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Editorial

Bacalhao under the Ponte 25 de Abril: impressions from Lisbon

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Close to the conference center in Lisbon where the European Public Health Association (EUPHA) held its annual meeting 2008, a huge bridge spans the Tagus river. It is so high that pedestrians can actually underlook it, but they cannot fail to hear the intense noise which it produces day and night. In addition to the irregular trains running on a separate bridge hanging below the main road bridge, there is the constant noise of cars crossing the river over an uneven surface consisting of metallic platforms. The peculiar hum of the innumerable car tyres striking the edges between these platforms is so famous that one can listen to it on Wikipedia.[1]

The bridge is called the *Ponte 25 de Abril*, and was named after the date of the 'carnation revolution' during which junior army officers overthrew Salazar's dictatorship. The pillars of the bridge on Lisbon's side of the river stand in a part of town which curiously mixes old and new, and during one evening I found a place at a table in an oldfashioned Portuguese restaurant some 200 m from our modern design hotel. The few other guests—all middle-aged men—sat with their backs turned to the door and their faces looking up to the television screen, which of course showed a football match.

I ordered a traditional dish called *bacalhao a Minhota*. This is salted cod fish prepared in the way of the Minho, i.e. with some potatoes and a lot of baked onions. Salted cod is one of the pillars of Portuguese cuisine, as illustrated by the rumor that there are more than 365 ways for it to be prepared. The popularity of salted cod in this country relates to the Atlantic exploits of the Portuguese, whose ships not only made their famous journeys of discovery but also fished for cod when the stocks of this delicious fish still seemed to be inexhaustible. Cod was often dried and salted so that it could be stored and transported, within Portugal and also to many other European countries.[2]

The *bacalhao a Minhota* was very tasty, but like many other Portuguese dishes also rather salty. The Portuguese diet is traditionally very rich in salt, because salt was used for conservation, not only of cod but also of other foods such as pork meat. Although the salt content of the Portuguese diet has been declining in recent decades, Portugal still has the highest rates of stroke mortality in western Europe.[3] Within Portugal, there are large disparities in stroke mortality between urban and rural areas (with rural areas suffering the highest rates[4]), as well as between socioeconomic groups (with lower socioeconomic groups suffering the highest rates[5]), which suggest that there is indeed a link between stroke mortality and adherence to the traditional Portuguese diet.

Now this may seem a simple story: one country on the fringes of western Europe which still has high rates of stroke mortality, like most other European countries had more than half a century ago, probably because they were all dependent on salt for food conservation.[6] But why has a salty diet lingered on for so much longer in Portugal? Such 'why' questions, which focus our attention on the fundamental determinants of population health,[7] are usually difficult to answer with certainty, but let me offer a guess.

Salting could only be gradually abolished as a food conservation method after the arrival of the refrigerator, which many western Europeans put in their kitchens in the 1950s and 1960s. In Portugal, this happened much later than elsewhere because it lagged behind other European countries in economic development. This was partly because the fascists under Antonio de Oliveira Salazar, whose power lasted from 1932 to 1974, resisted modernization. Under Salazar, Portugal more or less closed down to influences from outside, and even refused Marshall plan aid in the years following the Second World War. It remained committed to its colonial empire long after other European countries had already given up, until the military and economic situation grew so unbearable that junior army officers overthrew the Salazar government on 25 April 1974.[8]

The *Ponte 25 de Abril* was originally built under Salazar—who is now blamed for the awkward metallic platforms which produce such penetrating noise—and renamed after the revolution. After 1974, modernity gradually entered Portugal with large effects on population health, as evidenced by a spectacular decline of infant mortality[9] and a gradual decline of stroke mortality.[3] Eating my dessert—a delicious *arroz doce*—I wondered whether this is not another illustration of the important but often intractable link between politics and population health.

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