**RED WINE CHEMICAL HELPS ACTIVATE DNA-REPAIR PROTEIN**

Resveratrol is the red wine component claimed to confer health benefits. In a new study, at low dose, it was shown to attach itself to an enzyme which then activated the PARP-1 protein, known to have roles in stress-response & DNA-repair.

**TURNING CARBON DIOXIDE INTO MORE USEFUL COMPOUNDS**

Carbon dioxide is naturally present in the atmosphere, but is also a significant pollutant released by human activities. US researchers developed a process which converts CO$_2$ to a more useful oxalate compound - though it is currently too slow for practical use.

**BED BUG PHEROMONES COULD ACT AS CHEMICAL LURE**

Scientists have identified the chemical compounds released as aggregation pheromones by bedbugs. A blend of the six major components proved successful in tests at luring bed bugs into traps, and could become an effective way of controlling infestations.

**SYNTHETIC MOLECULES AFFECT SLEEP RHYTHM IN MICE**

Researchers have shown that synthetic molecules targeting components of the mammalian clock in mice induced wakefulness and reduced REM sleep, though also increased anxiety. The findings could help in development of treatments for sleep disorders.

**DETAILED MECHANISM OF ACTION FOR ASPIRIN PROPOSED**

The enzyme that aspirin acts on to induce its pharmacological effects has been known for some time, but researchers have now proposed a detailed mechanism for the acetylation of the enzyme, which occurs in two successive stages, using computational models.