In 2000, 55.7 million people died around the world, succumbing to a wide range of illnesses and conditions. (See Table 1.) Cardiovascular diseases, including various chronic heart conditions and stroke, were the largest cause—killing 16.7 million people. Infectious and parasitic diseases, including AIDS, tuberculosis and respiratory infections, malaria, and diarrheal diseases, were the second largest, taking 14.4 million people. And cancers were the third, responsible for 6.9 million deaths.

On the broadest scale, the two population groups at opposite ends of the income scale—the affluent and the impoverished—are dying from very different diseases. Infectious diseases primarily plague the developing world, especially people earning less than $2 a day, who cannot afford clean water, sanitation, or nutritious food. People in Africa and Southeast Asia are the most gravely affected by these: they account for 75 percent of the deaths from infectious diseases, but just 36 percent of the world’s population. In contrast, cardiovascular diseases and cancers primarily affect those who consume too many unhealthy foods, tobacco, alcohol, and drugs, and who lead sedentary lifestyles—primarily Europeans and Americans. They account for 42 percent of cardiovascular diseases and cancers, yet only 28 percent of the world’s population.

Underlying such overt causes as infectious and cardiovascular diseases are a number of risk factors for these illnesses. In 2002, the World Health Organization identified several major risks and assessed the contribution of each to global mortality. Of course, risk factors do not act exclusively—for instance, diarrheal diseases can be caused jointly by poor sanitation and poor nutrition. Thus, adding risk factors results in high-end estimates. Even as such, the WHO analysis conveys the significant impact consumption has on mortality. Indeed, in 2000, overabundant consumption of resources accounted for up to 46 percent of mortality, while lack of access to resources accounted for up to 23 percent of deaths—roughly 99 percent of which occurred in the developing world.

In the developing world, where people often lack access to clean fuels and well-ventilated shelter, the use of such solid fuels as coal, wood, and dung for cooking and heating caused 1.6 million deaths by triggering respiratory infections and lung diseases. Unsafe sex, mainly through spreading HIV or a lack of contraception, killed 3 million people in 2000—75 percent of whom lived in Africa. Due to lack of access to education, condoms, and healthcare, HIV is growing unchecked throughout this continent, with more than 3.5 million people newly infected in 2002.

Dietary deficiencies, including lack of calories, protein, iron, zinc, and Vitamin A, produced up to 6.2 million deaths, mostly in children and women of reproductive age—primarily by weakening the immune system, thus increasing susceptibility to infectious diseases. The lack of access to clean water and sanitation led to 1.7 million deaths in 2000, the vast majority from diarrheal diseases. Of these deaths, 99.8 percent occurred in the developing world, and 90 percent of the victims were children.

Improving the allocation of health resources and sanitation would dramatically reduce infectious disease deaths. Currently, almost 30 million of the 130 million children born each year do not receive vaccinations. Immunizing every child would prevent 3 million deaths each year, while costing just $1.3 billion more than the world currently spends annually on vaccinations—far less than the costs of long-term treatment and disability. Providing access to sanitation to just half of the 3 billion people who currently lack it would reduce the number of years of lost life by 30 million, at a cost of just $37.5 billion over 10 years.

In the industrial world, deaths brought about by lack of access to resources accounted for just 1 percent of deaths. People in these countries suffered primarily from diseases related to poor dietary and lifestyle behaviors.

High blood pressure, high cholesterol, being overweight, and eating too few fruits and vegetables together caused up to 7.6 million deaths in industrial countries by increasing the risk for a number of diseases.
including stroke, heart diseases, cancer, and diabetes. These conditions are primarily trig-
gerated by a diet too high in salt, sugar, fat, and calories; as these increase in the diet—often in
the form of processed foods—they displace
healthier, less convenient foods, such as fresh
fruits and vegetables.

Physical inactivity exacerbates poor dietary
behaviors and contributed to 855,000 deaths in
industrial countries by increasing rates of heart
disease, cancer, and diabetes. The use
of addictive substances only compounds the prob-
lems caused by poor diet and lack of exercise.
Tobacco and alcohol use cause heart disease,
stroke, and cancers and were responsible for 3
million deaths in the industrial world.

These problems do not plague only the
industrial world. More people die from
overconsumption in developing countries (up
to 14.3 million) than in industrial ones. And
even in high-mortality developing countries,
where poor sanitation and dietary deficiencies
account for up to 42 percent of deaths, over-
consumption now accounts for up to 27
percent of mortality. As conditions in the
developing world improve, those living there
often undergo a “risk transition”: increases in
income provide more access not only to food
and clean water but also to processed foods
and to tobacco, alcohol, and drugs; together
these shift the disease burden from infectious
to chronic diseases. In low-mortality
developing countries, where poor sanitation
and undernourishment are less of a problem,
overconsumption now causes up to 45 percent
of deaths.

A few countries have successfully countered
the poor health that stems from the increases
in unhealthful consumption that can accom-
pany growing affluence. South Korea, for
example, has minimized obesity by promoting
its traditional diet—high in rice and vegetables
and low in fats, salt, and sugar—through a
combination of education, support for local
farming, and mass media campaigns.

Two decades after going through a nutritional
transition in the 1950s, Finland suffered from
one of the highest rates of cardiovascular disease

<table>
<thead>
<tr>
<th>Table 1: Global Mortality by Cause, 2000</th>
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<tbody>
<tr>
<td>Cause of Death</td>
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<tr>
<td>Cardiovascular diseases</td>
</tr>
<tr>
<td>Infectious and parasitic diseases</td>
</tr>
<tr>
<td>Cancers</td>
</tr>
<tr>
<td>Maternal and perinatal conditions</td>
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<tr>
<td>and congenital abnormalities</td>
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<tr>
<td>Chronic respiratory diseases</td>
</tr>
<tr>
<td>Unintentional injuries</td>
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<tr>
<td>(such as auto accidents)</td>
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<td>Digestive diseases</td>
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<tr>
<td>Neuropsychiatric disorders</td>
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<tr>
<td>Violence and war</td>
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<tr>
<td>Genitourinary diseases</td>
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<tr>
<td>Suicide</td>
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<tr>
<td>Diabetes</td>
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<tr>
<td>Nutritional deficiencies and disorders</td>
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<tr>
<td>Other</td>
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<tr>
<td>Total</td>
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</tbody>
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in the world. In the 1970s, the government
worked with health experts, the food industry,
and local communities to reverse this trend,
and by 1995 the program had reduced heart
disease deaths by 65 percent.

Yet South Korea and Finland represent
exceptional cases. Most governments have not
faced the epidemic of overconsumption in their
societies and will need to work aggressively if
they are to prevent rapid growth in mortality in
the coming decades.
CONSUMPTION PATTERNS CONTRIBUTE TO MORTALITY (pages 108–09)

1. World Health Organization (WHO), *The World Health Report 2001* (Geneva: 2001), pp. 144–49. Mortality figures for 2001 show much the same pattern; data for 2000 are used here for comparison purposes, as WHO's detailed analysis by risk factor was done with data for the earlier year.


3. Ibid.

4. Ibid.


10. Ibid.

11. Ibid., pp. 69–70.

12. Ibid., p. 226.


15. Ibid., p. 68.

16. Ibid.


18. Ibid.


21. Ibid.

22. Ibid., p. 226.


25. Ibid.

26. Ibid., p. 86.

27. Ibid.

28. Risk transition from ibid., pp. 4–6; Barry Popkin,