country of the corresponding authors' affiliation. However, we noted a high scientific output related to cardiovascular disease in 80% (20 of 25) of DME and a low output from developing countries and DEEC. Previous studies on the geography of biomedical publications in general,[2] and of mental health[3] and HIV/AIDS[4] associated publications have reported similar findings.

Fragile research capacity, inadequate financial investment, language barriers, and exclusion of journals edited in developing countries from MEDLINE[5] are some of the factors that probably contribute to this situation. The poor research productivity of developing countries is both a consequence and a contributory factor for the widening gap between the health of the rich and the poor, and indicates the generally weak capacity of developing countries in all areas of non-communicable disease policy, advocacy, legislation, and strategy. Urgent action at global and national levels is needed to narrow this gap.

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A warning about the dangers of chuna packets

Sir—Chuna (calcium hydroxide) is popularly consumed as an additive to chewing tobacco in India. Various companies have started to market the additive in easy-to-carry pouches, which are available for as little as 1 Rupee (about 2 US cents). We draw your readers' attention to a grave and previously unknown threat posed by these pouches.

In the past year, we have seen seven children, aged 3–8 years, with acute ocular alkali burns, leading to severe visual loss, caused by these packets of calcium hydroxide. The problem is that children view the pouches as toys; when squeezed hard, the calcium hydroxide paste squirts out of the packet, much like playing clay. However, if the packet bursts suddenly, chuna is sprayed around and can enter the conjunctival fornices, where the paste gets stuck and is difficult to remove. A careful search after double eversion of the upper eyelids is needed to find and remove the particles of calcium hydroxide.

Calcium hydroxide damages the ocular surface, including the cornea,[1] and a corneal limbal stem-cell transplant is often needed to restore the corneal epithelium.[2]

We feel the public should be warned about the dangers of these seemingly harmless chuna packets.

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Nutrition and immune function: a 1992 report

Sir—In 2001, Ranjit Kumar Chandra reported that a daily nutritional supplement, which he has patented, greatly improved the cognitive performance of elderly individuals.[1] The improvements seemed large, and some of the standard errors were statistically impossible.[2] This anomaly led us to examine a *Lancet* article[3] based on the same study, which reported large improvements in immune function and a halving of days of infection.

Here too we found problems. First, table 3 of the article gives the average values of eight immunological measures for the supplement (S) and placebo (P) groups. For each measure, it gives two p values: one for $S_{12}-S_0$ (S_{12} and S_0 being the values at 12 and 0 months, respectively), and one for $(S_{12}-S_0)-(P_{12}-P_0)$. If the two changes (from S_0 to S_{12} and from P_0 to P_{12}) are in the same direction, the second p value must be greater than the first. But in all six cases for which the changes were in the same direction and for which p values were reported, the second p value was smaller than the first. Second, the SDs of the number of days of infection of the two groups are 5 and 7 according to the text, but histograms indicate values of about 17 for each. One of us wrote to Chandra about this, but received no reply.

The article states that "all individuals approached enrolled in the study". In our experience, this has never happened. Chandra's study required blood sampling and a year of biweekly visits. The article also states that all 96 participants "were middle class". If the participants were randomly sampled from the population this outcome is unlikely even if the fraction of the population that is middle class is very high. If a population is 95% middle class, and sampling is random, the probability that 96 persons sampled will all be middle class is less than 0·01.

We have no conflicts of interest to declare.

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Author's reply

Sir—The comments by Kenneth Carpenter and colleagues are inaccurate and irrelevant. The *Lancet* 1992 paper was based on a randomised controlled trial whose design and statistical methods had been submitted to the journal before the study began. The manuscript was reviewed by three referees and two statisticians consulted by *The Lancet*; they were provided with the relevant raw data and their suggestions were incorporated into the third and final version that was published. The paper has been commended by experts in the field, providing "hard evidence based on a well-designed prospective trial whose results when considered in the context of the basic and intermediate endpoint clinical data now available are biologically credible",[1] and has been referred to as a "landmark study".[2]

The typographical error resulting in my use of SE instead of SD was acknowledged and published in *Nutrition*. I communicated this fact to Seth Roberts and Saul Sternberg in a letter, which they acknowledged but now deny having received. There are other inaccuracies in Carpenter and colleagues' letter. The age data are