

should also be defined further to improve clarity to the readers.

4. The IAP guidelines also do not clearly state the type and amount of maintenance fluid to be given after correction of shock or dehydration in a severely malnourished child who is not tolerating enteral feeds.
5. What is the basis of recommending steroids in severely malnourished children? This may result in unnecessary use of steroids in malnourished children who are already in a catabolic state.
6. It would be nice if certain Do's and Dont's in the treatment of severely malnourished are given in a boxed form for better understanding and implementation of the guidelines.

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REFERENCES

1. Task Force of the Indian Academy of Pediatrics. IAP guidelines 2006 on hospital based management of severely malnourished children (adapted from the WHO guidelines). *Indian Pediatr* 2007; 44: 443-461.
2. Chatterjee P. Child malnutrition rises in India despite economic boom. *Lancet* 2007; 369: 1417 - 1418.
3. Ashworth A, Jackson A, Uauy R. Focussing on malnutrition management to improve child survival in India. *Indian Pediatr* 2007; 44: 413-416.
4. World Health Organization. The pocket book of hospital care for children. Guidelines for the management of common illness with limited resources. Geneva: WHO; 2005.

Reply

We thank Dr. Kumar and Gupta for raising important issues regarding management of severely malnourished child. The Task Force evaluated the WHO guidelines and reviewed literature for supporting the recommendations. For many of the issues, including some of those raised by the authors, there is little published evidence.

Following are the responses to the issues stated:

1. WHO recommends ReSoMal for malnourished

children(1). The solution is not available in India. There are no studies that have compared the reduced osmolarity ORS with ReSoMal in severely malnourished children with diarrhea. There is a study by Dutta et al that found reduced osmolarity ORS to be superior to standard WHO ORS in severely malnourished children with diarrhea(2). In absence of evidence and particularly for the purpose of program feasibility, the expert group recommended the use of reduced osmolarity ORS with added KCl. To ensure safe use in severely malnourished children, the Task Force has recommended that the ORS for rehydration is given over 8-10 hours(3). At the same time the guidelines have highlighted the WHO recommendations.

2. There is no evidence for the WHO guidelines for the management of septic shock; there is greater emphasis on use of blood after one fluid bolus which is not supported by any data and appears to be impractical. The Task Force has based its recommendations on the available guidelines on management of septic shock(4) but recommended a slower fluid infusion rate and the need for monitoring. The WHO guidelines appear to be based on kwashiorkor cases. Marasmic children with circulatory collapse may tolerate a rapid infusion of 10- 20 mL/kg of Ringer's lactate, and may need more, but should not continue to have rapid rates of infusion once the condition has improved.
3. The major emphasis in the management of a child with septic shock is on use of crystalloids. The recommendation to consider blood transfusion are based on the published guidelines for management of septic shock(4) and the rationale is to improve the oxygen carrying capacity to improve the tissue oxygenation. However, one may individualize the therapy based on the child's condition and availability of facilities for safe transfusions.
4. Once the shock is corrected, the malnourished child may receive maintenance fluids as N/5 in 5% or 10% dextrose with added KCl and need for further fluids is decided by the child's condition. If there are ongoing stool losses, the same should also be replaced with N/2 in 5% dextrose solution.
5. The guidelines recommend that steroids in low

doses may be considered in a child with septic shock who has features suggestive of adrenal insufficiency (hypoglycemia, hyponatremia, hyperkalemia in combination). The guidelines do not recommend steroids for all children with septic shock.

Overall, there is little good quality published evidence for many aspects of management of severely malnourished child and there is need for more research in these areas.

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REFERENCES

1. Ashworth A, Khanum S, Jackson A, Schofield C.

Guidelines for the inpatient treatment of severely malnourished children. Geneva: World Health Organisation; 2003.

2. Dutta P, Mitra U, Manna B, Niyogi SK, Roy K, Mondal C, *et al.* Double blind, randomised controlled clinical trial of hypo-osmolar oral rehydration salt solution in dehydrating acute diarrhoea in severely malnourished (marasmic) children. *Arch Dis Child* 2001; 84: 237-240.
3. Bhatnagar S, Lodha R, Choudhury P, Sachdev HP, Shah N, Narayan S, *et al.* IAP guidelines 2006 on hospital based management of severely malnourished children (adapted from the WHO Guidelines). *Indian Pediatr* 2007; 44: 443-461.
4. Carcillo JA, Fields AI. American College of Critical Care Medicine Task Force Committee Members. Clinical practice parameters for hemodynamic support of pediatric and neonatal patients in septic shock. *Crit Care Med* 2002; 30: 1365- 1378.

Probiotics and Diarrhea

This refers to IAP Guidelines 2004 and 2006 on Management of Acute Diarrhea (1,2).

The stand of Task Force on Probiotics needs some clarification. The group stated that there is presently insufficient evidence to recommend probiotics in the treatment of acute diarrhea in our setting. As reasons for this stand four points from the 1st Consensus Statement are cited. Under new point 5 it is stated: There is an urgent need to study the following issues before probiotics may be considered for treatment of diarrhea.

My dilemma is: Should I prescribe probiotics or wait for some more years when IAP Task Force provides us guidelines after conducting a nation-wide study on probiotics, because, results obtained in one region may not be applicable to the children in the other regions.

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REFERENCES

1. Consensus Statement of IAP National Task Force: Status Report on Management of Acute Diarrhea. *Indian Pediatr* 2004; 41: 335 - 348.
2. IAP Guidelines 2006 on Management of Acute Diarrhea. *Indian Pediatr* 2007; 44: 380 - 389.

Reply

Regarding the use of probiotics, the available evidence did not support the routine use of probiotics in acute diarrhea; hence, the recommendation for need for more data was made. The authors will like to clarify that conducting a study for evaluating the role of probiotics is not the mandate for the Task force. The authors do not agree with the statement made by Dr Paul as it is for group of researchers to take up research questions and design and conduct studies for the same.

The issues of probiotic safety and efficacy are important. There is no reason to believe that the probiotics will cause significant adverse effects in Indian children. However, the efficacy needs to be