

# How to raise the world's IQ

Simple ways to make the next generation more intelligent



Jul 11th 2024

The Economist

People today are much cleverer than they were in previous generations. A study of 72 countries found that average iq's rose by 2.2 points a decade between 1948 and 2020. This stunning change is known as the "Flynn effect" after James Flynn, the scientist who first noticed it. Flynn was initially baffled by his discovery. It took millions of years for the brain to evolve. How could it improve so rapidly over just a few decades?

The answer is largely that people were becoming better nourished and mentally stimulated. Just as muscles need food and exercise to grow strong, so the brain needs the right nutrients and activity to develop. Kids today are much less likely to be malnourished than they were in past decades, and more likely to go to school. Yet there is no room for complacency.

[This week](#) we look at two ways in which young minds are being squandered. In rich countries, the Flynn effect has largely run its course. Our special report and leader examine why educational attainment there has levelled off, and what can be done about it. In a separate briefing, we examine an even graver problem. In poor and middle-income countries, many children are still too ill-fed to reach their cognitive potential.

Globally, 22% of under-fives—roughly 150m children—are malnourished to the point of stunting. That means their brains are likely to be stunted, too. Half the world's children suffer micronutrient deficiency, which can also impede brain development. Poor nutrition and a lack of stimulation can translate into a loss of as many as 15 iq points. This has woeful consequences: one study found stunting led to incomes being 25% lower. Damage incurred during the “golden window” of the first 1,000 days after conception is likely to be permanent.

The world grows enough food, but several obstacles stop nutrients getting into young brains. One is [war](#). Families sheltering from shrapnel cannot venture out to plant or harvest, and some governments intentionally starve restive regions into submission. Another is [disease](#). Hungry children fall sick more often, and the energy they spend battling bugs cannot be devoted to growing grey matter.

[Poverty](#) is a big part of the problem. But global data from unicef, an aid agency, show that although half the children with very restricted diets (including no more than two food groups) are indeed from poor families, the other half are not. Other factors, such as poor eating habits, are also to blame.

Many parents, even in middle-income countries, think it is enough to stuff an infant with stodgy carbohydrates but neglect protein and micronutrients. Sexism plays a role, too. In patriarchal societies, husbands often eat first, wolf the tasty protein and leave their pregnant wives with iron deficiency. In some cultures, it is taboo for expectant mothers to eat certain highly nutritious foods, from eggs in parts of Ethiopia to shrimp in parts of Indonesia. Malnourished mothers are more likely to give birth to malnourished babies.

Demography adds urgency. Fertility is highest in countries where malnutrition is most widespread. Unless nutrition improves, the next generation will face greater cognitive challenges than the present one. That would be a dire outcome, especially because it is so easy to avoid. The World Bank estimates that it would cost a mere \$12bn a year to fight malnutrition “at scale”. That is slightly more than a third of what America wastes on farm subsidies.

Several tactics would work. The simplest is to fortify basic foods, such as flour, with micronutrients, such as iron, zinc and folic acid. This is cheap and can make a big difference. Adding iodine to salt has made cretinism (a severe form of mental retardation) a thing of the past in places where it was once common, from China to Switzerland. Nearly three-quarters of countries mandate that at least some mass-produced foods are fortified, but rice is usually not—making the Philippines' recent ban on "golden rice", genetically modified to have extra vitamin A, especially wrong-headed.

Another method is to give small sums of money to poor families with infants or pregnant mothers. Handing out cash is better than handing out food itself. It is more flexible—it can be spent on medicine as well as food. It costs less to distribute, since it can be sent digitally. And it is easier to monitor. Truckloads of grain for the poor are often stolen or adulterated.

Some schemes make handouts conditional on other things that might help children, such as vaccinations or teaching parents about nutrition and hygiene. Changing people's habits is hard, but they have an incentive to learn, as most parents care that their children grow up healthy. Promoting better nutrition should be part of health-care systems, concentrating on those crucial first 1,000 days. Ideally, women should learn about micronutrients and hand-washing before they are pregnant. Failing that, their first trip to antenatal care is a good time to catch their attention. Fathers are harder to reach, but may be won over if they are told that sharing food with their wives benefits their unborn children.

Meanwhile, more research is needed. Scientists in Bangladesh have found that most women in local slums have inflamed intestines, meaning they lack the right gut bacteria to absorb nutrients properly, and are testing cheap ways to promote benign bacteria. Researchers in Africa are working out how to treat anaemia (a lack of iron) without encouraging malaria (since the parasite thrives in iron-rich blood).

## **A terrible thing to waste**

Some argue that human intelligence will matter less as people outsource their thinking to artificial intelligence. To assume this would be as foolish as betting 100 years ago that the invention of the car would make it unnecessary to walk. In the workplace, human intelligence and ai will probably complement each other. And brains are for the joy of thinking, as well as earning money. Steven Pinker of Harvard University calls intelligence "a tailwind in life", helping people adapt rationally to new challenges or a changing environment. For a modest price, the next generation can have a stronger tailwind. It would not only be wrong to refuse them. It would be stupid. ■