More than 72 species of protozoan and helminth parasites can reach humans by food and water, and most of these infections are zoonoses. Some parasites show a cosmopolitan distribution, others a more restricted distribution due to their complex life cycles, which need the presence of one or more intermediate hosts. Of this large number of pathogens, only *Toxoplasma gondii* can be transmitted to humans by two different ways, *i.e.*, by cysts present in infected meat and by oocysts contaminating food and water. Eleven helminthic species (*Taenia saginata*, *Taenia solium*, *Taenia asiatica*, *Trichinella spiralis*, *Tr. nativa*, *Tr. britovi*, *Tr. pseudospiralis*, *Tr. murrelli*, *Tr. nelsoni*, *Tr. papuae* and *Tr. zimbabwensis*) can grow in meat of different animal species and can be transmitted to humans by the consumption of raw meat or meat products. Twenty trematode species, four cestode species and seven nematode species can infect humans through the consumption of raw sea- and/or fresh-water food (fishes, molluscs, frogs, tadpoles, camarons, crayfishes). Six species of *Cryptosporidium*, *Isospora belli*, *Cyclospora cayetanensis*, *Giardia duodenalis* and *Entamoeba histolytica/E. dispar* can contaminate food and water. Among the helminths, seven trematode species, seven cestode species and five species of nematodes can reach humans by contaminated food and water. Diagnostic and detection methods that can be carried out routinely on food and water samples are available only for few parasites (*Cryptosporidium* sp., *Giardia* sp., *Anisakidae*, *Trichinella* sp., *Taenia* sp.), *i.e.*, for parasites which represent a risk to human populations living in industrialised countries. The majority of food and waterborne infections of parasitic origin are related to poverty, low sanitation, and old food habits.

Key words: food, water, parasites, trematodes, cestodes, nematodes, protozoa, helminths

Tel. +39 06 4990 2304; Fax +39 06 4938 7065; email: pozio@iss.it