FAST dancing and cycling up hills could reduce a woman's chance of developing breast cancer, US research shows. A study of 32,000 post-menopausal American women suggests slim women who do lots of strenuous exercise are 30 per cent less likely to develop breast cancer than those who don't exercise vigorously.

The study tracked 32,000 women for 11 years and found those who did more vigorous activity, including heavy housework and strenuous exercise like running, aerobics, cycling up hills and fast dancing, had lower rates of developing disease.

Lighter activities like washing clothes, painting, walking and bowling did not offer any protection, according to the study by the National Cancer Institute published in the journal Breast Cancer Research.

And vigorous activity was only protective in lean women, not those carrying more weight.

"Possible mechanisms through which physical activity may protect against breast cancer that are independent of body mass include reduced exposure to growth factors, enhanced immune function, and decreased chronic inflammation, variables that are related both to greater physical activity and to lower breast cancer risk," said lead researcher Michael Leitzmann.

Coffee keeps drivers alert on the road

SCIENCE has confirmed what many long-distance drivers already know – coffee really does keep you alert on the road.

Researchers at Swinburne University of Technology in Melbourne used a spectacle-like device that counts the number of times a person blinks to judge the effectiveness of caffeine on wakefulness.

A group of drivers aged in their 20s were given a capsule containing 200mg of caffeine, which is roughly equivalent to two cups of coffee, or a dummy substance.

Those given the caffeine had improved reaction times and improved alertness that persisted for about three hours, said Dr John Patterson, from the university's Sensory Neuroscience Laboratory.

Over the years there have been a range of recommendations for staying alert on long drives, including stopping for a brisk walk, taking a power nap, and drinking coffee.

Dr Patterson said the new findings clarify a murky picture on the alerting effects of caffeine.

The study, published in the journal Psychopharmacology, used an Australian-designed device that measures drowsiness by observing total duration of eye blinks and the ratio of amplitude and velocity of eye closure during blinking.

Urine checks to monitor heart health

URINE checks could be the key to protecting people from heart disease, say Australian scientists who have discovered a clear link between protein in pee and cardiovascular problems.

High levels of protein in urine, called proteinuria, is an early signal of kidney disease but researchers at the George Institute for International Health in Sydney have discovered it is also an indicator of a related condition, coronary heart disease.

The team reviewed 26 published studies involving almost 170,000 people and found the first significant evidence.

"The results suggest that people with proteinuria have a risk of coronary heart disease that is at least 50 per cent greater than those without," said Dr Rachel Huxley, director of nutrition and lifestyle at the institute.

"The relationship was consistent across diverse population subgroups, including individuals with and without diabetes."

The team was unable to say if the protein...
levels played a role in causing heart disease, or were simply an indicator.

New ways to pick up early signs of disease are much needed, they said.

The research is published in the journal Public Library of Science Medicine.

**Breakthrough in insect-transmitted disease**

AUSTRALIAN researchers have made a discovery that could open up a new front in the fight against insect-transmitted diseases.

Insect virologist Dr Karyn Johnson, from the University of Queensland, has found a type of bacteria, Wolbachia, can actually protect flies from mortality caused by pathogenic viruses.

The team used Wolbachia-infected vinegar flies and injected them with a virus fatal to the insects.

“Usually we would expect a bacterial infection may compromise the fly making it more susceptible to other pathogens, but what we found was Wolbachia protected the insects,” Dr Johnson said.

“If this type of interaction is widespread there could be significant implications for the way viruses are maintained in insect populations.”

Researchers are now looking to find how the bacteria protects the flies from the virus. “If we can work out that mechanism and then harness it we might have a new range of control strategies for insect-transmitted diseases,” she said.

The study is published in the journal *Science*.

**Breastfed babies better are behaved**

BABIES who are breastfed are less likely to have conduct problems as youngsters, a conference has heard.

Parents of children aged one to five who were breastfed as infants were 15 per cent less likely to report concern for the child’s behaviour than parents of kids who were not breastfed, researchers told the American Public Health Association meeting in San Diego.