CLAIMS

1. Computer-readable storage media storing computer-readable instructions, which when executed by a computer having at least one processor, cause the computer to:

acquire target behavior data for identifying a history of behavior executed by a target user; and

output, from an estimation model generated by executing supervised learning, at least one of target menopause state and/or PMS state data for identifying a menopause symptom state and/or PMS state of the target user, target sleep state data for identifying a sleep state of the target user, target state data for identifying an exercise state, a state related to a lifestyle disease, or a state of physical activity insufficiency of the target user, target state data for identifying a nutritional state of the target user, target state data for identifying a hydration state of the target user, and target state data for identifying an immune state of the target user, by inputting the target behavior data to the estimation model.

2. The computer-readable storage media according to claim 1, wherein the instructions further cause the computer to output, from the estimation model, the target menopause state and/or PMS state data including at least one of target comprehensive state data for identifying a

comprehensive state of a menopause symptom of the target user, target first state data for identifying a first symptom state of the target user, and target second state data for identifying a second symptom state of the target user, by inputting the target behavior data to the estimation model.

3. The computer-readable storage media according to claim 1, wherein the instructions further cause the computer to output, from the estimation model, the target sleep state data including at least one of target property data for identifying a sleep property of the target user, target rhythm data for identifying a sleep rhythm of the target user, target time data for identifying a sleep time of the target user, and target category data for identifying a sleep category to which the target user belongs, by inputting the target behavior data to the estimation model.

4. The computer-readable storage media according to claim 1, wherein the instructions further cause the computer to output, from the estimation model, target state data for identifying an exercise state, a state related to a lifestyle disease, or a state of physical activity insufficiency of the target user, the target state data

including at least one of data for identifying a body weight of the target user, data for identifying a body mass index (BMI) of the target user, data for identifying the number of steps of the target user, data for identifying whether the target user smokes, and data for identifying a metabolic syndrome diagnostic reference value of the target user, by inputting the target behavior data to the estimation model.

Claim 5. The computer-readable storage media according to claim 1, wherein the instructions further cause the computer to output, from the estimation model, target state data for identifying a nutritional state of the target user, the target state data including at least one of data for identifying an immune deficiency degree of the target user, data for identifying the presence or absence of subjective symptoms associated with nutritional deterioration of the target user, data for identifying diversity of Food Intake of the target user, and data for identifying the appetite of the target user, by inputting the target behavior data to the estimation model.

Claim 6. The computer-readable storage media according to claim 1, wherein the instructions further cause the computer to output, from the estimation model, target state

data for identifying a hydration state of the target user, the target state data including at least one of data for identifying a serum Na value of the target user, data for identifying a urine osmotic pressure of the target user, data for identifying urine specific gravity of the target user, data for identifying a urine color of the target user, data for identifying a BUN (urea nitrogen)/creatinine ratio of the target user, data for identifying a dehydration evaluation scale of the target user, and data for identifying a subjective symptom associated with moisture deficiency of the target user, by inputting the target behavior data to the estimation model.

Claim 7. The computer-readable storage media according to claim 1, wherein the instructions further cause the computer to output, from the estimation model, target state data for identifying an immune state of the target user, the target state data including at least one of data for identifying susceptibility of the target user to cold, data for identifying a frequency of causing cold of the target user, data for identifying SIgA concentration of the target user, data for identifying allergic symptoms of the target user, data for identifying oral environment and/or a state of immunity of the target user, data for identifying a sleep state of the target user, data for identifying an

exercise state of the target user, and data for identifying a stress state of the target user, by inputting the target behavior data to the estimation model.

Claim 8. An information processing system in which an information processing device performs:

acquiring first purchase data indicating a purchase history of a target customer,

predicting degrees of a plurality of types of health symptoms from the first purchase data by using a health prediction model related to the plurality of types of health symptoms of a first type to an N-th type (N is an integer of 2 or more), and

providing health information indicating the predicted degrees of the plurality of types of health symptoms to the target customer,

wherein the health prediction model related to a k-th type ($1 \leq k \leq N$) of health symptoms can calculate a numerical value indicating the degrees of the k-th type of health symptoms from the first purchase data related to the product category.