



Metaphase chromosomes obtained in aqueous solutions containing Mg^{2+} and sucrose are very compact (*inset*). Dilution with the same solutions without sucrose causes a rapid influx of water into chromatids and some chromosomes become completely disassembled, allowing the visualization of many thin chromatin plates. Artificial-color figure prepared by Pablo Castro-Hartmann and Joan-Ramon Daban from original grey-scale electron micrographs (Biochemistry, 2010, 49:4043-4050).