikrishnan AG, Baruah MP, Khandelwal D, Gupta Y — Transgenerational karma. *Indian Journal of Endocrinology and Metabolism* 2017; **21**: 265.
- 7 Kalra S, Baruah MP, Sahay R — Salutogenesis in Type 2 diabetes care: A biopsychosocial perspective. *Indian Journal of Endocrinology and Metabolism* 2018; **22**: 169.
- 8 Unnikrishnan AG, Kalra S, Garg MK — Preventing obesity in India: Weighing the options. *Indian Journal of Endocrinology and Metabolism* 2012; **16**: 4.
- 9 Kalra S, Balachandran K — De-Hearsay (Diabetes e-Hearsay). *J Pak Med Assoc* 2017; **67**: 1293-5.