

|                  |   |
|------------------|---|
| Title            | A study of exercises by the use of Swedish bars (report II) : physical fitness training using Swedish bars  |
| Sub Title        |   |
| Author           | 森下, 孝(Morishita, Takashi)   |
| Publisher        | 慶應義塾大学体育研究所   |
| Publication year | 1978  |
| Jtitle           | 体育研究所紀要 (Bulletin of the institute of physical education, Keio university). Vol.18, No.1 (1978. 12) ,p.87- 88   |
| JaLC DOI         |   |
| Abstract         |   |
| Notes            | Abstract  |
| Genre            |   |
| URL              | <a href="https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00135710-00180001-0087">https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00135710-00180001-0087</a> |

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the Keio Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

# A Study of Exercises by the Use of Swedish Bars (Report II)

—Physical Fitness Training Using Swedish Bars—

By *Takashi Morishita*\*

## 1. Preface

As to exercises for which Swedish bars are used, a report was made on the general view, the muscular discharge phenomenon generated by exercise, with what objectives exercises should be done and the elements of prescription.

The purpose of this paper is to make a study on how the exercise equipment should be used as a means of developing and materializing what was reported previously. For this purpose, there should be improvement on the exercise equipment, and selection of auxiliary equipment should be made for use. A plan to utilize these equipment for multiple purposes should be devised.

## 2. Method of Study and Preparation of Program

The intention of the study is to place importance on the development of overall physical fitness, especially the training of muscular strength, as to the Swedish bar exercises practiced so far, and to make programs generalized and advanced, as well as to utilize the exercise equipment.

### (1) Swedish Bars for Various Uses

The pictures show the exercise equipment provided in the basic physical fitness study room, Keio University Physical Education Institute, which is jointly used for training purposes.

Two sets of two-railing Swedish bars (three-railing bars are desirable) were fixed in parallel. As auxiliary equipment, two sets of parallel bars (one being high and the other low) and two sets of parallel bars (one being high and the other low) and two sets each of abdominal muscular stand and back muscular stand (mobile—high and low) were chosen and used according to exercise program.

### (2) Classification of Exercises Suited to Muscular Strength Training

---

\* Assistant Professor of the Institute of Physical Education, Keio University.

- ① Exercises in which upper arm muscles are used mainly.
- ② Exercises which consist mainly of upper arm muscle and jumping exercises.
- ③ Exercises in which upper arm muscles and abdominal muscles are used mainly.
- ④ Exercises in which upper arm muscles and back muscles are used mainly.
- ⑤ Exercises in which abdominal muscles and back muscles are used mainly.
- ⑥ Exercises in which upper arm muscles and chest muscles are used mainly.
- ⑦ Exercises in which upper arm muscles and side muscles are used mainly.

For the training of the muscles mentioned above, suitable pieces of equipment were chosen, and the effects of the exercises produced in the muscles were confirmed by electromyography. The results of the confirmation were used as a standard in the preparation of programs.

(3) Programs in Which Swedish Bar Equipment Was Used Mainly

The kinds of training which were said to be representatives of muscular strength training theretofore were circuit training (R. E. Morgan), weight training, isometric training, etc. A study was made on the program in which beginners and stout experts were included, by taking up the merits of these trainings as well as expanding the domain of exercises by using Swedish bars independently or jointly.

Shown herein are two examples, one each for male and female.

### 3. Conclusions

In the study, in order to make it easy to choose exercise programs suitable to people, young and old, men and women, respectively, various courses were established, by examining the conventional training program, by effecting revisions therein, and by expanding the domain of exercise, as Swedish bars were used in addition to the already provided training equipment.

Exercises using Swedish bars have relatively and compositively elements necessary for the training of various muscles of the body. Therefore, if the use of Swedish bars is included in exercise programs and such programs are used extensively, it seems that they are effective in the training of muscular strength as well as in the training of overall physical fitness.