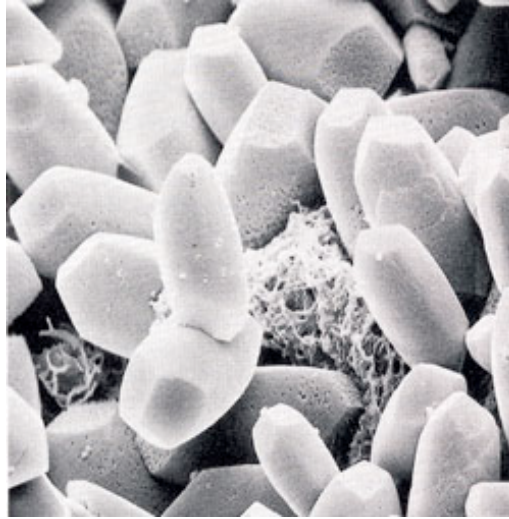
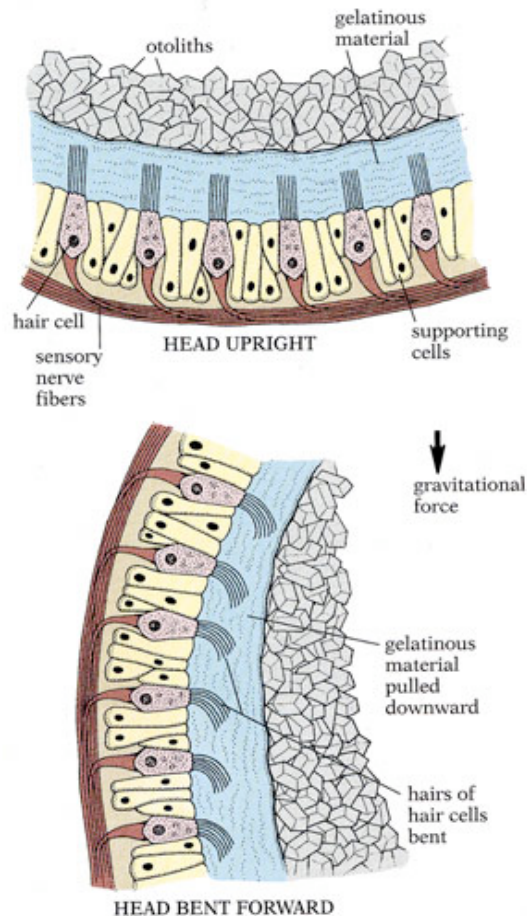


HOW OUR BODIES MAINTAIN BALANCE



Otoliths in the inner ear. The crystals of calcium carbonate, called otoliths, shown in this scanning electron micrograph are surrounded by a gelatinous film in which hairs are embedded. When the head tilts, the altered pull of the otoliths on the hairs sends signals on head position to the brain.



How otoliths function. When the head is in an upright position, the weight of the otoliths presses directly down on the sensitive hair cells, the tips of which are embedded in the membrane. When the head is tilted (bottom), the altered pull of the otoliths on the hairs generates signals to the brain.