

like any other therapy, should be subject to double blind placebo-controlled studies to detect both effect and side effect. Until we have such information, all arguments regarding its efficacy, side effect, low cost, etc. are irrelevant.

An ardent nationalist may promote these remedies, whether they are good or bad, because they are Indian. He will be doing a disservice to the nation by championing treatments which may be ineffective or harmful or both, wasting our resources on an illusion and denying efficacious and possibly cheaper therapies. 'Eye of newt and toe of frog, Wool of bat and tongue of dog, Adder's fork and blind-worm's sting, Lizards leg and owlet's wing, For a charm of powerful trouble, Like a hell-broth boil and bubble' – part of the formula for a potion prescribed to the troubled Macbeth, but it is no longer popular among the British

despite its roots in (literary) tradition. The ingredients are devilishly difficult to get hold of in any quantity, the method of preparation imprecise, and most of all, there are no double blind placebo-controlled studies showing its effectiveness (say as an anti-anxiety elixir). Neither should we hang on to culturally endorsed remedies, at least to treat real diseases. One of the reasons driving the current interest in herbal medicines may be its recent popularity in the West, along with all things that are 'Eastern' such as yoga, acupuncture and mysticism, and magnetotherapy, numerology, tarot reading, etc. We, of course, have a penchant for Western approval in every sphere of life. The affluent West can afford these charming peccadilloes when the foundation of their society, including the healing sciences, rests on the cornerstone of rigorous logic. With little

funds for such foibles, we have to be more prudent. We should use any form of treatment that works – if we can show to our satisfaction that it does indeed work. Western approval is not necessary. A true patriot will only promote those treatments (or any other activity) that is logically sound and empirically useful, regardless of its place of origin. For we must remember that nature cannot be fooled and *sathyameva jayathae*.

1. Valiathan, M. S., *Curr. Sci.*, 1998, 75, 1122–1127.
2. Chattopadhyay, M. K., *Curr. Sci.*, 1999, 76, 1415.

SEBASTIAN J. PADAYATTY

Bright Farm, Thubrahalli,  
Whitefield,  
Bangalore 560 066, India

## Hypothyroidism

This is regarding the article entitled 'Study of prevalence of hypothyroidism in women of reproductive age in Meghalaya, North-Eastern India' (*Curr. Sci.*, 1998, 75, 1390–1393). I have a few queries regarding the same.

(1) What is the population from which the sample was drawn? We can then comment on the prevalence of hypothyroidism. Was it from a hospital, or specialty clinic, or was it from the general population. If it was from the general population, how were these women selected? What sampling method was used? If they were from a hospital or clinic, why did the women come there? Were they healthy or did they have any particular illness for which they consulted a doctor? (2) The range of serum  $T_4$  in non-pregnant women at the upper end (216.6 ng/ml) crossed the upper limit of their normals (120 ng/ml). In non-pregnant women, a truly elevated serum  $T_4$  level suggests thyrotoxicosis. Were the women (or woman?) with high  $T_4$  clinically toxic? Details of the population attain importance to answer questions such as these. (3) It is well known that pregnancy results in increased total

serum  $T_4$  levels due to estrogen-induced elevation of thyroid binding globulin levels. How was the diagnosis of hypothyroidism made in this group? What was the TSH level in the lone woman diagnosed as hypothyroid? (4) Thyroid deficiency may be very common in the north-east. But there is no objective evidence in this presentation to say that it is so.

G. R. SRIDHAR

Endocrine and Diabetes Centre,  
15-12-16 Krishnanagar,  
Visakhapatnam 530 002, India

### Response:

We thank G. R. Sridhar for reading our paper on the prevalence of hypothyroidism in women of reproductive age in Meghalaya. We wish to state that (1) the samples were randomly selected from a general population of about 3 lakhs and the individuals were visibly healthy, (2) no apparent symptoms of thyrotoxicosis

were observed in the women with high total  $T_4$  levels (free  $T_4$  levels were not monitored), and (3) the level of total  $T_4$  (29.44 ng/ml) was considered as an indicator of hypothyroidism in the pregnant women where TSH level was found to be 0.3  $\mu$ IU/ml. It is important to mention that in areas of less severe iodine deficiency, endemic goitre is associated with normal TSH concentrations (Ingbar, S. H., in *William's Textbook of Endocrinology* (eds Wilson, J. D. and Foster, D. W.), W.B. Saunders Company, London, 7th edition, 1985, pp. 682–815). Our data indicate prevalence of hypothyroidism in women of Meghalaya beyond any doubt. However, as mentioned in the concluding paragraph of the paper, the prevalence of hypothyroidism in the general population of the State with reference to age, sex, food habits, ethnic origin, economic status, etc. remains to be analysed.

B. B. P. GUPTA

Department of Zoology,  
North-Eastern Hill University,  
Shillong 793 022, India