

| 7-day shift work cycles  | Experimental period | Animal                         | Glucose tolerance/insulin sensitivity    |                  |                                  | Study                             |
|--|---------------------|--------------------------------|--|------------------|----------------------------------|-----------------------------------|
|  |                     |                                | Test method                              | Testing time     | Outcome                          |                                   |
| 12 h advance on day 1,<br>normal phase on day 2-7  | 3 weeks             | C57BL/6<br>male mice           | OGTT                                     | ZT9 on<br>day 2  | glucose tolerance ↓              | Figueiro et al. 2017 [14]         |
| 12 h advance on day 1-3,<br>normal phase on day 4-7  | 3 weeks             | C57BL/6<br>male mice           | OGTT                                     | ZT9 on<br>day 4  | glucose tolerance ↓              | Figueiro et al. 2017 [14]         |
| 10 h delay on day 1-4,<br>normal phase on day 5-7  | 12 weeks            | Sudanian<br>grass male<br>rats | OGTT                                     | ZT2; day<br>NR   | glucose tolerance ↓              | Grosbellet et al. 2015 [15]       |
| 8 h advance on day 1-3,<br>normal phase on day 4-6<br>(6-day cycles)   | 8 weeks             | C57BL/6<br>female/male<br>mice | OGTT                                     | NR               | glucose tolerance ↓              | Thaiss et al. 2014 [16]           |
| 10 h advance on day 1-4,<br>normal phase on day 5-7  | 20 weeks            | Long-Evans<br>male rats        | OGTT                                     | ZT2 on<br>day 7  | glucose tolerance<br>unchanged   | Bartol-Munier et al. 2006<br>[17] |
| 6 h advance on day 1-3,<br>12 h advance on day 4-6,<br>18 h advance on day 7-9,<br>normal phase on day 10-<br>12 (12-day cycles) | 10 weeks            | Sprague<br>Dawley<br>male rats | hyperinsulinemic-<br>euglycemic<br>clamp | ZT2 on<br>day 10 | insulin sensitivity<br>unchanged | Gale et al. 2011 [18]             |

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