

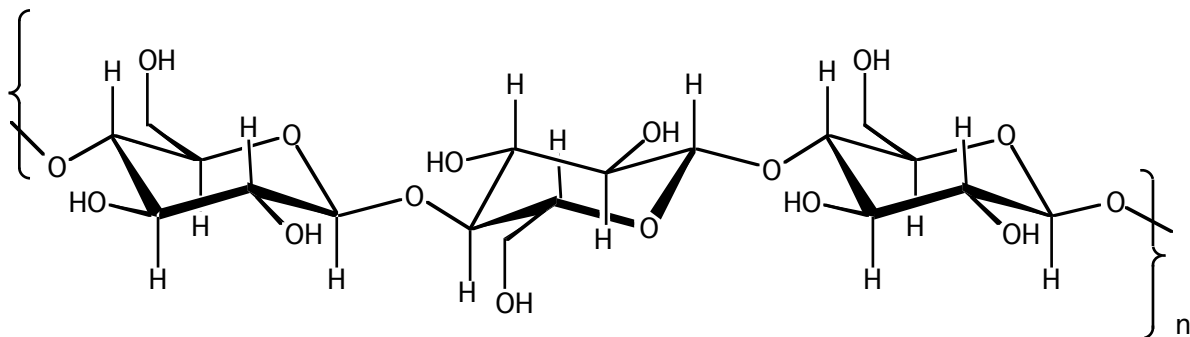
WHAT'S IN THAT FRESH CUP OF COFFEE

THAT YOU HAD THIS MORNING?

WHAT'S GOING ON AT THE MOLECULAR LEVEL?

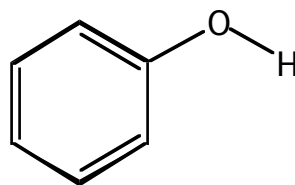
COFFEE CONTAINS:

CELLULOSE: INSOLUBLE, POLYMERIC PLANT MATERIAL



n = thousands

TANNINS: COMPLEX COMPOUNDS CONTAINING PHENOL GROUPS



PHENOL

CAFFEINE: < 5%

DARK PIGMENTS

MANY FLAVOR AND AROMA COMPOUNDS

LOTS OF OTHER COMPOUNDS