

Structures of decidua

► It has four parts

- **Decidua basalis** : it forms the maternal part of the placenta
- **Decidua capsularis**: it covers the conceptus
- **Decidua parietalis** : the rest of the endometrium
- **Decidua reflexa** : junction between capsularis and parietalis

Preview from Notesale.co.uk
Page 7 of 43

- ▶ The syncytiotrophoblast, the outer cell layer surrounding villi, possesses a brush border
- ▶ Microvilli that constitute the border are felt to be involved in pinocytotic activity. Vacuoles within the cytoplasm of these cells are indicative of the absorptive and secretory activities of the syncytiotrophoblast
- ▶ Syncytiotrophoblasts are composed of pyknotic nuclei that are hyperchromatic
- ▶ The cytotrophoblastic nuclei are more round and open

preview from Notesale.co.uk
page 13 of 43

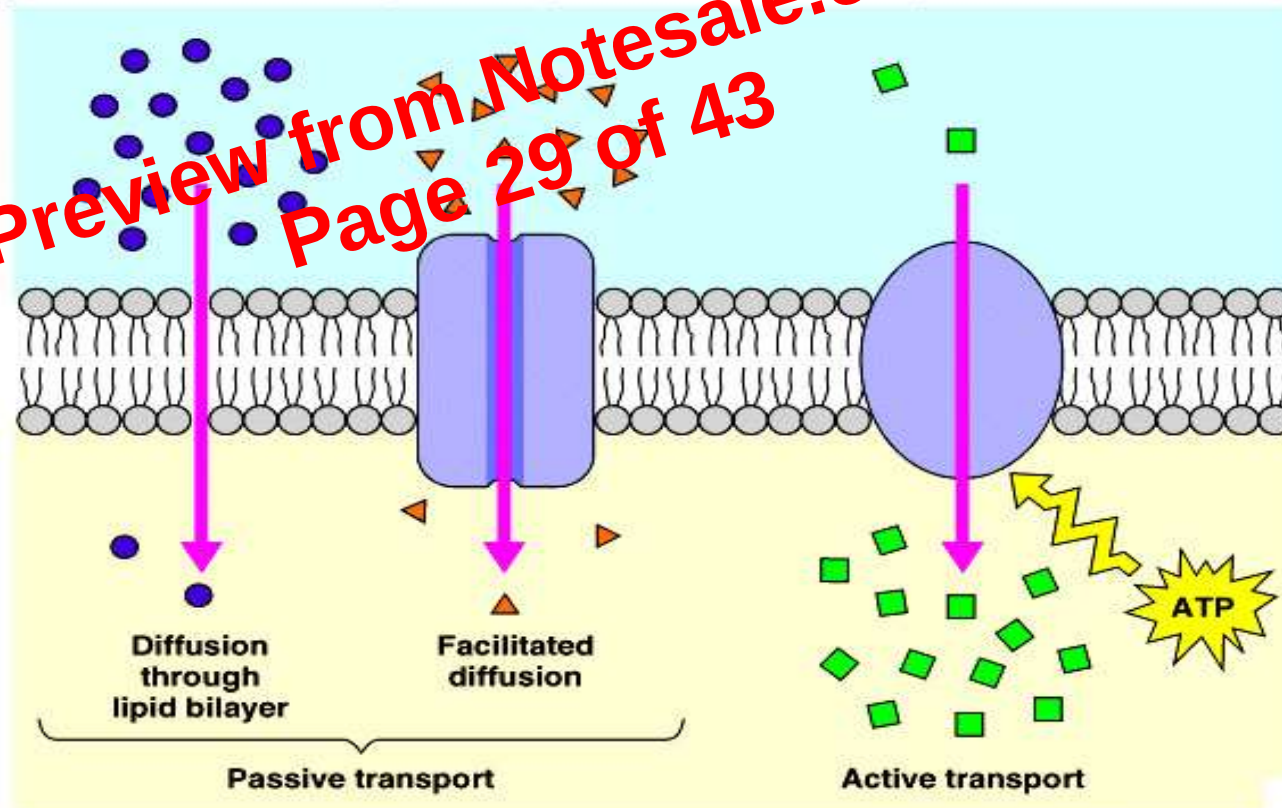
PLACENTAL BARRIER

- ▶ This is a composite structure that separating the fetal blood from the maternal blood
- ▶ It has four layers:
 - Syncytiotrophoblast
 - Cytotrophoblast
 - Connective tissue of villous
 - Endothelium of fetal capillaries
- After the 20th week, the cytotrophoblastic cells disappear and the placental membrane consists only of 3 layers

Preview from Notesale.co.uk
Page 19 of 43

Preview from Notesale.co.uk
Page 29 of 43

Figure 8.14 Review: A comparison of passive and active transport



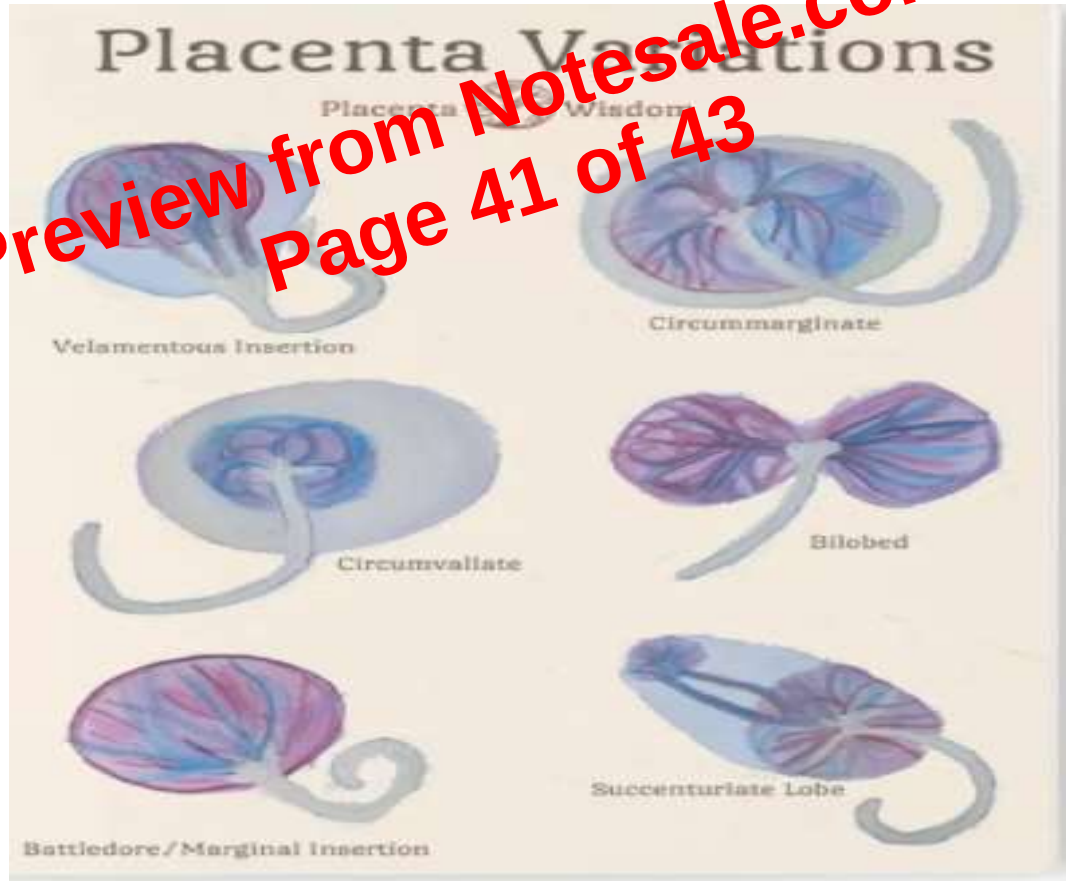
Copyright © The Benjamin/Cummings Publishing Co., Inc., from Campbell's BIOLOGY, Fourth Edition.

Applied aspect

- ▶ In iron deficient anemia of mother, baby is not anemic
- ▶ In starvation, ketones cross placenta and are utilised as source of energy resulting in IUGR babies
- ▶ In GDM mothers more glucose to babies result in macrosomia
- ▶ Various drugs that pass through placenta
- ▶ Infections like viruses and bacteria

Preview from Notesale.co.uk
Page 36 of 43

Preview from Notesale.co.uk
Page 41 of 43



Preview from Notesale.co.uk
Page 42 of 43

