

What food should I have to survive a night shift?

Eating healthily is not always a top priority in the small hours. But, as three experts tell **Abi Rimmer**, choosing well can maintain your energy and have long term benefits



Planning ahead is your friend

Martin Kohlmeier, director of the Human Research Core, University of North Carolina nutrition research institute

“The effect of a disrupted sleep cycle on energy metabolism is real but of modest size. In the end, it’s about the practicalities of food access, convenience, and the time demands of the shift. Planning ahead is your friend. Your first thought should be hydration—go for water and other calorie free drinks because you will need a lot of it. Dehydration, paradoxically often from too much caffeine, is a common cause of fatigue.

“Before your shift, eat a main meal with whole grains and other complex starches to curb your hunger and cravings.

“Take your own food with you so that you don’t fall into the delivery service and vending machine trap. Convenience foods typically contain extra calories, sugar, saturated fat, and salt, but do not keep you full for long. Sugary and salty foods are also a major reason for the weight gain that is such a common problem for shift workers.

“Plan for your meal breaks: high protein foods like chicken and hummus are filling and calm cravings, while prepackaged healthy snacks, such as unsalted nuts and cut vegetables, are accessible on the run. Always pack water with your lunch box.”

“Not everybody responds the same way to poor food choices. About one in five will gain weight with high saturated fat consumption, and one in six will have higher blood pressure with extra salt. Unwanted weight gain and a rise in blood pressure are important warning signs. Check regularly and take corrective action right away.”



Calories at night do count

Roopa McCrossan, vice chair of the trainee committee of the Association of Anaesthetists

“Cake, crisps, and chocolate? Oh sorry, that’s what we want to eat on night shift—what you should eat couldn’t be more different. The bad news is, calories on nights do count, in fact they may count more than you think.

“The reason the night shift makes you feel awful is the misalignment of the circadian clock and the sleep-wake cycle. Sleep deprivation affects food choices—there is evidence that you are more likely to crave calorie dense carbs, sugary food, and salty snacks—and limits our ability to process food. We become resistant to insulin, triglyceride levels go up, leptin (the satiety hormone) drops, while ghrelin (the hunger hormone) rises. In fact, research has shown you can eat around 400 calories extra a day from being tired. It’s no wonder that obesity, heart disease and type 2 diabetes are higher in night shift workers. So, how can we avoid the pitfalls?

“Firstly, eat a healthy, filling meal before your shift—choose foods that will release energy slowly. Keep hydrated during the shift—water is best.

“Avoid eating between midnight and 6 am, if possible, and if you do need to eat during the night, go for low calorie, protein rich snacks—don’t graze your way through the night.

“Finally, eat a healthy breakfast before your daytime sleep so you don’t wake up hungry.

“Try it out on your next set of nights and see how you get on.”



Make a night shift survival pack

Minha Rajput-Ray, medical director of the NNEdPro Global Centre for Nutrition and Health

“Shift working is inevitable for healthcare staff. The ‘internal body clock’ disruption can put doctors at higher risk of gastrointestinal symptoms, cardiometabolic disease, and may contribute to poor psychological health. These tips can enable you to be in peak condition to get through those night shifts. Further guidance may be needed for employees with diabetes, those using medication, and those observing dietary restrictions for religious reasons.

“First, make healthy choices. Focus on nutrient quality, good quality proteins, and slow release carbohydrates. Try your best to avoid processed food to minimise insulin spikes.

“Get into a routine. Eat your main meal in the earlier part of the evening—ideally before you begin the night shift—to provide your body with much needed fuel. This also means that if you don’t get a proper break you can manage with some healthy snacks for the rest of the shift.

“Invest in a night shift ‘survival pack’. Keep a cool bag handy with healthy snacks such as snack bars and wholemeal crackers. Top up with a yogurt pot and easy to carry fruit like bananas, tangerines, or apples.

“Watch your caffeine; sweetened caffeine drinks contribute to total calorie intake and may interfere with the much needed rest at the end of the shift.

“Finally, keep hydrated.”

Cite this as: *BMJ* 2019;365:l2143