MEN who hate supermarket shopping now have the ultimate excuse to leave it to their mothers, wives or girlfriends.

Today, a study says that over thousands of years evolution has designed women to excel when it comes to hunting down the most fulfilling food.

According to the study by a team in California, women are just as good as men at navigating, but they only call on their mental maps when there is food to be found - and the more calories in a food, the more accurate they are at locating it.

The team, from the University of California, Santa Barbara and Yale University, was following up years of research which showed that men excel at spatial problems, such as map reading. This probably has its origins in the African savannah, when men were hunting down highly mobile prey.

But in these ancient hunter-gatherer societies, women collected plants and this posed a key question, said the team: Should not women more accurately remember the location of plant foods than men?

Experiments conducted on 45 men and 41 women at six gatherings of a large farmers’ market suggest that they do, and that more nutritious foods are more accurately remembered, said Max Krasnow, a member of the team whose paper is published today in the Proceedings of the Royal Society: Biological Sciences.

The team asked the men and women to show the direction of a stall where they had bought a certain food, such as strawberries or tomatoes, using a compass. A zero degree error meant the subjects were bang on target, while 90 degrees meant they were hopeless.

"Men were making 33 degree pointing error, when women were around 25 degrees, which is a 27 per cent improvement," said Mr Krasnow. Women also did better with a high-calorie food, such as a doughnut, compared with a stick of celery.

"It was a dramatic effect," he said. "Memory for the high-calorie foods like honey and avocados was as much as four times as accurate as memory for the low-calorie foods like cucumber and lettuce."

The research also shows that women have the same navigational skills as men if there is sufficient motivation to get to a destination, such as a cream bun.

"It seems like the mechanism in men has a chronic higher activation, whereas in women it shows specificity for certain situations," said Mr Krasnow. Traditional methods to test navigating talents have neglected to explore the crucial calorific motivation of chocolate, cake and other high-calorie foods, he said.