detected for each individual. Very often, the noxious substances are cereals and/or milk and its derivatives.

46 adults with rheumatoid arthritis were submitted to our regimen for over one year (17 patients), over two years (17), or over three years (12). Every three months we evaluate painful joints, swollen joints, morning stiffness, nightly awakenings, Ritchie and Lee indices, ESR, and white blood cell counts.

The nutrition change was a failure in 10 patients and induced a significant benefit for all tested indices in 36 patients (78%). Among the 36 responders, there were 17 clearly improved and 19 in complete remission for one to five years. 8 of these 19 patients stopped all medications and no relapse was noticed. The favourable action of diet appeared before the end of the third month in 32 responders. Improvement was progressive but often rapid and clinical signs were corrected before ESR. 7 responders who abandoned the dietetic prescription relapsed but improved again when the diet was restored.

We note that Kjeldsen-Kragh et al also suppressed gluten and dairy products for 3–5 months, which may explain their good results.

The development of rheumatoid arthritis could be due to a food or bacterial peptide that crosses the gut wall and proceeds towards joints.1 The aberrant expression of HLA-DR molecules on synovial cells and chondrocytes would allow the presentation of this peptide to T cells that respond by an immune response against joints. The diet could act by eliminating of a food peptide or by a change in gut flora eliminating a bacteria or by recovery of lesions of small-bowel mucosa.

Drugs for childhood fever

Sir,—Your Oct 26 editorial recommending that antipyretic agents be used in febrile children implies that ibuprofen is safer than paracetamol (acetaminophen). The only statement on the safety of ibuprofen is the comment that over 240 million doses have been given without ill-effect, with reference to a study in which 93 children received ibuprofen, or whom 18 were withdrawn (13 for ineffective antipyresis, 5 for possible adverse effects).1 The statement quoted is not in the paper itself but in a reply from the authors to a comment in the journal and no references are given.

Death, renal failure, and metabolic acidosis have all been reported in children after acute ibuprofen overdose.2,3 Ibuprofen, like other non-steroidal anti-inflammatory agents, decreases renal blood flow and may cause gastrointestinal bleeding, ulceration, and perforation.4 Because its mode of action is similar to that of aspirin, the possibility that it too may result in Reye's syndrome has been postulated.4 Paracetamol is exceptionally safe when given in the correct dose. Prospective drug surveillance studies have found no adverse effects with paracetamol in inpatients.5 After acute poisoning, hepatotoxicity is the main concern. This complication, however, is very uncommon in children and is thought to be due to the increased capacity for sulphation and increased levels of glutathione.6 We recommend a total daily dose of paracetamol of 60 mg/kg, which can be given in 4–6 divided doses (ie, the drug can be given more than four times daily). In the cases of chronic paracetamol poisoning described in the review by Penna and Buchanan, the doses prescribed exceeded 300 mg/kg daily.7 We feel that rather than risking the widespread use of a new drug with major and minor side-effects we should be informing doctors and parents how to use paracetamol appropriately. More consideration needs to be given to manufacturers' dose recommendations spanning wide age groups, which could lead to 100 mg/kg daily being given to some children. We are also concerned by the call from community pharmacists for the easier availability of paracetamol suppositories.


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since these are an inflexible dose formulation likely to result in standard doses given across a wide age and weight range of children.

The Royal Liverpool Children’s Hospital is one of the largest children’s hospitals in western Europe and we have not found a clinical need for an alternative to paracetamol for the management of fever in children.

Institute of Child Health, Royal Liverpool Children’s Hospital, Liverpool L7 8AP, UK
Pharmacy Department, Royal Liverpool Children’s Hospital
Mersery Regon Health Authority


SIR,—Your Oct 26 editorial illustrates the ability of experts to read into scientific articles what they wish to hear. Having cited one paper on “sudden febrile infants deaths” to jangle the alarm bells for the outcome of febrile convulsions, your editorial cites guidelines from the Royal College of Physicians and British Paediatric Association(1) on the ineffectiveness of anticonvulsant therapy in reducing the incidence of febrile convulsions. The next sentences imply that the same article advises antipyretics to control febrile convulsions yet in the paper I read: “The working group knew of no evidence that antipyretic treatment influences the recurrence of febrile seizures”. The next paragraph suggests that antipyretics make a child feel better when febrile but in a previous paragraph on the lack of evidence that fever carries a biological advantage you cite a paper that also points out that there was no evidence that the antipyretics made the child feel better. Further, to write “In the absence of evidence that antipyretics are harmful”(2) sits uneasily with the citation of a paper on paracetamol poisoning and hepatotoxicity in children.(3) When the delivery of pharmaceutical information is put on one side, what is left in the editorial? A traditionalist view that warning one’s hands is no use and that some drug or the other must be given, even if it is more for the parent’s sake than the child’s. That may be pragmatic but the arguments are not scientifically sound.

Department of Paediatrics,
Faculty of Medicine and Health Sciences,
United Arab Emirates University,
PO Box 17666,
All-Ain, United Arab Emirates

PIETER DEBUSE

SIR,—Your Oct 26 editorial states that “antipyretics does not seem to prolong the illness or adversely affect outcome”. Two articles cited do indeed show that treatment with “antipyretic” drugs had no effect on duration of illness. However, in neither are temperature data presented. Were the doses high enough to lower body temperature? In the cited study by Doran et al,(4) paracetamol was given to children with chickenpox, but the dose of this drug was stated as not being sufficiently high to produce antipyresis. To my knowledge, there have been no prospective studies with children to determine whether fever shortens or prolongs illness. You state that “Fever is a symptom not a diagnosis”. It is important to add that fever is a response to pathogens, not just a symptom, and there is a large body of evidence supporting the hypothesis that this response is adaptive.(5,6) You also state that “Patients and professionals are so alarmed by the threat of febrile convulsions”. I know of no data indicating that convulsions associated with modest fevers are in any way related to fever. One study showed that the recurrence rate of febrile convulsions in fact decreased nine-fold in those children who had the highest temperatures during their “febrile” convulsions. Whether this means that high fever (>40°C) is protective during convulsions is unclear.

A child with a temperature of over 39°C is likely to be “uncomfortable, irritable, and anorectic” but not because of the presence of fever. The magnitude of a fever is probably just an indicator of illness severity (and thus a crude indicator of the host’s response to the pathogen). Drugs that reduce fever are probably making the child less uncomfortable and less irritable as a result of the analgesic (and perhaps anti-inflammatory) effects, not their antipyretic properties.

Department of Physiology,
University of Michigan Medical School,
Ann Arbor, Michigan 48109, USA

MATTHEW J. KLUGER