





Figure 8. Structural relationship between chromatin plates and granules in chromosomes. Metaphase chromosomes purified in sucrose gradients were incubated on the electron microscopy grid (before glutaraldehyde crosslinking) with solutions containing 5 mmol/L NaCl and 5 mmol/L Pipes (pH 7.2) plus 10 mmol/L EDTA and 50% sucrose (**a**, **b**; **b** is a higher magnification of the region marked with the white rectangle in **a**) or 2.5 mmol/L MgCl₂ and 2.5 mmol/L CaCl₂ (**c**). In addition, the sample **c** was digested with micrococcal nuclease. (**d**) Small chromatin fragments from chicken erythrocytes were incubated in solution, before the spreading, in 90 mmol/L TEAB (pH 8.6), 1.7 mmol/L MgCl₂ and 40% sucrose. Bars: 600 nm (**a**); 200 nm (**b**–**d**).

Figure 7. Denaturation of slightly crosslinked samples with high concentrations of NaCl. Metaphase chromosomes purified in glycerol gradients were dialysed against a buffer containing 5 mmol/L NaCl and 5 mmol/L MgCl₂, at room temperature for 4 h, and syringed vigorously through a 22-gauge needle to try to dissociate plates from chromatids. After spreading and crosslinking for 30 min with a low concentration of glutaraldehyde (0.01%) in the same solution used for the dialysis, the samples were incubated on the grid with this solution containing, in addition, 1 mol/L (**d** and **f**) or 2 mol/L (**a**–**c** and **e**) of NaCl. The white arrow in **e** points to a small plate surrounded by irregularly folded chromatin. Bars: 200 nm.