

## A basic manual as for breeding mice

### TSOD (Male)

- Birth
  - We regard 0-week-old as the week when a mouse is born. We do not regard 1-week-old as the week when a mouse is born.
  
- Weaning at the week of 3-week-old
  - TSOD is weaned on Thursday at the week of 3-week-old.
  - Male TSOD mice whose body weights are more than or equal to 12.0 grams are passed, and male mice whose body weights are less than 12.0 grams are excluded.
  - Male mice are sorted into cages according to body weights. The maximum heads per cage is 5 (140.8cm<sup>2</sup>/head).
  - Mice are given diet which we crush on the lids until 6-week-old. The crushed diet is given on the cage lid and in the cage. This makes it easier for mice to eat diet.
  
- After weaning
  - The cages are refreshed once a week.
  - We weigh the mice on Thursday at the week of 4-week-old. The mice whose weights *increase* by more than or equal to 9.0 grams from 3 weeks old are passed. The mice whose weights increase by less than 9.0 grams from weaning are excluded.
  - We weigh the mice on Friday at the week of 6-week-old. The mice whose weights are less than or equal to 36.9 grams are excluded.
  - After 7-week-old, we give diet not only on the lid but also into the cage depending upon the condition of the mice.

## **TSNO (Male)**

- Birth
  - We regard 0-week-old as the week when the mouse is born. We do not regard 1-week-old as the week when the mouse is born.
  
- Weaning at the week of 3-week-old
  - TSNO is weaned on Monday, Tuesday, and Thursday at the week of 3-week-old.
  - Male TSNO mice whose body weights are less than or equal to 10.0 grams are passed, and male TSNO mice whose body weights are more than 10.1 grams are excluded.
  - After weighing, 7 heads of mice are housed in a cage (100.6cm<sup>2</sup>/head).
  - Mice are given diet which we do not crush on the cage lids.
  
- After weaning
  - The cages are refreshed once a week.

## Other information

### Breeding environment

The patient's conditions of TSOD mouse such as blood sugar level depends upon the environmental factors. It is necessary to determine breeding environment.

- Temperature  
Preset: between 20 and 26 degrees Celsius  
Permissible range: between 18 and 28 degrees Celsius
- Humidity  
Preset: between 40 and 70 percentages  
Permissible range: between 30 and 80 percentages
- Ventilation  
Fresh air all the time (HEPA filter)  
Ventilation number of times  
Preset: 15 times per hour  
Permissible range: between 10 and 20 times per hour
- Illumination  
12 hours illumination  
Turn on at 8 am and turn off at 8 pm

### Diet and water

- Diet  
Autoclaved MF(solid feed for mouse, rat breeding), ceaseless feeding (Oriental Yeast Co., Ltd.)  
As for nutrient composition of MF, please refer to the document on the Oriental Yeast website.
- Drinking water  
For drinking water, adjust the residual chlorine concentration more than 1 ppm just before changing water.
- Animal bedding  
Wood chip (Japan SLC, Inc.)