when they come in contact with warm wash solution, the processor must allow time for the eggs to warm before processing. The result would be that eggs, like every other raw food of animal origin, are held under strict time-temperature control to ensure a safe, wholesome product reaches the consumer.

In summary, *S enteritidis* in poultry does not appear to be a problem that is a function of high production, controlled environment husbandry methods, but is an evolving problem throughout the industry, complicated by transovarian transmission.

Accordingly, institutional food service operations, such as hospitals, should recognize the special susceptibility to their patients and adhere to published guidelines of "Safe Handling of Eggs in Quantity."" Four key guidelines from this document are:

- Avoid serving raw eggs and foods containing raw eggs; institutionally prepared Caesar salad and Hollandaise sauce, for example. Products such as homemade ice cream, homemade eggnog and homemade mayonnaise also should be avoided, but commercial forms of these products are safe to serve since they are made with pasteurized eggs.
- Cook eggs thoroughly until both the yolk and white are firm, not runny, in order to kill any bacteria that may be present. There may be some risk in serving eggs lightly cooked; soft-cooked, soft-scrambled or sunny-side-up, for example.
- Realize that serving lightly cooked foods containing eggs, such as soft custards, meringues and french toast, may be particularly risky for people with weakened immune systems and other high-risk groups.
- Review recipes and food-handling practices to consider using pasteurized egg products instead of shell eggs whenever possible.

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Diamidine Use in Treatment of *Pneumocystis carinii*

To the Editor:

The reintroduction of pentamidine into therapy for peumocystosis was preceded by an unusual chapter in pharmacologic investigation. The basic studies formed a romantic search for a compound that would influence the metabolism of glucose, an essential metabolite of trypanosomes. In 1935, an investigation of hypoglycemic-producing guanidine derivatives was initiated.' Synthalin (decamethylene diguanidine hydrochloride) was determined to have trypanocidal activity, an action later found not due to hypoglycemia.' Subsequently, an exploration of compounds in which aromatic carrier chains were substituted for the alkyl chains and a shift to terminal amidine groups was made." The fundamental chemotherapeutic constitutent was determined to be the aromatic diamidine group. Oxygen, nitrogen and sulfur linkages were also introduced into the alkane chain. Four promising compounds were isolated (stilbamidine, pentamidine, propamidine and phenamidine). The last three compounds contained an oxygen link in the alkane chain.

These aromatic diamidines have therapeutic activity in human trypanosomiasis, leishmaniasis and gram-positive bacterial infections. Although stilbamidine seemingly was the most effective drug, its neurotoxicity made pentamidine the agent of choice for such therapy. At a later time, stilbamidine was demonstrated to be satisfactory treatment for blastomycosis.[4] Advantage was taken of its neurotoxicity in the treatment of tic douloreux." The use of the diamidines for such purposes is a far cry from the agent sought as a hypoglycemic drug for trypanosomiasis, and the story is a tribute to the many investigators who by perseverence and perhaps, serendipity, brought these compounds to modern medicine for the treatment of *Pneumocystis carinii.*

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