

reducing the risk of acute coronary syndromes. Improved autonomic function leads to a reduced risk of sudden cardiac death. Cancer, like coronary heart disease, is also to an extent preventable and shares several common risk factors such as poor nutrition, obesity, inflammation, and physical inactivity. Therefore, improvements in some of these risk factors with regular exercise could plausibly explain the cancer mortality benefits recorded by Wen and colleagues. The oncoprotective effects of exercise are certainly an expanding topic of research in cancer.¹³

Finally, noteworthy from a public health perspective, 54% of individuals in the Taiwanese cohort studied were inactive, with another 22% doing low levels of leisure-time physical activity only. Rural-to-urban migration across the Asia-Pacific region through rapid economic growth and industrialisation during the past few decades could explain these low levels of physical activity and the concomitant epidemics of obesity and diabetes that are being witnessed.¹⁴ The knowledge that as little as 15 min per day of exercise on most days of the week can substantially reduce an individual's risk of dying could encourage many more individuals to incorporate a small amount of physical activity into their busy lives. Governments and health professionals both have major roles to play to spread this good news story and convince people of the importance of being at least minimally active.

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Bahrain: continuing imprisonment of doctors

The wave of prodemocracy protest and revolution in many Arab states—the Arab Spring—reached Bahrain in February, 2011. The protest was soon ruthlessly suppressed with the help of forces from Saudi Arabia.¹ Bahrain's main public hospital, the Salmaniya Medical Complex, was subsequently occupied by the military. Several independent observers recorded the brutality of the clampdown, reports of imprisonment, torture, and extraction of confessions, and the military trials.^{2–5} More than 70 medical professionals, including 47 doctors, were arrested and more than 150 medical workers have been suspended or dismissed from their jobs.²

Ireland's close medical relation with Bahrain, which extends back many years,⁶ took on a new dimension when the Royal College of Surgeons in Ireland (RCSI) invested almost €100 million to develop the RCSI-Medical University of Bahrain. In June, 2011, when RCSI and the Royal College of Physicians of Ireland conferred joint degrees in Bahrain, the failure of either College's president to visit the families of the imprisoned doctors, some of whom had trained in Dublin and were fellows of RCSI, drew strong protest from the medical profession in Ireland.^{7,8} Subsequently the international human rights organisation Front Line Defenders organised a



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Conor McCabe Photography

Fatima Al Balushi, Bahrain's Minister of Human Rights and acting Minister of Health, with Eoin O'Brien

delegation from Ireland to visit Bahrain to offer support to these medical personnel. The delegation comprised two doctors, Damian McCormack and me; three politicians, Averil Power, Senator of the Irish Parliament, David Andrews, former Minister for Foreign Affairs, and Marian Harkin, Member of the European Parliament; two members of Front Line Defenders, Andrew Anderson and Khalid Ibrahim; and a photojournalist, Conor McCabe.

During a 2-day visit we met the administration of the Salmaniya Medical Complex, representatives of the Ministry of Foreign Affairs, and Fatima Al Balushi, Minister of Human Rights and Social Development and acting Minister of Health.⁹ In our preamble to these meetings we indicated that although many similarities existed between Ireland and Bahrain, freedom of speech was a cornerstone of Ireland's democracy, and accused persons were innocent until proven guilty. Al Balushi expressed her pride in the human rights achievements in Bahrain, especially in furthering the rights of women and religious freedom. Al Balushi said that the Arab Spring had brought the country to the verge of civil war. She claimed that several doctors had failed to care for the wounded and must therefore face trial. Asked if the allegations of kidnapping, detention, and torture were true, she answered that if such was found to be the case, the perpetrators would be duly prosecuted. She acknowledged that mistakes had been made but said that these had been redressed by the King with the appointment of an independent commission to investigate violations of human rights, the transfer of trials from military to civilian courts, and the release

of medical detainees who were not a threat to national security. Al Balushi agreed to approach the King with a request on our behalf for the release of detained doctors (a request that has not been granted to date and many imprisoned doctors are now reported to be on hunger strike); she asked in return that I give Bahrain fair coverage in *The Lancet*, which she regarded as being unfairly biased against Bahrain.¹⁰

Our delegation went to secret locations to meet members of the families of imprisoned doctors and doctors who had been released pending trial, and to meet ambulance drivers who said they had been taken from their ambulances, imprisoned, and tortured. Some of those who said they had been imprisoned were clearly suffering from anxiety, emotional instability, and depression. The loyalty and affection expressed by doctors suspended from the Salmaniya Medical Complex, where so many of them had served for many years, contrasted strongly with their feeling of betrayal by RCSI-Bahrain. We also met Nabeel Rajab, President of the Bahrain Centre for Human Rights, and Abdulla Al Derazi, General Secretary of the Bahrain Human Rights Society, who have each carefully documented instances of torture for submission to the relevant international human rights bodies.

At the end of our visit we were in no doubt that doctors and medical personnel had been subjected to human rights abuses, including kidnapping, detention without trial in solitary confinement, and the extraction of confessions under torture. We left Bahrain moved by their gratitude for our support and embarrassed that we were offering so little in the face of the enormity of their suffering and courage. The medical community worldwide needs to take notice and speak out for colleagues who are being denied basic human rights, and who are being subjected to indignities that the medical profession should not tolerate.

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The value of the National Health and Nutrition Survey in Japan

There is profound global interest in the Japanese diet as a possible partial explanation for the Japanese people's favourable health status and longevity. The diet differs substantially from that found in western countries and is often deemed a good guide for people who design healthy diets around the world. But is Japan's diet really contributing to better health for its people? Does reliance on a traditional Japanese diet correlate with improved health outcomes and longevity? Are there robust data to back up this common assumption?

The Japanese Government has done an annual nationwide nutrition survey, the National Health and Nutrition Survey, without fail since 1948.¹ Although slight changes have been made to the survey method over the years, it continues to use 1-day or 3-day semiweighed diet records. Since 2004, about 9000 people have participated in this survey every year.

Japan had a marked westernisation of diets between 1960 and 1975, characterised by an increase in average fat intake from 20 to 55 g per person daily.

During this time, age-standardised mortality rates from stroke and stomach cancer—the two main chronic diseases in Japan at the time—started to decrease.^{2,3} Some reports show a very high salt consumption—up to 27 g per person daily—in the 1950s among farmers in some regions.⁴ The national nutrition survey shows that the average intake had decreased to 14.5 g per person daily by 1972. Thus, westernisation of the Japanese diet helped decrease health risks during this time. Despite this occurrence, western populations still find Japanese dietary habits attractive mainly because of their lower fat intake. However, data show that from 1975 to 2009, average fat intake increased gradually from 21% to 26% of total energy intake while the age-standardised coronary heart disease mortality rate decreased during the same period.⁵ But since no data exist for intake of saturated fat and

other fatty acids, an accurate explanation of the effect of dietary change on change in mortality is impossible.

Japan, like many other countries, has had a striking increase in the number of people suspected to have diabetes since the mid to late 1990s. But this increase comes at a time when energy intake has steadily decreased from 1970 until the latest year for which data are available, 2009 (from 2210 to 1861 kcal per person daily). Carbohydrate intake (which includes alcohol) has decreased during the same period. Therefore, interpretation of the increase in the number of people with suspected diabetes as being the result of excess caloric or carbohydrate intake is not possible. Instead, low dietary fibre intake and high dietary glycaemic index could be causes of the increase in diabetes, in view of the preference of Japanese people for highly refined rice and bread as their main staples. But no data are available for these variables, and dietary fibre has only been included in the report since 2001.

In addition to these problems of potentially valuable data being excluded from the survey, the data from the survey are, for the most part, only accessible to researchers with governmental tasks. Moreover, accessible data are not the original raw data but the results of calculations, such as compilation of food items. Another problem is that the quality of the data is not assured because of a lack of comprehensive reports on the survey design and data quality control. The survey method is poorly described in the governmental reports, although some efforts have been made to improve the methods, and no statements exist about quality control. For example, standard portion sizes would usually be used when respondents do not weigh the food they eat, but the standardisation methods are not officially reported. As a result, for example, whether the observed decreasing trend in energy intake was

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