

Commentary

A budget cut that nobody can live with

The Minister of Energy has convened a crisis meeting in the Government of the Body. He asks the other ministers to submit proposals that can cut energy consumption by 50%, since there are simply no more calories available. The Minister of Cardiac Affairs is enraged, claiming that his ministry cannot sustain such a cut. Others are of the same opinion.

When the government is finally ready to start its deliberations, they agree to review each ministry in turn. The Minister of Cardiac Affairs and the Minister of Respiration secure promises of a smaller cut than the others. So does the Minister of Cerebral Affairs, in spite of his indefensibly large budget. Everybody agrees, however, that if the cerebral sector were to suffer, they would all be in big trouble. But where should the really large cuts be made?

The government decides that the Minister of Locomotion must cut to the bone – no unnecessary movement, no play, no running, not even a smile. With this intervention, the government has saved nearly 30% of its energy consumption.

Certain ministries, such as Digestion and Bone Marrow, use inordinate amounts of energy for cell division. In the intestine, the epithelium is renewed every three days, with a surface equal to a regular football field. The government decides that the pace of cell division should be reduced by half, even if this means that the football field will shrink to a volleyball field. In the bone marrow, cells are dividing at a very rapid rate, including the red blood corpuscles and all the defence systems.

The Defence Staff, the CD4 cells, also

expend a lot of energy on cell division. Here, cuts can be made without any threat to the body. Finally, the government agrees to send a delegation to the neighbouring countries, Mum and Dad, to request more energy. As it is, nobody can live with such budget cuts in the long run.

This scenario could have been taken from the girl described in the case history presented by Klčovansky and collaborators or from some of the numerous children found in the department of nutrition of the paediatric ward at Uganda's largest hospital, Mulago in Kampala. Previously, mortality was higher here than on the intensive-care unit: one in four children did not return home alive (1).

Malnutrition is much like paediatric AIDS, with AIDS-defining infections such as *Pneumocystis jiroveci* pneumonia (PCP) (2, 3). Many of the doctors regarded malnutrition as a trivial disease – «it's only from lack of food». In reality, these were extremely frail patients with multiple organ failure who need to be treated with great care, especially at the initial stage (4).

When the immune defence system is stripped of resources, there are no soldiers to meet the invasion forces, and therefore there will be no battles fought. There will be no *rubor*, *calor*, *dolor* or *tumor* forming around an infection, and the CRP level may be low even where there is sepsis. This could be erroneously interpreted as indicating that everything is fine. Instead, antibiotics must be administered to all malnourished children at the initial stage (5). The case history provides us here in Norway with insight into a condition which is far too common in the

world at large, although it is uncommon here. A valuable lesson.

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