A lesser flamingo's energy surplus, which is defined as the net rate at which it gains chemical energy (averaged over 1 or more whole days) is calculated by estimating the rate at which it filters algae from the water, and then subtracting the energy needed to pump water through the filter, and that expended on general metabolism.

From the assumptions made, it follows that a flamingo should be able to make a positive energy surplus if the food concentration exceeds about 0ï 12 kg dry matter per m^3 of water, and if it spends 80% of its time feeding. During incubation, however, less than half the total time can be spent feeding, and in this case the food concentration would need to be at least 0ï 25 kg/m^3. About 2 days would be required to produce an egg at this concentration, and less than 1 day at the highest concentrations observed.