small delay in delivery, and the benefit seen in very premature labour can be lost in a large study. There seemed to be an increase in survival for fetuses of 24 to 27 weeks' gestation. Most obstetricians would also use ritodrine in the 28 to 32 week period and give steroids to help fetal lung maturation.

MJW: Given that almost 10% of patients given β mimetics develop pulmonary oedema, are the benefits greater than the risks?

JS: There are some parts of the United States where these drugs are not used because of concern about safety. How clearly is the risk of pulmonary oedema related to the fluid in which the ritodrine is given?

AMC: In my experience pulmonary oedema is seen in less than 5% of cases. Ritodrine infusions should be made up in small volumes of dextrose and given with a syringe pump. Fluid overload seems to be a feature in many but not all cases of pulmonary oedema.

JMBH: Pulmonary oedema can be caused by increased pulmonary capillary pressure or by increased capillary permeability. A combination of the two is a particularly potent cause of pulmonary oedema as small pressure changes cause great increases in lung water. There really isn't any evidence in humans that β_2 agonists increase capillary permeability. In fact they have a favourable effect helping clear fetal lung liquids at birth by increasing sodium transport.

JS: How useful is thyrotrophin releasing hormone in preterm labour?

MS: There is increasing evidence that thyrotrophin releasing hormone is effective in enhancing lung maturation and reducing the risk of hyaline membrane disease. It is generally used in conjunction with corticosteroids. Interestingly, the hormone itself can cause a tachycardia but I don't know how haemodynamically important it is in this situation.

CMO: β_2 Agonists have been used to treat failing left ventricles as they produce peripheral vasodilation but have a small inotropic effect on the myocardium. The action of ritodrine on the myocardium was probably not unfavourable in this patient but fluid overload was responsible for the pulmonary oedema. Ritodrine should have been given in dextrose rather than saline. The subject has been confusing for years as women in labour are difficult to study. The 48 hour prolongation of pregnancy with ritodrine is valuable as steroids given during this time will help maturation of the fetal lungs.

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(Accepted 28 September 1993)

The World Medical Association: can hope triumph over experience?

Tessa Richards

The World Medical Association was set up in 1947 in the wake of outrage about war crimes committed by doctors in Hitler's Germany. For nearly 50 years it has lurched from one controversy to another, arguing within itself about its funding, its voting system, and the representativeness and political affiliation of some of its member medical associations. The BMA withdrew from the association in 1984, supporting a breakaway "Toronto" group including Canada, the Scandinavian countries, the Netherlands, Ireland, and Jamaica. All but Britain and Jamaica have now rejoined and membership is growing, but the association is still struggling to gain credibility and clout. After 20 years of part time stewardship the recent appointment of a new full time secretary general has fuelled expectations that internal reforms will be implemented, and the WMA's standing and profile improved.

The World Medical Association is at a crossroads. To its credit it has a string of worthy statements and declarations. The key ones, such as the 1948 Declaration of Geneva (a modern restatement of the Hippocratic oath), the 1964 Declaration of Helsinki on research on human subjects, and the 1975 Declaration of Tokyo on torture and other inhuman and degrading treatment of prisoners, are widely known and respected throughout the world, if not always adhered to. The association has also run international conferences on medical education and collaborated modestly with the World Health Organisation.

On the debit side, the association has never succeeded in being the influential international body it has aspired to be. Indeed it has never even succeeded in being a truly "world" organisation. Membership reached a peak of over 60 in 1971 and a low of 35 in 1985; it is now running at 59. Its periodic statements have usually been reactive and poorly publicised. Internal divisions, mass resignations, the formation of an independent splinter group, and public controversy about its choice of officers—resulting in its president elect standing down last year—have not inspired confidence.[1] Moreover, the association has failed in the most basic of tasks—communication. The average doctor on the Clapham, Shanghai, or Milanese omnibus remains ignorant, if not of its existence, of its aims and activities, and so does the public at large.

To make sense of the WMA's current position it is important to understand its chequered history and how it is run. This article outlines this history and describes how the association works. Drawing on discussions that I had at the WMA's latest general assembly in Budapest, this article suggests how it might work better.

In trouble from the start

The association came into being in 1947, the year of the Nuremberg trials. These documented how doctors participated in the atrocities of Hitler's "racial hygiene" programmes—notably in the human "experiments" carried out in the death camps. They also exposed the fact that there was no internationally recognised code of medical ethics.

British Medical Journal, London WC1H 9JR
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BMJ 1994;308:262-6

Against this background the World Medical Association was set up, although at this stage consideration of ethical issues was not at the top of the agenda. Its stated aim was to promote ties between doctors and national medical organisations, and six lofty objectives were defined (box), to which a seventh, "To promote world peace," was added at the first meeting of the association's general assembly in Paris on 18 September 1947.

This initial assembly was prophetic. Although it addressed the burning issue of the war crimes committed by German doctors and pledged to "recognise the sanctity, moral liberty, and personal dignity of every human being," the focus was on doctors' rights —not patients' rights. Procedural wrangling about the association's constitution and bylaws dominated the agenda.[2]

Financing the organisation was (and remains) a problem. The money raised by contributions from national member associations would clearly never be enough for the World Medical Association to fulfil the tasks it had set itself. The first assembly, therefore, voted to accept a gift of $50 000 a year for five years from the American delegates. One of the strings attached to this gift was that the association's headquarters would be in North America.

The organisation remains dependent on the contributions it receives from the American Medical Association. It has also depended heavily on its Japanese members and more recently on the German Bundesarztekammer (national chamber of physicians). This support has afforded these countries considerable influence because of an idiosyncratic voting system that is the source of much disquiet about the association: votes are weighted according to the number of doctors an association "declares"—that is, pays for.

Objectives of the World Medical Association

1 To promote closer ties among the national medical organisations and among the doctors of the world by personal contact and all other means available.

2 To maintain the honour and protect the interests of the medical profession.

3 To study and report on the professional problems which confront the medical profession in the different countries.

4 To organise an exchange of information on matters of interest to the medical profession.

5 To establish relations with, and to present the views of the medical profession to, the World Health Organisation, Unesco, and other appropriate bodies.

6 To assist all peoples of the world to attain the highest possible level of health.

7 To promote world peace.

Membership crises

The resignation of the American Medical Association in 1973 as a result of disagreements over funding and voting strengths was a tremendous blow. By 1977 the British Medical Association was also ambivalent about maintaining its membership, and views then, as now, were polarised. "Who is right?" asked a 1977 *BMJ* briefing article. Is "a WMA that does not include the Soviet Union, China, and the USA a grandiose sounding board for windbags," or is it an organisation with a "vital role in preserving the professional voice in medical ethics, education and standards"?[3]

One of the BMA's main reservations was over the "representativeness" of some national member associations—for example, the Transkei Medical Association (no country outside South Africa recognised the Transkei as an independent state); the Chinese Medical Association, based in Taiwan; and the Cuban Free Doctors Association, based in Miami. Doubts about the WMA's political stance came to a head when it readmitted the Medical Association of South Africa in 1977 in the face of passionate opposition from most member associations, which thought that the association should take a strong stand against apartheid.[4] Faced with falling membership and repeated warnings that it was ineffective and too politicised, the association tinkered. It moved its headquarters from New York to Ferney-Voltaire in France in 1974, cut its staff, and appointed a new but part time secretary general, Dr André Wynen, a Belgian surgeon.

The splinter group

Dr Wynen reopened negotiations with the Americans, who rejoined in 1979, after the bylaws were changed to establish a voting structure related to the number of members declared. This change did not go down well with many national associations, and when coupled with the WMA's persistent defence of the South African Medical Association, prompted a wave of resignations, notably from the Dutch and Scandinavians. The BMA stayed in but increased its demands for constitutional reform.[5]

The South African controversy escalated. The World Health Organisation formally requested the WMA to withdraw the South African Medical Association's membership. Dr Wynen refused, and diplomatic links between the two organisations were severed. At a stroke any influence that the association had had at international level was greatly reduced.

Frustrated in its attempts to effect reform, the BMA resigned from the WMA in 1984 and supported a breakaway group made up of the medical associations of Denmark, Finland, Iceland, Ireland, the Netherlands, New Zealand, Norway, and Sweden, joined later by Canada and Jamaica. The group met annually and flirted with the idea of establishing a rival international body before opting to campaign for four key changes: firstly, that member associations of the WMA should be truly representative of the medical profession in their country; secondly, that member associations should be politically independent of their own government; thirdly, that the WMA should adopt a more democratic voting system; and, fourthly, that any barrier to the association adopting and publishing its statements should be removed. (The registration of the WMA in New York, where it is subject to antitrust laws, has raised problems in formulating some declarations, notably one on medical manpower.)

In response the WMA agreed that member associations that were not truly representative of doctors in their own countries should not be allowed membership. It also agreed to change, although not fundamentally, its voting structure. Instead of one vote per 5000 declared members it became one per 10 000 (or any number up to 10 000), and resolutions on ethical issues required a two thirds majority of those present. The association did not, however, respond to the suggestion that it should be reregistered elsewhere and it remains registered as a non-profit organisation in New York, which makes contributions to it tax deductible.

These changes satisfied most of the so called Toronto group (a name adopted after its 1987 meeting in Toronto) who, with the notable exception of Britain and Jamaica, rejoined the WMA in 1991. But despite this outward reconciliation the Toronto group survived and continues to meet; its collective power now exceeds that of the Americans or Japanese.

The constitution

Arguments about the power base within the WMA exercise the minds of many of its members. The secretary general is in a pivotal position but the elected officers have little influence. More power, in terms of setting the agenda, is invested in the council, which meets every six months and reports to the annual world medical assembly. The assembly is the association's key event and where the policies of the WMA are established formally. Draft resolutions, statements, and declarations—the distinction between these terms is rather blurred—are presented, discussed, and eventually put to the vote. The assembly is composed of selected delegates (who hold voting rights) from the member national medical associations; WMA officers and council members; individual members, known as associate members; and invited observers, of whom the BMA is one. Other observer organisations include the International Committee of the Red Cross, the International Council of Nurses, and the International Hospital Federation. Representatives of some non-member medical associations also attend.

The 14 man council (women are thin on the ground in this forum) are elected by the assembly for two-year stints. International balance is attempted by ensuring that each of the six WMA regions (North America, Europe, Pacific, Africa, Asia, and Latin America) are represented. But the all pervading link between purchasing power and influence remains, for any country that can pay for a membership of 50 000 gets a seat. Council members and their official advisers and observers meet every six months and draw together the information and decisions that have come from the WMA's three specialist committees: finance and planning, medical ethics, and sociomedical affairs. These are made up of a mixture of council members and "approved" advisers. The WMA pays the expenses of its council members but not the advisers and observers—so once again influence at the discussion stage is related to a country's ability to pay.

A rich man's world

Unsurprisingly, the foremost concern of the finance and planning committee is membership "dues," the primary source of the association's revenue. Sw fr 2·5 a year is the price member associations must pay for each member they "declare." Associate members, of which there are 1365 (750 of whom are Japanese) bring in little extra revenue—the $40 a year membership fee is swallowed up by the costs of providing a fancy certificate, a monthly newsletter, an option on a $20 000 accidental death insurance, and a copy of the *World Medical Journal* (a slim, low profile volume).

The declaration of members is an arbitrary affair. Although linked to a country's ability to pay, it also reflects the country's level of enthusiasm and commitment to the association. The fact that some affluent countries do not choose to pay for all their members causes considerable ill will. A glance at a selection of the contributions in the 1991 and 1992 league table of dues paid shows that the Americans continue to dominate, but the Germans and French are now up with the Japanese (table).

But what of the poorer countries? For the past two years the medical associations of Brazil, Panama, Argentina, and Venezuela, among others, have failed to pay any dues. The penalty for this is expulsion from the association. As a result the Latin American input to the WMA is in jeopardy. Other countries adopt a minimalist approach and retain membership by declaring only a fraction of their members. The Indian Medical Association, for example, was narrowly accepted as a member last October on the basis that it will pay for only 500 of the 90 000 doctors it represents.

China joined the WMA in 1989 but has had no meaningful presence. "Nominally representing over 400 000 doctors, it paid for only a few hundred for a couple of years and then paid nothing," said Dr Wynen. "I agree, it is very difficult for the poorer countries, but they can have a voice if they choose. A country can secure a vote even if they only declare 10 members. On that basis the 34 African states could acquire a powerful voting lobby. Of course we are keen to get in more members from developing and former Eastern Bloc countries, but it is hard to see how the organisation can afford to help them participate. To remain viable and independent we must finance ourselves solely through our members. If they can't afford it what is the solution?

Ceremonial circus

The annual assembly, which is held in a different country each year, is a costly business. The host member associations pay handsomely for the privilege of entertaining this select circle of the world's medical profession (and their spouses). National pride is at stake and lengthy ceremonial sessions complete with dignitaries are complemented by impressive social programmes. Although these provide the opportunity for useful exchange among member associations they are also an unashamedly attractive alternative for delegates whose commitment to the assembly floor is limited.

Meetings extend over five days and, although the registration fees are high (another obvious barrier to participation), the association still has to reach into its pocket. "This year's assembly in Budapest cost about $150 000," said Mr Angel Orozco, the association's executive director. "Most of this goes on paying for the transport and accommodation expenses of the council and officials, and our interpretation costs are high too. We also helped the Hungarians and paid for some of the eastern European delegates to attend."

The rationale for such lengthy meetings is dubious. Much time is spent on ceremony, ritual business, and mutual congratulation. Although a certain amount of this is necessary in the interests of international goodwill and openness, the time allotted seems excessive. Sessions frequently overrun, and agenda items are deferred or abandoned.

Paradoxically, when it comes to the presentation of the many—sometimes too many—statements that have been prepared by the specialist committees, discussions are often minimal. For fine tuning previous statements or agreeing those that have been drawn up well after lengthy and wide consultation this is not a problem. "But the quality of some of the statements is dubious," said Dr Markku Äärimaa of the Finnish Medical Association. "Those on important ethical issues are mixed in with the lightweight. Not all get the

1991 membership fees paid and voting strength of a selection of WMA members

Medical association	Dues paid (Sw fr)	Members declared	Voting strength
American	341 000	136 000	14
German	183 500	73 400	8
Japanese	138 000	55 200	6
French	125 000	50 000	5
Canadian	74 200	29 675	3
Swedish	55 000	22 000	3
Royal Dutch	50 107	20 043	3
Australian	32 110	12 844	2
Finnish	26 250	10 500	2
Spanish	14 000	5 600	1
Czech	250	100	1
Brazilian	202	81	1
Federal Hungarian medical societies	187	75	1

The other medical associations that are WMA members but are not shown on this table have a voting strength of one, except South Africa's Medical Association (MASA), which has two votes.

attention they deserve. The sheer weight of paper is daunting. In the heat of partisan debate outcomes can be unpredictable."

Adding to the mêlée is a one and a half day scientific session. Sandwiched between the pre and post assembly council and committee meetings and the plenary sessions, this session has questionable merit. "In my view it's misused," said Dr Äärimaa; "at worst it has been little more than an exercise to enable individual members to claim back expenses. The council has now agreed to shorten it to one day, but that does not tackle the fundamental problem. It must be made worthwhile. The topics we discuss are often important—for example, this year it was on rationing health care—but to conduct worthwhile debates we need to invite acknowledged international experts to address the meeting and attract informed participants. We could then publish the proceedings. This would give the WMA much greater visibility. As it is we simply select speakers from among ourselves (in such a way as to appease each region), and exchange known and frequently poorly informed in house views."

Consensus among critics

One of the most striking things about talking to WMA members is the extent to which they agree on what is wrong with the association and what needs to be done to change it. Its rich and narrow membership is an obvious problem. "The WMA has shown little sensitivity to the needs of poorer countries," said Dr Williams, of the Canadian Medical Association. "The new secretary general needs to go on a recruiting drive and at the same time change the subscription structure to introduce a graduated scale of dues perhaps linked to gross domestic product, so that the poor countries can afford to join the association."

But membership is one thing, active participation another. As it stands, the WMA is not a rich organisation and its finances are finely balanced. Its ability to pay for its poorer members to attend meetings, contribute to debates—and cast their votes—is severely limited. Even if it could ensure that all its member associations attended key meetings, the democratic deficit remains. Ideally, voting power would not be linked with a member association's financial contributions but with the number of doctors it represents. Arbitrary declaration of members would not be allowed and the poorer countries would be supported to enable them to declare their full membership.

Although support for such a system has its advocates, it is acknowledged to be counsel of perfection. "Although the voting structure needs to be changed," said Dr Otto Kloiber of the Bundesarztekammer, "no one has come up with a good model yet. One approach would be to adopt a dual system; the current system of weighted votes could continue for decisions on financial and organisational matters but it should be one country one vote for ethical and medical issues."

The WMA's unequivocally low profile and low standing is another major concern. "We must adopt a more public profile and become more active on the international scene," said Dr Bill Coote of the Australian Medical Association. "We should be commenting on key and controversial issues and be seen to be doing so. Thus, more emphasis on public relations is needed. Our standing as an organisation concerned with drawing up ethical standards needs to be enhanced. To do this we must get broader input into our ethics committee by collaborating with the many other organisations concerned with medical ethics."

Complaints about the organisation and administration of the WMA are rife. "It lacks direction and is too set in its ways," said Professor Priscilla Kincaid Smith, who was appointed president elect in Budapest. "Business tends to grind to a halt in between sessions. I think the president should appoint an executive committee to ensure that topics are pursued and business continues. Discussion documents must be circulated more efficiently, timetables improved, and the secretariat enlarged and changed to make it function more efficiently." Another important criticism is that the statements that are brought to the assembly are sometimes drawn up badly and the delegates poorly briefed. "We should also be more discriminating about the topics we focus on," said Dr Williams. "Any single country can raise their pet peeve here, irrespective of whether it has any broad international relevance."

Prospects for change

The appointment of a new full time secretary general, after considerable wrangling about the selection process (there were over 100 applicants but only three were shortlisted) has lifted morale among WMA members. Most are keenly aware that the association needs a strong and active leader to move it out of the doldrums.

"It is undeniably a challenge," said Dr Ian Field, former secretary of the BMA, who took up the post of secretary general on 1 January, "but I am optimistic. The internal pressure for change, led by the Toronto group, is already having an effect, and the example of the newly transformed Commonwealth Medical Organisation is encouraging. A few years ago that was little more than a closed talking shop, but under Dr John Havard's leadership [also a former secretary of the BMA] it has become both influential and financially viable. The WMA needs to undergo a similar transformation."

Putting the WMA on a more secure financial footing without sacrificing its independence is vital. Tackling the question mark over its integrity no less so. Its former stance over South Africa and more recently the publicity surrounding the Hans-Joachim Sewering affair have been damaging. Dr Sewering was forced to resign his presidency of the WMA in January this year after it was revealed that he was a former SS officer and had knowingly signed a document in 1943 for the transfer of a 14 year old girl with epilepsy to a clinic where euthanasia was carried out. The way the WMA handled the affair has been criticised, and a recent article in the *Hastings Centre Report* suggested it epitomised the association's "inability or lack of desire to act in ways that demonstrate its commitment to human rights."[6]

The issue grumbles on. At the Budapest assembly an American associate member put forward a motion that the association's treasurer, Dr Karsten Vilmar, should stand down because he had nominated Dr Sewering and continued to support him. The motion was resoundingly squashed but may resurface. Then there are the internal mutterings about the lack of accountability of previous secretary generals. Clearly the WMA has some way to go before it achieves its aim of being a beacon on ethics for the world medical community.

There are promising signs, though. Membership is broadening with increasing participation of countries from central and eastern Europe (map). The recent acceptance of the Medical Association of South Africa by the Confederation of Medical Associations of Africa should have two positive effects. Firstly, other African states are likely to seek WMA membership. This is obviously desirable for at present, apart from South Africa, Zaire sits in isolation at the assembly as the voice of Africa. Secondly, this recognition should effect a reconciliation between the WMA and the World Health Organisation, in trouble itself.

Worth the candle?

Many of the WMA's fiercest critics also number among its staunchest supporters. Their desire for change is fuelled by the conviction that the WMA is a unique organisation with a valuable role to play. They are convinced that there is a need for a strong independent international association of doctors to participate actively in international health debates. They argue that the WMA is in a position to put the patient's view as well as that of the medical profession to debates that are increasingly dominated by health economists, health policy analysts, and health managers. Most support the idea of adopting the new mission statement proposed by the task force, which makes it clear that the focus of the association has changed, that its aim is "to provide a forum for national medical associations to actively cooperate, communicate, and achieve consensus on high standards of medical ethics and professional competence."

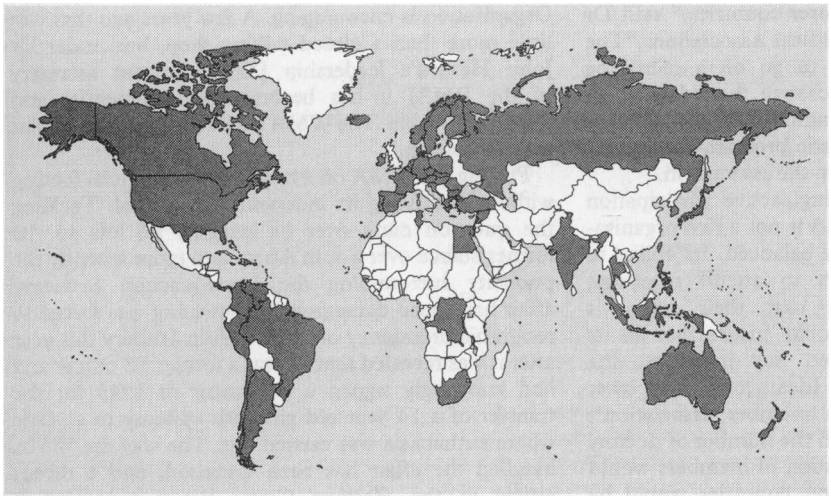
"The importance of the WMA's ethical statements should not be underestimated," said Dr Hernan Reyes of the International Committee of the Red Cross. "We use them in the field all the time. Doctors working in countries under repressive regimes that pay scant regard to medical ethics can gain much from being made aware that there are internationally respected codes of conduct. It gives them the strength to stand up to their governments. It also helps those countries who have not formulated their views or drafted up their own ethical codes. I think the WMA has a vital role to play, although it could play it better. Its statements must be well publicised, followed up, and implemented."

The broadening membership of the WMA and its apparent commitment to change under the new leadership of a former secretary of the BMA puts Britain in an equivocal position; it is beginning to look increasingly isolated. The South African issue can no longer be held up as a reason for the BMA not to rejoin. Although it would be costly to rejoin (see box), it is hard to play the "cannot afford it" card when countries such as India, Romania, Macedonia, Latvia, and the Ukraine are coming forward. To maintain that no amount of internal reform will ever enable this unwieldy international organisation to acquire the "vision, purpose, foresight, and effectiveness" it has been seen (and continues) to lack[5] seems unduly pessimistic. Clearly the WMA must define, adopt, and implement more realistic objectives, but with the focus on medical ethics the BMA could make a valuable contribution. A concerted effort under its new leader would offer the WMA its best chance yet.

The cost of representation

If the BMA were to declare only its full paying members (40 000) it would cost the association about £70 000 a year to belong to the World Medical Association. If it declared its full membership of 97 000, which includes student, retired, and overseas members, it would increase its voting strength, but clearly this would be much more expensive.

BMA representation at European level on the Comité Permanente, the European Union of Medical Specialists (UEMS), the European Union of General Practitioners (UEMO), and the Permanent Working Group of European Junior Hospital Doctors (PWG) costs the association between £120 000 and £130 000 a year.



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ANY QUESTIONS

What are the indications for prescribing soya milk for infants?

Soya infant formulas are similar in composition to the other standard formulas except for the protein and carbohydrate content. They are lactose free and contain corn syrup solids or sucrose, or a combination of the two. Because of several increasingly recognised side effects, however, the indications for their use in the clinical setting has diminished considerably. Soya infant formulas are now no longer recommended for treatment during recovery from acute infantile gastroenteritis or for chronic diarrhoea after the infection, whether due to sensitivity to cows' milk or secondary lactose intolerance.[1] Not only is there a risk of sensitivity to soya protein but this may coexist with that due to cows' milk and, indeed, is more likely in infants with intolerance of cows' milk protein.[2] A protein hydrolysate is recommended for the latter. As soya infant formulas are lactose free they are indicated for galactosaemia and primary hypolactasia. They are also indicated in vegan families to avoid the energy deprivation due to exclusion of all cows' milk products. A further category of infants in whom soya milk may be useful are older infants who are put on a diet free of cows' milk—for example, for treating eczema—and in whom the flavour of a protein hydrolysate may be unacceptable. Above the age of 9 months it is often difficult to get an infant who is used to the taste of an infant formula to accept the more unpalatable protein hydrolysates. Finally, because of worries over the high aluminium content of soya infant formulas, they are not recommended for preterm infants or any infants with impaired renal function and hence an increased risk of aluminium toxicity.[3]—S G MITTON, *senior lecturer in child health, London*

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