

The background of the slide features a light gray gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered in the middle of the slide.

ADIPOSE CONNECTIVE TISSUE

ADIPOCYTES

- LARGE CELLS FOUND ISOLATED OR IN SMALL GROUPS WITHIN LOOSE OR DENSE IRREGULAR CONNECTIVE TISSUE.
- OCCUR IN LARGE AGGREGATES IN ADIPOSE TISSUE

ADIPOSE TISSUE

- CONNECTIVE TISSUE IN WHICH FAT-STORING CELLS OR ADIPOCYTES PREDOMINATE.
- REPRESENTS 15%-20% OF THE BODY WEIGHT IN MEN, MORE IN WOMEN.
- STORAGE DEPOTS FOR
- NEUTRAL FATS, CHIEFLY TRIGLYCERIDES
- WHITE AND BROWN ADIPOSE TISSUES ARE DIFFERENT IN COLOR, LOCATION, FUNCTION, AND STRUCTURE.

WHITE ADIPOSE TISSUE

- MORE COMMON.
- CELLS EACH CONTAINING ONE LARGE CYTOPLASMIC DROPLET.
- LONG-TERM ENERGY STORAGE
- WHEN COMPLETELY DEVELOPED, A WHITE ADIPOCYTE IS VERY LARGE, BETWEEN 50 AND 150 UMM IN DIAMETER... UNILOCULAR
- SIGNET-RING APPEARANCE.
- LIPOMAS !
- THE DISTRIBUTION OF WHITE ADIPOSE TISSUE CHANGES SIGNIFICANTLY THROUGH CHILDHOOD AND ADULT LIFE.
- ADIPOCYTES DEVELOP FROM MESENCHYMAL STEM CELLS.

BROWN ADIPOSE TISSUE

- CONSTITUTES 2%-5% OF THE NEWBORN BODY WEIGHT
- LOCATED MAINLY IN THE BACK, NECK, AND SHOULDERS.
- IN ADULTS IT IS FOUND ONLY IN SCATTERED AREAS: AROUND THE KIDNEYS, ADRENAL GLANDS, AORTA, AND MEDIASTINUM.
- COLOR OF BROWN FAT: VERY ABUNDANT MITOCHONDRIA AND THE LARGE NUMBER OF BLOOD CAPILLARIES.
- BROWN ADIPOCYTES CONTAIN MANY SMALL LIPID INCLUSIONS....MULTILOCULAR
- TISSUE'S PRINCIPAL FUNCTION OF HEAT PRODUCTION AND WARMING THE BLOOD (THERMOGENESIS).
- CELLS OF BROWN FAT ARE SMALLER THAN WHITE ADIPOCYTES.....THE NUCLEUS TO BE MORE CENTRALLY LOCATED.

ADIPOSE CT

