CAROLINE FERNANDES

A global treaty to protect human health from the most toxic persistent organic pollutants is to be negotiated by more than 120 countries in Johannesburg next month. The United Nations Environment Programme is seeking agreement for the treaty to reduce or eliminate the 12 persistent organic pollutants that the programme regards as the most threatening to future generations.

These pollutants (pesticides, industrial chemicals, and byproducts of industrial processes) are toxic and accumulate in fatty tissue, becoming more concentrated with time higher up the food chain. In the Arctic the indigenous diet of the Inuit people relies on such fatty foods as whale and seal, which are high in pollutants such as polychlorinated biphenyls (PCBs). Inuit mothers typically have high levels of PCBs in their breast milk—up to five times the levels in mothers in industrialised countries. In the picture above an Alaskan Inuit woman prepares whale blubber for her freezer.

continue to replicate and may cause an impairment in the production of proteins, which will be followed by disease. All organisms use various systems to repair cellular DNA, although when they are unable to correct the damage exactly they generally stop operating, bringing genetic replication to a halt. The result is apoptosis (cell death).

Judy Siegel-Itzkovich *Jerusalem*

EU plans new food authority

The European Union is set to have its own food authority to help improve safety standards across the 15 nation bloc under plans published by the European Commission earlier this month. Already the proposals have the backing of members of the European Parliament (MEPs) and will now be examined by EU member governments.

The initiative follows several food scares in recent years ranging from *Listeria*, contaminated wine, and dioxins to the ongoing concerns over beef and "mad cow disease." If the legislative timetable is kept, the food authority will be operating by

2002. The European Commission envisages an authority with 250 staff and a budget of some 40 million euros within three years, and for the overall number of employees eventually to rise to about 330. The agency's role would be to provide authoritative, up to date scientific advice to consumers, industry, governments, and EU institutions.

According to EU Health and Consumer Commissioner David Byrne, "a key element of the authority is the closest involvement of the food safety authorities of the member states to facilitate the early identification of emerging risks and to avoid confusing and conflicting messages to consumers." The authority is part of a wide ranging package of measures the commission has proposed for the entire food chain "from the farm to the fork" to contribute to a high level of public health protection and restore consumer confidence. The authority would be completely independent, operating under its own management board consisting of national and EU representatives with some places reserved for other interested parties from consumers and industry.

Rory Watson *Brussels*

Predisposition for long life may be shared by family members

Scott Gottlieb *New York*

Family members may share a genetic predisposition to live to be 100 years or older, according to the results of a new study (*Journal of the American Geriatrics Society* 2000;48:1483-5).

Researchers, led by a team from Harvard Medical School in Boston, Massachusetts, examined the family trees of four American families in which people regularly lived beyond 90 years of age.

The research team compared the estimated life expectancy of the average person born in 1801, 1850, and 1900 with the actual life span of members of each of the four families whose ancestors they had traced back to those years. Although they did not take into account environmental factors that could influence survival rates, such as parental care and protection from disease, the team found that groups of siblings in the four families typically lived far beyond the norms for their time.

The investigators noted that there was only a 10% chance that a typical 19th century family would have had six siblings living beyond the age of 90, as was the case in a New Hampshire family that ultimately included

one man and four women who lived beyond the age of 100.

In another family, 50% of the 46 members from one generation lived to extreme old age, dying at ages ranging from 90 to 106 years. The researchers concluded that such high numbers could not be attributed to chance and that genetics must have played an important part in the outcome, especially since the centenarians included cousins who had not been raised in common childhood environments.

The authors noted that Nova Scotia, parts of the northern mid-west United States, and the Italian island of Sardinia have the highest concentrations of families living to older ages. While the current evidence is largely circumstantial, researchers said that localising families where members live to extremes of old age might help in the search for genes that contribute to an increased incidence of disease; it might also help researchers identify gene products that could offer protection against heart disease and stroke, two diseases that are often identified with early death. □

SEAN SPINQUE/FALMOS

A Bolivian centenarian and her daughter